Appendix I

Sewer Reconnaissance and Sampling Logs

2020-06-02, Julia McClafferty, Utility Corridor Recon

Created	2020-06-02 12:55:47 UTC by Julia McClafferty
Updated	2020-09-16 15:55:47 UTC by Julia McClafferty
Location	42.3680029857, -83.3997096501

Basic Information

Project Name	Ford
Task	Utility Corridor Recon
Location	Livonia, MI
Date	2020-06-02
Completed By	Julia McClafferty
Additional Personnel	Rachel Bielak
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	64.04 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

IP

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	IP
Model	100’
Pine/Geotech Number	1348
Calibrated?	No

Daily Log of Activities

08:35, Onsite

Time	08:35
Description of Task	Onsite

08:50, H&S tailgate

Time	08:50
Description of Task	H&S tailgate

09:00, Inspect manholes near intersection of Levan and Plymouth - did not find sanitary manhole

Time	09:00
Description of Task	Inspect manholes near intersection of Levan and Plymouth - did not find sanitary manhole

09:47, Arrive at SAMH 1228 - no TC needed, not grated but no bolts (4 small holes open on lid)

Time	09:47
Description of Task	Arrive at SAMH 1228 - no TC needed, not grated but no bolts (4 small holes open on lid)

09:50, Arrive at SL-2. TC needed, vapor barrier needed

Time	09:50

Description of Task	Arrive at SL-2. TC needed, vapor barrier needed

09:55, Arrive at SAMH 1231. No TC needed, no grated lid

Time	09:55
Description of Task	Arrive at SAMH 1231. No TC needed, no grated lid

10:17, Inspect manholes near stark and rosati intersection

Time	10:17
Description of Task	Inspect manholes near stark and rosati intersection

10:21, SAMH 1181 flow input from East, output south. North storm drain flows from East to south. South storm drain flows from north to west.

Time	10:21
Description of Task	SAMH 1181 flow input from East, output south. North storm drain flows from East to south. South storm drain flows from north to west.

10:57, Arrive at STMH 1001. TC not needed, grated lid - needs vapor barrier

Time	10:57
Description of Task	Arrive at STMH 1001. TC not needed, grated lid - needs vapor barrier

11:08, Arrive at storm manhole adjacent to CB 1040. In the middle of Precision Broadband driveway. Grated - needs vapor barrier

Time	11:08
Description of Task	Arrive at storm manhole adjacent to CB 1040. In the middle of Precision Broadband driveway. Grated - needs vapor barrier

11:17, Arrive at STMH 1066 and SAMH 1067. Both in driveways. Storm needs vapor barrier

Time	11:17
Description of Task	Arrive at STMH 1066 and SAMH 1067. Both in driveways. Storm needs vapor barrier

11:23, Arrive at SAMH 1082 and STMH 1088. High traffic area need TC. Storm needs vapor barrier

Time	11:23
Description of Task	Arrive at SAMH 1082 and STMH 1088. High traffic area need TC. Storm needs vapor barrier

11:29, Arrive at SAMH 1122. No TC needed but should notify resident. No vapor barrier needed

Time	11:29
Description of Task	Arrive at SAMH 1122. No TC needed but should notify resident. No vapor barrier needed

11:32, Split up with Rachel to finish rest of recon in neighborhood

Time	11:32
Description of Task	Split up with Rachel to finish rest of recon in neighborhood

11:39, Arrive at SAMH 1116. ROW In front of 34920 Beacon. Grass over grown. No vapor barrier needed

Time	11:39
Description of Task	Arrive at SAMH 1116. ROW In front of 34920 Beacon. Grass over grown. No vapor barrier needed

11:46, Arrive at SAMH 1123. ROW in front of 34682 beacon. No vapor barrier needed

Time	11:46
Description of Task	Arrive at SAMH 1123. ROW in front of 34682 beacon. No vapor barrier needed

11:51, Arrive at STMH 1210. Needs vapor barrier

Time	11:51
Description of Task	Arrive at STMH 1210. Needs vapor barrier

12:00, Lunch break

Time	12:00
Description of Task	Lunch break

12:30, Inspect manholes bear Levan and Plymouth - see captions on photos

Time	12:30
Description of Task	Inspect manholes bear Levan and Plymouth - see captions on photos

13:24, Inspect manholes near intersection of Levan and Van Court. Southeast CB has piping from north, east and west. Northwest CB runs west/East. North CB has piping from north and then is too deep to see rest of piping

Time	13:24
Description of Task	Inspect manholes near intersection of Levan and Van Court. Southeast CB has piping from north, east and west. Northwest CB runs west/East. North CB has piping from north and then is too deep to see rest of piping

13:30, Communicate with Kris our findings at Levan and Van court

Time	13:30
Description of Task	Communicate with Kris our findings at Levan and Van court

13:37, Offsite

Time	13:37
Description of Task	Offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos

Intersection of Levan and Plymouth

Intersection of Levan and Plymouth

Intersection of Levan and Plymouth

SAMH 1228

SL-2

SAMH 1231

SAMH 1181

SAMH 1181

North storm drain on Rosati

South storm drain on Rosati

STMH 1001

CB 1002

Sanitary off of Plymouth and Belden

Sanitary in front of Instrumental Distribution

Storm adjacent to CB 1040 - (STMH 1041)

CB 1040

CB 1039

SAMH 1043 - in front of KONE

STMH 1066

SAMH 1067

SAMH 1082

STMH 1088

SAMH 1122

SAMH 1116

SAMH 1123

STMH 1210

Storm man hole north of Plymouth along Levan

Storm man hole north of Plymouth along Levan

Catch basin in Levan Wine Shoppe parking lot. Pipes running north and south. Catch basin of this one runs only south

Catch basin in Plymouth and Levan intersection. Runs west into storm manholes

STMH 1219

SAMH 1113

SAMH 1096

Signature

Signed 2020-06-02 20:38:43 UTC

2020-06-08, Julia McClafferty, Utility Corridor

Created	2020-06-08 14:04:35 UTC by Julia McClafferty
Updated	2020-09-16 13:46:55 UTC by Julia McClafferty
Location	42.3739275244, -83.3919535485

Basic Information

Project Name	Ford
Task	Utility Corridor
Project Number	30050315
Location	Livonia, MI
Date	2020-06-08
Completed By	Julia McClafferty
Additional Personnel	Rachel Bielak
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	64.04 degrees F and Partly Cloudy
PPE	Level D
Are you using equipment?	Yes

IP

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	IP
Model	100 ft
Pine/Geotech Number	1348
Calibrated?	No

Daily Log of Activities

09:35, Arrive onsite

Time	09:35
Description of Task	Arrive onsite

09:50, Call with Adam

Time	09:50
Description of Task	Call with Adam

10:10, H&S tailgate

Time	10:10
Description of Task	H&S tailgate

10:18, Arrive at SL-2; DTW: 15.5 ft; vapor barrier placed at 10:35 AM; left cone on top of manhole; observed flow in manhole

Time	10:18
Description of Task	Arrive at SL-2; DTW: 15.5 ft; vapor barrier placed at 10:35 AM; left cone on top of manhole; observed flow in manhole

10:57, Arrive at STMH 1088; observed minimal flow from north, pipes located north, south, east and west; not enough water to set WLM off - DTB: 7.95; vapor barrier placed at 11:15 AM; placed cone on top of manhole

Time	10:57
Description of Task	Arrive at STMH 1088; observed minimal flow from north, pipes located north, south, east and west; not enough water to set WLM off - DTB: 7.95; vapor barrier placed at 11:15 AM; placed cone on top of manhole

11:24, Arrive at STMH 1066; pipping from north, south and east; water is stagnant; DTW: 9.22 ft, orange rust-like particulates on WLM; vapor barrier placed at 11:30 AM; placed cone on top of manhole

Time	11:24
Description of Task	Arrive at STMH 1066; pipping from north, south and east; water is stagnant; DTW: 9.22 ft, orange rust-like particulates on WLM; vapor barrier placed at 11:30 AM; placed cone on top of manhole

11:37, Arrive at STMH 1041; observed flow from west; piping from north, south, west, and northeast; not enough water to set WLM off, DTB: 9.8 ft; vapor barrier placed 11:48 AM; placed cone on top of manhole

Time	11:37
Description of Task	Arrive at STMH 1041; observed flow from west; piping from north, south, west, and northeast; not enough water to set WLM off, DTB: 9.8 ft; vapor barrier placed 11:48 AM; placed cone on top of manhole

11:52, Arrive at STMH 1001 to verify north/south flow. Confirmed flow runs north/south.

Time	11:52
Description of Task	Arrive at STMH 1001 to verify north/south flow. Confirmed flow runs north/south.

12:04, Arrive at STMH 1171; flow from west to east; DTW: 15.55 ft; vapor barrier placed at 12:13 PM; placed cone on top of manhole

Time	12:04
Description of Task	Arrive at STMH 1171; flow from west to east; DTW: 15.55 ft; vapor barrier placed at 12:13 PM; placed cone on top of manhole

12:20, Offsite to office to gather sampling materials for tomorrow

Time	12:20
Description of Task	Offsite to office to gather sampling materials for tomorrow

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos

SL-2 vapor barrier

Vapor barrier on STMH 1088

Sheen on top of stagnant water in STMH 1066

Vapor barrier on STMH 1066

Vapor barrier on STMH 1041

Vapor barrier on STMH 1171

Signature

Signed 2020-06-08 18:06:46 UTC

2020-06-09, Julia McClafferty, Utility Corridor flow meter installation/sampling

Created	2020-06-09 10:36:58 UTC by Julia McClafferty
Updated	2020-09-16 17:05:51 UTC by Julia McClafferty
Location	42.3727422813348, -83.3916696534337

Basic Information

Project Name	Ford
Task	Utility Corridor flow meter installation/sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-06-09
Completed By	Julia McClafferty
Additional Personnel	Rachel Bielak; ADS crew
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	60.08 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

IP

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	IP
Model	100 ft
Pine/Geotech Number	1348
Calibrated?	No

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000
Pine/Geotech Number	3639
Calibrated?	Yes
Calibration standard information	49.8/50 CH4; 33.7/35 CO2; 20.3/20.9 O2

Calibration Documents

geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-6386

Gem 2000+ Calibration Certificate

Unit Number: 3639 Factory Calibration Date: 5/24/2018 Field Calibration Date: 8/5/2020 11:12 AM
Serial Number: GM13973 Technician: Chris Mills

- ✔ Cleaned Unit and Case
- ✔ Visually inspect for damage and missing parts
- ✔ Manual is in case.

Battery charge 100 % Pass
Pump flow 750 ml/min Pass

Zero

Gas Zeroed	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass

Span

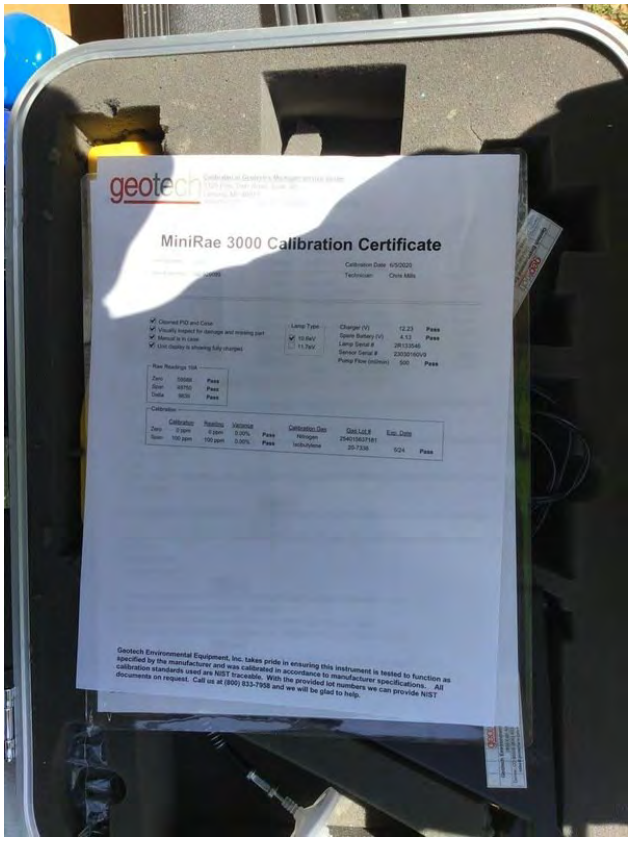
Gas Spaned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	6396
Calibrated?	Yes
Calibration standard information	10/10 ppm isobutylene

Calibration Documents



Peripump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peripump
Model	Geopump
Pine/Geotech Number	5850
Calibrated?	No

Daily Log of Activities

06:30, Arcadis onsite

Time	06:30
Description of Task	Arcadis onsite

07:05, ADS onsite

Time	07:05
Description of Task	ADS onsite

07:10, H&S tailgate

Time	07:10
Description of Task	H&S tailgate

07:23, Arrive at STMH 1001

Time	07:23
Description of Task	Arrive at STMH 1001

07:39, ADS enters manhole

Time	07:39
Description of Task	ADS enters manhole

08:00, Begin to install flow meter in north 42” inlet

Time	08:00
Description of Task	Begin to install flow meter in north 42” inlet

08:14, Measure from bottom of invert to rim of manhole = 15.9’. DTW: 15.75’

Time	08:14
Description of Task	Measure from bottom of invert to rim of manhole = 15.9’. DTW: 15.75’

08:17, ADS exits manhole

Time	08:17
Description of Task	ADS exits manhole

08:46, Vapor barrier placed on STMH 1001

Time	08:46
Description of Task	Vapor barrier placed on STMH 1001

08:58, Arrive at STMH 1210

Time	08:58
Description of Task	Arrive at STMH 1210

09:06, ADS enters manhole

Time	09:06
Description of Task	ADS enters manhole

09:07, Begin to install flow meter in 8” inlet

Time	09:07
Description of Task	Begin to install flow meter in 8” inlet

09:23, Measure from bottom of invert to top of manhole rim = 9.1’. DTW: 9.5’

Time	09:23
Description of Task	Measure from bottom of invert to top of manhole rim = 9.1’. DTW: 9.5’

09:30, ADS exits manhole

Time	09:30
Description of Task	ADS exits manhole

09:53, Vapor barrier placed on STMH 1210

Time	09:53
Description of Task	Vapor barrier placed on STMH 1210

10:05, ADS offsite to fuel up

Time	10:05
Description of Task	ADS offsite to fuel up

10:18, Arrive at STMH 1219

Time	10:18
Description of Task	Arrive at STMH 1219

10:34, ADS enters manhole

Time	10:34
Description of Task	ADS enters manhole

10:40, North inlet is connected to PVC piping located north of manhole and doesn't seem to be connected to storm water line.

Time	10:40
Description of Task	North inlet is connected to PVC piping located north of manhole and doesn't seem to be connected to storm water line.

10:50, Communicate with Adam about findings

Time	10:50
Description of Task	Communicate with Adam about findings

11:11, Offsite to start on SAMH 1096 while we wait for an answer from the team about STMH 1219

Time	11:11
Description of Task	Offsite to start on SAMH 1096 while we wait for an answer from the team about STMH 1219

11:14, Arrive at SAMH 1096

Time	11:14
Description of Task	Arrive at SAMH 1096

11:23, ADS enters manhole

Time	11:23
Description of Task	ADS enters manhole

11:29, Measure from bottom of invert to top of manhole = 11.7'. DTW: 11.5'

Time	11:29
Description of Task	Measure from bottom of invert to top of manhole = 11.7'. DTW: 11.5'

12:40, ADS exits manhole

Time	12:40
Description of Task	ADS exits manhole

12:10, Complete work at SAMH 1096; ADS offsite

Time	12:10
Description of Task	Complete work at SAMH 1096; ADS offsite

12:18, Locate sanitary manhole in front of 34367 Capitol

Time	12:18
Description of Task	Locate sanitary manhole in front of 34367 Capitol

13:15, Arrive at WDC; DTW: 17.97; CH4: 0.00, PID: 0.0; Can # 1L3818, filter # 1938; initial vacuum digital: -29.8, initial vacuum analog (sampling): -15, final vacuum analog (sampling): -5, final vacuum digital -5.7; sample time 13:57; locked WDC before leaving

Time	13:15
Description of Task	Arrive at WDC; DTW: 17.97; CH4: 0.00, PID: 0.0; Can # 1L3818, filter # 1938; initial vacuum digital: -29.8, initial vacuum analog (sampling): -15, final vacuum analog (sampling): -5, final vacuum digital -5.7; sample time 13:57; locked WDC before leaving

14:26, Arrive at SAMH 1231; DTW: 15.49; CH4: 0.00, PID: 0.0; Can #1L3840, filter #1910; initial vacuum -29.1, initial vacuum analog (sampling) -16, final vacuum analog (sampling) -7, final vacuum digital -6.0; sample time: 14:44

Time	14:26
Description of Task	Arrive at SAMH 1231; DTW: 15.49; CH4: 0.00, PID: 0.0; Can #1L3840, filter #1910; initial vacuum -29.1, initial vacuum analog (sampling) -16, final vacuum analog (sampling) -7, final vacuum digital -6.0; sample time: 14:44

15:00, Arrive at EDC; DTW: 16.5; can # 1L3938; filter # 2005; CH4: 0.0, PID: 0.0; initial vacuum digital: -29.2, initial vacuum analog: -29; initial vacuum analog (sampling): -17; final vacuum analog (sampling): -7, final vacuum digital: -6.8, sample time 15:32; locked EDC before leaving

Time	15:00
Description of Task	Arrive at EDC; DTW: 16.5; can # 1L3938; filter # 2005; CH4: 0.0, PID: 0.0; initial vacuum digital: -29.2, initial vacuum analog: -29; initial vacuum analog (sampling): -17; final vacuum analog (sampling): -7, final vacuum digital: -6.8, sample time 15:32; locked EDC before leaving

15:39, Arrive SL-2; DTW: 15.38; can #1L3391, filter # 1938; CH4: 0.0, PID: 0.0, initial vacuum digital: -29.2, initial vacuum analog: -30, initial vacuum analog (sampling): -17, final vacuum analog (sampling): -8, final vacuum digital: -7.6; sample time: 15:58

Time	15:39
Description of Task	Arrive SL-2; DTW: 15.38; can #1L3391, filter # 1938; CH4: 0.0, PID: 0.0, initial vacuum digital: -29.2, initial vacuum analog: -30, initial vacuum analog (sampling): -17, final vacuum analog (sampling): -8, final vacuum digital: -7.6; sample time: 15:58

16:12, Arrive at STMH 1088; DTW/DTB: 7.92; CH4: 0.0, PID: 0.0; can# 1L3930, filter #1938, initial vacuum digital: -29.2; initial vacuum analog: -30, initial vacuum analog (sampling): -17, final vacuum analog (sampling): -8, final vacuum digital: -7.3, sample time: 16:37

Time	16:12
Description of Task	Arrive at STMH 1088; DTW/DTB: 7.92; CH4: 0.0, PID: 0.0; can# 1L3930, filter #1938, initial vacuum digital: -29.2; initial vacuum analog: -30, initial vacuum analog (sampling): -17, final vacuum analog (sampling): -8, final vacuum digital: -7.3, sample time: 16:37

16:50, STMH-1088 water sample taken at 16:50

Time	16:50
Description of Task	STMH-1088 water sample taken at 16:50

17:02, Unable to collect any sediment sample at STMH-1088. Concrete bottom

Time	17:02
Description of Task	Unable to collect any sediment sample at STMH-1088. Concrete bottom

17:19, Arrive at STMH-1066; DTW: 9.22; CH4: 0.1, PID: 0.0; can # 1L3397, filter # 2005, initial vacuum digital -29.1, initial vacuum analog -29, initial vacuum analog (sampling) -15, final vacuum analog (sampling) -7, final vacuum digital -8.3, sample time: 17:37

Time	17:19

Description of Task	Arrive at STMH-1066; DTW: 9.22; CH4: 0.1, PID: 0.0; can # 1L3397, filter # 2005, initial vacuum digital -29.1, initial vacuum analog -29, initial vacuum analog (sampling) -15, final vacuum analog (sampling) -7, final vacuum digital -8.3, sample time: 17:37

17:47, STMH-1066 water sample taken at 17:47. Visible sheen on stagnant water

Time	17:47
Description of Task	STMH-1066 water sample taken at 17:47. Visible sheen on stagnant water

17:53, Unable to collect sediment at STMH-1066. Concrete bottom

Time	17:53
Description of Task	Unable to collect sediment at STMH-1066. Concrete bottom

17:58, Arrive at STMH-1041; DTW/DTB: 9.7; CH4: 0.1, PID: 0.0, can #1L3923, filter #1831; initial vacuum digital -29, initial vacuum analog: >-30, initial vacuum analog (sampling): -23, final vacuum analog (sampling): -9.5, final vacuum digital: -7.6; sample time: 18:16

Time	17:58
Description of Task	Arrive at STMH-1041; DTW/DTB: 9.7; CH4: 0.1, PID: 0.0, can #1L3923, filter #1831; initial vacuum digital -29, initial vacuum analog: >-30, initial vacuum analog (sampling): -23, final vacuum analog (sampling): -9.5, final vacuum digital: -7.6; sample time: 18:16

18:26, STMH-1041 water sample collected at 18:26

Time	18:26
Description of Task	STMH-1041 water sample collected at 18:26

18:35, Unable to collect sediment sample. Concrete bottom - see photo

Time	18:35
Description of Task	Unable to collect sediment sample. Concrete bottom - see photo

06:45, Drop off equipment/supplies at trailer

Time	06:45
Description of Task	Drop off equipment/supplies at trailer

19:03, Offsite

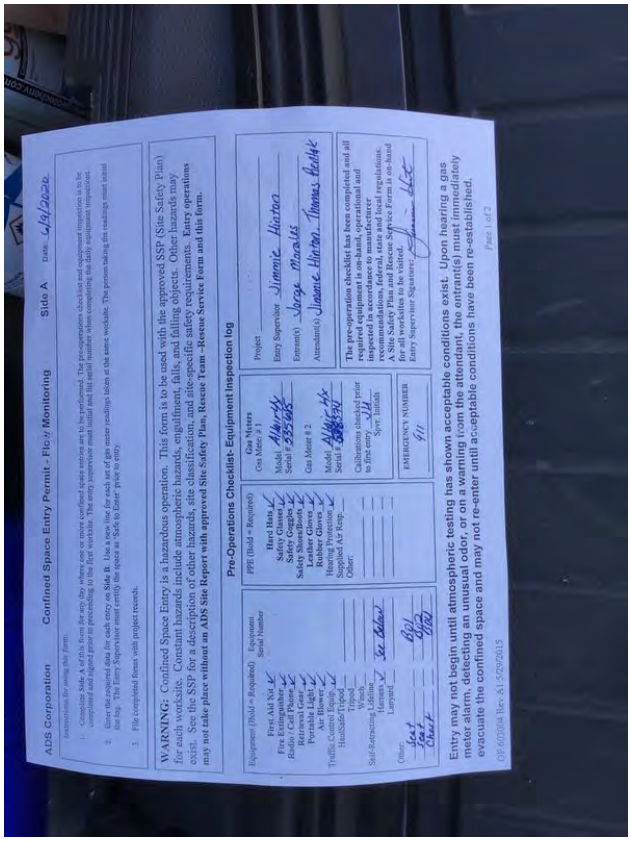
Time	19:03
Description of Task	Offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos



ADS Corporation Confined Space Entry Permit - Field Monitoring Side A Date: 6/9/2020

Instructions for using this form:

1. Complete Side A of this form for any day where one or more confined space entries are to be performed. The pre-operation checklist and equipment inspection is to be completed and signed-off on prior to proceeding to the first worksite. The entry supervisor must initial and sign in the box corresponding to the daily operations section.
2. Enter the required data for each entry on Side B. Use a new line for each set of gas meter readings taken at the same worksite. The person taking the readings must initial the log. The Entry Supervisor must certify the work at each location prior to entry.
3. File completed forms with project records.

WARNING: Confined Space Entry is a hazardous operation. This form is to be used with the approved SSP (Site Safety Plan) for each worksite. Constant hazards include atmospheric hazards, engulfment, falls, and falling objects. Other hazards may exist. See the SSP for a description of other hazards, site classification, and site-specific safety requirements. Entry operations may not take place without an ADS Site Report with approved Site Safety Plan, Rescue Team -Rescue Service Form and this form.

Pre-Operations Checklist- Equipment Inspection log

Equipment (Hold = Required) Equipment Serial Number

First Aid Kit ✓
Fire Extinguisher ✓
Radio / Cell Phone ✓
Retrieval Line ✓
Portable Light ✓
Air Blower ✓
Traffic Control Equip. ✓
Shoulder Closure ___
Tripod ___
Winch ___
Self-Retracting Lifeline ✓
Harness ✓
Lanyard ___
Other: Seat Chair

PPE (Hold = Required)

Hard Hats ✓
Safety Glasses ✓
Safety Goggles ✓
Safety Footwear ✓
Leather Gloves ✓
Rubber Gloves ✓
Hearing Protection ✓
Spotter(s) Req. ___
Other: ___

Gas Meters

Gas Meter # 1
Model: Altair 4X
Serial #: 355665

Gas Meter # 2
Model: Altair 4X
Serial #: 388390

Calibration checked prior to first entry: Yes ___ Spvr. Initials ___

EMERGENCY NUMBER
911

Project ___
Entry Supervisor: Jimmie Hinton
Entrant(s): Jorge Morales
Attendant(s): Jimmie Hinton, Thomas Beltyk

The pre-operation checklist has been completed and all required equipment is on-hand, operational and inspected as required. All applicable manufacturer recommendations, federal, state and local regulations. A Site Safety Plan and Rescue Service Form is on-hand for all worksites to be visited.
Entry Supervisor Signature: Jimmie Hinton

Entry may not begin until atmospheric testing has shown acceptable conditions exist. Upon hearing a gas meter alarm, detecting an unusual odor, or on a warning from the attendant, the entrant(s) must immediately evacuate the confined space and may not re-enter until acceptable conditions have been re-established.

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ADS confined space permit

STMH 1001

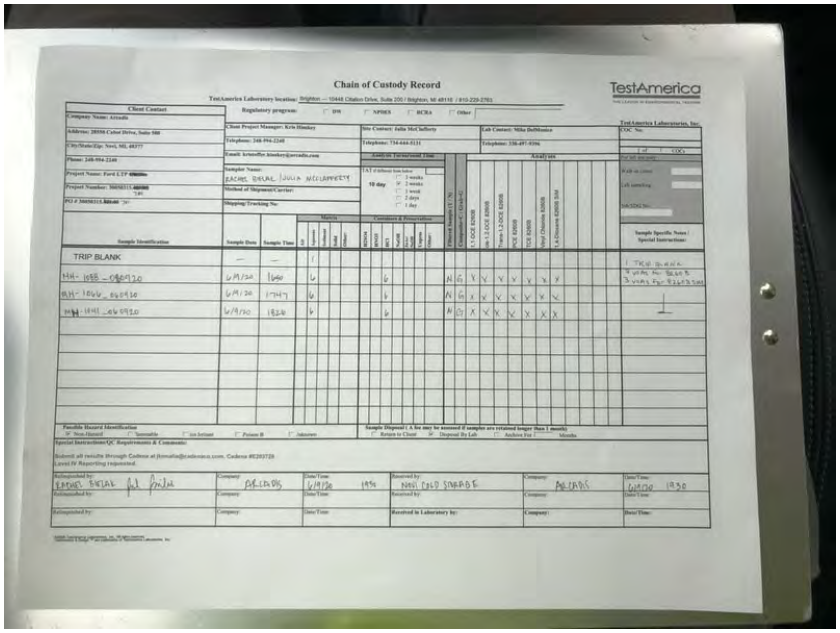
STMH 1210

STMH 1219 inlet piping to N 12”

Vapor barrier at SL-2 still intact (2 holes are from us poking holes to sample)

MH-1088 concrete bottom

STMH-1041



Signature

Signed 2020-06-09 14:48:05 UTC

2020-06-10, Julia McClafferty, Utility Corridor sampling

Created	2020-06-10 13:33:38 UTC by Julia McClafferty
Updated	2020-09-08 12:45:38 UTC by Julia McClafferty
Location	42.3729910056184, -83.3919121242742

Basic Information

Project Name	Ford
Task	Utility Corridor sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-06-10
Completed By	Julia McClafferty
Additional Personnel	Rachel Bielak
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	80.96 degrees F and Mostly Cloudy
PPE	Level D
Are you using equipment?	Yes

Peripump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peripump
Model	Geopump
Pine/Geotech Number	5850
Calibrated?	No

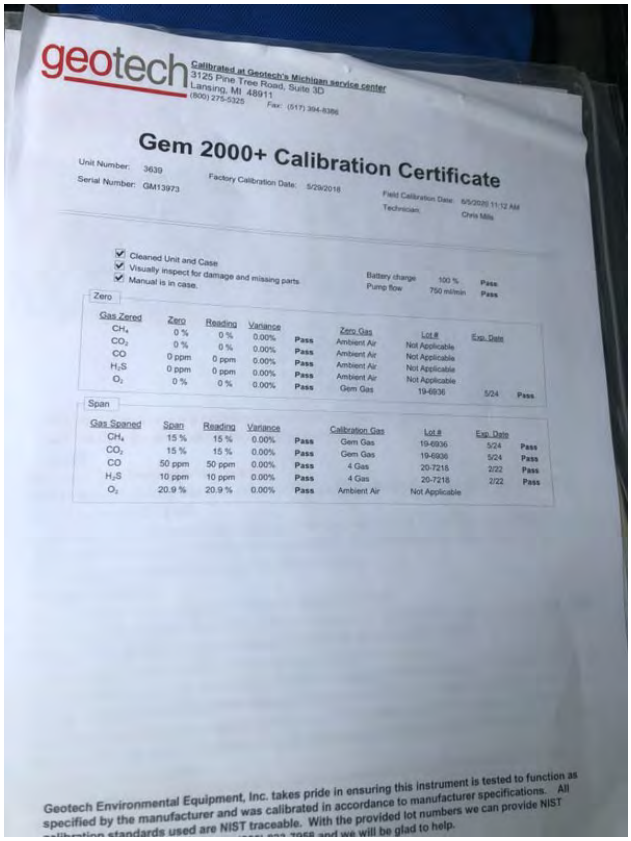
IP

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	IP
Model	10 ft
Pine/Geotech Number	1348
Calibrated?	No

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000
Pine/Geotech Number	3639
Calibrated?	Yes
Calibration standard information	34.5/35 CO2, 50.6/50 CH4, 20.8/20.9 O2

Calibration Documents



geotech

Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 3639
Serial Number: GM13973
Factory Calibration Date: 5/29/2018
Field Calibration Date: 6/5/2020 11:12 AM
Technician: Chris Mills

- [x] Cleaned Unit and Case
- [x] Visually inspect for damage and missing parts
- [x] Manual is in case.

Battery charge 100 % Pass
Pump flow 750 ml/min Pass

Zero

Gas Zered	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass

Span

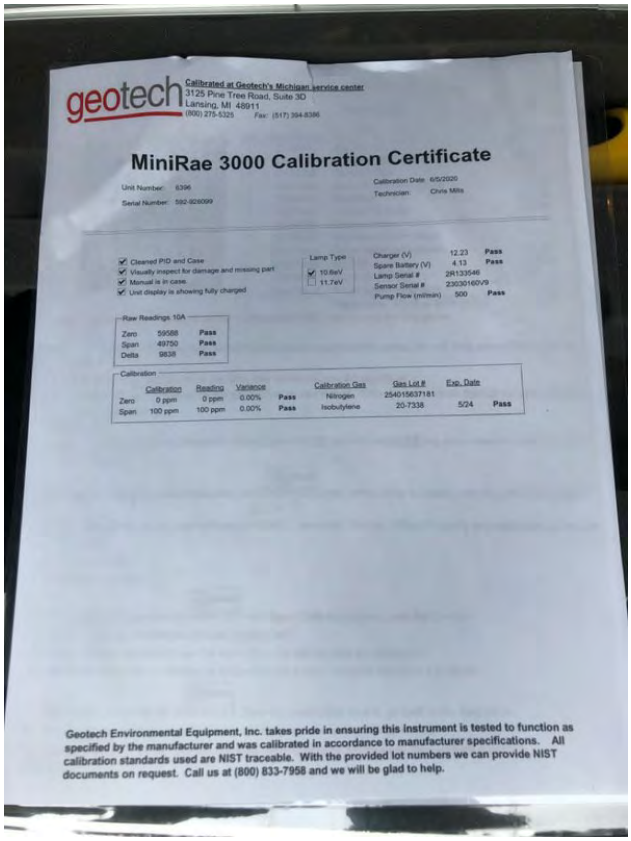
Gas Spaned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	20-7215	2/22	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	6396
Calibrated?	Yes
Calibration standard information	10/10 ppm isobutylene

Calibration Documents



Daily Log of Activities

09:25, Arrive on-site

Time	09:25
Description of Task	Arrive on-site

09:30, H&S tailgate

Time	09:30
Description of Task	H&S tailgate

09:40, Calibrate equipment

Time	09:40
Description of Task	Calibrate equipment

09:53, Arrive at SAMH 1122, DTW/DTB: 8.3; can # 1L2625, filter # 1946; CH4: 0.1, PID: 0.0, initial vacuum digital -29.2, initial vacuum analog -26.5, initial vacuum analog (sampling) -14, final vacuum digital -5.8, final vacuum analog (sampling) -4.5, sample time: 10:12

Time	09:53
Description of Task	Arrive at SAMH 1122, DTW/DTB: 8.3; can # 1L2625, filter # 1946; CH4: 0.1, PID: 0.0, initial vacuum digital -29.2, initial vacuum analog -26.5, initial vacuum analog (sampling) -14, final vacuum digital -5.8, final vacuum analog (sampling) -4.5, sample time: 10:12

10:19, Unable to collect water or sediment sample at SAMH 1122. Dry.

Time	10:19
Description of Task	Unable to collect water or sediment sample at SAMH 1122. Dry.

10:26, Arrive at STMH 1171; DTW: 15.58; CH4: 0.1, PID: 0.0; can #1L3937, filter #1922; initial vacuum digital -29.1, initial vacuum analog -29, initial vacuum (sampling) -21.5, final vacuum analog (sampling) -7, final vacuum digital -7.2 , sample time 10:49

Time	10:26
Description of Task	Arrive at STMH 1171; DTW: 15.58; CH4: 0.1, PID: 0.0; can #1L3937, filter #1922; initial vacuum digital -29.1, initial vacuum analog -29, initial vacuum (sampling) -21.5, final vacuum analog (sampling) -7, final vacuum digital -7.2 , sample time 10:49

10:57, STMH 1171 water sample collected at 10:57

Time	10:57
Description of Task	STMH 1171 water sample collected at 10:57

11:07, Unable to collect any sediment after multiple tries. Sampling cup is only collecting water. Bottom was not soft. Communicated with Adam

Time	11:07
Description of Task	Unable to collect any sediment after multiple tries. Sampling cup is only collecting water. Bottom was not soft. Communicated with Adam

11:30, Arrive at STMH 1001; DTW: 15.65; can #1L3925, filter #1845; CH4: 0.1, PID: 0.0; initial vacuum digital -29.2, initial vacuum analog >-30, initial vacuum analog (sampling) -18.5, final vacuum analog (sampling) -8, final vacuum digital -8.4, sample time: 11:41

Time	11:30
Description of Task	Arrive at STMH 1001; DTW: 15.65; can #1L3925, filter #1845; CH4: 0.1, PID: 0.0; initial vacuum digital -29.2, initial vacuum analog >-30, initial vacuum analog (sampling) -18.5, final vacuum analog (sampling) -8, final vacuum digital -8.4, sample time: 11:41

12:00, STMH 1001 water sample collected at 12:00

Time	12:00
Description of Task	STMH 1001 water sample collected at 12:00

12:06, Unable to collect sediment sample. Concrete bottom. ADS confirmed yesterday there was no sediment observed in manhole

Time	12:06
Description of Task	Unable to collect sediment sample. Concrete bottom. ADS confirmed yesterday there was no sediment observed in manhole

12:21, Arrive at STMH 1210, DTW: 9.08, CH4: 0.1, PID: 0.0; can #1L2919, filter #1734, initial vacuum digital -29.1, initial vacuum analog -29, initial vacuum analog (sampling) -14.5, final vacuum analog (sampling) -7, final vacuum digital -7.8; sampling time: 12:31 DUP: can #1L1841, filter #1913, initial vacuum digital -29.2, initial vacuum analog -25.5, initial vacuum analog (sampling) -14, final vacuum analog (sampling) -4, final vacuum digital -4.6

Time	12:21
Description of Task	Arrive at STMH 1210, DTW: 9.08, CH4: 0.1, PID: 0.0; can #1L2919, filter #1734, initial vacuum digital -29.1, initial vacuum analog -29, initial vacuum analog (sampling) -14.5, final vacuum analog (sampling) -7, final vacuum digital -7.8; sampling time: 12:31 DUP: can #1L1841, filter #1913, initial vacuum digital -29.2, initial vacuum analog -25.5, initial vacuum analog (sampling) -14, final vacuum analog (sampling) -4, final vacuum digital -4.6

12:52, STMH 1210 sample collected at 12:52

Time	12:52
Description of Task	STMH 1210 sample collected at 12:52

13:05, Unable to collect sediment sample at STMH 1210. Concrete bottom

Time	13:05
Description of Task	Unable to collect sediment sample at STMH 1210. Concrete bottom

01:20, Communicate with adam about storm coming into Livonia. Head to trailer to drop off equipment and supplies

Time	01:20
Description of Task	Communicate with adam about storm coming into Livonia. Head to trailer to drop off equipment and supplies

13:46, Offsite

Time	13:46
Description of Task	Offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

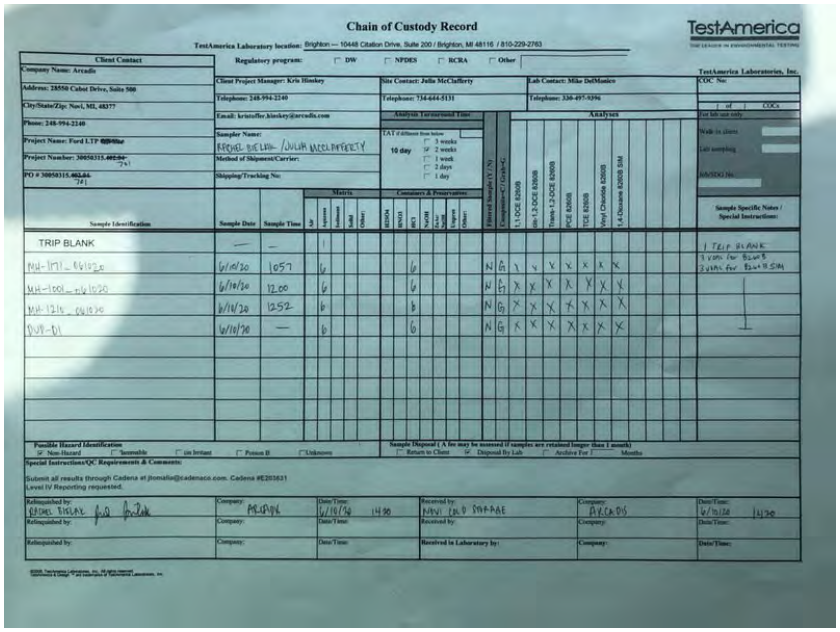
Other Photos

SAMH 1122

STMH 1001

STMH 1210

STMH 1171



Chain of Custody Record

TestAmerica

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Client Contact	Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other			TestAmerica Laboratories, Inc.
Company Name: Arcadis	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	1 of 1 COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: RACHEL BIELAK / JULIA MCCLAFFERTY	TAT if different from below ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10 day		Walk-in client: Lab sampling: Job/SDG No.
Project Name: Ford LTP ~~GP-Nine~~	Method of Shipment/Carrier:			
Project Number: 30050315.~~402.04~~ 741	Shipping/Tracking No:			

Sample Identification	Sample Date	Sample Time	Matrix: Air / Aqueous / Sediment / Solid / Other	Containers & Preservation: 8260A / 8015D / HCl / NaOH / Zn Acet / NaHSO4 / Other	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	1,4-Dioxane 8260B SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK	—	—	1											1 TRIP BLANK: 3 VOAs for 8260B 2 VOAs for 8260B SIM
MH-1171_061020	6/10/20	1057	6	6	N	G	Y	X	X	X	X	X	X	
MH-1001_061020	6/10/20	12.00	6	6	N	G	X	X	X	X	X	X	X	
MH-1216_061020	6/10/20	1252	6	6	N	G	X	X	X	X	X	X	X	
DUP-01	6/10/20	—	6	6	N	G	X	X	X	X	X	X	X	

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203631

Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
RACHEL BIELAK	ARCADIS	6/10/20 1430	NAVI KALD SHARAE	ARCADIS	6/10/20 1430
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Signature

Signed 2020-06-10 21:44:50 UTC

2020-06-15, Emma Witherspoon, Utility Corridor

Created	2020-06-15 11:09:46 UTC by Emma Witherspoon
Updated	2020-09-17 17:06:50 UTC by Julia McClafferty
Location	42.3729049504785, -83.3918925659024

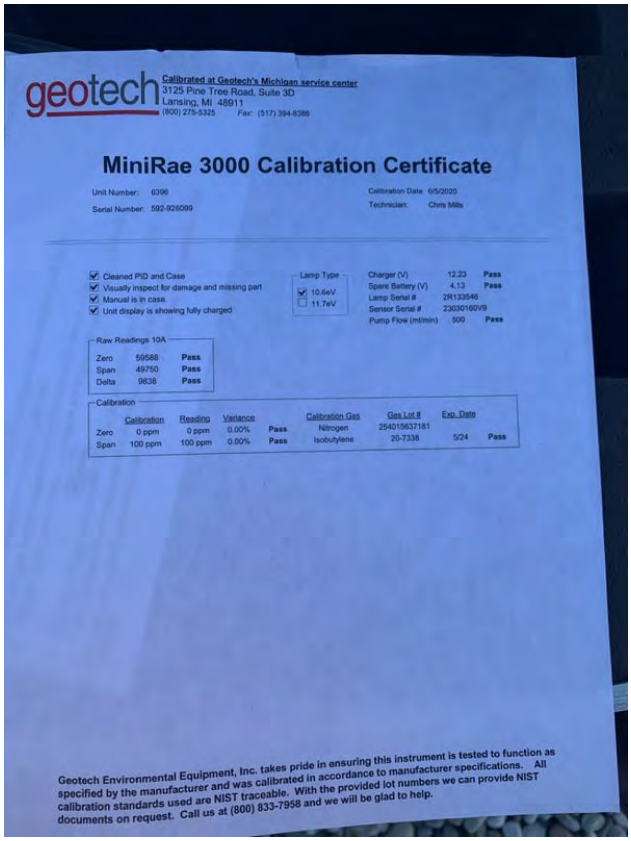
Basic Information

Project Name	Ford LTP
Task	Utility Corridor
Location	Livonia, MI
Date	2020-06-15
Completed By	Emma Witherspoon
Additional Personnel	Rachel Bielak Xenia Chan
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	50.00 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	Yes

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	3000
Pine/Geotech Number	6396
Calibrated?	Yes
Calibration standard information	10 ppm isobutylene expiration date: 5/30/2021 Lot number 18-6278 10.2/10

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 6396
Serial Number: 592-926099
Calibration Date 6/5/2020
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.23	Pass
Spare Battery (V)	4.13	Pass
Lamp Serial #	2R133546	
Sensor Serial #	23030160V9	
Pump Flow (ml/min)	500	Pass

Raw Readings 10A

Zero	59588	Pass
Span	49750	Pass
Delta	9838	Pass

Calibration

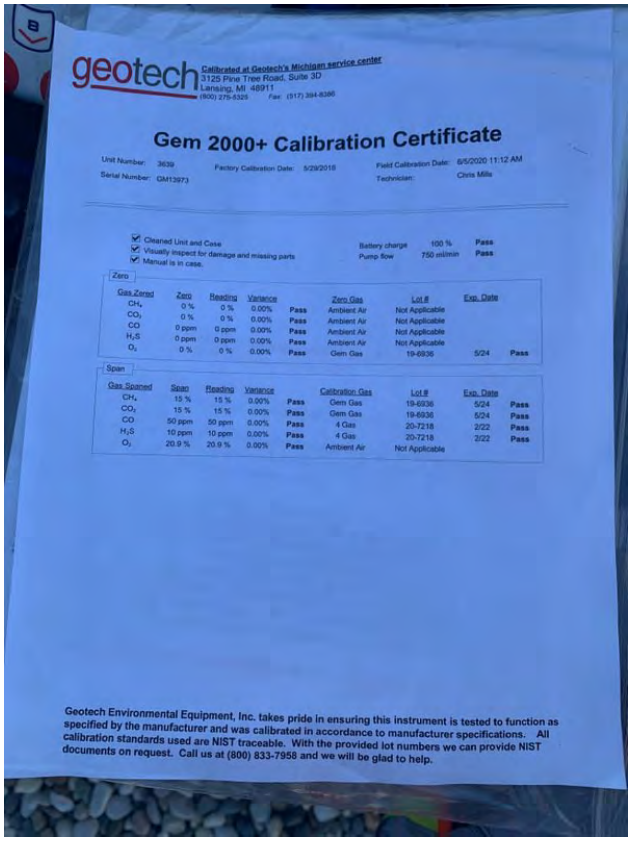
	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254015637181		
Span	100 ppm	100 ppm	0.00%	Pass	Isobutylene	20-7338	5/24	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000+
Pine/Geotech Number	3639
Calibrated?	Yes
Calibration standard information	Lot number: 605285 Expiration date: 2/2020 48.2/50 34.0/35.0

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 3639
Serial Number: GM13973
Factory Calibration Date: 5/29/2018
Field Calibration Date: 6/5/2020 11:12 AM
Technician: Chris Mills

- [x] Cleaned Unit and Case
- [x] Visually inspect for damage and missing parts
- [x] Manual is in case.

Battery charge 100 % Pass
Pump flow 750 ml/min Pass

Zero

Gas Zeroed	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass

Span

Gas Spanned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

Daily Log of Activities

07:00, Health and safety tailgate and equipment calibrations

Time	07:00
Description of Task	Health and safety tailgate and equipment calibrations

07:40, Arcadis Onsite SAMH 1116 Rachel Bielak Xenia Chan Emma Witherspoon

Time	07:40
Description of Task	Arcadis Onsite SAMH 1116 Rachel Bielak Xenia Chan Emma Witherspoon

07:55, SAMH 1116 PID: 0ppm depth to water: 10.25 ft Initial Digital gauge Pressure: -28.2 Can #: 1L1517 Gauge #: 1913 Initial analog gauge Pressure: -30 Methane: 0.00% Sample start time: 8:05 Initial open analog pressure: -13.5 Final analog gauge pressure: -5 Final Digital gauge pressure: -5.5

Time	07:55

Description of Task	SAMH 1116 PID: 0ppm depth to water: 10.25 ft Initial Digital gauge Pressure: -28.2 Can #: 1L1517 Gauge #: 1913 Initial analog gauge Pressure: -30 Methane: 0.00% Sample start time: 8:05 Initial open analog pressure: -13.5 Final analog gauge pressure: -5 Final Digital gauge pressure: -5.5

08:16, SAMH 1113 Depth to water: 12.27 ft Initial Digital Gauge Pressure: -27.4 Initial Analog gauge Pressure: -28.5 Canister #: 1L1868 Gauge number: 1922 Sample Start time: 8:29 Initial open Analog gauge Pressure -15 Final Analog gauge Pressure: -8 Final Digital Gauge Pressure: -9.9 GEM Methane: 0% PID: 0ppm

Time	08:16
Description of Task	SAMH 1113 Depth to water: 12.27 ft Initial Digital Gauge Pressure: -27.4 Initial Analog gauge Pressure: -28.5 Canister #: 1L1868 Gauge number: 1922 Sample Start time: 8:29 Initial open Analog gauge Pressure -15 Final Analog gauge Pressure: -8 Final Digital Gauge Pressure: -9.9 GEM Methane: 0% PID: 0ppm

08:38, SAMH 1123 Depth to Bottom: 8.2 ft Canister #: 1L3948 Gauge #: N/A PID: 0.0 ppm GEM- Methane: 0.00 % Start Sample Time: 8:52 Initial Analog Gauge Pressure: -27.5 Initial Digital Gauge Pressure: -28.9 Initial Open Analog Gauge Pressure: -15.0 Final Analog Gauge Pressure: -7.0 Final Digital Gauge Pressure: -9.6

Time	08:38
Description of Task	SAMH 1123 Depth to Bottom: 8.2 ft Canister #: 1L3948 Gauge #: N/A PID: 0.0 ppm GEM- Methane: 0.00 % Start Sample Time: 8:52 Initial Analog Gauge Pressure: -27.5 Initial Digital Gauge Pressure: -28.9 Initial Open Analog Gauge Pressure: -15.0 Final Analog Gauge Pressure: -7.0 Final Digital Gauge Pressure: -9.6

09:10, Arcadis Off-site Emma Witherspoon Xenia Chan Rachel Bielak

Time	09:10
Description of Task	Arcadis Off-site Emma Witherspoon Xenia Chan Rachel Bielak

09:22, Arcadis On-site Emma Witherspoon, Rachel Bielak inspection of STMH 1219

Time	09:22
Description of Task	Arcadis On-site Emma Witherspoon, Rachel Bielak inspection of STMH 1219

10:08, SAMH 1181 Depth to Bottom: 8.52 ft Canister #:1738 Analog Gauge #:1946 Initial digital gauge pressure:-29.3 Initial analog gauge pressure: -26 Sample start time:10:18 Initial open analog gauge pressure: -10.5 Final analog gauge pressure:-4 Final digital gauge pressure:-6.3 PID: 0ppm GEM- methane: 0.0%

Time	10:08
Description of Task	SAMH 1181 Depth to Bottom: 8.52 ft Canister #:1738 Analog Gauge #:1946 Initial digital gauge pressure:-29.3 Initial analog gauge pressure: -26 Sample start time:10:18 Initial open analog gauge pressure: -10.5 Final analog gauge pressure:-4 Final digital gauge pressure:-6.3 PID: 0ppm GEM- methane: 0.0%

10:30, Collect water sample at SAMH 1181

Time	10:30
Description of Task	Collect water sample at SAMH 1181

10:40, No sediment sample could be collected at SAMH 1181

Time	10:40
Description of Task	No sediment sample could be collected at SAMH 1181

11:08, Inspection of MH East of Stark on Capitol

Time	11:08
Description of Task	Inspection of MH East of Stark on Capitol

11:22, SAMH 1096 Depth to bottom: 10.85 ft Canister #: 1L2642 Gauge #: N/A Initial digital gauge pressure: -29.7 Initial analog gauge pressure: -29.5 Sample start time: 11:30 Initial open analog gauge pressure: -16 Final analog gauge pressure: -7 Final digital gauge pressure: -9.2 PID: 0.0ppm GEM - Methane: 0.0%

Time	11:22
Description of Task	SAMH 1096 Depth to bottom: 10.85 ft Canister #: 1L2642 Gauge #: N/A Initial digital gauge pressure: -29.7 Initial analog gauge pressure: -29.5 Sample start time: 11:30 Initial open analog gauge pressure: -16 Final analog gauge pressure: -7 Final digital gauge pressure: -9.2 PID: 0.0ppm GEM - Methane: 0.0%

11:42, Collect water sample at SAMH 1096

Time	11:42
Description of Task	Collect water sample at SAMH 1096

11:52, No sediment sample could be collected at SAMH 1096

Time	11:52
Description of Task	No sediment sample could be collected at SAMH 1096

12:00, SAMH 1082 Depth to bottom: 7.75 Canister #: 1L2845 Gauge #: 1912 Initial digital gauge pressure: -29.1 Initial analog gauge pressure: -28.5 Sample start time: 12:09 Initial open analog gauge pressure:-20 Final digital gauge pressure: -6.2 Final analog gauge pressure: -6 PID: 0ppm GEM-Methane: 0%

Time	12:00
Description of Task	SAMH 1082 Depth to bottom: 7.75 Canister #: 1L2845 Gauge #: 1912 Initial digital gauge pressure: -29.1 Initial analog gauge pressure: -28.5 Sample start time: 12:09 Initial open analog gauge pressure:-20 Final digital gauge pressure: -6.2 Final analog gauge pressure: -6 PID: 0ppm GEM- Methane: 0%

12:20, Collect water sample at SAMH 1082

Time	12:20
Description of Task	Collect water sample at SAMH 1082

12:31, No sediment sample could be collected at SAMH 1082

Time	12:31
Description of Task	No sediment sample could be collected at SAMH 1082

12:36, Arcadis off-site

Time	12:36
Description of Task	Arcadis off-site

13:00, Arcadis and ADS onsite STMH 1219

Time	13:00
Description of Task	Arcadis and ADS onsite STMH 1219

13:04, ADS entered STMH 1219 3 12” pipes found Debris cleared from MH

Time	13:04
Description of Task	ADS entered STMH 1219 3 12” pipes found Debris cleared from MH

13:10, ADS exited STMH 1219 Vapor barrier placed

Time	13:10

Description of Task	ADS exited STMH 1219 Vapor barrier placed

13:26, ADS and Arcadis arrive at STMH 1171

Time	13:26
Description of Task	ADS and Arcadis arrive at STMH 1171

13:39, ADS entered STMH 1171 to install flow meter in the 24" West pipe Depth to water: 18.5 ft

Time	13:39
Description of Task	ADS entered STMH 1171 to install flow meter in the 24" West pipe Depth to water: 18.5 ft

14:25, ADS and Arcadis offsite

Time	14:25
Description of Task	ADS and Arcadis offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No
General waste comments	Small waste water contained in a 5 gallon bucket

Photos

Other Photos

SAMH 1116

SAMH 1113

SAMH 1123

SAMH 1181

SAMH 1096

SAMH 1082

Signature

Signed 2020-06-15 18:38:22 UTC

2020-06-16, Emma Witherspoon, Utility Corridor sampling

Created	2020-06-16 11:25:48 UTC by Emma Witherspoon
Updated	2020-09-17 17:06:03 UTC by Julia McClafferty
Location	42.3729622740521, -83.3913349047911

Basic Information

Project Name	Ford LTP
Task	Utility Corridor sampling
Location	Livonia, MI
Date	2020-06-16
Completed By	Emma Witherspoon
Additional Personnel	Rachel Bielak
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	57.92 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	Yes

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	3000
Pine/Geotech Number	6396
Calibrated?	Yes
Calibration standard information	10 ppm isobutylene expiration date: 5/30/2021 Lot number 18-6278 10.1/10

Calibration Documents

geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 6396
Serial Number: 592-826099
Calibration Date 6/5/2020
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.23	Pass
Spare Battery (V)	4.13	Pass
Lamp Serial #	29133546	
Sensor Serial #	23030160V9	
Pump Flow (ml/min)	500	Pass

Raw Readings 10A

Zero	59588	Pass
Span	49750	Pass
Delta	9838	Pass

Calibration

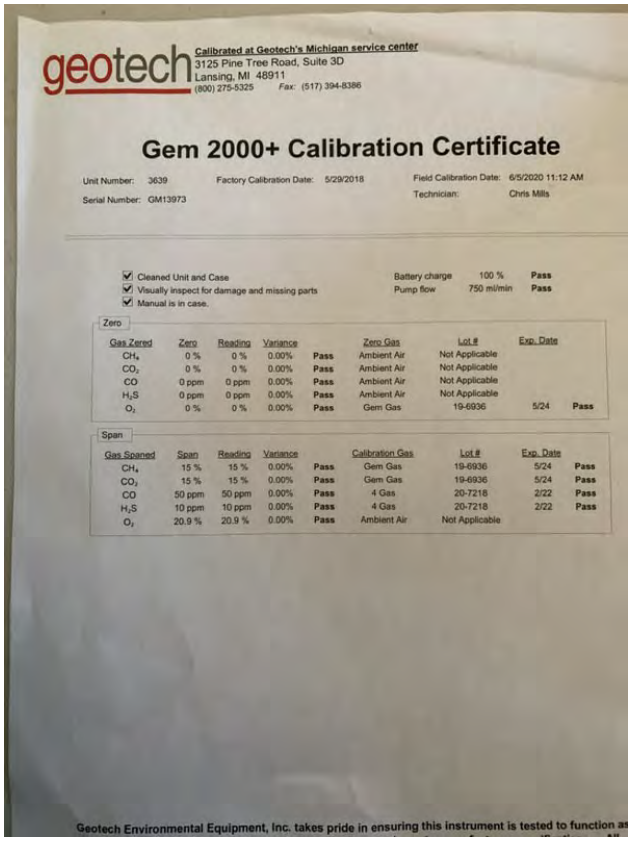
	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	2540156371B1		
Span	100 ppm	100 ppm	0.00%	Pass	Isobutylene	20-7338	5/24	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000plus
Pine/Geotech Number	3639
Calibrated?	Yes
Calibration standard information	Lot number: 605285 Expiration date: 2/2020 49.5/50 34.6/35.0

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 3639 Factory Calibration Date: 5/29/2018 Field Calibration Date: 6/5/2020 11:12 AM
Serial Number: GM13973 Technician: Chris Mills

☑ Cleaned Unit and Case
☑ Visually inspect for damage and missing parts
☑ Manual is in case.

Battery charge 100 % Pass
Pump flow 750 ml/min Pass

Zero

Gas Zered	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass

Span

Gas Spaned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	19-6936	5/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	20-7218	2/22	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as

Daily Log of Activities

07:30, H&S tailgate and equipment calibrations

Time	07:30
Description of Task	H&S tailgate and equipment calibrations

08:05, Arcadis On-site Rachel Bielak & Emma Witherspoon

Time	08:05
Description of Task	Arcadis On-site Rachel Bielak & Emma Witherspoon

08:08, SAMH 1043 Depth to bottom: 8.5 ft Canister #: 1L1508 Gauge #: 1946 Initial digital gauge pressure: -29.3 Initial analog gauge pressure: -30 Sample start time: 8:18 Initial open analog gauge pressure: -14 Final analog gauge pressure:-8 Final digital gauge pressure: -8.7 PID: 0ppm GEM-Methane: 0.0% Water flowing north

Time	08:08

Description of Task	SAMH 1043 Depth to bottom: 8.5 ft Canister #: 1L1508 Gauge #: 1946 Initial digital gauge pressure: -29.3 Initial analog gauge pressure: -30 Sample start time: 8:18 Initial open analog gauge pressure: -14 Final analog gauge pressure:-8 Final digital gauge pressure: -8.7 PID: 0ppm GEM- Methane: 0.0% Water flowing north

08:30, Conducted water sampling at SAMH 1043

Time	08:30
Description of Task	Conducted water sampling at SAMH 1043

08:35, Sediment Sample could not be collected at SAMH 1043

Time	08:35
Description of Task	Sediment Sample could not be collected at SAMH 1043

08:42, SAMH 1067 Depth to bottom: 8.6 ft Canister #: 1L3248 Gauge #: 1910 Initial digital gauge pressure: -29.3 Initial analog gauge pressure: -28 Sample start time: 8:50 Initial open analog gauge pressure: -15.5 Final analog gauge pressure: -6 Final digital gauge pressure: -5.6 PID: 0ppm GEM- Methane: 0.00% Water flowing south

Time	08:42
Description of Task	SAMH 1067 Depth to bottom: 8.6 ft Canister #: 1L3248 Gauge #: 1910 Initial digital gauge pressure: -29.3 Initial analog gauge pressure: -28 Sample start time: 8:50 Initial open analog gauge pressure: -15.5 Final analog gauge pressure: -6 Final digital gauge pressure: -5.6 PID: 0ppm GEM- Methane: 0.00% Water flowing south

09:00, Conducted water sampling at SAMH 1067

Time	09:00
Description of Task	Conducted water sampling at SAMH 1067

09:15, Sediment sample could not be collected at SAMH 1067

Time	09:15
Description of Task	Sediment sample could not be collected at SAMH 1067

09:21, SAMH 1020 Depth to bottom: 6.4 ft Canister #: 1L3944 Gauge #: 1910 Initial digital gauge pressure:-29.2 Initial analog gauge pressure:-29 Sample start time: 9:28 Initial open analog gauge pressure: -14 Final analog gauge pressure: -7 Final digital gauge pressure: -8.2 PID: 0ppm GEM- methane: 0.00% Water flowing north

Time	09:21
Description of Task	SAMH 1020 Depth to bottom: 6.4 ft Canister #: 1L3944 Gauge #: 1910 Initial digital gauge pressure:-29.2 Initial analog gauge pressure:-29 Sample start time: 9:28 Initial open analog gauge pressure: -14 Final analog gauge pressure: -7 Final digital gauge pressure: -8.2 PID: 0ppm GEM- methane: 0.00% Water flowing north

09:38, Conduct water sampling at SAMH 1020

Time	09:38
Description of Task	Conduct water sampling at SAMH 1020

09:45, Collected sediment sample from SAMH 1020 Sediment was collected above water channel underneath the ladder

Time	09:45
Description of Task	Collected sediment sample from SAMH 1020 Sediment was collected above water channel underneath the ladder

10:00, Arcadis off site

Time	10:00
Description of Task	Arcadis off site

10:05, Start COC and QC process for air canisters

Time	10:05
Description of Task	Start COC and QC process for air canisters

11:40, Start COC and QC process for water and sediment samples

Time	11:40
Description of Task	Start COC and QC process for water and sediment samples

13:57, Arcadis on site Rachel Bielak, Emma Witherspoon

Time	13:57
Description of Task	Arcadis on site Rachel Bielak, Emma Witherspoon

13:57, STMH 1219 Depth to bottom: 14.7 ft Canister #: 1L1765 Gauge #: 1912 Initial digital gauge pressure: -29.3 Initial analog gauge pressure: -29.5 Sample start time: 14:08 Initial open analog gauge pressure: -14 Final digital gauge pressure: -7.4 Final analog gauge pressure: -7 PID: 0ppm GEM-Methane: 0.00%

Time	13:57

Description of Task	STMH 1219 Depth to bottom: 14.7 ft Canister #: 1L1765 Gauge #: 1912 Initial digital gauge pressure: -29.3 Initial analog gauge pressure: -29.5 Sample start time: 14:08 Initial open analog gauge pressure: -14 Final digital gauge pressure: -7.4 Final analog gauge pressure: -7 PID: 0ppm GEM- Methane: 0.00%

14:22, Conduct water sampling at STMH 1219

Time	14:22
Description of Task	Conduct water sampling at STMH 1219

15:07, Sediment sample could not be collected at STMH 1219

Time	15:07
Description of Task	Sediment sample could not be collected at STMH 1219

15:15, Arcadis offsite

Time	15:15
Description of Task	Arcadis offsite

15:15, Samples shipped out

Time	15:15
Description of Task	Samples shipped out

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No
General waste comments	Purge water run through HCS system

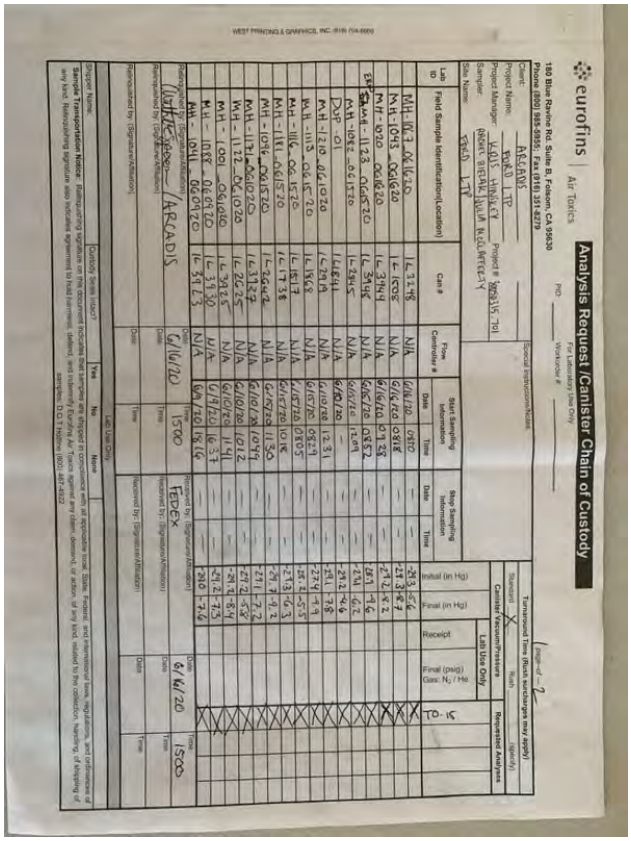
Photos

Other Photos

SAMH 1043

SAMH 1067

SAMH 1020



Canister COC

STMH 1219

Signature

Signed 2020-06-16 19:16:52 UTC

2020-09-14, Julia McClafferty, Utility Corridor Sampling

Created	2020-09-14 12:30:51 UTC by Julia McClafferty
Updated	2020-09-15 15:21:10 UTC by Julia McClafferty
Location	42.3746227518442, -83.3907293232654

Basic Information

Project Name	Ford
Task	Utility Corridor Sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-09-14
Completed By	Julia McClafferty
Additional Personnel	Christina Weaver
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	64.94 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100 ft
Pine/Geotech Number	6512
Calibrated?	No

Daily Log of Activities

07:50, Arrive on-site

Time	07:50
Description of Task	Arrive on-site

08:00, H&S tailgate

Time	08:00
Description of Task	H&S tailgate

08:20, Attempt to open SL#2. Cannot open manhole with our tool.

Time	08:20
Description of Task	Attempt to open SL#2. Cannot open manhole with our tool.

08:45, Leave site to check warehouse again for manhole tool

Time	08:45
Description of Task	Leave site to check warehouse again for manhole tool

09:27, Apply vapor barrier at SL-2

Time	09:27

Description of Task	Apply vapor barrier at SL-2

09:50, Apply vapor barrier at STMH-1001

Time	09:50
Description of Task	Apply vapor barrier at STMH-1001

10:15, Apply vapor barrier at STMH-1041

Time	10:15
Description of Task	Apply vapor barrier at STMH-1041

10:22, Spoke with Reemco worker. Asked us if we knew anything about the trees on Belden that are dying

Time	10:22
Description of Task	Spoke with Reemco worker. Asked us if we knew anything about the trees on Belden that are dying

10:35, Apply vapor barrier at STMH-1066

Time	10:35
Description of Task	Apply vapor barrier at STMH-1066

10:59, Apply vapor barrier at STMH-1088

Time	10:59
Description of Task	Apply vapor barrier at STMH-1088

11:15, Apply vapor barrier at STMH-1171

Time	11:15
Description of Task	Apply vapor barrier at STMH-1171

11:24, Apply vapor barrier at STMH-1219

Time	11:24
Description of Task	Apply vapor barrier at STMH-1219

11:40, Apply vapor barrier at STMH-1210

Time	11:40
Description of Task	Apply vapor barrier at STMH-1210

11:50, Head back to trailer to return supplies and prep for tomorrow

Time	11:50
Description of Task	Head back to trailer to return supplies and prep for tomorrow

12:15, Offsite

Time	12:15
Description of Task	Offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-09-14 17:23:56 UTC

Christina Weaver, Julia McClafferty, 2020-09-14, 2020-09-18

Created	2020-09-14 13:23:49 UTC by Christina Weaver
Updated	2020-09-22 14:36:48 UTC by Julia McClafferty
Location	42.3680250944, -83.3916629812
Field Staff	Christina Weaver, Julia McClafferty
Project Number	30050315.701
Start Date	2020-09-14
End Date	2020-09-18

SL-2_091520, 12:55

samplers	Christina Weaver, Julia McClafferty
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	09:27
DTW (ft below rim) During Vapor Barrier Install	15.39
Flow Notes During Vapor Barrier Install	Flow coming from West and North it is heading East
Vapor Barrier Install Notes	Cone placed on top of manhole

Sampling Information

Date Sampled	2020-09-15
DTW (ft below rim) During Sampling	15.1
Flow Notes During Sampling	Flow headed east
Sampling Notes	CO2:0% O2:19.3% CH4 LEL:3%

Vapor Sampling

Sample ID	SL-2_091520
Canister Number	1L2786
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.2
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:55
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	12:56
Digital Stop Pressure	-6.5

Was a Vapor DUP collected?	No
Photos	

MH-1001_091520, 13:49, 14:05

samplers	Christina Weaver, Julia McClafferty
Location	STMH-1001

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	09:50
DTW (ft below rim) During Vapor Barrier Install	15.58
DTB (ft below rim) During Vapor Barrier Install	15.6
Flow Notes During Vapor Barrier Install	Slow flow moving from North to South. Inflow pipe is NW
Vapor Barrier Install Notes	Warmth coming out of manhole

Sampling Information

Date Sampled	2020-09-15
DTW (ft below rim) During Sampling	15.58
Flow Notes During Sampling	Flow moving south
DTB (ft below rim) During Sampling	15.6
Sampling Notes	A few inches of water sitting on top of vapor barrier. No recent rain. May be from sprinkler

Vapor Sampling

Sample ID	MH-1001_091520
Canister Number	1L2631
Filter Number	1902
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:49
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-17.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:50
Digital Stop Pressure	-6
Vapor Sampling Notes	CO2: 0% O2: 20% CH4 LEL: 0
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1001_091520
Liquid Sample Time	14:05

Liquid Sampling Notes	Hard bottom no soil
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

MH-1041_091520, 14:43

samplers	Christina Weaver, Julia McClafferty
Location	STMH-1041

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	10:15
DTW (ft below rim) During Vapor Barrier Install	9.98
DTB (ft below rim) During Vapor Barrier Install	9.98
Flow Notes During Vapor Barrier Install	Inflow pipes are from NE and NW. Almost dry. Slight trickle headed south

Sampling Information

Date Sampled	2020-09-15
DTW (ft below rim) During Sampling	9.98
Flow Notes During Sampling	See note below
DTB (ft below rim) During Sampling	9.98
Sampling Notes	CO2: 0 O2: 20.4 LEL: 0. Water is flowing into nearby grate connected to this manhole. Grate is west of manhole water. Water is running down street on surface from the North. Work being completed on sprinkler to the North. Adam Richmond approved no ground water sampling. Hard bottom no soil to sample.

Vapor Sampling

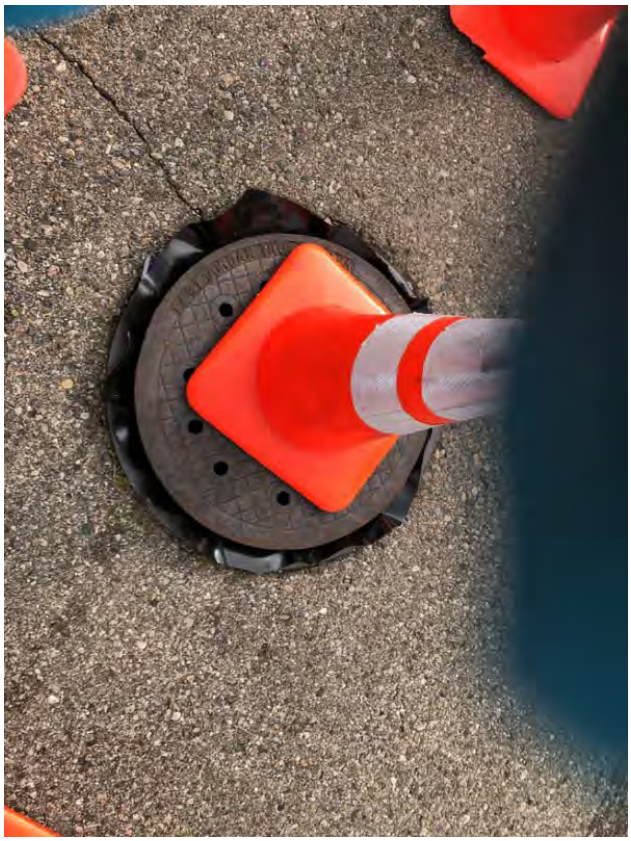
Sample ID	MH-1041_091520
Canister Number	1L2748

Filter Number	1910
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:43
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:44
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L3207
DUP Filter Number	2005
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-27.5
DUP Analog Start Pressure (at start of sample)	-15
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-4
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Photos



11864

MH-1066_091620, 09:04, 09:15

samplers	Christina Weaver, Julia McClafferty

Location	STMH-1066

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	10:35
DTW (ft below rim) During Vapor Barrier Install	9.27
DTB (ft below rim) During Vapor Barrier Install	9.27
Flow Notes During Vapor Barrier Install	Inflow pipe from E main flow is Running south. Water has oil sheen

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	9.24
Flow Notes During Sampling	Flow moving south
DTB (ft below rim) During Sampling	9.27
Sampling Notes	CO2: 0.1% O2: 20% LEL: 0%. Hard bottom no soils

Vapor Sampling

Sample ID	MH-1066_091620
Canister Number	1L2470
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:04
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	18
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:05
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1066_091620
Liquid Sample Time	09:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

FOR LEASE
Philip Sprague
+1 248 353 5400

MH-1088_091620, 09:40

samplers	Christina Weaver, Julia McClafferty
Location	STMH-1088

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	10:59
DTW (ft below rim) During Vapor Barrier Install	8.14
DTB (ft below rim) During Vapor Barrier Install	8.14
Flow Notes During Vapor Barrier Install	Small amount of water from SW inlet. inlets from SE and SW. main flow is South. Dry.

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	8.14
Flow Notes During Sampling	No flow. Dry
DTB (ft below rim) During Sampling	8.14
Sampling Notes	CO2: 0.1% O2: 20% LEL: 0%

Vapor Sampling

Sample ID	MH-1088_091620
Canister Number	1L3116
Filter Number	2028
PID (ppm)	5.8

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	15.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:41
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Elevated PID reading near hole where we poked a hole in barrier. 0 ppm in breathing zone and around manhole. Removed barrier elevated PID near lip of manhole and in manhole. 0 ppm in breathing zone. No water. Hard bottom
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No
Photos	

MH-1171_091620, 10:45, 10:57

samplers	Christina Weaver, Julia McClafferty

Location	STMH-1171

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	11:15
DTW (ft below rim) During Vapor Barrier Install	15.52
Flow Notes During Vapor Barrier Install	Inflow pipes are E and W. Main flow goes East. Flow is too high to take DTB here

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	15.53
Flow Notes During Sampling	Flow too fast to take DTB measurement
Sampling Notes	CO2: 0% O2: 20% LEL: 0% Hard bottom/ fast flow. No sediment to sample

Vapor Sampling

Sample ID	MH-1171_091620
Canister Number	1L3086
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1171_091620
Liquid Sample Time	10:57
Liquid Sampling Notes	Flow coming from west moving east
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

Photos

MH-1219_091620, 11:28, 11:40

samplers	Christina Weaver, Julia McClafferty
Location	STMH-1219

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	11:24
DTW (ft below rim) During Vapor Barrier Install	14.7
DTB (ft below rim) During Vapor Barrier Install	14.7
Flow Notes During Vapor Barrier Install	Inlet south main flow is NE

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	14.7
Flow Notes During Sampling	Flow is NE
DTB (ft below rim) During Sampling	14.7
Sampling Notes	CO2: 0% O2: 20% LEL: 0%

Vapor Sampling

Sample ID	MH-1219_091620
Canister Number	000001352
Filter Number	2020
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:28
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:29
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1219_091620
Liquid Sample Time	11:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

MH-1210_091620, 12:22

samplers	Christina Weaver, Julia McClafferty

Location	STMH-1210

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-09-14
Time Vapor Barrier Installed	11:40
DTW (ft below rim) During Vapor Barrier Install	9.1
DTB (ft below rim) During Vapor Barrier Install	9.1
Flow Notes During Vapor Barrier Install	Inflow pipes NE SW. one outflow west

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	9.1
Flow Notes During Sampling	Outflow west
DTB (ft below rim) During Sampling	9.1
Sampling Notes	CO2: 0.1% O2: 19.8% LEL: 0%

Vapor Sampling

Sample ID	MH-1210_091620
Canister Number	1L2870
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:22
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	12:23
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Photos

MH-1122_091620, 08:37

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1122

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	8.59
Flow Notes During Sampling	No flow. Only outlet pipe heading south. Hard bottom, no water
DTB (ft below rim) During Sampling	8.59
Sampling Notes	CO2: 0.1% O2: 19.9% LEL: 0%. CO2 did not zero outside of manhole

Vapor Sampling

Sample ID	MH-1122_091620
Canister Number	1L2482
Filter Number	1912
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:37
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	17
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	08:38
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

EDC_091620, 13:12

samplers	Christina Weaver, Julia McClafferty
Location	EDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	16.9
Flow Notes During Sampling	Did not measure DTB grate in way where WLM could get stuck
Sampling Notes	CO2: 0% O2: 0% LEL: 0%

Vapor Sampling

Sample ID	EDC_091620
Canister Number	1L2711
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:12
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:13
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No

WDC_091620, 14:33

samplers	Christina Weaver, Julia McClafferty
Location	WDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	17.8
Flow Notes During Sampling	Cannot observe flow. Grate on bottom cannot take a total depth
Sampling Notes	CO2: 0% O2: 0% LEL: 0%

Vapor Sampling

Sample ID	WDC_091620
Canister Number	1L1990
Filter Number	1902
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:33
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:34
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No

MH-1231_091620, 15:14

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-16
DTW (ft below rim) During Sampling	15.3
Flow Notes During Sampling	Flow moving East
Sampling Notes	CO2: 0% O2: 19.8% LEL:0%

Vapor Sampling

Sample ID	MH-1231_091620
Canister Number	1L3256
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:14
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	5.51
Sample End Time	15:15
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No

MH-1113_091720, 10:50

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1113

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-17
DTW (ft below rim) During Sampling	11.5
Flow Notes During Sampling	No flow
DTB (ft below rim) During Sampling	11.5
Sampling Notes	CO2: 0 O2: 0.1 LEL: 0

Vapor Sampling

Sample ID	MH-1113_091720
Canister Number	1L3830
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:50
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-14.5
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	10:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No

MH-1123_091720, 11:09

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1123

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-17
DTW (ft below rim) During Sampling	8.32
Flow Notes During Sampling	No flow, dry
DTB (ft below rim) During Sampling	8.32
Sampling Notes	CO2: 0% O2: 19.4% LEL: 0%

Vapor Sampling

Sample ID	MH-1123_091720
Canister Number	1L3203
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:09
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:10
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No

MH-1116_091720, 11:28

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1116

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-17
DTW (ft below rim) During Sampling	10.25
Flow Notes During Sampling	Slight wet, no flow
DTB (ft below rim) During Sampling	10.25
Sampling Notes	CO2: 0 O2: 19.6 LEL: 0

Vapor Sampling

Sample ID	MH-1116_091720
Canister Number	1L2481
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:28
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	11:29
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No

MH-1020_091820, 09:59, 10:05

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1020

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-18
Flow Notes During Sampling	Very slight flow from south to north

Vapor Sampling

Sample ID	MH-1020_091820

Canister Number	1L2609
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:59
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-14.5
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:00
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1020_091820
Liquid Sample Time	10:05
Liquid Sampling Notes	Was only able to collect 3 VOAs worth
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1043_091820, 08:26, 08:32

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1043

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-18
Flow Notes During Sampling	Slight flow from north to south

Vapor Sampling

Sample ID	MH-1043_091820
Canister Number	1L3897
Filter Number	2020
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:26
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	08:26
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1043_091820
Liquid Sample Time	08:32
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1067_091820, 09:18

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1067

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-18
Flow Notes During Sampling	Stagnant
Sampling Notes	Not enough liquid to collect sample

Vapor Sampling

Sample ID	MH-1067_091820
Canister Number	1L1527
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:18
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-27

Analog Start Pressure (at start of sample)	-14.5
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:19
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1082_091820, 09:46

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1082

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-18
Flow Notes During Sampling	Stagnant.
Sampling Notes	Not enough sediment or liquid to collect samples

Vapor Sampling

Sample ID	MH-1082_091820
Canister Number	1L1865
Filter Number	1946
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:46
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-17.5
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-5
Sample End Time	09:47
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1181_091820, 10:50, 11:00

samplers	Christina Weaver, Julia McClafferty

Location	SAMH-1181

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-18
Flow Notes During Sampling	Slight flow from north and east to south

Vapor Sampling

Sample ID	MH-1181_091820
Canister Number	1L3042
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:50
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:51
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1181_091820
Liquid Sample Time	11:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1096_091820, 11:22, 11:30

samplers	Christina Weaver, Julia McClafferty
Location	SAMH-1096

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-09-18

Vapor Sampling

Sample ID	MH-1096_091820
Canister Number	1L1803
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:22
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:23
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1096_091820
Liquid Sample Time	11:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

2020-09-15, Julia McClafferty, Utility Corridor Sampling

Created	2020-09-15 15:21:15 UTC by Julia McClafferty
Updated	2020-09-21 13:17:47 UTC by Julia McClafferty
Location	42.3746227518, -83.3907293233

Basic Information

Project Name	Ford
Task	Utility Corridor Sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-09-15
Completed By	Julia McClafferty
Additional Personnel	Christina Weaver
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	64.94 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100 ft
Pine/Geotech Number	6512
Calibrated?	No

GEM

Supplier	Pine
Type of Equipment (GEM, PID, etc)	GEM
Model	2000
Pine/Geotech Number	7225
Calibrated?	Yes
Calibration standard information	CH4: 15.5/15 CO2: 15.4/15 O2: 20.3/20.9

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	3943
Calibrated?	Yes
Calibration standard information	Bump check passed

Calibration Documents

Peripump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peripump
Model	Geopump
Pine/Geotech Number	3693
Calibrated?	No

Daily Log of Activities

11:20, Arrive on-site

Time	11:20
Description of Task	Arrive on-site

11:23, Calibrate equipment

Time	11:23
Description of Task	Calibrate equipment

11:30, H&S tailgate

Time	11:30
Description of Task	H&S tailgate

11:48, Go to SSDS to grab digital gauge

Time	11:48
Description of Task	Go to SSDS to grab digital gauge

12:15, Arrive at SL-2

Time	12:15
Description of Task	Arrive at SL-2

13:15, Complete sampling at SL-2. Took extra time to decon due to sewage exposure on tubing and equipment

Time	13:15
Description of Task	Complete sampling at SL-2. Took extra time to decon due to sewage exposure on tubing and equipment

13:20, Dispose of tubing and vapor barrier

Time	13:20
Description of Task	Dispose of tubing and vapor barrier

13:30, Arrive at MH-1001

Time	13:30
Description of Task	Arrive at MH-1001

14:15, Complete sampling at MH-1001

Time	14:15
Description of Task	Complete sampling at MH-1001

14:22, Arrive at MH-1041

Time	14:22
Description of Task	Arrive at MH-1041

14:53, Contact Adam about sprinkler maintenance that is allowing water to flow into MH-1041. Manhole was dry yesterday and now has enough water to collect a sample due to the sprinkler runoff. Confirmed that we should not collect water sample at this location since it would not be representative.

Time	14:53
Description of Task	Contact Adam about sprinkler maintenance that is allowing water to flow into MH-1041. Manhole was dry yesterday and now has enough water to collect a sample due to the sprinkler runoff. Confirmed that we should not collect water sample at this location since it would not be representative.

15:17, Confirm no sediment can be sampled at MH-1041

Time	15:17
Description of Task	Confirm no sediment can be sampled at MH-1041

15:30, Arrive back to trailer to store equipment and air samples

Time	15:30
Description of Task	Arrive back to trailer to store equipment and air samples

16:05, Relinquish liquid sample (MW-1041) to Christina.

Time	16:05
Description of Task	Relinquish liquid sample (MW-1041) to Christina.

16:15, Offsite

Time	16:15
Description of Task	Offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-09-16 00:08:43 UTC

2020-09-16, Julia McClafferty, Utility Corridor Sampling

Created	2020-09-16 11:57:33 UTC by Julia McClafferty
Updated	2020-09-21 13:15:12 UTC by Julia McClafferty
Location	42.3746227518, -83.3907293233

Basic Information

Project Name	Ford
Task	Utility Corridor Sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-09-16
Completed By	Julia McClafferty
Additional Personnel	Christina Weaver
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	51.98 degrees F and Mostly Cloudy
PPE	Level D
Are you using equipment?	Yes

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100 ft
Pine/Geotech Number	6512
Calibrated?	No

GEM

Supplier	Pine
Type of Equipment (GEM, PID, etc)	GEM
Model	2000
Pine/Geotech Number	7225
Calibrated?	Yes
Calibration standard information	Bump Check: CH4: 15.6/15 CO2: 15.9/15 O2: 20.3/20.9

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	3943
Calibrated?	Yes
Calibration standard information	Bump check passed

Peripump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peripump
Model	Geopump
Pine/Geotech Number	3693
Calibrated?	No

Daily Log of Activities

07:45, Arrive on-site

Time	07:45
Description of Task	Arrive on-site

07:55, Calibrate equipment

Time	07:55
Description of Task	Calibrate equipment

08:05, H&S tailgate

Time	08:05
Description of Task	H&S tailgate

08:20, Arrive at MH-1122

Time	08:20
Description of Task	Arrive at MH-1122

08:49, Complete sampling at MH-1122

Time	08:49
Description of Task	Complete sampling at MH-1122

08:54, Arrive at MH-1066

Time	08:54
Description of Task	Arrive at MH-1066

09:25, Complete sampling at MH-1066

Time	09:25
Description of Task	Complete sampling at MH-1066

09:27, Arrive at MH-1088

Time	09:27
Description of Task	Arrive at MH-1088

09:50, PID reading at MH-1088 opening is 5.8 ppm. Breathing zone is 0.0 ppm. Communicated with Adam about concerns when removing the vapor barrier. Determined to crack the lid and let vapors air out then measure breathing zone to see if it is safe to collect water and sediment samples

Time	09:50
Description of Task	PID reading at MH-1088 opening is 5.8 ppm. Breathing zone is 0.0 ppm. Communicated with Adam about concerns when removing the vapor barrier. Determined to crack the lid and let vapors air out then measure breathing zone to see if it is safe to collect water and sediment samples

09:59, PID reading after opening manhole is ranging from 0-5 ppm (measures directly at the opening). Breathing zone is blow 0.4 ppm. No liquid or sediment available to collect a sample. Closed MH lid at 10:02

Time	09:59
Description of Task	PID reading after opening manhole is ranging from 0-5 ppm (measures directly at the opening). Breathing zone is blow 0.4 ppm. No liquid or sediment available to collect a sample. Closed MH lid at 10:02

10:05, Head back to trailer to drop of traffic cones, and recalibrate PID

Time	10:05
Description of Task	Head back to trailer to drop of traffic cones, and recalibrate PID

10:34, Arrive at MH-1171

Time	10:34
Description of Task	Arrive at MH-1171

11:14, Complete sampling at MH-1171. Hard bottom was not able to collect sediment sample

Time	11:14
Description of Task	Complete sampling at MH-1171. Hard bottom was not able to collect sediment sample

11:16, Arrive at MH-1219

Time	11:16
Description of Task	Arrive at MH-1219

12:00, Complete sampling at MH-1219. Hard bottom - could not collect sediment sample

Time	12:00
Description of Task	Complete sampling at MH-1219. Hard bottom - could not collect sediment sample

12:09, Arrive at MH-1210

Time	12:09
Description of Task	Arrive at MH-1210

12:38, Complete sampling at MH-1210. Could only collect 2.5 VOAs for liquid sample. Disposed of VOAs in purge bucket. Hard bottom - could not collect sediment sample

Time	12:38
Description of Task	Complete sampling at MH-1210. Could only collect 2.5 VOAs for liquid sample. Disposed of VOAs in purge bucket. Hard bottom - could not collect sediment sample

12:47, Arrive at EDC

Time	12:47
Description of Task	Arrive at EDC

13:19, Complete sampling at EDC

Time	13:19
Description of Task	Complete sampling at EDC

13:33, Communicate with Adam about concerns with sampling sanitary sewers.

Time	13:33

Description of Task	Communicate with Adam about concerns with sampling sanitary sewers.

14:13, Arrive at WDC

Time	14:13
Description of Task	Arrive at WDC

14:38, Complete sampling at WDC

Time	14:38
Description of Task	Complete sampling at WDC

14:45, Arrive at MH-1231

Time	14:45
Description of Task	Arrive at MH-1231

15:23, Complete sampling at MH-1231

Time	15:23
Description of Task	Complete sampling at MH-1231

15:35, Arrive back to trailer to store vapor samples, write up COCs, and send out update and stop work email to team

Time	15:35
Description of Task	Arrive back to trailer to store vapor samples, write up COCs, and send out update and stop work email to team

17:03, Offsite

Time	17:03
Description of Task	Offsite

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-09-16 16:50:03 UTC

2020-09-17, Julia McClafferty, Utility Corridor Sampling

Created	2020-09-17 14:39:22 UTC by Julia McClafferty
Updated	2020-09-21 13:18:25 UTC by Julia McClafferty
Location	42.3746227518, -83.3907293233

Basic Information

Project Name	Ford
Task	Utility Corridor Sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-09-17
Completed By	Julia McClafferty
Additional Personnel	Christina Weaver
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	51.98 degrees F and Mostly Cloudy
PPE	Level D
Are you using equipment?	Yes

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100 ft
Pine/Geotech Number	6512
Calibrated?	No

GEM

Supplier	Pine
Type of Equipment (GEM, PID, etc)	GEM
Model	2000
Pine/Geotech Number	7225
Calibrated?	Yes
Calibration standard information	Bump check: CH4: 15.6/15 CO2: 15.9/15 O2: 20.2/20.9

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	3943
Calibrated?	Yes
Calibration standard information	Bump check passed

Daily Log of Activities

10:15, Arrive on-site

Time	10:15
Description of Task	Arrive on-site

10:22, Calibrate equipment

Time	10:22
Description of Task	Calibrate equipment

10:30, H&S tailgate

Time	10:30
Description of Task	H&S tailgate

10:40, Arrive at MH-1113

Time	10:40
Description of Task	Arrive at MH-1113

10:54, Complete sampling at MH-1113

Time	10:54
Description of Task	Complete sampling at MH-1113

10:56, Arrive at MH-1123

Time	10:56
Description of Task	Arrive at MH-1123

11:13, Complete sampling at MH-1123

Time	11:13
Description of Task	Complete sampling at MH-1123

11:16, Arrive at MH-1116

Time	11:16
Description of Task	Arrive at MH-1116

11:34, Complete sampling at MH-1116

Time	11:34
Description of Task	Complete sampling at MH-1116

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-09-18 14:53:35 UTC

2020-09-18, Julia McClafferty, Utility Corridor Sampling

Created	2020-09-18 11:04:08 UTC by Julia McClafferty
Updated	2020-09-21 13:19:20 UTC by Julia McClafferty
Location	42.3746227518, -83.3907293233

Basic Information

Project Name	Ford
Task	Utility Corridor Sampling
Project Number	30050315
Location	Livonia, MI
Date	2020-09-18
Completed By	Julia McClafferty
Additional Personnel	Rachel Bielak
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	46.94 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	Yes

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100 ft
Pine/Geotech Number	6512
Calibrated?	No

GEM

Supplier	Pine
Type of Equipment (GEM, PID, etc)	GEM
Model	2000
Pine/Geotech Number	7225
Calibrated?	Yes
Calibration standard information	Bump Check: CH4: 15.8/15 CO2: 16.2/15 O2: 19.8/20.9

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	3943
Calibrated?	Yes
Calibration standard information	Bump check passed.

Peripump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peripump
Model	Geopump
Pine/Geotech Number	3693
Calibrated?	No

Daily Log of Activities

06:53, Arrive on-site

Time	06:53
Description of Task	Arrive on-site

06:56, Calibrate equipment, gather PPE and sampling supplies

Time	06:56
Description of Task	Calibrate equipment, gather PPE and sampling supplies

07:35, H&S tailgate

Time	07:35
Description of Task	H&S tailgate

07:41, Arrive at MH-1020

Time	07:41
Description of Task	Arrive at MH-1020

08:07, Sprinklers turned on while we were about to collect the vapor sample. Had to move to next location

Time	08:07
Description of Task	Sprinklers turned on while we were about to collect the vapor sample. Had to move to next location

08:10, Arrive at MH-1043

Time	08:10
Description of Task	Arrive at MH-1043

09:06, Complete sampling at MH-1043

Time	09:06
Description of Task	Complete sampling at MH-1043

09:08, Arrive at MH-1067

Time	09:08
Description of Task	Arrive at MH-1067

09:33, Complete sampling at MH-1067

Time	09:33
Description of Task	Complete sampling at MH-1067

09:35, Arrive at MH-1082

Time	09:35
Description of Task	Arrive at MH-1082

09:52, Complete sampling at MH-1082

Time	09:52
Description of Task	Complete sampling at MH-1082

09:56, Arrive at MH-1020

Time	09:56
Description of Task	Arrive at MH-1020

10:23, Complete sampling at MH-1020

Time	10:23
Description of Task	Complete sampling at MH-1020

10:25, Head back to trailer to grab more supplies

Time	10:25
Description of Task	Head back to trailer to grab more supplies

10:41, Arrive at MH-1181

Time	10:41
Description of Task	Arrive at MH-1181

11:10, Complete sampling at MH-1181

Time	11:10
Description of Task	Complete sampling at MH-1181

11:13, Arrive at MH-1096

Time	11:13
Description of Task	Arrive at MH-1096

11:45, Complete sampling at MH-1096

Time	11:45
Description of Task	Complete sampling at MH-1096

12:03, Dispose of tubing and PPE in a drum at the HCS. Labeled with pending analysis

Time	12:03
Description of Task	Dispose of tubing and PPE in a drum at the HCS. Labeled with pending analysis

12:09, Clean up supplies and equipment at trailer, write up COCs

Time	12:09
Description of Task	Clean up supplies and equipment at trailer, write up COCs

13:13, Drop off GEM and digital manometer at SSDS

Time	13:13
Description of Task	Drop off GEM and digital manometer at SSDS

13:16, Offsite

Time	13:16

Description of Task	Offsite

13:48, Relinquish samples to novi fridge and drop off supplies

Time	13:48
Description of Task	Relinquish samples to novi fridge and drop off supplies

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	Yes
Number of drums created during activities	1
Size of drums	55-gallon
Type of Drums	Stainless Steel
Condition of drums	Good
General waste comments	Sanitary sewer sampling tubing and PPE

Signature

Signed 2020-09-18 20:49:33 UTC

2020-12-14, Andrew Banitt, Utility corridor sampling

Created	2020-12-14 15:10:58 UTC by Andrew Banitt
Updated	2020-12-15 19:07:39 UTC by Emma Witherspoon
Location	42.3679724264366, -83.3916486225818

Basic Information

Project Name	Ford LTP
Task	Utility corridor sampling
Location	Livonia, MI
Date	2020-12-14
Completed By	Andrew Banitt
Additional Personnel	Emma Whitherspoon
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	30.02 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	1367
Calibrated?	No

Daily Log of Activities

08:03, HS tailgate meeting

Time	08:03
Description of Task	HS tailgate meeting

10:13, Arrive at SL-2

Time	10:13
Description of Task	Arrive at SL-2

10:35, Arrive at SL-3

Time	10:35
Description of Task	Arrive at SL-3

10:45, Arrive at STMH-1041

Time	10:45
Description of Task	Arrive at STMH-1041

10:56, Arrive at STMH-1066

Time	10:56
Description of Task	Arrive at STMH-1066

11:03, Arrive at STMH-1088

Time	11:03
Description of Task	Arrive at STMH-1088

11:13, Arrive at STMH-1001

Time	11:13
Description of Task	Arrive at STMH-1001

11:25, Arrive at STMH-1210

Time	11:25
Description of Task	Arrive at STMH-1210

11:35, Arrive at STMH-1219

Time	11:35
Description of Task	Arrive at STMH-1219

11:55, Arrive at STMH-1171

Time	11:55
Description of Task	Arrive at STMH-1171

12:14, Arrive at SAMH-1244

Time	12:14
Description of Task	Arrive at SAMH-1244

12:25, Arrive at SAMH-1245

Time	12:25
Description of Task	Arrive at SAMH-1245

12:56, Arrive at SAMH-1258

Time	12:56
Description of Task	Arrive at SAMH-1258

13:08, Arrive at SAMH-1256

Time	13:08
Description of Task	Arrive at SAMH-1256

13:19, Arrive at SAMH-1255

Time	13:19
Description of Task	Arrive at SAMH-1255

10:31, Arrive at SL3.

Time	10:31
Description of Task	Arrive at SL3.

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-12-14 15:13:42 UTC

Emma Witherspoon, Andrew Banitt, 2020-12-14, 2020-12-17

Created	2020-12-14 14:22:20 UTC by Emma Witherspoon
Updated	2020-12-18 17:28:57 UTC by Emma Witherspoon
Location	42.3728157652186, -83.3920847998967
Field Staff	Emma Witherspoon, Andrew Banitt
Project Number	30050315.701
Start Date	2020-12-14
End Date	2020-12-17

SL-2_121520, 11:58

Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	10:09
DTW (ft below rim) During Vapor Barrier Install	15.3
DTB (ft below rim) During Vapor Barrier Install	16
Flow Notes During Vapor Barrier Install	Flowing from N and W towards the E

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	15.3

Vapor Sampling

Sample ID	SL-2_121520
Canister Number	1L1540
Filter Number	23628
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:58
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:10
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No

Photos

SL-3_121620, 12:03

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	17.1
Flow Notes During Sampling	Flow from W towards E

Vapor Sampling

Sample ID	SL-3_121620
Canister Number	1L3078
Filter Number	24544
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	12:03
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:16
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1041_121520, 12:30, 13:00

samplers	Emma Witherspoon, Andrew Banditt
Location	STMH-1041

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	10:44
DTW (ft below rim) During Vapor Barrier Install	9.95
DTB (ft below rim) During Vapor Barrier Install	10.05
Flow Notes During Vapor Barrier Install	Flow from N towards S

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	9.95

Vapor Sampling

Sample ID	MH-1041_121520
Canister Number	1L2908
Filter Number	23530
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:30
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5

Sample End Time	12:42
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1041_121520
Liquid Sample Time	13:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1066_121520, 13:16, 13:30

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1066

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	10:55
DTW (ft below rim) During Vapor Barrier Install	9.3
DTB (ft below rim) During Vapor Barrier Install	9.3
Flow Notes During Vapor Barrier Install	Flow from N towards S

Sampling Information

Date Sampled	2020-12-15

DTW (ft below rim) During Sampling	9.3
Flow Notes During Sampling	Flow from N towards S

Vapor Sampling

Sample ID	MH-1066_121520
Canister Number	1L2786
Filter Number	24208
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:16
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:28
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1066_121520
Liquid Sample Time	13:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

MH-1088_121520, 14:36

samplers	Emma Witherspoon, Andrew Banditt
Location	STMH-1088

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	11:03
DTW (ft below rim) During Vapor Barrier Install	8.15
DTB (ft below rim) During Vapor Barrier Install	8.15
Flow Notes During Vapor Barrier Install	Well dry

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	8.15
Flow Notes During Sampling	Well is dry

Vapor Sampling

Sample ID	MH-1088_121520
Canister Number	1L2362
Filter Number	24557
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:36
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:47
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No
Photos	

MH-1001_121620, 08:26, 08:40

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1001

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14

Time Vapor Barrier Installed	11:13
DTW (ft below rim) During Vapor Barrier Install	15.6
DTB (ft below rim) During Vapor Barrier Install	16.6
Flow Notes During Vapor Barrier Install	Flow from N towards S

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	15.6
Flow Notes During Sampling	Flow from N towards S

Vapor Sampling

Sample ID	MH-1001_121620
Canister Number	1L3267
Filter Number	23451
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:26
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	08:36
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1001_121620
Liquid Sample Time	08:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

MH-1210_121620, 08:58, 09:15

samplers	Emma Witherspoon, Andrew Banditt
Location	STMH-1210

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	11:23
DTW (ft below rim) During Vapor Barrier Install	9
DTB (ft below rim) During Vapor Barrier Install	9
Flow Notes During Vapor Barrier Install	No flow

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	9
Flow Notes During Sampling	No flow

Vapor Sampling

Sample ID	MH-1210_121620
Canister Number	1L3308
Filter Number	24548
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:58
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:08
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1210_121620
Liquid Sample Time	09:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1219_121620, 09:31, 09:45

samplers	Emma Witherspoon, Andrew Banditt
Location	STMH-1219

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	11:34
DTW (ft below rim) During Vapor Barrier Install	14.6
DTB (ft below rim) During Vapor Barrier Install	14.8
Flow Notes During Vapor Barrier Install	Flow from S towards NE

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	14.6

Vapor Sampling

Sample ID	MH-1219_121620
Canister Number	1L1549
Filter Number	23405
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:31
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:44
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1219_121620
Liquid Sample Time	09:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1171_121520, 15:06, 15:20

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1171

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	11:54
DTW (ft below rim) During Vapor Barrier Install	15.3
DTB (ft below rim) During Vapor Barrier Install	17.6
Flow Notes During Vapor Barrier Install	Flow from W towards E

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	15.3
Flow Notes During Sampling	Flow from W towards E

Vapor Sampling

Sample ID	MH-1171_121520
Canister Number	1L1752
Filter Number	25176
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:06
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	15:17
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1171_121520
Liquid Sample Time	15:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

MH-1244_121520, 10:53

samplers	Emma Witherspoon, Andrew Banditt
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	12.2
Flow Notes During Sampling	Water flowing from the W and N towards the S

Vapor Sampling

Sample ID	MH-1244_121520
Canister Number	1L3864
Filter Number	23155
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:53
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:05
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No
Photos	

MH-1245_121520, 09:56

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1245

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	8.95
Flow Notes During Sampling	Flow from W towards E

Vapor Sampling

Sample ID	MH-1245_121520
Canister Number	1L2836
Filter Number	23527
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	09:56
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-25.5
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	10:10
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No
Photos	

MH-1258_121620, 10:41

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1258

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	4.7
Flow Notes During Sampling	Water is not flowing; trickle from NE pipe

Vapor Sampling

Sample ID	MH-1258_121620
Canister Number	1L1711
Filter Number	24891
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	10:53
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No
Photos	

MH-1256_121620, 11:05

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	8.7
Flow Notes During Sampling	Flow from SE upper and W towards SE lower

Vapor Sampling

Sample ID	MH-1256_121620
Canister Number	1L1929
Filter Number	24859
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	11:05
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-7
Sample End Time	11:15
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No
Photos	

MH-1255_121620, 11:27

samplers	Emma Witherspoon, Andrew Banitt

Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2020-12-14
Time Vapor Barrier Installed	13:22
DTW (ft below rim) During Vapor Barrier Install	9
DTB (ft below rim) During Vapor Barrier Install	9.1
Flow Notes During Vapor Barrier Install	Flow from NW towards S

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	9

Vapor Sampling

Sample ID	MH-1255_121620
Canister Number	1L2395
Filter Number	24843
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.4
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6.5
Sample End Time	11:38
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Photos

EDC_121520, 08:45

Location	EDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	17.34
Flow Notes During Sampling	No flow

Vapor Sampling

Sample ID	EDC_121520
Canister Number	1L2651
Filter Number	23497
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-27.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	08:58
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

WDC_121520, 09:24

Location	WDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	18.05
Flow Notes During Sampling	No flow

Vapor Sampling

Sample ID	WDC_121520
Canister Number	1L2503
Filter Number	23576
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:24
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	09:34
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No

MH-1231_121520, 11:31

samplers	Emma Witherspoon, Andrew Banditt
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-15
DTW (ft below rim) During Sampling	15.35
Flow Notes During Sampling	Flow towards E

Vapor Sampling

Sample ID	MH-1231_121520
Canister Number	1L3297
Filter Number	24914
PID (ppm)	11.7
PID (ppm) in breathing zone	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:31
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28

Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:43
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

MH-1096_121620, 13:56, 14:15

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1096

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	11.6
Flow Notes During Sampling	Flow from W and N towards E

Vapor Sampling

Sample ID	MH-1096_121620
Canister Number	1L2967
Filter Number	23582
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:56
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5
Sample End Time	14:09
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_121620
DUP Canister Number	1L1899
DUP Filter Number	25315
DUP Digital Start Pressure	-28.5
DUP Analog Start Pressure (before opening can)	-28.5

DUP Analog Start Pressure (at start of sample)	-28
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5.5
DUP Digital Stop Pressure	-5.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1096_121620
Liquid Sample Time	14:15
Was a liquid DUP collected?	No

Liquid DUP Information

Liquid DUP ID	DUP-01_121620
Able to collect sediment sample?	No

MH-1113_121620, 15:04

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1113

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-16
DTW (ft below rim) During Sampling	13.2
Sampling Notes	Flow from N towards S

Vapor Sampling

Sample ID	MH-1113_121620
Canister Number	1L2993
Filter Number	24323
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:04
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	15:15
Digital Stop Pressure	-6.5

Was a Vapor DUP collected?	No

MH-1116_121720, 09:09

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1116

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
DTW (ft below rim) During Sampling	10.2
Flow Notes During Sampling	Flow from W towards E

Vapor Sampling

Sample ID	MH-1116_121720
Canister Number	1L2630
Filter Number	23190
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-29.5
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:21
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No

MH-1122_121720, 09:33, 09:46

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1122

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
Flow Notes During Sampling	Well is dry
DTB (ft below rim) During Sampling	8.7

Vapor Sampling

Sample ID	MH-1122_121720
Canister Number	1L2054
Filter Number	25250
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:33
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:43
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	Yes

Sediment Sampling

Depth of Sediment (in.)	0.5
Sample ID	MH-1122_121720
Sediment Sample Time	09:46
Was a sediment DUP collected?	No

MH-1123_121720, 10:15

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1123

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
Flow Notes During Sampling	Well is dry
DTB (ft below rim) During Sampling	8.7

Vapor Sampling

Sample ID	MH-1123_121720
Canister Number	1L2595
Filter Number	24145

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:15
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:27
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No

MH-1181_121720, 10:40

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1181

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
DTW (ft below rim) During Sampling	9
Flow Notes During Sampling	Flow from N and W towards S

Vapor Sampling

Sample ID	MH-1181_121720
Canister Number	40885
Filter Number	25251
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:40
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28.5

Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	10:52
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1181_121720
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1020_121720, 11:22, 11:35

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1020

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
DTW (ft below rim) During Sampling	6.9
Flow Notes During Sampling	Flow S towards N

Vapor Sampling

Sample ID	MH-1020_121720
Canister Number	1L1913
Filter Number	23563
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:22
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:33
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1020_121720
Liquid Sample Time	11:35
Was a liquid DUP collected?	No

MH-1043_121720, 12:04, 12:20

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1043

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
DTW (ft below rim) During Sampling	8.2
Flow Notes During Sampling	Flow from S towards N

Vapor Sampling

Sample ID	MH-1043_121720
Canister Number	1L2658
Filter Number	24108
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:04
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28.5
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	12:15
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1043_121720
Liquid Sample Time	12:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1067_121720, 13:49, 14:05

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1067

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
DTW (ft below rim) During Sampling	8.5
Flow Notes During Sampling	Flow from N towards S

Vapor Sampling

Sample ID	MH-1067_121720
Canister Number	1L2840
Filter Number	24729
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:49
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	14:01
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1067_121720
Liquid Sample Time	14:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1082_121720, 02:19

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1082

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2020-12-17
DTW (ft below rim) During Sampling	7.8
Flow Notes During Sampling	Well is dry

Vapor Sampling

Sample ID	MH-1082_121720
Canister Number	1L2719
Filter Number	23587
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	02:19
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:29
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

2021-03-22, Emma Witherspoon, UC Sampling

Created	2021-03-22 16:47:27 UTC by Emma Witherspoon
Updated	2021-03-31 14:05:30 UTC by Julia McClafferty
Location	42.3681082454, -83.398981292

Basic Information

Project Name	Ford LTP
Task	UC Sampling
Project Number	30080642
Location	Livonia, MI
Date	2021-03-22
Completed By	Emma Witherspoon
Additional Personnel	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	62.96 degrees F and Partly Cloudy
PPE	Level D
Are you using equipment?	Yes

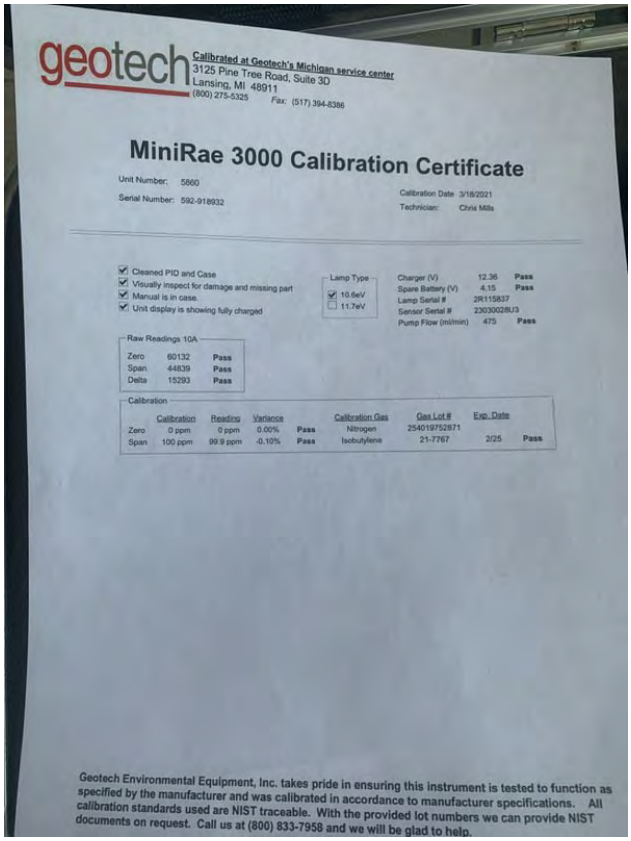
Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	Geopump
Pine/Geotech Number	7017
Calibrated?	No

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRae 300
Pine/Geotech Number	5860
Calibrated?	Yes
Calibration standard information	Isobutylene 10.5/10 ppm

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 5660
Serial Number: 592-918932
Calibration Date: 3/18/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.36	Pass
Spare Battery (V)	4.15	Pass
Lamp Serial #	2R115837	
Sensor Serial #	23030028U3	
Pump Flow (ml/min)	475	Pass

Raw Readings 10A

Zero	60132	Pass
Span	44839	Pass
Delta	15293	Pass

Calibration

	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254019752871		
Span	100 ppm	99.9 ppm	-0.10%	Pass	Isobutylene	21-7767	2/25	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

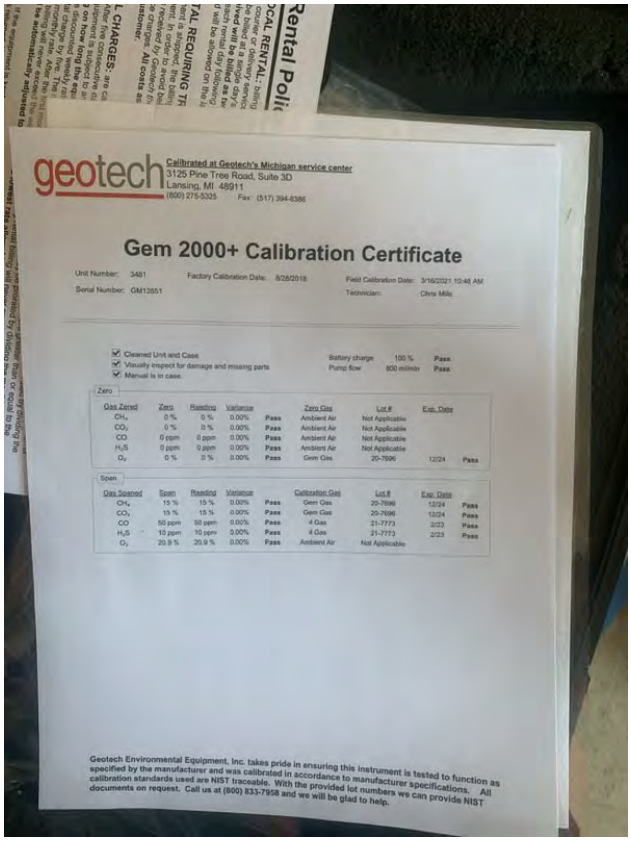
WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	7069
Calibrated?	No

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000+
Pine/Geotech Number	3481
Calibrated?	Yes
Calibration standard information	CO2- 14.7/15% CH4-15.5/15% N2-Balance

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-6386

Gem 2000+ Calibration Certificate

Unit Number: 3481 Factory Calibration Date: 8/28/2018 Field Calibration Date: 3/16/2021 10:46 AM
Serial Number: GM13551 Technician: Chris Mills

Cleaned Unit and Case
Visually inspect for damage and missing parts
Manual is in case.

Battery charge 100 % Pass
Pump flow 800 ml/min Pass

Zero

Gas Zeroed	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass

Span

Gas Spanned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	21-7773	2/23	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	21-7773	2/23	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

Daily Log of Activities

08:30, Arcadis on-site; conduct H&S tailgate

Time	08:30
Description of Task	Arcadis on-site; conduct H&S tailgate

09:07, Conduct vapor barrier installation

Time	09:07
Description of Task	Conduct vapor barrier installation

13:15, Conduct UC sampling

Time	13:15
Description of Task	Conduct UC sampling

17:10, Arcadis off-site

Time	17:10
Description of Task	Arcadis off-site

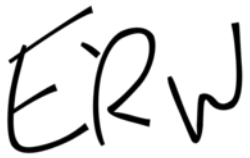
Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature



Signed 2021-03-23 01:25:46 UTC

2020-12-15, Andrew Banitt, Utility Corridor Sampling

Created	2020-12-15 13:13:57 UTC by Andrew Banitt
Updated	2020-12-15 20:50:00 UTC by Andrew Banitt
Location	42.3730466622867, -83.3919670665778

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Sampling
Location	Livonia, MI
Date	2020-12-15
Completed By	Andrew Banitt
Additional Personnel	Emma Whitherspoon
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	19.94 degrees F and Mostly Cloudy
PPE	Level D
Are you using equipment?	Yes

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 2000
Pine/Geotech Number	3782
Calibrated?	Yes
Calibration standard information	CO2 15.4/15 CH4 15.2/15

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	5813
Calibrated?	Yes
Calibration standard information	100 ppm balance C4H8

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	1367
Calibrated?	No

Daily Log of Activities

08:03, Arcadis is on site. Equipment is calibrated.

Time	08:03

Description of Task	Arcadis is on site. Equipment is calibrated.

08:45, Vapor sample taken at EDC.

Time	08:45
Description of Task	Vapor sample taken at EDC.

09:24, Vapor sample taken at WDC.

Time	09:24
Description of Task	Vapor sample taken at WDC.

09:56, Vapor sample taken at SAMH-1245.

Time	09:56
Description of Task	Vapor sample taken at SAMH-1245.

10:53, Vapor sample taken at SAMH-1244.

Time	10:53
Description of Task	Vapor sample taken at SAMH-1244.

11:31, Vapor sample taken at SAMH-1231.

Time	11:31
Description of Task	Vapor sample taken at SAMH-1231.

11:58, Vapor sample taken at SL2.

Time	11:58
Description of Task	Vapor sample taken at SL2.

12:30, Vapor sample taken at STMH-1041.

Time	12:30
Description of Task	Vapor sample taken at STMH-1041.

13:00, Water sample taken at STMH-1041. Sediment sample not available.

Time	13:00
Description of Task	Water sample taken at STMH-1041. Sediment sample not available.

13:16, Vapor sample taken at STMH-1066.

Time	13:16
Description of Task	Vapor sample taken at STMH-1066.

13:30, Water sample taken at STMH-1066. Sediment sample not available.

Time	13:30
Description of Task	Water sample taken at STMH-1066. Sediment sample not available.

14:36, Vapor sample taken at STMH-1088. Water and sediment samples not available.

Time	14:36
Description of Task	Vapor sample taken at STMH-1088. Water and sediment samples not available.

15:06, Vapor sample taken at STMH-1171.

Time	15:06
Description of Task	Vapor sample taken at STMH-1171.

15:20, Water samples taken at STMH-1171. Sediment sample not available.

Time	15:20
Description of Task	Water samples taken at STMH-1171. Sediment sample not available.

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-12-15 13:18:25 UTC

2020-12-16, Andrew Banitt, Utility Corridor Sampling

Created	2020-12-16 13:08:06 UTC by Andrew Banitt
Updated	2020-12-16 20:11:56 UTC by Andrew Banitt
Location	42.3730466622867, -83.3919670665778

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Sampling
Location	Livonia, MI
Date	2020-12-16
Completed By	Andrew Banitt
Additional Personnel	Emma Whitherspoon
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	26.06 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 2000
Pine/Geotech Number	3782
Calibrated?	Yes
Calibration standard information	CO2 15.4/15 CH4 15.2/15

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	5813
Calibrated?	Yes
Calibration standard information	100 ppm balance C4H8

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	1367
Calibrated?	No

Daily Log of Activities

08:02, Arcadis is on site. Arcadis calibrates equipment.

Time	08:02

Description of Task	Arcadis is on site. Arcadis calibrates equipment.

08:26, Vapor sample taken at STMH-1001.

Time	08:26
Description of Task	Vapor sample taken at STMH-1001.

08:40, Water samples taken at STMH-1001. Sediment sample not available.

Time	08:40
Description of Task	Water samples taken at STMH-1001. Sediment sample not available.

08:58, Vapor sample taken at STMH-1210.

Time	08:58
Description of Task	Vapor sample taken at STMH-1210.

09:15, Water samples taken at STMH-1210. Sediment sample not available.

Time	09:15
Description of Task	Water samples taken at STMH-1210. Sediment sample not available.

09:31, Vapor sample taken at STMH-1219.

Time	09:31
Description of Task	Vapor sample taken at STMH-1219.

09:45, Water samples taken at STMH-1219. Sediment sample not available.

Time	09:45
Description of Task	Water samples taken at STMH-1219. Sediment sample not available.

10:42, Vapor sample taken at SAMH-1258.

Time	10:42
Description of Task	Vapor sample taken at SAMH-1258.

11:05, Vapor sample taken at SAMH-1256.

Time	11:05
Description of Task	Vapor sample taken at SAMH-1256.

11:27, Vapor sample taken at SAMH-1255.

Time	11:27
Description of Task	Vapor sample taken at SAMH-1255.

12:03, Vapor sample taken at SL3.

Time	12:03
Description of Task	Vapor sample taken at SL3.

13:56, Vapor sample with duplicate taken at SAMH-1096.

Time	13:56
Description of Task	Vapor sample with duplicate taken at SAMH-1096.

14:15, Water samples with duplicate taken at SAMH-1096.

Time	14:15
Description of Task	Water samples with duplicate taken at SAMH-1096.

15:04, Vapor sample taken at SAMH-1113.

Time	15:04
Description of Task	Vapor sample taken at SAMH-1113.

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-12-16 13:08:55 UTC

2020-12-17, Andrew Banitt, Utility Corridor Sampling

Created	2020-12-17 13:42:45 UTC by Andrew Banitt
Updated	2020-12-17 20:46:00 UTC by Andrew Banitt
Location	42.3730466622867, -83.3919670665778

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Sampling
Location	Livonia, MI
Date	2020-12-17
Completed By	Andrew Banitt
Additional Personnel	Emma Whitherspoon
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	28.04 degrees F and Light Snow and Fog/Mist
PPE	Level D
Are you using equipment?	Yes

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 2000
Pine/Geotech Number	3782
Calibrated?	Yes
Calibration standard information	CO2 15.4/15 CH4 15.2/15

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	5813
Calibrated?	Yes
Calibration standard information	100 ppm balance C4H8

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	1367
Calibrated?	No

Daily Log of Activities

08:34, Arcadis is on site. Arcadis calibrates equipment.

Time	08:34

Description of Task	Arcadis is on site. Arcadis calibrates equipment.

09:09, Vapor sample taken at SAMH-1116.

Time	09:09
Description of Task	Vapor sample taken at SAMH-1116.

09:33, Vapor sample taken at at SAMH-1122.

Time	09:33
Description of Task	Vapor sample taken at at SAMH-1122.

09:46, Sediment sample taken at SAMH-1122. No water sample available.

Time	09:46
Description of Task	Sediment sample taken at SAMH-1122. No water sample available.

10:15, Vapor sample taken at SAMH-1123.

Time	10:15
Description of Task	Vapor sample taken at SAMH-1123.

10:40, Vapor sample taken at SAMH-1181.

Time	10:40
Description of Task	Vapor sample taken at SAMH-1181.

11:00, Water samples taken at SAMH-1181. No sediment sample available.

Time	11:00
Description of Task	Water samples taken at SAMH-1181. No sediment sample available.

11:22, Vapor sample taken at SAMH-1020.

Time	11:22
Description of Task	Vapor sample taken at SAMH-1020.

11:35, Water samples taken at SAMH-1020. No sediment sample available.

Time	11:35
Description of Task	Water samples taken at SAMH-1020. No sediment sample available.

12:04, Vapor sample taken at SAMH-1043.

Time	12:04
Description of Task	Vapor sample taken at SAMH-1043.

12:20, Water samples taken at SAMH-1043. No sediment sample available.

Time	12:20
Description of Task	Water samples taken at SAMH-1043. No sediment sample available.

13:49, Vapor sample taken at SAMH-1067.

Time	13:49
Description of Task	Vapor sample taken at SAMH-1067.

14:05, Water samples taken at SAMH-1067. No sediment sample available.

Time	14:05
Description of Task	Water samples taken at SAMH-1067. No sediment sample available.

14:19, Vapor sample taken at SAMH-1082. No water or sediment sample available.

Time	14:19
Description of Task	Vapor sample taken at SAMH-1082. No water or sediment sample available.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2020-12-17 13:43:39 UTC

Emma Witherspoon, Andrew Banitt, 2021-03-22, 2021-03-30

Created	2021-03-22 13:04:23 UTC by Emma Witherspoon
Updated	2021-03-30 19:09:42 UTC by Emma Witherspoon
Location	42.3684818742, -83.3891679826
Field Staff	Emma Witherspoon, Andrew Banitt
Project Number	30050315.701
Start Date	2021-03-22
End Date	2021-03-30

MH-1001_032321, 10:46, 10:55

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1001

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:07
DTW (ft below rim) During Vapor Barrier Install	16.41
DTB (ft below rim) During Vapor Barrier Install	16.5
Flow Notes During Vapor Barrier Install	No flow

Sampling Information

Date Sampled	2021-03-23

Vapor Sampling

Sample ID	MH-1001_032321
Canister Number	1L1753
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:46
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	10:48
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1001_032321
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1041_032321, 11:18, 11:30

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1041

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:15
DTW (ft below rim) During Vapor Barrier Install	9.62
DTB (ft below rim) During Vapor Barrier Install	9.69
Flow Notes During Vapor Barrier Install	No flow

Sampling Information

Date Sampled	2021-03-23
DTW (ft below rim) During Sampling	9.62

Vapor Sampling

Sample ID	MH-1041_032321

Canister Number	1L1691
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:18
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	11:19
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1041_032321
Liquid Sample Time	11:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Photos

MH-1066_032321, 11:47, 12:00

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1066

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:23
DTW (ft below rim) During Vapor Barrier Install	9.03
DTB (ft below rim) During Vapor Barrier Install	9.07
Flow Notes During Vapor Barrier Install	No flow

Sampling Information

Date Sampled	2021-03-23
DTW (ft below rim) During Sampling	9.02

Vapor Sampling

Sample ID	MH-1066_032321
Canister Number	34000742
Filter Number	2005
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6
Sample End Time	11:48
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1066_032321
Liquid Sample Time	12:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1088_032321, 12:11

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1088

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:28
DTW (ft below rim) During Vapor Barrier Install	8.01
DTB (ft below rim) During Vapor Barrier Install	8.01
Flow Notes During Vapor Barrier Install	Dry

Sampling Information

Date Sampled	2021-03-23

Vapor Sampling

Sample ID	MH-1088_032321
Canister Number	1L1861
Filter Number	1920
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:11
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-6
Sample End Time	12:12
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Photos

MH-1210_032321, 13:20, 13:30

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1210

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:35
DTW (ft below rim) During Vapor Barrier Install	8.83
DTB (ft below rim) During Vapor Barrier Install	8.86
Flow Notes During Vapor Barrier Install	No flow

Sampling Information

Date Sampled	2021-03-23
DTW (ft below rim) During Sampling	8.83

Vapor Sampling

Sample ID	MH-1210_032321
Canister Number	1L2737
Filter Number	1913
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-5
Sample End Time	13:21
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1210_032321
Liquid Sample Time	13:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1219_032321, 14:27, 14:30

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1219

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:42
DTW (ft below rim) During Vapor Barrier Install	14.62
DTB (ft below rim) During Vapor Barrier Install	14.65
Flow Notes During Vapor Barrier Install	Trickle from S to N

Sampling Information

Date Sampled	2021-03-23
DTW (ft below rim) During Sampling	14.62

Vapor Sampling

Sample ID	MH-1219_032321
Canister Number	1L3050
Filter Number	2011
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:28
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	1L2201
DUP Filter Number	1922
DUP Digital Start Pressure	-28.5
DUP Analog Start Pressure (before opening can)	-30
DUP Analog Start Pressure (at start of sample)	-15
DUP Suggested Analog Stop Pressure	-6.5
DUP Analog Stop Pressure	-6.5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1219_032321
Liquid Sample Time	14:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1171_032321, 14:55, 15:00

samplers	Emma Witherspoon, Andrew Banitt
Location	STMH-1171

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	09:50
DTW (ft below rim) During Vapor Barrier Install	15.38
DTB (ft below rim) During Vapor Barrier Install	17.65
Flow Notes During Vapor Barrier Install	Strong flow from W to E

Sampling Information

Date Sampled	2021-03-23
DTW (ft below rim) During Sampling	15.37

Vapor Sampling

Sample ID	MH-1171_032321
Canister Number	1L2471

Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:55
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6
Sample End Time	14:56
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1171_032321
Liquid Sample Time	15:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No
Photos	

MH-1255_032321, 16:37

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-22
Time Vapor Barrier Installed	10:21
DTW (ft below rim) During Vapor Barrier Install	8.92
DTB (ft below rim) During Vapor Barrier Install	8.96
Flow Notes During Vapor Barrier Install	Moderate flow from NW to S

Sampling Information

Date Sampled	2021-03-23

Vapor Sampling

Sample ID	MH-1255_032321
Canister Number	1L1594
Filter Number	1928
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.6
LEL in breathing zone (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:37
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	16:38
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Photos

MH-1248_032221, 13:15

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1248

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
DTW (ft below rim) During Sampling	7.95
Flow Notes During Sampling	Moderate flow from W and NW towards E
DTB (ft below rim) During Sampling	8.11

Vapor Sampling

Sample ID	MH-1248_032221
Canister Number	1L2107
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.

Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	13:17
Digital Stop Pressure	-6
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L3952
DUP Filter Number	1910
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-7
DUP Digital Stop Pressure	-6.5
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1245_032221, 13:34

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1245

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
DTW (ft below rim) During Sampling	9.37
Flow Notes During Sampling	Moderate flow from W to E
DTB (ft below rim) During Sampling	9.6

Vapor Sampling

Sample ID	MH-1245_032221
Canister Number	1L2943
Filter Number	2028
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.

CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:35
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1244_032221, 13:47

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
DTW (ft below rim) During Sampling	11.6
Flow Notes During Sampling	Moderate flow from W, trickle from N, towards S
DTB (ft below rim) During Sampling	11.66

Vapor Sampling

Sample ID	MH-1244_032221
Canister Number	1L3272
Filter Number	1946
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5

Sample End Time	13:48
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1231_032221, 14:04

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
DTW (ft below rim) During Sampling	15.25
Flow Notes During Sampling	Strong flow from N, moderate flow from W towards E
DTB (ft below rim) During Sampling	15.91

Vapor Sampling

Sample ID	MH-1231_032221
Canister Number	34002498
Filter Number	1946
PID (ppm)	50.4
PID (ppm) in breathing zone	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:04
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	14:05
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No

MH-1258_032221, 14:29

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1258

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
DTW (ft below rim) During Sampling	4.82
Flow Notes During Sampling	No flow
DTB (ft below rim) During Sampling	6.99

Vapor Sampling

Sample ID	MH-1258_032221
Canister Number	1L2380
Filter Number	1946
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:30
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1256_032221, 14:40

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
DTW (ft below rim) During Sampling	8.9
Flow Notes During Sampling	Trickle from W towards S
DTB (ft below rim) During Sampling	8.94

Vapor Sampling

Sample ID	MH-1256_032221

Canister Number	1L3342
Filter Number	2020
PID (ppm)	4
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:40
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16.5
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-6
Sample End Time	14:42
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-3_032221, 15:48

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
Flow Notes During Sampling	Moderate flow from W towards E

Vapor Sampling

Sample ID	SL-3_032221
Canister Number	1L2533
Filter Number	01938
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	15:48
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	15:49
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-4_032221, 16:10

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
Flow Notes During Sampling	Moderate flow from W towards E

Vapor Sampling

Sample ID	SL-4_032221
Canister Number	1L1941
Filter Number	1910
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	16:11
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1096_032221, 16:25, 16:30

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1096

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-22
Flow Notes During Sampling	Moderate flow from NW and SW towards SE

Vapor Sampling

Sample ID	MH-1096_032221
Canister Number	1L1788
Filter Number	1910
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	16:26
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1096_032221
Liquid Sample Time	16:30
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-5_032321, 09:14

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23

Vapor Sampling

Sample ID	SL-5_032321
Canister Number	1L3233
Filter Number	2046
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:14
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-12
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	09:15
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

WDC_032321, 09:55

samplers	Emma Witherspoon, Andrew Banitt
Location	WDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23
DTW (ft below rim) During Sampling	16.95

Vapor Sampling

Sample ID	WDC_032321
Canister Number	1L3287
Filter Number	1913
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:55
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-5
Sample End Time	09:56
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No

EDC_032321, 10:15

samplers	Emma Witherspoon, Andrew Banitt
Location	EDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23

Vapor Sampling

Sample ID	EDC_032321
Canister Number	1L2839
Filter Number	1845
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:16

Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

MH-1181_032321, 15:20, 15:30

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1181

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23
Flow Notes During Sampling	Trickle from W and N towards S

Vapor Sampling

Sample ID	MH-1181_032321
Canister Number	1L2651
Filter Number	2035
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25.5
Analog Start Pressure (at start of sample)	-5
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-1
Sample End Time	15:22
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1181_032321
Liquid Sample Time	15:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1123_032321, 15:47

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1123

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23
Flow Notes During Sampling	Dry

Vapor Sampling

Sample ID	MH-1123_032321
Canister Number	1L2641
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:47
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5
Sample End Time	15:48
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No

MH-1116_032321, 15:58

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1116

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23
Flow Notes During Sampling	Moderate flow from W to E

Vapor Sampling

Sample ID	MH-1116_032321
Canister Number	1L3222
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:58
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-22
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	0
Analog Stop Pressure	-6
Sample End Time	15:59
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No

MH-1113_032321, 16:12

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1113

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23
Flow Notes During Sampling	Moderate flow from N to S

Vapor Sampling

Sample ID	MH-1113_032321
Canister Number	1L2879
Filter Number	1910
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:12
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	16:13
Digital Stop Pressure	-4.5

Was a Vapor DUP collected?	No

MH-1259_032321, 17:10

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-23
Flow Notes During Sampling	Dry

Vapor Sampling

Sample ID	MH-1259_032321
Canister Number	1L3216
Filter Number	19380
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	17:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	17:11
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1122_032421, 08:46

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1122

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-24
Flow Notes During Sampling	Dry

Vapor Sampling

Sample ID	MH-1122_032421
Canister Number	1L1612
Filter Number	1913
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:46
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-7
Sample End Time	08:47
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1020_032421, 09:08, 09:15

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1020

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-24
Flow Notes During Sampling	Moderate flow from S towards N

Vapor Sampling

Sample ID	MH-1020_032421
Canister Number	1L2620
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:08
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	09:09
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1020_032421
Liquid Sample Time	09:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1043_032421, 09:47, 09:50

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1043

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-24
Flow Notes During Sampling	Moderate flow from S towards N

Vapor Sampling

Sample ID	MH-1043_032421
Canister Number	1L2566
Filter Number	1824
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:47
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7.5

Analog Stop Pressure	-7.5
Sample End Time	09:48
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1043_032421
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1067_032421, 10:26, 10:30

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1067

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-24
Flow Notes During Sampling	Trickle from N towards S

Vapor Sampling

Sample ID	MH-1067_032421
Canister Number	1L2677
Filter Number	1910
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:26
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:27
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1067_032421
Liquid Sample Time	10:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1082_032421, 10:49

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1082

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-03-24
Flow Notes During Sampling	Dry

Vapor Sampling

Sample ID	MH-1082_032421
Canister Number	1L2058
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:49
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-7
Sample End Time	10:50
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-2_033021, 14:49

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-03-29

Time Vapor Barrier Installed	12:33

Sampling Information

Date Sampled	2021-03-30

Vapor Sampling

Sample ID	SL-2_033021
Canister Number	1L2416
Filter Number	2005
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:50
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No

Photos

2021-03-23, Emma Witherspoon, UC Sampling

Created	2021-03-23 12:23:35 UTC by Emma Witherspoon
Updated	2021-03-31 14:07:30 UTC by Julia McClafferty
Location	42.3681082454, -83.398981292

Basic Information

Project Name	Ford LTP
Task	UC Sampling
Project Number	30080642
Location	Livonia, MI
Date	2021-03-23
Completed By	Emma Witherspoon
Additional Personnel	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	46.94 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

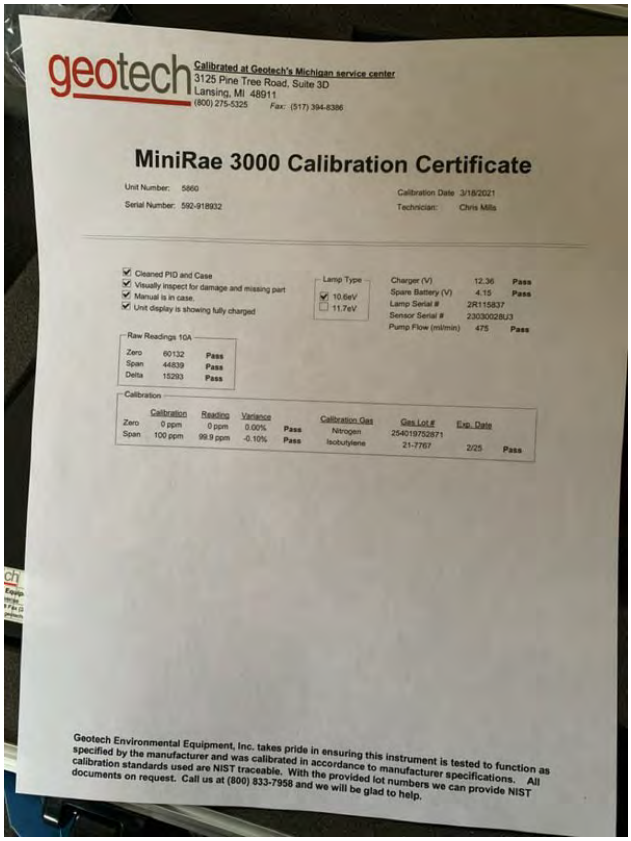
Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	Geopump
Pine/Geotech Number	7017
Calibrated?	No

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRae 300
Pine/Geotech Number	5860
Calibrated?	Yes
Calibration standard information	Isobutylene 10.8/10 ppm

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 5860
Serial Number: 592-918932
Calibration Date 3/18/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.36	Pass
Spare Battery (V)	4.15	Pass
Lamp Serial #	2R115837	
Sensor Serial #	23030028U3	
Pump Flow (ml/min)	475	Pass

Raw Readings 10A

Zero	60132	Pass
Span	44839	Pass
Delta	15293	Pass

Calibration

	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	2540197528?1		
Span	100 ppm	99.9 ppm	-0.10%	Pass	Isobutylene	21-7767	2/25	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

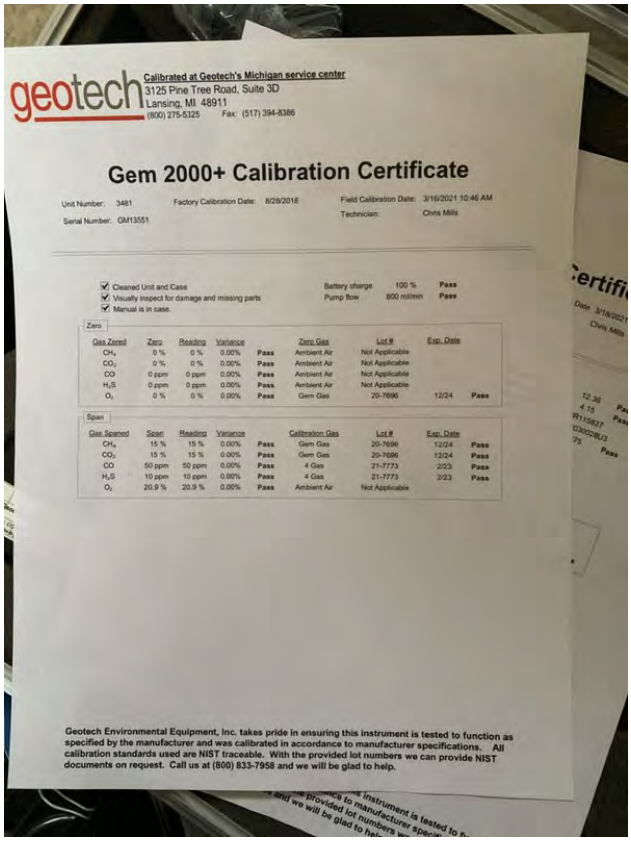
WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	7069
Calibrated?	No

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000+
Pine/Geotech Number	3481
Calibrated?	Yes
Calibration standard information	CO2- 14.5/15% CH4-15.6/15% N2-Balance

Calibration Documents



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3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 3481 Factory Calibration Date: 8/28/2018 Field Calibration Date: 3/16/2021 10:46 AM
Serial Number: GM13551 Technician: Chris Mills

- Cleaned Unit and Case
- Visually inspect for damage and missing parts
- Manual is in case.

Battery charge 100 % Pass
Pump flow 800 ml/min Pass

Zero

Gas Zeroed	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass

Span

Gas Spanned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	21-7773	2/23	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	21-7773	2/23	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

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Daily Log of Activities

08:00, Arcadis on-site; conduct H&S tailgate

Time	08:00
Description of Task	Arcadis on-site; conduct H&S tailgate

08:50, Conduct UC sampling

Time	08:50
Description of Task	Conduct UC sampling

09:27, SL-2 vapor barrier was moved when a ISCO device was placed (pictures attached). Notified J. McClafferty. Vapor Barrier was removed and SL-2 was not sampled.

Time	09:27
Description of Task	SL-2 vapor barrier was moved when a ISCO device was placed (pictures attached). Notified J. McClafferty. Vapor Barrier was removed and SL-2 was not sampled.

18:00, Arcadis off-site

Time	18:00
Description of Task	Arcadis off-site

18:30, Dropped liquid samples off at Arcadis Cold Storage

Time	18:30
Description of Task	Dropped liquid samples off at Arcadis Cold Storage

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos

Signature

Signed 2021-03-23 16:27:04 UTC

2021-03-24, Emma Witherspoon, UC Sampling

Created	2021-03-24 12:06:05 UTC by Emma Witherspoon
Updated	2021-03-31 14:09:13 UTC by Julia McClafferty
Location	42.3681082454, -83.398981292

Basic Information

Project Name	Ford LTP
Task	UC Sampling
Project Number	30080642
Location	Livonia, MI
Date	2021-03-24
Completed By	Emma Witherspoon
Additional Personnel	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	55.94 degrees F and Cloudy
PPE	Level D
Are you using equipment?	Yes

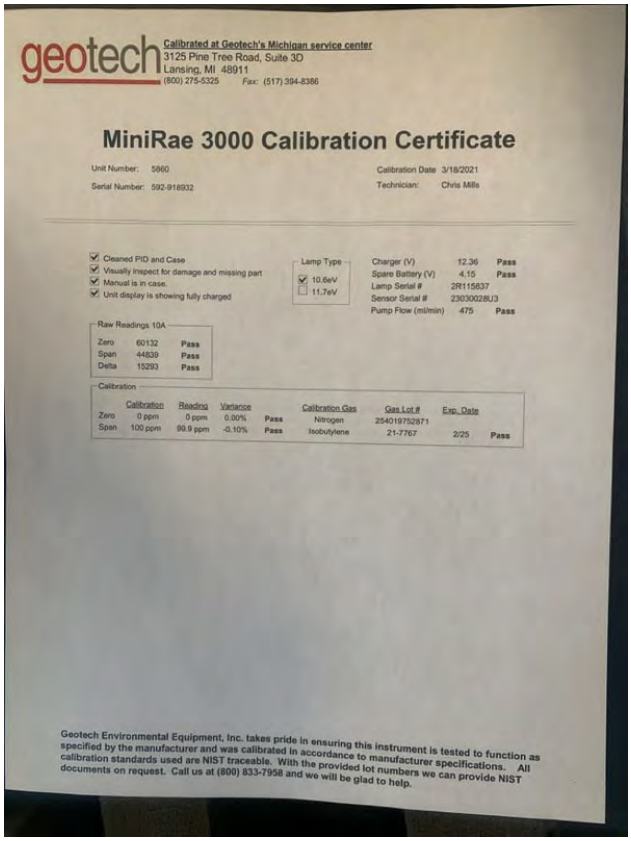
Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	Geopump
Pine/Geotech Number	7017
Calibrated?	No

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRae 300
Pine/Geotech Number	5860
Calibrated?	Yes
Calibration standard information	Isobutylene 10.9/10 ppm

Calibration Documents



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3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 5860
Serial Number: 592-918932
Calibration Date 3/18/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.36	Pass
Spare Battery (V)	4.15	Pass
Lamp Serial #	2R115837	
Sensor Serial #	2303002BU3	
Pump Flow (ml/min)	475	Pass

Raw Readings 10A

Zero	60132	Pass
Span	44839	Pass
Delta	15293	Pass

Calibration

	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254019752871		
Span	100 ppm	99.9 ppm	-0.10%	Pass	Isobutylene	21-7767	2/25	Pass

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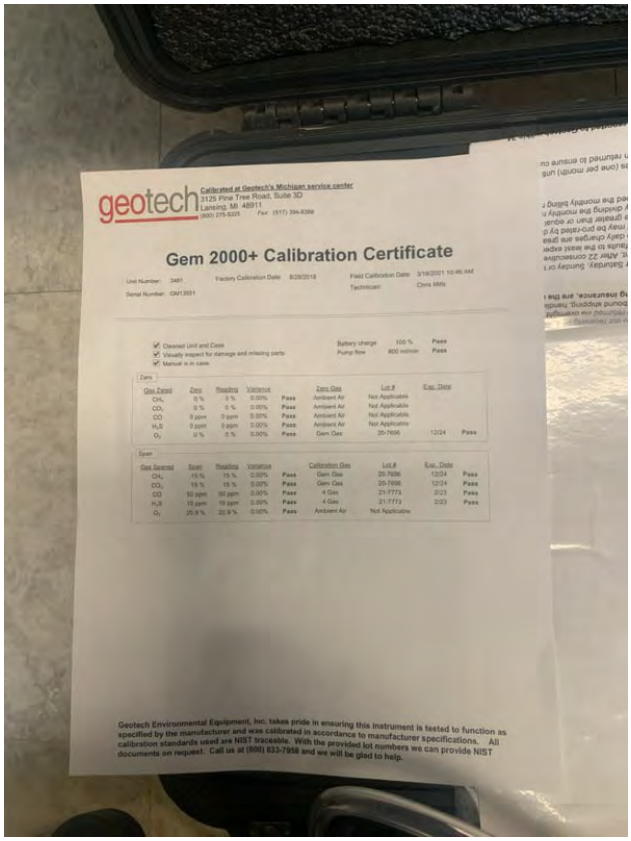
WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	100’
Pine/Geotech Number	7069
Calibrated?	No

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	2000+
Pine/Geotech Number	3481
Calibrated?	Yes
Calibration standard information	CO2- 14.6/15% CH4-15.6/15% N2-Balance

Calibration Documents



Daily Log of Activities

08:00, Arcadis on-site; conduct H&S tailgate

Time	08:00
Description of Task	Arcadis on-site; conduct H&S tailgate

08:45, Conduct UC sampling

Time	08:45
Description of Task	Conduct UC sampling

11:00, Conduct Canister QC

Time	11:00
Description of Task	Conduct Canister QC

16:00, Arcadis off-site; mob to dump sampling waste

Time	16:00
Description of Task	Arcadis off-site; mob to dump sampling waste

17:00, Dropped liquid samples off at Arcadis Cold Storage; dropped off equipment at Arcadis warehouse

Time	17:00
Description of Task	Dropped liquid samples off at Arcadis Cold Storage; dropped off equipment at Arcadis warehouse

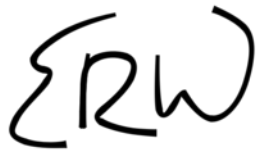
Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature



Signed 2021-03-24 16:07:41 UTC

2021-04-19, Emma Witherspoon, UC sampling

Created	2021-04-19 13:14:57 UTC by Emma Witherspoon
Updated	2021-04-19 20:13:45 UTC by Emma Witherspoon
Location	42.3728160059485, -83.3925836131799

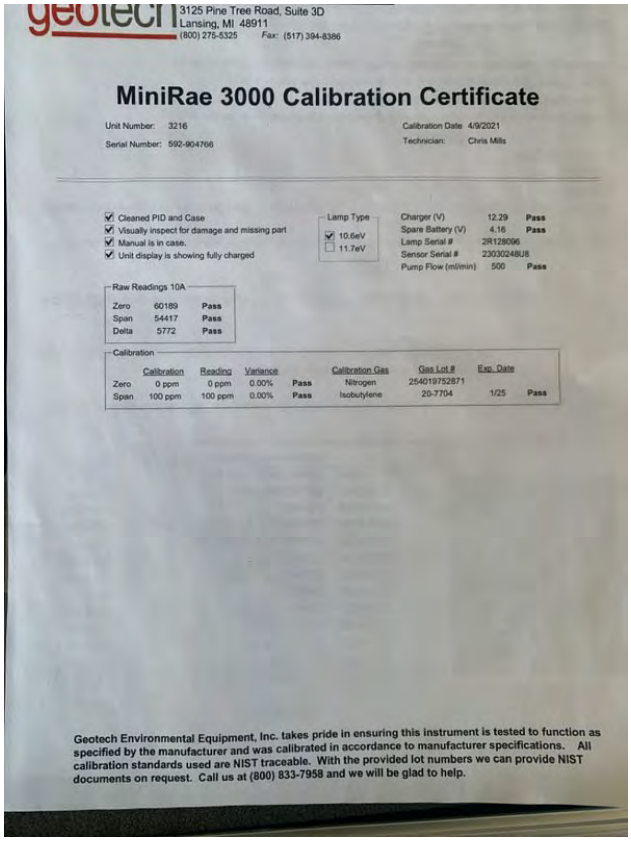
Basic Information

Project Name	Ford LTP
Task	UC sampling
Location	Livonia, MI
Date	2021-04-19
Completed By	Emma Witherspoon
Additional Personnel	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	51.08 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	Yes

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MultiRae 3000
Pine/Geotech Number	3216
Calibrated?	Yes
Calibration standard information	101.8/100 ppm isobutylene

Calibration Documents



geotech 3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 3216
Serial Number: 592-904766
Calibration Date 4/9/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.29	Pass
Spare Battery (V)	4.16	Pass
Lamp Serial #	2R128096	
Sensor Serial #	23030248U6	
Pump Flow (ml/min)	500	Pass

Raw Readings 10A

Zero	60189	Pass
Span	54417	Pass
Delta	5772	Pass

Calibration

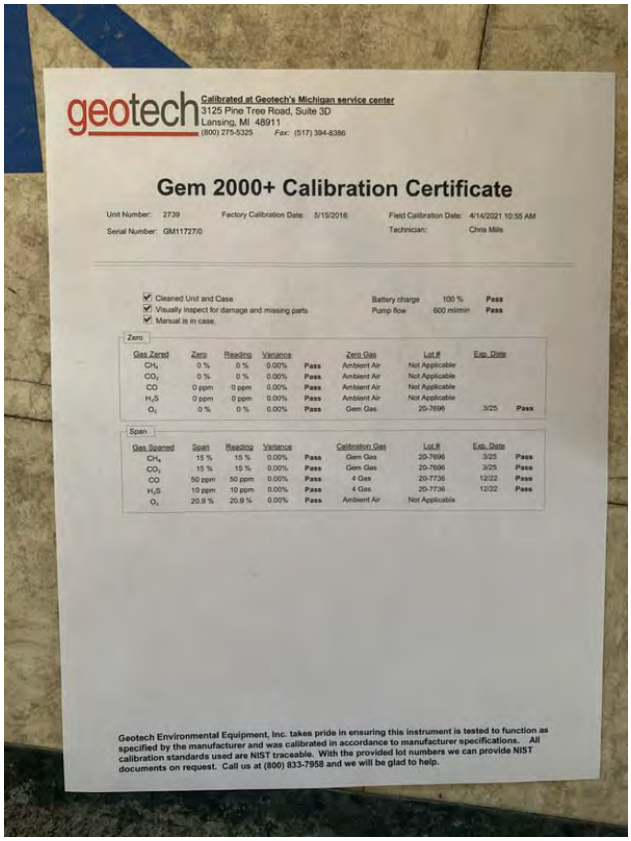
	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254019752871		
Span	100 ppm	100 ppm	0.00%	Pass	Isobutylene	20-7704	1/25	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 2000 +
Pine/Geotech Number	2739
Calibrated?	Yes
Calibration standard information	CH4- 15.5/15% CO2- 15.3/15%

Calibration Documents



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Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 2739 Factory Calibration Date: 5/15/2018 Field Calibration Date: 4/14/2021 10:55 AM
Serial Number: GM11727/0 Technician: Chris Mills

- [x] Cleaned Unit and Case
- [x] Visually inspect for damage and missing parts
- [x] Manual is in case.

Battery charge 100 % Pass
Pump flow 600 ml/min Pass

Zero

Gas Zeroed	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass

Span

Gas Spaned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	20-7736	12/22	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	20-7736	12/22	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	200’
Pine/Geotech Number	2003
Calibrated?	No

Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	Geopump
Pine/Geotech Number	5039
Calibrated?	No

Daily Log of Activities

08:30, Arcadis on-site; begin sampling prep

Time	08:30
Description of Task	Arcadis on-site; begin sampling prep

09:00, Calibrate equipment

Time	09:00
Description of Task	Calibrate equipment

09:25, Conduct H&S tailgate

Time	09:25
Description of Task	Conduct H&S tailgate

10:11, Conduct vapor barrier installation

Time	10:11
Description of Task	Conduct vapor barrier installation

10:33, Conduct UC sampling

Time	10:33
Description of Task	Conduct UC sampling

11:32, Contacted J. McClaffertyabout broken MH cover at MH-1259

Time	11:32
Description of Task	Contacted J. McClaffertyabout broken MH cover at MH-1259

12:10, Arcadis off-site

Time	12:10
Description of Task	Arcadis off-site

13:00, Arcadis on-site; resume UC sampling

Time	13:00
Description of Task	Arcadis on-site; resume UC sampling

16:30, Arcadis off-site

Time	16:30
Description of Task	Arcadis off-site

17:00, Dropped samples off at Arcadis Cold Storage

Time	17:00
Description of Task	Dropped samples off at Arcadis Cold Storage

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos

Signature

Signed 2021-04-19 20:04:20 UTC

2021-04-20, Emma Witherspoon, UC sampling

Created	2021-04-20 12:04:54 UTC by Emma Witherspoon
Updated	2021-04-20 18:53:03 UTC by Emma Witherspoon
Location	42.3728160059485, -83.3925836131799

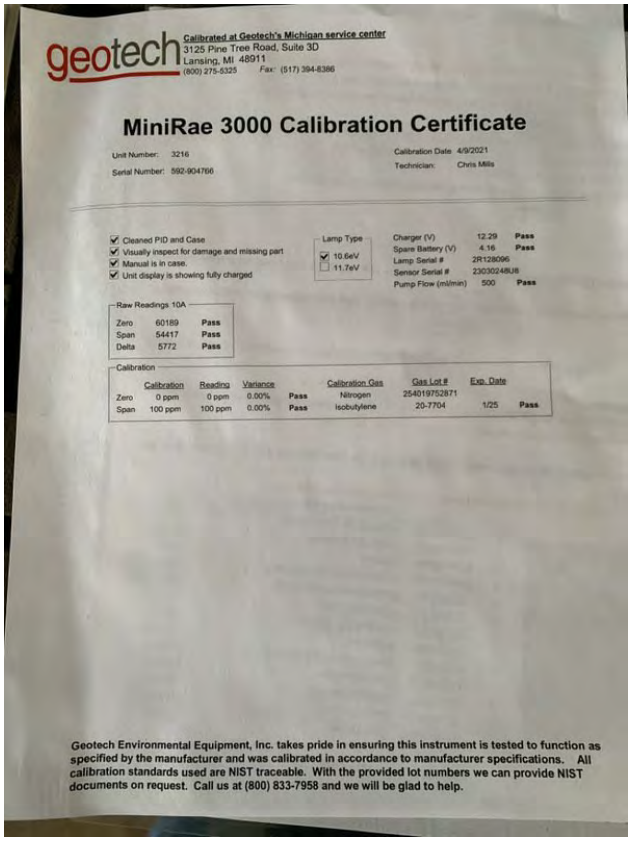
Basic Information

Project Name	Ford LTP
Task	UC sampling
Location	Livonia, MI
Date	2021-04-20
Completed By	Emma Witherspoon
Additional Personnel	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	51.08 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	Yes

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MultiRae 3000
Pine/Geotech Number	3216
Calibrated?	Yes
Calibration standard information	104/100 ppm isobutylene

Calibration Documents



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3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 3216
Serial Number: 592-904766
Calibration Date: 4/9/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.29	Pass
Spare Battery (V)	4.16	Pass
Lamp Serial #	2R128096	
Sensor Serial #	23030248U8	
Pump Flow (ml/min)	500	Pass

Raw Readings 10A

Zero	60189	Pass
Span	54417	Pass
Delta	5772	Pass

Calibration

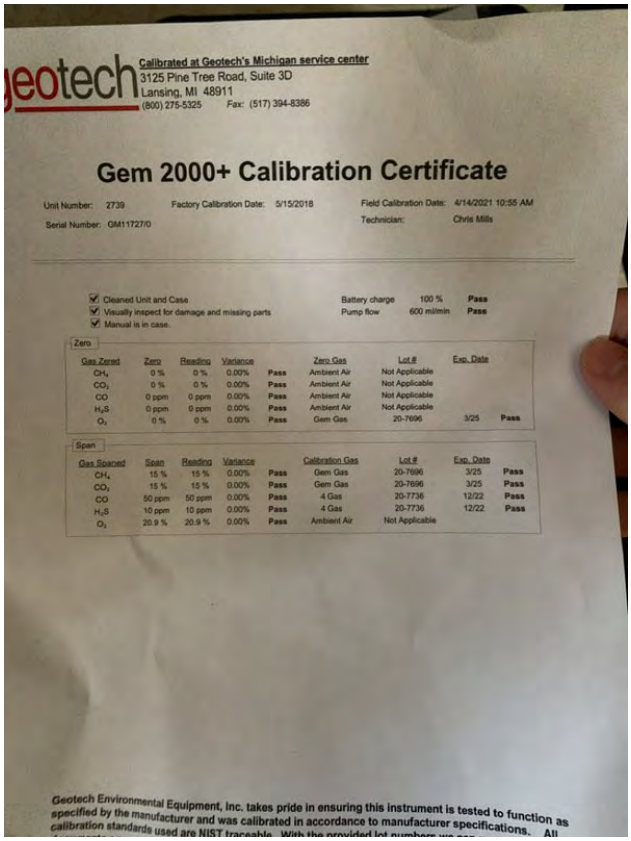
	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254019752871		
Span	100 ppm	100 ppm	0.00%	Pass	Isobutylene	20-7704	1/25	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 2000 +
Pine/Geotech Number	2739
Calibrated?	Yes
Calibration standard information	CH4- 15.6/15% CO2- 15.3/15%

Calibration Documents



Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 2739 Factory Calibration Date: 5/15/2018 Field Calibration Date: 4/14/2021 10:55 AM
Serial Number: GM11727/0 Technician: Chris Mills

- ☑ Cleaned Unit and Case — Battery charge 100 % Pass
- ☑ Visually inspect for damage and missing parts — Pump flow 600 ml/min Pass
- ☑ Manual is in case.

Zero

Gas Zeroed	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass

Span

Gas Spanned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	20-7736	12/22	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	20-7736	12/22	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can

WLM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	WLM
Model	200’
Pine/Geotech Number	2003
Calibrated?	No

Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	Geopump
Pine/Geotech Number	5039
Calibrated?	No

Daily Log of Activities

08:00, Arcadis on-site; conduct H&S tailgate

Time	08:00
Description of Task	Arcadis on-site; conduct H&S tailgate

08:15, Calibrate equipment

Time	08:15
Description of Task	Calibrate equipment

08:45, Conduct UC sampling

Time	08:45
Description of Task	Conduct UC sampling

12:00, Conduct sample QC

Time	12:00
Description of Task	Conduct sample QC

14:45, Arcadis off-site

Time	14:45
Description of Task	Arcadis off-site

15:00, Shipped out vapor samples

Time	15:00
Description of Task	Shipped out vapor samples

15:30, Liquid samples dropped off at Test America

Time	15:30
Description of Task	Liquid samples dropped off at Test America

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2021-04-20 12:09:29 UTC

2021-06-10, Emma Witherspoon, UC Sampling

Created	2021-06-10 11:38:44 UTC by Emma Witherspoon
Updated	2021-06-10 22:27:33 UTC by Emma Witherspoon
Location	42.3987360299028, -83.2948038541556

Basic Information

Project Name	Ford LTP
Task	UC Sampling
Project Number	30080642
Location	Livonia, MI
Date	2021-06-10
Completed By	Emma Witherspoon
Additional Personnel	Allyson Hartz, Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	69.98 degrees F and Fog and Fog/Mist
PPE	Level D
Are you using equipment?	Yes

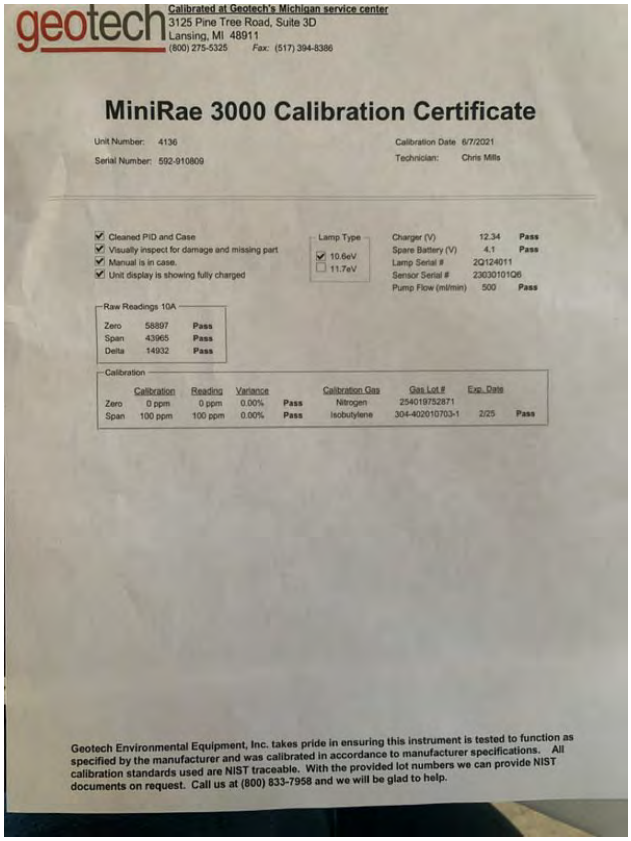
Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	GeoPump 2
Pine/Geotech Number	6381
Calibrated?	No

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRae 3000
Pine/Geotech Number	4136
Calibrated?	Yes
Calibration standard information	Lot # ENJ-248-100-6 106/100 ppm isobutylene

Calibration Documents



geotech
Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 4136
Serial Number: 592-910809
Calibration Date 6/7/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.34	Pass
Spare Battery (V)	4.1	Pass
Lamp Serial #	2Q124011	
Sensor Serial #	2303010106	
Pump Flow (ml/min)	500	Pass

Raw Readings 10A

Zero	58897	Pass
Span	43965	Pass
Delta	14932	Pass

Calibration

	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254019752871		
Span	100 ppm	100 ppm	0.00%	Pass	Isobutylene	304-402010703-1	2/25	Pass

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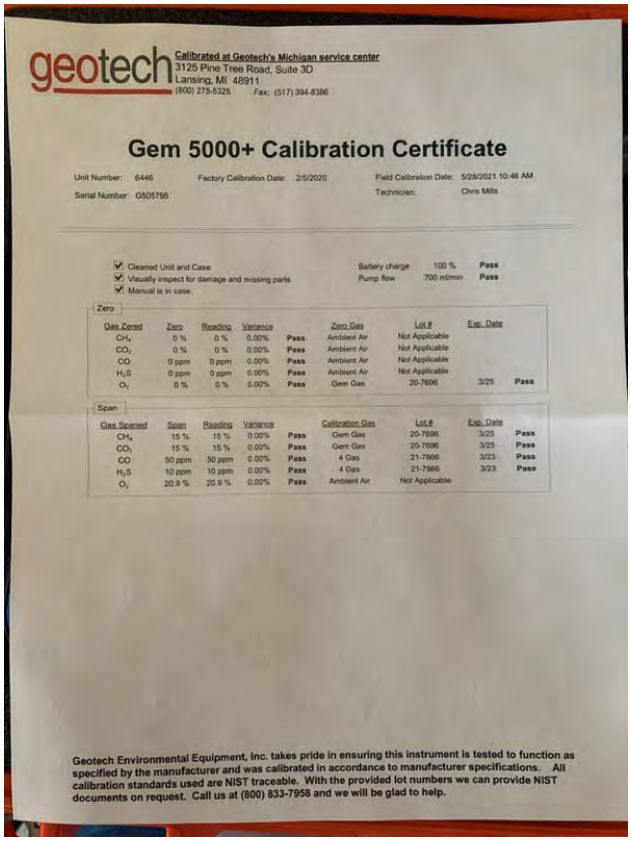
GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 5000+
Pine/Geotech Number	6446
Calibrated?	Yes
Calibration standard information	Lot #: 304-401743643-1 35.7/35 % CO2 51.4/50 % CH4

Calibration Documents



geotech Calibrated at Geotech's Michigan service center
3125 Pine Tree Road, Suite 3D
Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

Gem 5000+ Calibration Certificate

Unit Number: 6446 Factory Calibration Date: 2/5/2020 Field Calibration Date: 5/28/2021 10:46 AM
Serial Number: G505795 Technician: Chris Mills

- ☑ Cleaned Unit and Case
- ☑ Visually inspect for damage and missing parts
- ☑ Manual is in case.

Battery charge 100 % Pass
Pump flow 700 ml/min Pass

Zero

Gas Zered	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass

Span

Gas Spaned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	3/25	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	21-7866	3/23	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	21-7866	3/23	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

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Daily Log of Activities

07:40, Arcadis on-site (A. Banitt & E. Witherspoon); conduct Equipment Calibration

Time	07:40
Description of Task	Arcadis on-site (A. Banitt & E. Witherspoon); conduct Equipment Calibration

08:00, Conduct H&S tailgate

Time	08:00
Description of Task	Conduct H&S tailgate

08:30, City of Livonia and Arcadis on-site; conduct UC sampling event

Time	08:30
Description of Task	City of Livonia and Arcadis on-site; conduct UC sampling event

12:00, Break for lunch

Time	12:00
Description of Task	Break for lunch

13:00, Arcadis on-site to resume UC sampling event (A. Hartz, E. Witherspoon, A. Banitt)

Time	13:00
Description of Task	Arcadis on-site to resume UC sampling event (A. Hartz, E. Witherspoon, A. Banitt)

14:32, MH north of 1261 is sealed with an epoxy; sample not collected.

Time	14:32
Description of Task	MH north of 1261 is sealed with an epoxy; sample not collected.

15:06, MH further north of SAMH 1261 is also sealed and covered by equipment

Time	15:06
Description of Task	MH further north of SAMH 1261 is also sealed and covered by equipment

15:15, Third MH north of SAMH 1261 accessible, let team know; sample not collected

Time	15:15
Description of Task	Third MH north of SAMH 1261 accessible, let team know; sample not collected

15:55, Conduct recon around SAMH 1252; A. Hartz off-site

Time	15:55
Description of Task	Conduct recon around SAMH 1252; A. Hartz off-site

17:14, Arcadis off-site

Time	17:14
Description of Task	Arcadis off-site

Material Tracking

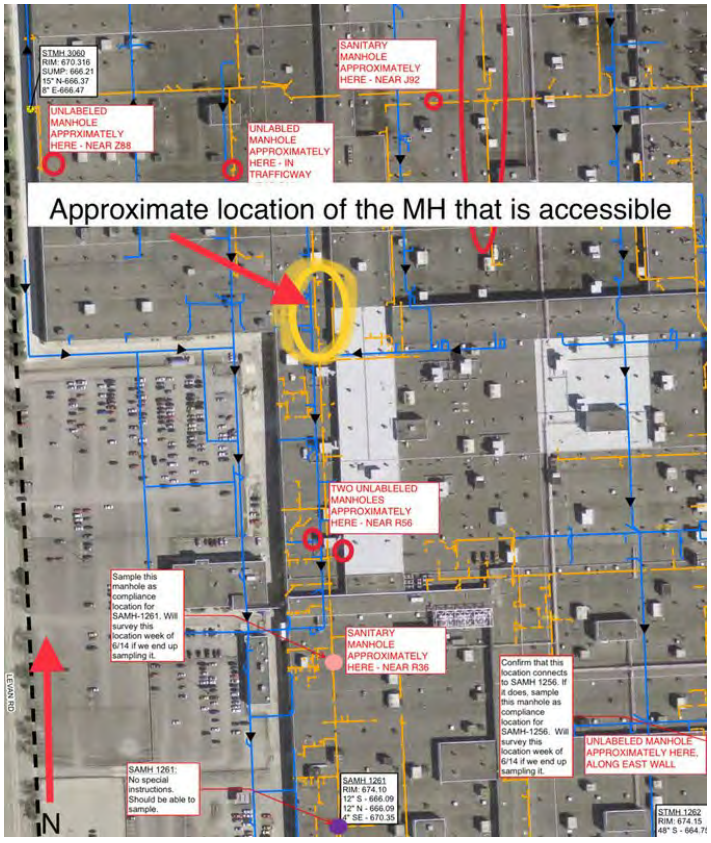
Are you using any materials onsite today?	No

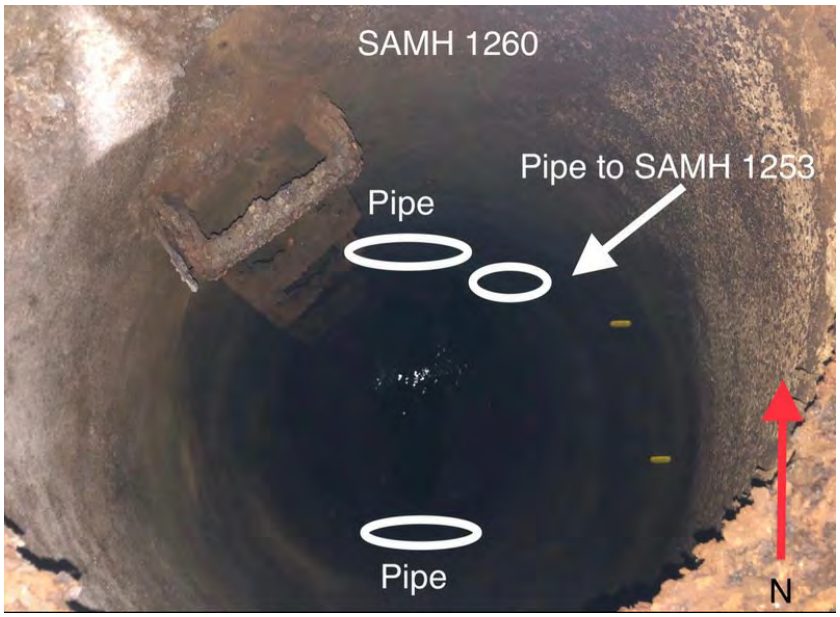
Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

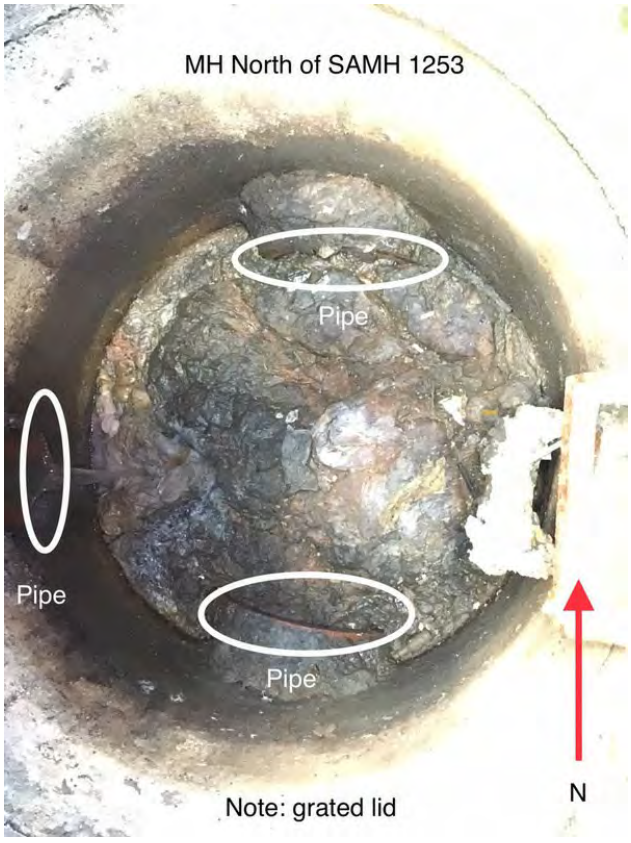
Other Photos

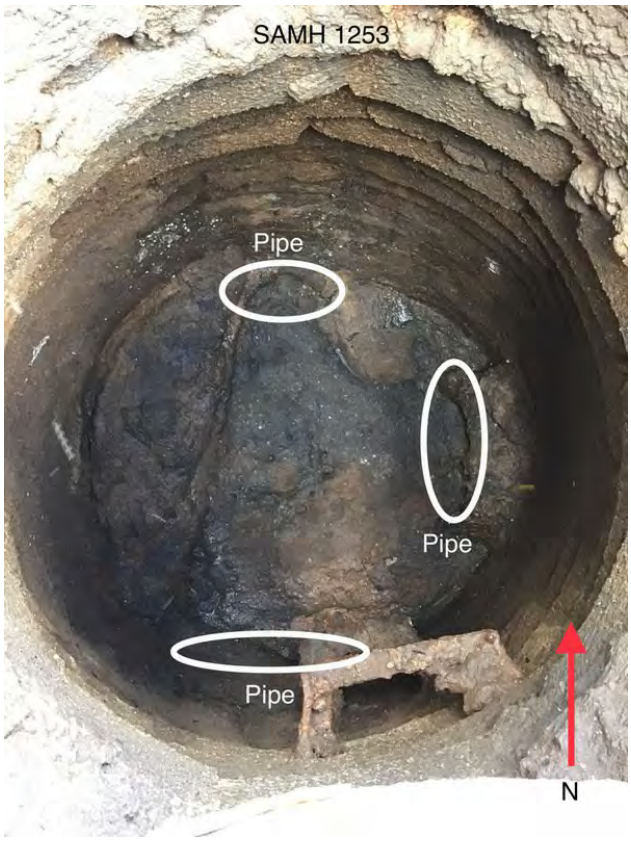



SAMH 1260
Pipe to SAMH 1253
Pipe
Pipe
N

ATTENTION
DO NOT WALK
UP RAMP !
USE SIDE DOOR !
SAMH 1253
N

MH West of SAMH 1252
Pipe
Pipe
N


MH North of SAMH 1253
Pipe
Pipe
Pipe
N
Note: grated lid



Signature

Signed 2021-06-10 11:46:12 UTC

2021-06-11, Emma Witherspoon, UC Sampling

Created	2021-06-11 19:13:43 UTC by Emma Witherspoon
Updated	2021-06-11 19:25:23 UTC by Emma Witherspoon
Location	42.3987360299028, -83.2948038541556

Basic Information

Project Name	Ford LTP
Task	UC Sampling
Project Number	30080642
Location	Livonia, MI
Date	2021-06-11
Completed By	Emma Witherspoon
Additional Personnel	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	86.00 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	No

Daily Log of Activities

09:00, Arcadis on-site

Time	09:00
Description of Task	Arcadis on-site

09:15, QC liquid and vapor samples

Time	09:15
Description of Task	QC liquid and vapor samples

11:00, Arcadis off-site

Time	11:00
Description of Task	Arcadis off-site

11:12, E. Witherspoon dropped vapor samples off at FedEx

Time	11:12
Description of Task	E. Witherspoon dropped vapor samples off at FedEx

11:25, A. Banitt dropped liquid samples off at Test America Lab

Time	11:25
Description of Task	A. Banitt dropped liquid samples off at Test America Lab

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No

Did you drum any waste today?	No

Signature

Signed 2021-06-11 19:25:22 UTC

2021-07-26, Andrew Banitt, Utility Corridor

Created	2021-07-26 23:30:08 UTC by Andrew Banitt
Updated	2021-07-26 23:33:25 UTC by Andrew Banitt
Location	42.5335808073571, -83.516305258128

Basic Information

Project Name	Ford LTP
Task	Utility Corridor
Location	Livonia, MI
Date	2021-07-26
Completed By	Andrew Banitt
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	87.98 degrees F and Mostly Clear
PPE	Level D
Are you using equipment?	No

Daily Log of Activities

12:00, Arcadis is on site. Arcadis recons south manhole on corner of parkdale and Stark. Water flow in from the north and exits to the east. Line does not connect with Stark road line.

Time	12:00
Description of Task	Arcadis is on site. Arcadis recons south manhole on corner of parkdale and Stark. Water flow in from the north and exits to the east. Line does not connect with Stark road line.

12:15, Recon of north manhole: dead end to the north and water flows south. Does not connect to Stark road line. Pictures attached. Arcadis is off site.

Time	12:15
Description of Task	Recon of north manhole: dead end to the north and water flows south. Does not connect to Stark road line. Pictures attached. Arcadis is off site.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos

Signature

Signed 2021-07-26 23:33:24 UTC

2021-09-29, Andrew Banitt, Utility Corridor Recon

Created	2021-09-29 16:21:58 UTC by Andrew Banitt
Updated	2021-09-29 20:52:40 UTC by Andrew Banitt
Location	42.3728587836377, -83.3809376433843

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Recon
Location	Livonia, MI
Date	2021-09-29
Completed By	Andrew Banitt
Additional Personnel	Allyson Hartz
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
PPE	Level D
Are you using equipment?	No

Daily Log of Activities

12:20, Recon at manholes at Capitol.

Time	12:20
Description of Task	Recon at manholes at Capitol.

12:43, Recon manholes at Beacon.

Time	12:43
Description of Task	Recon manholes at Beacon.

13:06, Recon manholes at Wadsworth.

Time	13:06
Description of Task	Recon manholes at Wadsworth.

13:33, Recon manholes on Stark south of Plymouth.

Time	13:33
Description of Task	Recon manholes on Stark south of Plymouth.

13:49, Recon manholes at Orangelawn.

Time	13:49
Description of Task	Recon manholes at Orangelawn.

14:00, Recon manholes at Pinetree.

Time	14:00
Description of Task	Recon manholes at Pinetree.

14:17, Recon manholes at Richland.

Time	14:17
Description of Task	Recon manholes at Richland.

14:56, Recon manholes at Hathaway

Time	14:56
Description of Task	Recon manholes at Hathaway

16:15, Arcadis returns to trailer.

Time	16:15
Description of Task	Arcadis returns to trailer.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos

Capitol 1E

Capitol 2E

Beacon 1E

Wadsworth 1E

Wadsworth 2E

Stark 1E Sidewalk

Stark Yard 2E

Orangelawn 1E

Pinetree 1W

Pinetree 2W

Richland 1W

Richland 2W

Richland 3W

Hathaway 1E

Hathaway 3E

Hathaway 4E

Hathaway 2E

Hathaway 1W

Hathaway 2W

Signature

Signed 2021-09-29 17:05:59 UTC

2021-09-30, Andrew Banitt, Utility Corridor Recon

Created	2021-09-30 20:02:36 UTC by Andrew Banitt
Updated	2021-09-30 20:04:16 UTC by Andrew Banitt
Location	42.3619172163719, -83.3803538683237

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Recon
Location	Livonia, MI
Date	2021-09-30
Completed By	Andrew Banitt
Additional Personnel	Allyson Hartz
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	69.98 degrees F and Mostly Cloudy
PPE	Level D
Are you using equipment?	No

Daily Log of Activities

16:00, Recon manholes at Richland.

Time	16:00
Description of Task	Recon manholes at Richland.

16:15, Return to trailer.

Time	16:15
Description of Task	Return to trailer.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Photos

Other Photos	
	Richland 1E

Signature

Signed 2021-09-30 20:04:03 UTC

Emma Witherspoon, Andrew Banitt, 2021-04-19, 2021-04-20

Created	2021-04-19 14:09:38 UTC by Emma Witherspoon
Updated	2021-07-08 16:11:34 UTC by Julia McClafferty
Location	42.3681404474, -83.3915898653
Field Staff	Emma Witherspoon, Andrew Banitt
Project Number	30050315.701
Start Date	2021-04-19
End Date	2021-04-20

SL-2_042021, 10:43

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-04-19
Time Vapor Barrier Installed	10:11

Sampling Information

Date Sampled	2021-04-20
DTW (ft below rim) During Sampling	15.1

Vapor Sampling

Sample ID	SL-2_042021
Canister Number	40868
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:43
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5.5
Sample End Time	10:44
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Liquid sampling SL-2_042021 Time: 1050
Was a Vapor DUP collected?	No

Photos

MH-1255_042021, 11:12

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2021-04-19
Time Vapor Barrier Installed	10:25

Sampling Information

Date Sampled	2021-04-20

Vapor Sampling

Sample ID	MH-1255_042021
Canister Number	1L1641
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	11:12
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:13
Digital Stop Pressure	-6
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	1L2406
DUP Filter Number	1938
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-12
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-6.5
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1258_041921, 10:39

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1258

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1258_041921
Canister Number	LC630
Filter Number	1912
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:39

Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-7
Sample End Time	10:40
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1256_041921, 10:53

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1256_041921
Canister Number	1L3173
Filter Number	2005
PID (ppm)	14.6
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:53
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6
Sample End Time	10:54
Digital Stop Pressure	-3.5
Vapor Sampling Notes	Strong smell when MH was opened
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1259_041921, 11:22

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1259_041921
Canister Number	1L2746
Filter Number	1928
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1.6
LEL in breathing zone (%)	1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:22
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-7
Sample End Time	11:23
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1248_041921, 13:46

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1248

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1248_041921

Canister Number	1L2323
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:46
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-9
Analog Stop Pressure	-9
Sample End Time	13:47
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1245_041921, 13:55

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1245

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1245_041921
Canister Number	0000003004
Filter Number	2028
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:55
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-6
Sample End Time	13:56
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1244_041921, 14:07

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1244_041921
Canister Number	1L3011
Filter Number	1910
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:08
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1231_041921, 14:31

samplers	Emma Witherspoon, Andrew Banitt

Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19

Vapor Sampling

Sample ID	MH-1231_041921
Canister Number	1L2538
Filter Number	1824
PID (ppm)	10
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:31
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6.5
Sample End Time	14:32
Digital Stop Pressure	-7
Vapor Sampling Notes	Liquid sampling DTW:15.25 ft Sample taken at 1435. MH-1231_041921 DUP-01 taken.
Was a Vapor DUP collected?	No

SL-3_041921, 15:09, 15:15

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19
DTW (ft below rim) During Sampling	17.06

Vapor Sampling

Sample ID	SL-3_041921

Canister Number	1L2580
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-14.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-7
Sample End Time	15:10
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L1508
DUP Filter Number	1938
DUP Digital Start Pressure	-28.5
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-14.5
DUP Suggested Analog Stop Pressure	-5.5
DUP Analog Stop Pressure	-6
DUP Digital Stop Pressure	-5.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_041921
Liquid Sample Time	15:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_041921, 15:42, 15:45

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-19
DTW (ft below rim) During Sampling	15.02

Vapor Sampling

Sample ID	SL-4_041921
Canister Number	1L2753
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:42
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-7
Sample End Time	15:43
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_041921
Liquid Sample Time	15:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_042021, 08:45, 08:50

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-20
DTW (ft below rim) During Sampling	15.09

Vapor Sampling

Sample ID	SL-5_042021
Canister Number	1L2532
Filter Number	1910

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-7
Sample End Time	08:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_042021
Liquid Sample Time	08:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

WDC_042021, 09:15

samplers	Emma Witherspoon, Andrew Banitt
Location	WDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-20

Vapor Sampling

Sample ID	WDC_042021
Canister Number	1L1624
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-7
Sample End Time	09:16
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No

EDC_042021, 09:28

samplers	Emma Witherspoon, Andrew Banitt
Location	EDC

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-04-20

Vapor Sampling

Sample ID	EDC_042021
Canister Number	1L3264
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:28
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:29
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No

Emma Witherspoon, Andrew Banitt, 2021-06-10

Created	2021-06-10 12:53:42 UTC by Emma Witherspoon
Updated	2021-06-11 13:36:18 UTC by Emma Witherspoon
Location	42.36923390160061, -83.38211341391451
Field Staff	Emma Witherspoon, Andrew Banitt
Project Number	30050315.701
Start Date	2021-06-10

SL-7_061021, 08:58, 09:05

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Strong flow from W

Vapor Sampling

Sample ID	SL-7_061021
Canister Number	1L2029
Filter Number	1920
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:58
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-6
Sample End Time	09:00
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_061021
Liquid Sample Time	09:05
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-6_061021, 09:29, 09:35

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Trickle from E, flow from N to S

Vapor Sampling

Sample ID	SL-6_061021
Canister Number	1L2144
Filter Number	2103
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:29
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:30
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_061021
Liquid Sample Time	09:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_061021, 09:53, 10:00

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Strong flow from W and N towards S

Vapor Sampling

Sample ID	SL-5_061021
Canister Number	1L1987
Filter Number	2035
PID (ppm)	7
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	19.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:53
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17.5
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6
Sample End Time	09:55
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L2254
DUP Filter Number	2005
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-29.5
DUP Analog Start Pressure (at start of sample)	-20
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-9
DUP Digital Stop Pressure	-3.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_061021
Liquid Sample Time	10:00
Was a liquid DUP collected?	No

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-8_061021, 10:22, 10:25

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Moderate flow from N to S

Vapor Sampling

Sample ID	SL-8_061021
Canister Number	1L2187
Filter Number	2050
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	19.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:22
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-5
Sample End Time	10:23
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_061021
Liquid Sample Time	10:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_061021, 10:41, 10:45

samplers	Emma Witherspoon, Andrew Banitt
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Flow from N towards S

Vapor Sampling

Sample ID	SL-9_061021
Canister Number	1L2180
Filter Number	1824
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:41
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	10:43
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_061021
Liquid Sample Time	10:45
Was a liquid DUP collected?	No

MH-1234_061021, 13:24

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1234

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Flow from N towards S

Vapor Sampling

Sample ID	MH-1234_061021
Canister Number	1L1974
Filter Number	1831
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:24
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	22.5
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	13:26
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1233_061021, 13:48

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1233

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10
Flow Notes During Sampling	Moderate flow from N to S

Vapor Sampling

Sample ID	MH-1233_061021
Canister Number	1L1962
Filter Number	1913
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:48
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	13:49
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1252_061021, 14:08

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1252

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10

Vapor Sampling

Sample ID	MH-1252_061021
Canister Number	1L2243
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:08
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	14:09
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

MH-1261_061021, 14:42

samplers	Emma Witherspoon, Andrew Banitt
Location	SAMH-1261

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-06-10

Vapor Sampling

Sample ID	MH-1261_061021
Canister Number	1L2292
Filter Number	2005
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:42
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-7
Sample End Time	14:43
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Andrew Banitt, Korey Pearson, 2021-07-13

Created	2021-07-13 13:00:16 UTC by Andrew Banitt
Updated	2021-07-14 14:00:42 UTC by Andrew Banitt
Location	42.37305478240541, -83.38080463490871
Field Staff	Andrew Banitt, Korey Pearson
Project Number	30050315.701
Start Date	2021-07-13

SL-15_071321, 09:06, 09:10

samplers	Andrew Banitt, Korey Pearson
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-15_071321
Canister Number	34000980
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:06
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-6
Sample End Time	09:08
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_071321
Liquid Sample Time	09:10
Was a liquid DUP collected?	No

SL-14_071321, 09:38, 09:40

samplers	Andrew Banitt, Korey Pearson
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-14_071321
Canister Number	8976
Filter Number	1902
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:38
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6.5
Sample End Time	09:39
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_071321
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-13_071321, 10:01, 10:05

samplers	Andrew Banitt, Korey Pearson
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-13_071321
Canister Number	8518
Filter Number	2046
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:01
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:03
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_071321
Liquid Sample Time	10:05
Was a liquid DUP collected?	No

SL-7_071321, 10:26, 10:30

samplers	Andrew Banitt, Korey Pearson
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-7_071321
Canister Number	09641
Filter Number	2103
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:26
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-6
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:27
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_071321
Liquid Sample Time	10:30
Was a liquid DUP collected?	No

SL-6_071321, 10:50, 10:55

samplers	Andrew Banitt, Korey Pearson
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-6_071321
Canister Number	1L2670
Filter Number	1922
PID (ppm)	12.3
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:50
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30

Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6
Sample End Time	10:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_071321
Liquid Sample Time	10:55
Was a liquid DUP collected?	No

SL-5_071321, 12:13, 12:10

samplers	Andrew Banitt, Korey Pearson
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-5_071321
Canister Number	1L3071
Filter Number	1831
PID (ppm)	10
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:13
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:15
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L2821
DUP Filter Number	1922
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-16
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-6
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_071321
Liquid Sample Time	12:10
Liquid Sampling Notes	Visible sheen
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-8_071321, 12:39, 12:40

samplers	Andrew Banitt, Korey Pearson
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-8_071321
Canister Number	1L3895
Filter Number	2103
PID (ppm)	9.8
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28

Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:41
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_071321
Liquid Sample Time	12:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_071321, 13:03, 13:00

samplers	Andrew Banitt, Korey Pearson
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-9_071321
Canister Number	34000335
Filter Number	2046
PID (ppm)	11.2
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:03
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:04
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_071321
Liquid Sample Time	13:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_071321, 13:30, 13:30

samplers	Andrew Banitt, Korey Pearson
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-10_071321
Canister Number	1L1556
Filter Number	2005
PID (ppm)	5
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	13:31
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_071321
Liquid Sample Time	13:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_071321, 13:51, 13:50

samplers	Andrew Banitt, Korey Pearson
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-11_071321
Canister Number	LC296
Filter Number	1910
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-5
Sample End Time	13:52
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_071321
Liquid Sample Time	13:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_071321, 14:15, 14:05

samplers	Andrew Banitt, Korey Pearson
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-07-13

Vapor Sampling

Sample ID	SL-12_071321
Canister Number	1L3179
Filter Number	2028
PID (ppm)	9
PID (ppm) in breathing zone	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-5
Sample End Time	14:16
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_071321
Liquid Sample Time	14:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

2021-07-13, Andrew Banitt, Utility Corridor Sampling

Created	2021-07-13 12:08:38 UTC by Andrew Banitt
Updated	2021-07-14 14:47:07 UTC by Andrew Banitt
Location	42.3728260314606, -83.3914166005625

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Sampling
Project Number	30080642.701
Location	Livonia, MI
Date	2021-07-13
Completed By	Andrew Banitt
Additional Personnel	Korey Pearson
Are you connected to the internet (WiFi or data plan)?	Yes
Get weather data from the National Weather Service website for your current location?	N/A
Weather	71.06 degrees F and Light Rain and Fog/Mist
PPE	Level D
Are you using equipment?	Yes

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE 3000
Pine/Geotech Number	4136
Calibrated?	Yes
Calibration standard information	Bump test 101/100 ppm.

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM 5000
Pine/Geotech Number	6446
Calibrated?	Yes
Calibration standard information	CO2 34.5/35 CH4 51.2/50 O2 20.9/20.9

Peri Pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peri Pump
Model	Geopump
Pine/Geotech Number	6381
Calibrated?	No

Daily Log of Activities

08:00, On site. H&S tailgate.

Time	08:00
Description of Task	On site. H&S tailgate.

08:45, Meet with city. Begin sampling.

Time	08:45
Description of Task	Meet with city. Begin sampling.

14:45, Sampling complete.

Time	14:45
Description of Task	Sampling complete.

16:30, Off site.

Time	16:30
Description of Task	Off site.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2021-07-13 12:09:37 UTC

Andrew Banitt, Korey Pearson, 2021-10-07, 2021-10-07

Created	2021-10-07 13:44:26 UTC by Andrew Banitt
Updated	2021-10-07 20:27:32 UTC by Andrew Banitt
Location	42.37298510964485, -83.38082492456665
Field Staff	Andrew Banitt, Korey Pearson
Project Number	30050315.701
Start Date	2021-10-07
End Date	2021-10-07

SL-15_100721, 09:52, 09:55

samplers	Andrew Banitt, Korey Pearson
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-15_100721
Canister Number	1L3258
Filter Number	1922
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-5
Sample End Time	09:53
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_100721
Liquid Sample Time	09:55
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-14_100721, 10:13, 10:10

samplers	Andrew Banitt, Korey Pearson
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-14_100721
Canister Number	1L2190
Filter Number	1922
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:13
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5
Sample End Time	10:14
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_100721
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_100721, 10:32, 10:30

samplers	Andrew Banitt, Korey Pearson
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-13_100721
Canister Number	1L2176
Filter Number	1912
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:32
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	10:33
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_100721
Liquid Sample Time	10:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_100721, 10:51, 10:50

samplers	Andrew Banitt, Korey Pearson
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-7_100721
Canister Number	1L3353
Filter Number	1922

PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	10:53
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_100721
Liquid Sample Time	10:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_100721, 11:09, 11:05

samplers	Andrew Banitt, Korey Pearson
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-6_100721
Canister Number	1L3075
Filter Number	2016
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:10
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_100721
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_100721, 12:24, 12:15

samplers	Andrew Banitt, Korey Pearson
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-5_100721
Canister Number	1L3191
Filter Number	2046
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:24
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-5

Sample End Time	12:25
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L2904
DUP Filter Number	2005
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-16
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-3.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_100721
Liquid Sample Time	12:15
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-8_100721, 12:46, 12:45

samplers	Andrew Banitt, Korey Pearson
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-8_100721
Canister Number	1L2465
Filter Number	1922
PID (ppm)	3.7
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:46
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	12:47
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_100721
Liquid Sample Time	12:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_100721, 13:10, 13:00

samplers	Andrew Banitt, Korey Pearson
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-9_100721
Canister Number	1L2792
Filter Number	1913
PID (ppm)	3.7
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:10
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7.5

Analog Stop Pressure	-7.5
Sample End Time	13:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_100721
Liquid Sample Time	13:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_100721, 13:26, 13:25

samplers	Andrew Banitt, Korey Pearson
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-10_100721
Canister Number	1L2478
Filter Number	1912
PID (ppm)	3.5
PID (ppm) in breathing zone	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:26
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	13:27
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_100721
Liquid Sample Time	13:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_100721, 13:50, 13:45

samplers	Andrew Banitt, Korey Pearson
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-11_100721
Canister Number	1L2819
Filter Number	1824
PID (ppm)	3.8
PID (ppm) in breathing zone	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:51
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_100721
Liquid Sample Time	13:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_100721, 14:09, 14:05

samplers	Andrew Banitt, Korey Pearson

Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-12_100721
Canister Number	1L1857
Filter Number	1938
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	14:11
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_100721
Liquid Sample Time	14:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_100721, 14:45

samplers	Andrew Banitt, Korey Pearson
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	MH-1231_100721
Canister Number	1L2688
Filter Number	1938
PID (ppm)	2.1
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	14:46
Digital Stop Pressure	-7
Vapor Sampling Notes	Water sample taken. MH-1231 1445
Was a Vapor DUP collected?	No

SL-2_100721, 15:21

samplers	Andrew Banitt, Korey Pearson
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-2_100721
Canister Number	LC305
Filter Number	2005
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	15:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	15:22
Digital Stop Pressure	-5
Vapor Sampling Notes	Water sample taken. SL-2_100721 1515
Was a Vapor DUP collected?	No

SL-3_100721, 15:40, 15:45

samplers	Andrew Banitt, Korey Pearson
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-3_100721
Canister Number	1L1529
Filter Number	2005
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	15:42
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_100721

Liquid Sample Time	15:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_100721, 16:14, 16:15

samplers	Andrew Banitt, Korey Pearson
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-10-07

Vapor Sampling

Sample ID	SL-4_100721
Canister Number	1L2875
Filter Number	2005
PID (ppm)	14.9
PID (ppm) in breathing zone	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:14
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	16:16
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_100721
Liquid Sample Time	16:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

2021-10-07, Andrew Banitt, Utility Corridor Sampling

Created	2021-10-07 12:05:59 UTC by Andrew Banitt
Updated	2021-10-07 20:50:19 UTC by Andrew Banitt
Location	42.3685510377131, -83.3823170599229

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Sampling
Location	Livonia, MI
Date	2021-10-07
Completed By	Andrew Banitt
Additional Personnel	Korey Pearson
Are you connected to the internet (WiFi or data plan)?	No
Get weather data from the National Weather Service website for your current location?	N/A
Weather	65 degrees F cloudy
PPE	Level D
Are you using equipment?	Yes

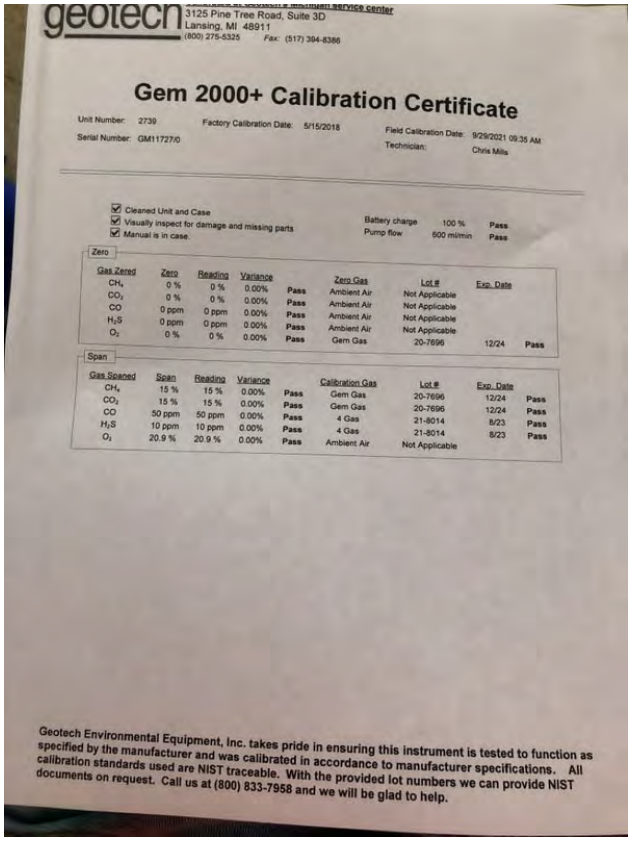
Peristaltic pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peristaltic pump
Model	Geopump
Pine/Geotech Number	4171
Calibrated?	No

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM2000
Pine/Geotech Number	2739
Calibrated?	Yes
Calibration standard information	CH4 15/15 CO2 15/15

Calibration Documents



geotech 3125 Pine Tree Road, Suite 3D Lansing, MI 48911 (800) 275-5325 Fax: (517) 394-8386

Gem 2000+ Calibration Certificate

Unit Number: 2739 Factory Calibration Date: 5/15/2018 Field Calibration Date: 9/29/2021 09:35 AM
Serial Number: GM11727/0 Technician: Chris Mills

- ☑ Cleaned Unit and Case
- ☑ Visually inspect for damage and missing parts
- ☑ Manual is in case.

Battery charge 100 % Pass
Pump flow 500 ml/min Pass

Zero

Gas Zered	Zero	Reading	Variance		Zero Gas	Lot #	Exp. Date	
CH_4	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO_2	0 %	0 %	0.00%	Pass	Ambient Air	Not Applicable		
CO	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
H_2S	0 ppm	0 ppm	0.00%	Pass	Ambient Air	Not Applicable		
O_2	0 %	0 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass

Span

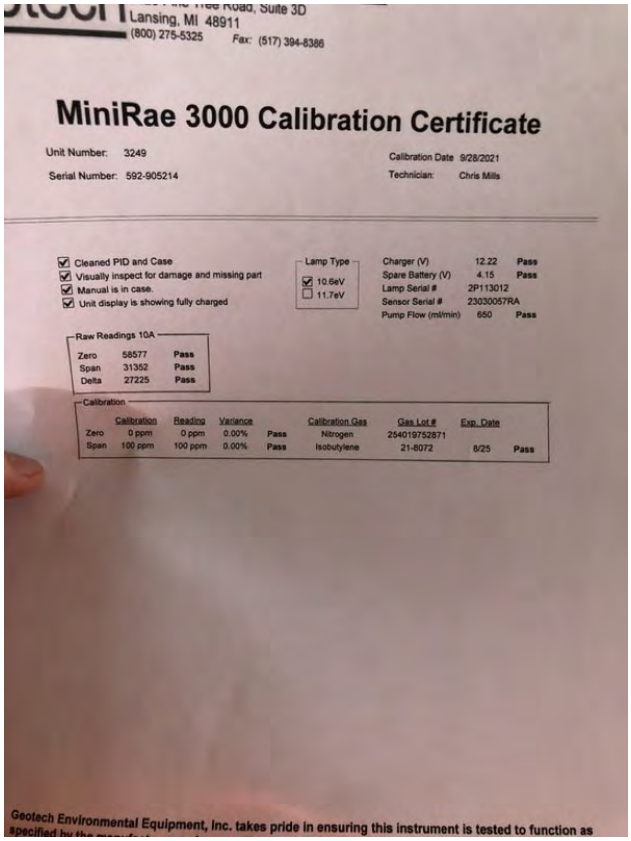
Gas Spaned	Span	Reading	Variance		Calibration Gas	Lot #	Exp. Date	
CH_4	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass
CO_2	15 %	15 %	0.00%	Pass	Gem Gas	20-7696	12/24	Pass
CO	50 ppm	50 ppm	0.00%	Pass	4 Gas	21-8014	8/23	Pass
H_2S	10 ppm	10 ppm	0.00%	Pass	4 Gas	21-8014	8/23	Pass
O_2	20.9 %	20.9 %	0.00%	Pass	Ambient Air	Not Applicable		

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRae 3000
Pine/Geotech Number	3249
Calibrated?	Yes
Calibration standard information	100/100 ppm

Calibration Documents



Lansing, MI 48911
(800) 275-5325 Fax: (517) 394-8386

MiniRae 3000 Calibration Certificate

Unit Number: 3249
Serial Number: 592-905214
Calibration Date 9/28/2021
Technician: Chris Mills

- [x] Cleaned PID and Case
- [x] Visually inspect for damage and missing part
- [x] Manual is in case.
- [x] Unit display is showing fully charged

Lamp Type
- [x] 10.6eV
- [ ] 11.7eV

Charger (V)	12.22	Pass
Spare Battery (V)	4.15	Pass
Lamp Serial #	2P113012	
Sensor Serial #	23030057RA	
Pump Flow (ml/min)	650	Pass

Raw Readings 10A

Zero	58577	Pass
Span	31352	Pass
Delta	27225	Pass

Calibration

	Calibration	Reading	Variance		Calibration Gas	Gas Lot #	Exp. Date	
Zero	0 ppm	0 ppm	0.00%	Pass	Nitrogen	254019752871		
Span	100 ppm	100 ppm	0.00%	Pass	Isobutylene	21-8072	8/25	Pass

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as

Daily Log of Activities

08:05, Arcadis on site meeting city of Livonia at Wendy's parking lot. H&S tailgate.

Time	08:05
Description of Task	Arcadis on site meeting city of Livonia at Wendy's parking lot. H&S tailgate.

08:45, Arcadis begins utility corridor sampling along Stark road.

Time	08:45
Description of Task	Arcadis begins utility corridor sampling along Stark road.

16:20, Sampling completed.

Time	16:20
Description of Task	Sampling completed.

17:00, Arcadis is off site.

Time	17:00
Description of Task	Arcadis is off site.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No

Signature

Signed 2021-10-07 12:08:31 UTC

Andrew Banitt, Sommer Guy, 2021-11-02

Created	2021-11-02 12:26:50 UTC by Andrew Banitt
Updated	2021-11-03 18:13:52 UTC by Julia McClafferty
Location	42.37310479194017, -83.38097403955885
Field Staff	Andrew Banitt, Sommer Guy
Project Number	30050315.701
Start Date	2021-11-02

SL-15_110221, 08:37, 08:30

samplers	Andrew Banitt, Sommer Guy
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-15_110221
Canister Number	1L3267
Filter Number	1912
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:37
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	08:39
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_110221
Liquid Sample Time	08:30
Was a liquid DUP collected?	No

SL-14_110221, 09:00, 08:55

samplers	Andrew Banitt, Sommer Guy
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-14_110221
Canister Number	1L2800
Filter Number	1845
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1
LEL in breathing zone (%)	1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:02
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_110221
Liquid Sample Time	08:55
Was a liquid DUP collected?	No

SL-13_110221, 09:23, 09:15

samplers	Andrew Banitt, Sommer Guy
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-13_110221
Canister Number	1L3982
Filter Number	2108
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25.5
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	09:24
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_110221
Liquid Sample Time	09:15
Was a liquid DUP collected?	No

SL-7_110221, 09:45, 09:40

samplers	Andrew Banitt, Sommer Guy
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-7_110221
Canister Number	1L2068
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:46
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_110221
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_110221, 10:05, 10:00

samplers	Andrew Banitt, Sommer Guy
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-6_110221
Canister Number	1L3061
Filter Number	2035
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15

Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:06
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_110221
Liquid Sample Time	10:00
Was a liquid DUP collected?	No

SL-5_110221, 10:47, 10:40

samplers	Andrew Banitt, Sommer Guy
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-5_110221
Canister Number	1L2663
Filter Number	1824
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	10:48
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L3395

DUP Filter Number	1920
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27
DUP Analog Start Pressure (at start of sample)	-17
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-6
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_110221
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-8_110221, 11:09, 11:05

samplers	Andrew Banitt, Sommer Guy
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-8_110221
Canister Number	1L2273
Filter Number	2050
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:11

Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_110221
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_110221, 12:27, 12:25

samplers	Andrew Banitt, Sommer Guy
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-9_110221
Canister Number	1L3372
Filter Number	2103
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	12:29
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_110221
Liquid Sample Time	12:25
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-10_110221, 12:48, 12:40

samplers	Andrew Banitt, Sommer Guy
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-10_110221
Canister Number	1L2817
Filter Number	1910
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:48
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:49
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_110221
Liquid Sample Time	12:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_110221, 13:08, 13:05

samplers	Andrew Banitt, Sommer Guy
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-11_110221
Canister Number	1L3387
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:08
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:10
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_110221
Liquid Sample Time	13:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_110221, 13:31, 15:25

samplers	Andrew Banitt, Sommer Guy
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-12_110221
Canister Number	1L2297
Filter Number	1922

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:31
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:32
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_110221
Liquid Sample Time	15:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_110221, 14:19

samplers	Andrew Banitt, Sommer Guy
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	MH-1231_110221
Canister Number	1L1533
Filter Number	2103
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:19
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:20
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Water sample at 1415
Was a Vapor DUP collected?	No

SL-2_110221, 14:44

samplers	Andrew Banitt, Sommer Guy
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-2_110221
Canister Number	1L2306
Filter Number	2121
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	14:46
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Water sample at 1440.
Was a Vapor DUP collected?	No

SL-3_110221, 15:08, 15:05

samplers	Andrew Banitt, Sommer Guy
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-3_110221
Canister Number	1L3058
Filter Number	2103
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:08
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-22
Analog Start Pressure (at start of sample)	-11
Suggested Analog Stop Pressure	0
Analog Stop Pressure	0
Sample End Time	15:09
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_110221
Liquid Sample Time	15:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_110221, 15:39, 15:30

samplers	Andrew Banitt, Sommer Guy
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-16_110221
Canister Number	1L3218
Filter Number	1946
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:39
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	15:40
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_110221
Liquid Sample Time	15:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_110221, 16:09, 16:00

samplers	Andrew Banitt, Sommer Guy
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-17_110221
Canister Number	1L2224
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1
LEL in breathing zone (%)	1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-5
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	0
Sample End Time	16:10
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_110221
Liquid Sample Time	16:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-18_110221, 16:30, 16:25

samplers	Andrew Banitt, Sommer Guy
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-18_110221
Canister Number	34002414
Filter Number	2105
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:30

Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	16:31
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_110221
Liquid Sample Time	16:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_110221, 16:54, 16:50

samplers	Andrew Banitt, Sommer Guy
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-02

Vapor Sampling

Sample ID	SL-4_110221
Canister Number	1L2471
Filter Number	1922
PID (ppm)	1.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:54
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	16:55
Digital Stop Pressure	-4.5

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_110221
Liquid Sample Time	16:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

2021-11-02, Andrew Banitt, Utility Corridor Sampling

Created	2021-11-02 21:24:15 UTC by Andrew Banitt
Updated	2021-11-02 21:30:13 UTC by Andrew Banitt
Location	42.3726658682296, -83.3919809544206

Basic Information

Project Name	Ford LTP
Task	Utility Corridor Sampling
Location	Livonia, MI
Date	2021-11-02
Completed By	Andrew Banitt
Additional Personnel	Sommer Guy
Are you connected to the internet (WiFi or data plan)?	No
Get weather data from the National Weather Service website for your current location?	N/A
Weather	40 degrees F partly cloudy
PPE	Level D
Are you using equipment?	Yes

PID

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	PID
Model	MiniRAE
Pine/Geotech Number	3249
Calibrated?	Yes
Calibration standard information	Bump check 99/100 ppm

GEM

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	GEM
Model	GEM2000
Pine/Geotech Number	3481
Calibrated?	Yes
Calibration standard information	CO2 34.5/35 CH4 51/50

Peri Pump

Supplier	Geotech
Type of Equipment (GEM, PID, etc)	Peri Pump
Model	GeoPump
Pine/Geotech Number	4171
Calibrated?	No

Daily Log of Activities

07:30, Arrive on site. H&S tailgate. Calibrate equipment.

Time	07:30

Description of Task	Arrive on site. H&S tailgate. Calibrate equipment.

08:00, Meet with city. Begin sampling.

Time	08:00
Description of Task	Meet with city. Begin sampling.

17:00, Sampling completed. Offload equipment.

Time	17:00
Description of Task	Sampling completed. Offload equipment.

17:45, Arcadis off site.

Time	17:45
Description of Task	Arcadis off site.

Material Tracking

Are you using any materials onsite today?	No

Waste Management

Are there any waste drums onsite?	No
Did you drum any waste today?	No
General waste comments	Waste taken to HCS dumpster. Purge water poured back into manhole.

Signature

Signed 2021-11-02 21:28:35 UTC

Andrew Banitt, Samantha Hindle , 2021-11-23, 2021-11-24

Created	2021-11-23 14:24:38 UTC by Andrew Banitt
Updated	2021-12-13 16:38:44 UTC by Julia McClafferty
Location	42.3730264101, -83.380560991
Field Staff	Andrew Banitt, Samantha Hindle
Project Number	30050315.701
Start Date	2021-11-23
End Date	2021-11-24

SL-15_112321, 09:30, 09:30

samplers	Andrew Banitt, Samantha Hindle
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-15_112321
Canister Number	1L2117
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:31
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_112321
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-14_112321, 09:53, 09:55

samplers	Andrew Banitt, Samantha Hindle
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-14_112321
Canister Number	1L2862
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:53
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:54
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_112321
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_112321, 10:16, 10:20

samplers	Andrew Banitt, Samantha Hindle
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-13_112321
Canister Number	1L2608
Filter Number	2108
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:16
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	10:18
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_112321
Liquid Sample Time	10:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_112321, 10:57, 10:55

samplers	Andrew Banitt, Samantha Hindle
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-7_112321
Canister Number	1L2928
Filter Number	2105
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:58
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_112321
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_112321, 11:21, 11:15

samplers	Andrew Banitt, Samantha Hindle
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-6_112321
Canister Number	1L3840
Filter Number	2115
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	11:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-8
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:22
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_112321
Liquid Sample Time	11:15
Was a liquid DUP collected?	No

SL-5_112321, 12:52, 12:55

samplers	Andrew Banitt, Samantha Hindle
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-5_112321
Canister Number	1L1836
Filter Number	2046
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:53
Digital Stop Pressure	-5.5

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_112321
Liquid Sample Time	12:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-8_112321, 13:16, 13:20

samplers	Andrew Banitt, Samantha Hindle
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-8_112321
Canister Number	1L2037
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:16
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:18
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_112321
Liquid Sample Time	13:20
Was a liquid DUP collected?	No

SL-9_112321, 13:39, 13:35

samplers	Andrew Banitt, Samantha Hindle
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-9_112321
Canister Number	1L1682
Filter Number	2046
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:40
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_112321
Liquid Sample Time	13:35
Was a liquid DUP collected?	No

SL-10_112321, 13:58, 14:00

samplers	Andrew Banitt, Samantha Hindle
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-10_112321
Canister Number	1L2953
Filter Number	1910
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:58
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:59
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_112321
Liquid Sample Time	14:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_112321, 14:20, 14:25

samplers	Andrew Banitt, Samantha Hindle
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-11_112321
Canister Number	1L2254
Filter Number	2046
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	14:21
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_112321
Liquid Sample Time	14:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_112321, 14:45, 14:45

samplers	Andrew Banitt, Samantha Hindle
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-12_112321
Canister Number	1L3134
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:45
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:46
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_112321
Liquid Sample Time	14:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_112321, 15:19, 15:20

samplers	Andrew Banitt, Samantha Hindle
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-19_112321
Canister Number	1L2659
Filter Number	1652
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:19
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	15:20
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_112321
Liquid Sample Time	15:20
Was a liquid DUP collected?	No

SL-22_112321, 15:39, 15:40

samplers	Andrew Banitt, Samantha Hindle
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-22_112321
Canister Number	1L1808
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1
LEL in breathing zone (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:39
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-10
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	15:40
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_112321
Liquid Sample Time	15:40
Was a liquid DUP collected?	No

SL-20_112321, 16:10, 16:10

samplers	Andrew Banitt, Samantha Hindle
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-23

Vapor Sampling

Sample ID	SL-20_112321
Canister Number	1L2343
Filter Number	1845
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1
LEL in breathing zone (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	16:11
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_112321
Liquid Sample Time	16:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_112421, 08:55

samplers	Andrew Banitt, Samantha Hindle
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	MH-1231_112421
Canister Number	1L2945
Filter Number	1703
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1
LEL in breathing zone (%)	3
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	08:56
Digital Stop Pressure	-5
Vapor Sampling Notes	Water sample at 855; DUP-01 collected
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L2575
DUP Filter Number	1629
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-30
DUP Analog Start Pressure (at start of sample)	-18
DUP Suggested Analog Stop Pressure	-6
DUP Analog Stop Pressure	-6
DUP Digital Stop Pressure	-5

SL-2_112421, 09:36

samplers	Andrew Banitt, Samantha Hindle
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-2_112421
Canister Number	1L2969
Filter Number	2005
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	1
LEL in breathing zone (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:36
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-21
Analog Start Pressure (at start of sample)	-10
Suggested Analog Stop Pressure	1
Analog Stop Pressure	0
Sample End Time	09:38
Digital Stop Pressure	-5
Vapor Sampling Notes	Water sample at 940
Was a Vapor DUP collected?	No

SL-3_112421, 10:00, 10:00

samplers	Andrew Banitt, Samantha Hindle
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-3_112421
Canister Number	1L3142
Filter Number	2028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:02
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_112421
Liquid Sample Time	10:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_112421, 10:19, 10:20

samplers	Andrew Banitt, Samantha Hindle
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-16_112421
Canister Number	1L1508
Filter Number	2110
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:19
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:20

Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_112421
Liquid Sample Time	10:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_112421, 10:47, 10:45

samplers	Andrew Banitt, Samantha Hindle
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-17_112421
Canister Number	1L2620
Filter Number	1922
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:47
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	10:48
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_112421
Liquid Sample Time	10:45
Was a liquid DUP collected?	No

SL-18_112421, 11:41, 11:40

samplers	Andrew Banitt, Samantha Hindle
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-18_112421
Canister Number	LC451
Filter Number	2135
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	11:42
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_112421
Liquid Sample Time	11:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_112421, 12:09, 12:10

samplers	Andrew Banitt, Samantha Hindle
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-4_112421
Canister Number	1L1813
Filter Number	1825
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:11
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	1L3189
DUP Filter Number	1938
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-15
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_112421
Liquid Sample Time	12:10
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02
Able to collect sediment sample?	No

SL-21_112421, 12:50, 12:50

samplers	Andrew Banitt, Samantha Hindle
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-11-24

Vapor Sampling

Sample ID	SL-21_112421
Canister Number	1L2720
Filter Number	2035
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:50
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	12:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_112421
Liquid Sample Time	12:50
Was a liquid DUP collected?	No

Andrew Banitt, Dominic Harmon, 2021-12-10, 2021-12-10

Created	2021-12-10 13:25:50 UTC by Andrew Banitt
Updated	2021-12-10 18:31:13 UTC by Andrew Banitt
Location	42.360170844820715, -83.38166074223857
Field Staff	Andrew Banitt, Dominic Harmon
Project Number	30050315.701
Start Date	2021-12-10
End Date	2021-12-10

SL-12_121021, 08:34, 08:30

samplers	Andrew Banitt
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-12_121021
Canister Number	1L2167
Filter Number	2115
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	08:35
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_121021
Liquid Sample Time	08:30
Was a liquid DUP collected?	No

SL-19_121021, 08:55, 08:45

samplers	Andrew Banitt, Dominic Harmon
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-19_121021
Canister Number	1L3173
Filter Number	1938
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	08:56
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_121021
Liquid Sample Time	08:45
Was a liquid DUP collected?	No

SL-22_121021, 09:22, 09:15

samplers	Andrew Banitt, Dominic Harmon
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-22_121021
Canister Number	1L2635
Filter Number	2014
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:23
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_121021
Liquid Sample Time	09:15
Was a liquid DUP collected?	No

SL-20_121021, 09:46, 09:40

samplers	Andrew Banitt, Dominic Harmon
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-20_121021
Canister Number	1L1527
Filter Number	1910
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:46
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:47
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_121021
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-21_121021, 10:08, 10:05

samplers	Andrew Banitt, Dominic Harmon
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-21_121021
Canister Number	1L3886
Filter Number	2108
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:08
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16

Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	10:09
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_121021
Liquid Sample Time	10:05
Was a liquid DUP collected?	No

SL-3_121021, 10:46, 10:40

samplers	Andrew Banitt, Dominic Harmon
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-3_121021
Canister Number	1L3873
Filter Number	1946
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:46
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	10:47
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_121021

Liquid Sample Time	10:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_121021, 11:09, 11:05

samplers	Andrew Banitt, Dominic Harmon
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-16_121021
Canister Number	40859
Filter Number	2103
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	11:10
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_121021
Liquid Sample Time	11:05
Was a liquid DUP collected?	No

SL-17_121021, 11:36, 11:30

samplers	Andrew Banitt, Dominic Harmon
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-10

Vapor Sampling

Sample ID	SL-17_121021
Canister Number	1L1950
Filter Number	2005
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:36
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:37
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_121021
Liquid Sample Time	11:30
Was a liquid DUP collected?	No

Andrew Banitt, Dominic Harmon, 2021-12-14, 2021-12-16

Created	2021-12-14 14:28:48 UTC by Andrew Banitt
Updated	2021-12-16 19:24:28 UTC by Andrew Banitt
Location	42.36835491115154, -83.38311359831201
Field Staff	Andrew Banitt, Dominic Harmon
Project Number	30050315.701
Start Date	2021-12-14
End Date	2021-12-16

SL-4_121421, 09:39, 09:25

samplers	Andrew Banitt, Dominic Harmon
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-4_121421
Canister Number	0000003046
Filter Number	2125
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:41
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	1L2566
DUP Filter Number	2125
DUP Digital Start Pressure	-29

DUP Analog Start Pressure (before opening can)	-30
DUP Analog Start Pressure (at start of sample)	-19
DUP Suggested Analog Stop Pressure	-6
DUP Analog Stop Pressure	-6
DUP Digital Stop Pressure	-4.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_121421
Liquid Sample Time	09:25
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-18_121421, 10:05, 10:00

samplers	Andrew Banitt, Dominic Harmon
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-18_121421
Canister Number	1L3270
Filter Number	2046
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:05
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	10:06
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_121421
Liquid Sample Time	10:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_121421, 10:26, 10:25

samplers	Andrew Banitt, Dominic Harmon
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-17_121421
Canister Number	1L3461
Filter Number	2115
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:26
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:28
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_121421
Liquid Sample Time	10:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_121421, 10:48, 10:45

samplers	Andrew Banitt, Dominic Harmon
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-16_121421
Canister Number	1L2996
Filter Number	2125
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:48
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:50
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_121421
Liquid Sample Time	10:45
Was a liquid DUP collected?	No

SL-3_121421, 11:19, 11:15

samplers	Andrew Banitt, Dominic Harmon
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-3_121421
Canister Number	1L2952
Filter Number	2050
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:19
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-5
Sample End Time	11:21
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_121421
Liquid Sample Time	11:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_121421, 11:51

samplers	Andrew Banitt, Dominic Harmon
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-2_121421
Canister Number	0000003035
Filter Number	1922
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:51
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:52
Digital Stop Pressure	-5.5
Vapor Sampling Notes	Water sample at 11:45
Was a Vapor DUP collected?	No

MH-1231_121421, 12:15

samplers	Andrew Banitt, Dominic Harmon
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	MH-1231_121421
Canister Number	1L2196
Filter Number	1913
PID (ppm)	1.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:15
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	12:16
Digital Stop Pressure	-5.5

Vapor Sampling Notes	Water at 1210 DUP-02
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	1L3881
DUP Filter Number	2005
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-30
DUP Analog Start Pressure (at start of sample)	-17
DUP Suggested Analog Stop Pressure	-5.5
DUP Analog Stop Pressure	-5.5
DUP Digital Stop Pressure	-5.5

SL-21_121421, 13:53, 13:40

samplers	Andrew Banitt, Dominic Harmon
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-21_121421
Canister Number	1L2748
Filter Number	1703
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:53
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	13:54
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_121421
Liquid Sample Time	13:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_121421, 14:06, 14:05

samplers	Andrew Banitt, Dominic Harmon
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-20_121421
Canister Number	1L1584
Filter Number	1845
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:06
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:07
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_121421
Liquid Sample Time	14:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_121421, 14:33, 14:25

samplers	Andrew Banitt, Dominic Harmon

Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-14

Vapor Sampling

Sample ID	SL-22_121421
Canister Number	1L3105
Filter Number	2121
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:33
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:34
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_121421
Liquid Sample Time	14:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-15_121621, 08:20, 08:20

samplers	Andrew Banitt, Dominic Harmon
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-15_121621
Canister Number	1L3131
Filter Number	1922
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	08:21
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_121621
Liquid Sample Time	08:20
Was a liquid DUP collected?	No

SL-14_121621, 08:36, 08:35

samplers	Andrew Banitt, Dominic Harmon
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-14_121621
Canister Number	1L2690
Filter Number	2115
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:36
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	08:38
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_121621
Liquid Sample Time	08:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_121621, 08:52, 08:50

samplers	Andrew Banitt, Dominic Harmon
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-13_121621
Canister Number	1L1599
Filter Number	2028
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29

Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	08:54
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_121621
Liquid Sample Time	08:50
Was a liquid DUP collected?	No

SL-7_121621, 09:05, 09:05

samplers	Andrew Banitt, Dominic Harmon
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-7_121621
Canister Number	1L3464
Filter Number	2005
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:07
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_121621
Liquid Sample Time	09:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_121621, 09:35, 09:35

samplers	Andrew Banitt, Dominic Harmon
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-6_121621
Canister Number	0000003032
Filter Number	2028
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:35
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:36
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_121621
Liquid Sample Time	09:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_121621, 09:56, 09:55

samplers	Andrew Banitt, Dominic Harmon
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-5_121621
Canister Number	1L3213
Filter Number	1946
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:56
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	09:57
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_121621
Liquid Sample Time	09:55
Was a liquid DUP collected?	No

SL-8_121621, 10:07, 10:10

samplers	Andrew Banitt, Dominic Harmon
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-8_121621

Canister Number	1L3147
Filter Number	1824
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:07
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	10:08
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_121621
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

SL-9_121621, 10:22, 10:20

samplers	Andrew Banitt, Dominic Harmon
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-9_121621
Canister Number	1L2942
Filter Number	2038
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:22
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:24
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_121621
Liquid Sample Time	10:20
Was a liquid DUP collected?	No

SL-10_121621, 10:36, 10:35

samplers	Andrew Banitt, Dominic Harmon
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-10_121621
Canister Number	1L2239
Filter Number	1720
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:36
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5

Sample End Time	10:37
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_121621
Liquid Sample Time	10:35
Was a liquid DUP collected?	No

SL-11_121621, 10:49, 10:50

samplers	Andrew Banitt, Dominic Harmon
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-11_121621
Canister Number	1L2475
Filter Number	1912
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:49
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	10:51
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_121621
Liquid Sample Time	10:50
Was a liquid DUP collected?	No

SL-12_121621, 11:05, 11:05

samplers	Andrew Banitt, Dominic Harmon
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-12_121621
Canister Number	34001054
Filter Number	2105
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:05
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	11:06
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_121621
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_121621, 11:17, 11:15

samplers	Andrew Banitt, Dominic Harmon
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2021-12-16

Vapor Sampling

Sample ID	SL-19_121621
Canister Number	1L1595
Filter Number	2115
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:17
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	11:19
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_121621
Liquid Sample Time	11:15
Was a liquid DUP collected?	No

Samantha Hindle Andrew Banitt Korey Pearson, 2022-01-12, 2022-01-14

Created	2022-01-12 14:12:31 UTC by Samantha Szpaichler
Updated	2022-01-18 13:20:19 UTC by Samantha Szpaichler
Location	42.373011172788566, -83.38084761061089
Field Staff	Samantha Hindle Andrew Banitt Korey Pearson
Project Number	30050315.701
Start Date	2022-01-12
End Date	2022-01-14

SL-15_011222, 09:30, 09:15

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-15_011222
Canister Number	2621
Filter Number	5059
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	09:31
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_011222
Liquid Sample Time	09:15
Was a liquid DUP collected?	No

SL-14_011222, 10:04, 09:50

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-14_011222
Canister Number	2644
Filter Number	5030
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:04
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:05
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_011222
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_011222, 10:52, 10:45

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-13_011222
Canister Number	2328
Filter Number	5058
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-5
Sample End Time	10:53
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Liquid Sample Time	10:45
Was a liquid DUP collected?	Yes

SL-7_011222, 11:29, 11:15

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-7_011222
Canister Number	2673
Filter Number	5027
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-5
Sample End Time	11:30
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_011222
Liquid Sample Time	11:15
Was a liquid DUP collected?	No

SL-6_011222, 11:48, 11:45

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-6_011222
Canister Number	2538
Filter Number	7039
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:48
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25

Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	11:49
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_011222
Liquid Sample Time	11:45
Was a liquid DUP collected?	No

SL-5_011222, 12:09, 12:05

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-5_011222
Canister Number	2121
Filter Number	7037
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-23.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	12:10
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_011222

Liquid Sample Time	12:05
Was a liquid DUP collected?	No

SL-8_011222, 13:22, 13:15

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-8_011222
Canister Number	2336
Filter Number	7036
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:23
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_011222
Liquid Sample Time	13:15
Was a liquid DUP collected?	No

SL-9, 13:40

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Vapor Sampling Notes	Analog stop read above 5 and couldn't drop, and digital stop was reading -1. Voided this canister
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_011222
Liquid Sample Time	13:40
Was a liquid DUP collected?	No

SL-10_011222, 14:23, 14:10

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-10_011222
Canister Number	2620
Filter Number	5024
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.2
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7

Analog Stop Pressure	-5
Sample End Time	14:24
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_011222
Liquid Sample Time	14:10
Was a liquid DUP collected?	No

SL-11_011222, 14:54, 14:35

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-12

Vapor Sampling

Sample ID	SL-11_011222
Canister Number	2679
Filter Number	5023
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:54
Digital Start Pressure	-28
Analog Stop Pressure	-5
Sample End Time	14:55
Digital Stop Pressure	-6
Vapor Sampling Notes	Tablet died during sampling, above values are known, estimates, or blank if not known
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_011222
Liquid Sample Time	14:35
Was a liquid DUP collected?	No

SL-9_011322, 08:58

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-9_011322
Canister Number	2678
Filter Number	5069
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:58
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	08:59
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No

SL-23_011322, 09:29, 09:25

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-23_011322
Canister Number	2539
Filter Number	5068

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:30
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_011322
Liquid Sample Time	09:25
Was a liquid DUP collected?	No

SL-12_011322, 09:56, 09:50

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-12_011322
Canister Number	2528
Filter Number	5061
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:56

Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:57
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_011322
Liquid Sample Time	09:50
Was a liquid DUP collected?	No

SL-19_011322, 10:20, 10:20

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-19_011322
Canister Number	2666
Filter Number	5060
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:20
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:21
Digital Stop Pressure	-7
Vapor Sampling Notes	Low flow in sewer

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_011322
Liquid Sample Time	10:20
Was a liquid DUP collected?	No

SL-22_011322, 11:22, 10:50

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-22_011322
Canister Number	2623
Filter Number	7033
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:22
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	11:23
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_011322
Liquid Sample Time	10:50
Was a liquid DUP collected?	No

SL-20_011322, 13:22, 13:20

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-20_011322
Canister Number	2303
Filter Number	7035
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:23
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_011322
Liquid Sample Time	13:20
Was a liquid DUP collected?	No

SL-4_011322, 14:20, 14:15

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-4_011322
Canister Number	2663
Filter Number	7034
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:20
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:21
Digital Stop Pressure	-6
Vapor Sampling Notes	When opened, Sewer smells like oil, sheen very obvious, continuous
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_011322
Liquid Sample Time	14:15
Was a liquid DUP collected?	No

SL-18_011322, 14:53, 14:50

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-18_011322
Canister Number	2331
Filter Number	7025
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:53
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-4
Sample End Time	14:54
Digital Stop Pressure	-4.5
Vapor Sampling Notes	Analog dial froze and then passed 6 and 5 too fast to stop, stopped at -4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_011322
Liquid Sample Time	14:50
Was a liquid DUP collected?	No

SL-17_011322, 15:26, 15:10

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-13

Vapor Sampling

Sample ID	SL-17_011322
Canister Number	2112
Filter Number	7024
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:26
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5

Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	15:27
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_011322
Liquid Sample Time	15:10
Was a liquid DUP collected?	No

SL-21_011422, 09:15, 09:15

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-14

Vapor Sampling

Sample ID	SL-21_011422
Canister Number	2641
Filter Number	7027
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:16
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_011422
Liquid Sample Time	09:15
Was a liquid DUP collected?	No

SL-16_011422, 09:51, 09:40

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-14

Vapor Sampling

Sample ID	SL-16_011422
Canister Number	2557
Filter Number	7026
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:51
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:52
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_011422
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-3_011422, 10:22, 10:25

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-14

Vapor Sampling

Sample ID	SL-3_011422
Canister Number	2548
Filter Number	7031
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:23
Digital Stop Pressure	-7.5
Vapor Sampling Notes	Smells heavily of oil
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_011422
Liquid Sample Time	10:25
Was a liquid DUP collected?	No

SL-2_011422, 10:55, 10:45

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-14

Vapor Sampling

Sample ID	SL-2_011422
Canister Number	2570

Filter Number	7030
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:56
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_011422
Liquid Sample Time	10:45
Was a liquid DUP collected?	No

MH-1231_011422, 11:31, 11:35

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-14

Vapor Sampling

Sample ID	MH-1231_011422
Canister Number	2107
Filter Number	7029
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	11:31
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:32
Digital Stop Pressure	-8
Vapor Sampling Notes	Strong odor
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_011422
Liquid Sample Time	11:35
Was a liquid DUP collected?	No

MH-1244_011422, 12:45, 12:00

samplers	Samantha Hindle Andrew Banitt Korey Pearson
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-14

Vapor Sampling

Sample ID	MH-1244_011422
Canister Number	2323
Filter Number	7028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6
Sample End Time	12:46

Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_011422
Liquid Sample Time	12:00
Was a liquid DUP collected?	No
Photos	

Samantha Hindle, Sommer Guy, 2022-01-18, 2022-01-20

Created	2022-01-18 13:23:04 UTC by Samantha Szpaichler
Updated	2022-01-20 17:59:21 UTC by Samantha Szpaichler
Location	42.372919097582226, -83.39199000977295
Field Staff	Samantha Hindle, Sommer Guy
Project Number	30050315.701
Start Date	2022-01-18
End Date	2022-01-20

SL-4_011822, 13:16, 13:00

samplers	Samantha Hindle, Sommer Guy
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-18

Vapor Sampling

Sample ID	SL-4_011822
Canister Number	2100
Filter Number	7076
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:16
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-5
Sample End Time	13:17
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_011822
Liquid Sample Time	13:00
Was a liquid DUP collected?	No

SL-20_011822, 11:34, 11:25

samplers	Samantha Hindle, Sommer Guy
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-18

Vapor Sampling

Sample ID	SL-20_011822
Canister Number	2544
Filter Number	7070
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:34
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:35
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_011822
Liquid Sample Time	11:25
Was a liquid DUP collected?	No

SL-21_011822, 11:10, 11:10

samplers	Samantha Hindle, Sommer Guy
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-18

Vapor Sampling

Sample ID	SL-21_011822
Canister Number	2647
Filter Number	7069
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:10
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	11:11
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_011822
Liquid Sample Time	11:10
Was a liquid DUP collected?	No

SL-22_011822, 10:45, 10:40

samplers	Samantha Hindle, Sommer Guy
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-18

Vapor Sampling

Sample ID	SL-22_011822
Canister Number	2625
Filter Number	7057
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_011822
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

SL-18_011822, 13:46, 13:40

samplers	Samantha Hindle, Sommer Guy
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-18

Vapor Sampling

Sample ID	SL-18_011822
Canister Number	2628
Filter Number	7068
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:46
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-24.5

Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2
Sample End Time	13:47
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_011822
Liquid Sample Time	13:40
Was a liquid DUP collected?	No

SL-15_011922, 09:08, 09:00

samplers	Samantha Hindle, Sommer Guy
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-15_011922
Canister Number	2542
Filter Number	7049
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:08
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:09
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_011922

Liquid Sample Time	09:00
Was a liquid DUP collected?	No

SL-14_011922, 09:20, 09:20

samplers	Samantha Hindle, Sommer Guy
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-14_011922
Canister Number	2645
Filter Number	7048
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:20
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:21
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_011922
Liquid Sample Time	09:20
Was a liquid DUP collected?	No

SL-13_011922, 09:40, 09:35

samplers	Samantha Hindle, Sommer Guy
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-13_011922
Canister Number	2563
Filter Number	7040
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:41
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_011922
Liquid Sample Time	09:35
Was a liquid DUP collected?	No

SL-7_011922, 10:01, 09:55

samplers	Samantha Hindle, Sommer Guy
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-7_011922
Canister Number	2553
Filter Number	7041
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:01
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:02
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_011922
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_011922, 10:26, 10:15

samplers	Samantha Hindle, Sommer Guy
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-6_011922
Canister Number	2249
Filter Number	7059
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:26
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:27
Digital Stop Pressure	-8.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_011922
Liquid Sample Time	10:15
Was a liquid DUP collected?	No

SL-5_011922, 10:41, 10:40

samplers	Samantha Hindle, Sommer Guy
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-5_011922
Canister Number	2256
Filter Number	7055
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:41
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	10:42
Digital Stop Pressure	-6

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_011922
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

SL-8_011922, 10:58, 10:55

samplers	Samantha Hindle, Sommer Guy
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-8_011922
Canister Number	2099
Filter Number	7060
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:58
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:59
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_011922
Liquid Sample Time	10:55
Was a liquid DUP collected?	No

SL-9_011922, 11:22, 11:20

samplers	Samantha Hindle, Sommer Guy
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-9_011922
Canister Number	2543
Filter Number	7056
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:23
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_011922
Liquid Sample Time	11:20
Was a liquid DUP collected?	No

SL-10_011922, 12:45, 12:45

samplers	Samantha Hindle, Sommer Guy
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-10_011922
Canister Number	2101
Filter Number	7044
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24.5
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_011922
Liquid Sample Time	12:45
Was a liquid DUP collected?	No

SL-11_011922, 13:25, 13:25

samplers	Samantha Hindle, Sommer Guy
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-11_011922
Canister Number	2319
Filter Number	7049
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:25
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	13:26
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_011922
Liquid Sample Time	13:25
Was a liquid DUP collected?	No

SL-23_011922, 14:02, 14:05

samplers	Samantha Hindle, Sommer Guy
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-23_011922
Canister Number	2636
Filter Number	7047
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:02
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26

Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:03
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_011922
Liquid Sample Time	14:05
Was a liquid DUP collected?	No

SL-12_011922, 14:28, 14:30

samplers	Samantha Hindle, Sommer Guy
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-12_011922
Canister Number	2640
Filter Number	7054
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:28
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:29
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_011922

Liquid Sample Time	14:30
Was a liquid DUP collected?	No

SL-19_011922, 14:47, 14:40

samplers	Samantha Hindle, Sommer Guy
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-19

Vapor Sampling

Sample ID	SL-19_011922
Canister Number	2545
Filter Number	7053
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:48
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_011922
Liquid Sample Time	14:40
Was a liquid DUP collected?	No

SL-16_012022, 10:12, 10:10

samplers	Samantha Hindle, Sommer Guy
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-20

Vapor Sampling

Sample ID	SL-16_012022
Canister Number	2262
Filter Number	7043
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:12
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	10:13
Digital Stop Pressure	-8.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_012022
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

SL-3_012022, 10:26, 10:25

samplers	Samantha Hindle, Sommer Guy
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-20

Vapor Sampling

Sample ID	SL-3_012022
Canister Number	2330
Filter Number	7050
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:26
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:27
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_012022
Liquid Sample Time	10:25
Was a liquid DUP collected?	No

SL-2_012022, 10:43, 10:40

samplers	Samantha Hindle, Sommer Guy
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-20

Vapor Sampling

Sample ID	SL-2_012022
Canister Number	2669
Filter Number	7042
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:43

Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:44
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_012022
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

MH-1231_012022, 11:06, 11:00

samplers	Samantha Hindle, Sommer Guy
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-20

Vapor Sampling

Sample ID	MH-1231_012022
Canister Number	2562
Filter Number	7051
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:06
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:07
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_012022
Liquid Sample Time	11:00
Was a liquid DUP collected?	No

SL-17_012022, 11:24, 11:25

samplers	Samantha Hindle, Sommer Guy
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-20

Vapor Sampling

Sample ID	SL-17_012022
Canister Number	2306
Filter Number	7071
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:24
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:25
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_012022
Liquid Sample Time	11:25
Was a liquid DUP collected?	No

Korey Pearson, Sommer Guy, Sam Hindle , 2022-01-27, 2022-01-27

Created	2022-01-27 14:27:25 UTC by Samantha Szpaichler
Updated	2022-01-27 22:26:14 UTC by Samantha Szpaichler
Location	42.360222986938766, -83.37956685580627
Field Staff	Korey Pearson, Sommer Guy, Sam Hindle
Project Number	30050315.701
Start Date	2022-01-27
End Date	2022-01-27

SL-21_012722, 09:32, 09:20

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-21_012722
Canister Number	2522
Filter Number	7034
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:32
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	09:33
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_012722
Liquid Sample Time	09:20
Was a liquid DUP collected?	No

SL-20_012722, 10:02, 10:00

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-20_012722
Canister Number	2129
Filter Number	7030
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:02
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	10:03
Digital Stop Pressure	-4
Was a Vapor DUP collected?	Yes
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_012722
Liquid Sample Time	10:00
Was a liquid DUP collected?	No

SL-22_012722, 10:23, 10:20

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-22_012722
Canister Number	2632
Filter Number	5061
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	10:24
Digital Stop Pressure	-7
Vapor Sampling Notes	Leaking slowly during QC check, voided that one. New canister used above.
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_012722
Liquid Sample Time	10:20
Was a liquid DUP collected?	No

SL-4_012722, 12:09

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-4_012722
Canister Number	2559
Filter Number	7031
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:10
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-18_012722, 12:23

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-18_012722
Canister Number	2682
Filter Number	5028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:24

Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-17_012722, 12:37

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-17_012722
Canister Number	2314
Filter Number	5023
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:37
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	12:38
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-16_012722, 12:48

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-16_012722
Canister Number	2629
Filter Number	7026
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:48
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:49
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-3_012722, 13:00

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-3_012722
Canister Number	2653
Filter Number	7025
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:00
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4
Sample End Time	13:01
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SL-2_012722, 13:15

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	SL-2_012722
Canister Number	2342
Filter Number	7029
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	13:16
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No

MH-1231_012722, 14:02

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	MH-1231_012722
Canister Number	2519
Filter Number	5052
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:02
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:03
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_012722
DUP Canister Number	2541
DUP Filter Number	7066
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-27.5
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-4

MH-1244_012722, 14:20

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	MH-1244_012722
Canister Number	2333
Filter Number	4018
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:20
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	14:21
Digital Stop Pressure	-3
Was a Vapor DUP collected?	Yes
Able to collect liquid sample?	No

MH-1231A_012722, 14:40

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-01-26
Time Vapor Barrier Installed	13:00

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	MH-1231A_012722
Canister Number	2297
Filter Number	7063
PID (ppm)	1

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:41
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No

MH-1256_012722, 15:13

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	MH-1256_012722
Canister Number	2310
Filter Number	5069
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:13
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3

Sample End Time	15:14
Digital Stop Pressure	-7
Vapor Sampling Notes	Very strong odors, canister logged -25 analog b4 opening valve
Was a Vapor DUP collected?	No

MH-1255_012722, 15:27

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-01-26
Time Vapor Barrier Installed	13:00

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	MH-1255_012722
Canister Number	2659
Filter Number	7077
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	15:28
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No

MH-1260A_012722, 16:25

samplers	Korey Pearson, Sommer Guy, Sam Hindle
Location	MH-1260A

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-27

Vapor Sampling

Sample ID	MH-1260A_012722
Canister Number	2567
Filter Number	7036
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	16:26
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No

Sommer Guy, Samantha Hindle, Korey Pearsons, 2022-01-31, 2022-02-04

Created	2022-01-31 14:57:54 UTC by Samantha Szpaichler
Updated	2022-03-09 22:03:44 UTC by Samantha Szpaichler
Location	42.372994576620286, -83.38077703498618
Field Staff	Sommer Guy, Samantha Hindle, Korey Pearsons
Project Number	30050315.701
Start Date	2022-01-31
End Date	2022-02-04

SL-15_013122, 10:03, 10:05

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-15_013122
Canister Number	2521
Filter Number	5029
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:03
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:04
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_013122
Liquid Sample Time	10:05
Was a liquid DUP collected?	No

SL-14_013122, 10:20, 10:20

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-14_013122
Canister Number	2656
Filter Number	5060
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:20
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:21
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_013122
Liquid Sample Time	10:20
Was a liquid DUP collected?	No

SL-13_013122, 10:43, 10:35

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-13_013122
Canister Number	2340
Filter Number	7064
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:43
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:44
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_013122
Liquid Sample Time	10:35
Was a liquid DUP collected?	No

SL-7_013122, 11:47, 11:40

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-7_013122
Canister Number	2643
Filter Number	5058
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:47
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5.5
Sample End Time	11:48
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_013122
Liquid Sample Time	11:40
Was a liquid DUP collected?	No

SL-6_013122, 12:11, 12:10

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-6_013122
Canister Number	2660
Filter Number	7024
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:11
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-32
Analog Start Pressure (at start of sample)	-29.5

Suggested Analog Stop Pressure	-10
Analog Stop Pressure	-10
Sample End Time	12:12
Digital Stop Pressure	-6
Vapor Sampling Notes	Analog dial beyond -30, at ~-32 reading. Dial off. When opening bronze after QC check, analog reads ~ -4.8.
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_013122
Liquid Sample Time	12:10
Was a liquid DUP collected?	No

SL-5_013122, 12:25, 12:30

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-5_013122
Canister Number	2532
Filter Number	7033
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5.5
Sample End Time	12:26
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_013122
Liquid Sample Time	12:30
Was a liquid DUP collected?	No

SL-21_013122, 13:41, 13:35

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-21_013122
Canister Number	2561
Filter Number	5068
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	13:42
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Collected sample before cleaning SL-12. Quinn Confirmed with Kris's and Julia to wait on SL-20 until flushing is complete.
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_013122
Liquid Sample Time	13:35
Was a liquid DUP collected?	No

SL-20_020122, 13:32, 13:30

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons

Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-20_020122
Canister Number	2124
Filter Number	5057
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:32
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:33
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_020122
Liquid Sample Time	13:30
Was a liquid DUP collected?	No

SL-18_013122, 14:31, 14:30

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-18_013122
Canister Number	2122
Filter Number	7028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:31
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:32
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_013122
Liquid Sample Time	14:30
Was a liquid DUP collected?	No

SL-17_013122, 14:57, 14:55

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-17_013122
Canister Number	2103
Filter Number	5030
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	14:58
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_013122
Liquid Sample Time	14:55
Was a liquid DUP collected?	No

SL-16_013122, 15:24, 15:15

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-16_013122
Canister Number	2244
Filter Number	7027
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:24
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-6.5

Analog Stop Pressure	-5.5
Sample End Time	15:25
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_013122
Liquid Sample Time	15:15
Was a liquid DUP collected?	No

SL-3_013122, 15:45, 15:45

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-01-31

Vapor Sampling

Sample ID	SL-3_013122
Canister Number	2654
Filter Number	5067
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-3
Sample End Time	15:46
Digital Stop Pressure	-4
Vapor Sampling Notes	Knob was stuck in open position while sampling, lead to lower pressure than intended.
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_013122

Liquid Sample Time	15:45
Was a liquid DUP collected?	No

SL-8_020122, 09:38, 09:35

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-8_020122
Canister Number	2626
Filter Number	7075
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.2
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:38
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:39
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_020122
Liquid Sample Time	09:35
Was a liquid DUP collected?	No

SL-9_020122, 10:14, 10:10

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-9_020122
Canister Number	2301
Filter Number	7085
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:14
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-3.5
Sample End Time	10:15
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_020122
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

SL-10_020122, 10:52, 10:50

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-10_020122
Canister Number	2348
Filter Number	5066
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:52
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-23.5
Suggested Analog Stop Pressure	-2.5
Analog Stop Pressure	-2.5
Sample End Time	10:53
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_020122
Liquid Sample Time	10:50
Was a liquid DUP collected?	No

SL-11_020122, 11:21, 11:20

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-11_020122
Canister Number	2533
Filter Number	7081
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:21

Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:22
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_020122
Liquid Sample Time	11:20
Was a liquid DUP collected?	No

SL-23_020122, 11:40, 11:40

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-23_020122
Canister Number	2322
Filter Number	7082
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:40
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:41
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_020122
Liquid Sample Time	11:40
Was a liquid DUP collected?	No

SL-12_020122, 12:02, 12:00

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-12_020122
Canister Number	2677
Filter Number	5027
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:02
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	12:03
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_020122
Liquid Sample Time	12:00
Was a liquid DUP collected?	No

SL-19_020122, 12:27, 12:25

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons

Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-19_020122
Canister Number	2309
Filter Number	7084
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:28
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_020122
Liquid Sample Time	12:25
Was a liquid DUP collected?	No

SL-22_020122, 13:48, 13:50

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-22_020122
Canister Number	2106
Filter Number	7079
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:48
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:49
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_020122
Liquid Sample Time	13:50
Was a liquid DUP collected?	No

SL-4_020122, 14:13, 14:10

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-4_020122
Canister Number	2337
Filter Number	7090
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:13
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:14
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_020122
DUP Canister Number	2655
DUP Filter Number	5024
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-27
DUP Analog Start Pressure (at start of sample)	-22
DUP Suggested Analog Stop Pressure	-2.5
DUP Analog Stop Pressure	-2.5
DUP Digital Stop Pressure	-7.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_020122
Liquid Sample Time	14:10
Was a liquid DUP collected?	No

Liquid DUP Information

Liquid DUP ID	DUP-01_020122
Able to collect sediment sample?	No

SL-2_020122, 14:38, 14:40

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	SL-2_020122
Canister Number	2254

Filter Number	7083
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:38
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:39
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_020122
Liquid Sample Time	14:40
Was a liquid DUP collected?	No

MH-1231_020122, 15:05, 15:00

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	MH-1231_020122
Canister Number	2252
Filter Number	7074
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.

Sample Start Time	15:05
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	15:06
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_020122
DUP Canister Number	2688
DUP Filter Number	7037
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-7
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_020122
Liquid Sample Time	15:00
Was a liquid DUP collected?	Yes

MH-1244_020122, 15:28, 15:30

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-01

Vapor Sampling

Sample ID	MH-1244_020122
Canister Number	2630
Filter Number	5051
PID (ppm)	0.6

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.

CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:28
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	15:29
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_020122
Liquid Sample Time	15:30
Was a liquid DUP collected?	No

MH-1231A_020422, 09:11, 09:10

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-01-27
Time Vapor Barrier Installed	12:00

Sampling Information

Date Sampled	2022-02-04

Vapor Sampling

Sample ID	MH-1231A_020422
Canister Number	2652
Filter Number	4028
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:11
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29

Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:11
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_020422
Liquid Sample Time	09:10
Was a liquid DUP collected?	No

MH-1255_020422, 09:48, 09:40

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	MH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-01-27
Time Vapor Barrier Installed	12:00

Sampling Information

Date Sampled	2022-02-04

Vapor Sampling

Sample ID	MH-1255_020422
Canister Number	2520
Filter Number	7035
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:48
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-22.5
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	09:49
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_020422
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_020422, 10:08, 10:10

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-04

Vapor Sampling

Sample ID	MH-1256_020422
Canister Number	2686
Filter Number	7039
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:08
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:08
Digital Stop Pressure	-6
Vapor Sampling Notes	Strong urine-like odor.
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_020422
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

MH-1260A_020422, 10:29, 10:35

samplers	Sommer Guy, Samantha Hindle, Korey Pearsons
Location	MH-1260A

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-04

Vapor Sampling

Sample ID	MH-1260A_020422
Canister Number	2307
Filter Number	7091
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:29
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:30
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1260A_020422
Liquid Sample Time	10:35
Was a liquid DUP collected?	No

Samantha Hindle, Korey Pearson, Sommer Guy, 2022-02-07, 2022-02-11

Created	2022-02-07 16:55:14 UTC by Samantha Szpaichler
Updated	2022-02-09 17:08:47 UTC by Samantha Szpaichler
Location	42.37299654636753, -83.39185019962805
Field Staff	Samantha Hindle, Korey Pearson, Sommer Guy
Project Number	30050315.701
Start Date	2022-02-07
End Date	2022-02-11

MH-1259_020722, 13:12, 13:10

samplers	Samantha Hindle, Korey Pearson, Sommer Guy
Location	MH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-07

Vapor Sampling

Sample ID	MH-1259_020722
Canister Number	2673
Filter Number	7054
PID (ppm)	2.4
PID (ppm) in breathing zone	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:12
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:13
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_020722
Liquid Sample Time	13:10

Liquid Sampling Notes	1 vial broke on ground after sampling. Contained spill.
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_020722, 13:36, 13:35

samplers	Korey Pearson, Sommer Guy
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-01-27
Time Vapor Barrier Installed	12:00

Sampling Information

Date Sampled	2022-02-07

Vapor Sampling

Sample ID	MH-1255_020722
Canister Number	2624
Filter Number	7032
PID (ppm)	2.2
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:36
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:37
Digital Stop Pressure	-8.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_020722
Liquid Sample Time	13:35
Was a liquid DUP collected?	No

MH-1256_020722, 13:53, 13:55

samplers	Korey Pearson, Sommer Guy

Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-07

Vapor Sampling

Sample ID	MH-1256_020722
Canister Number	2517
Filter Number	5070
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:53
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	13:54
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_020722
Liquid Sample Time	13:55
Was a liquid DUP collected?	No

MH-1244_020722, 14:19, 14:20

samplers	Korey Pearson, Sommer Guy
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-07

Vapor Sampling

Sample ID	MH-1244_020722
Canister Number	2232
Filter Number	5050
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:19
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:20
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_020722
Liquid Sample Time	14:20
Was a liquid DUP collected?	No

MH-1231A_020722, 14:38, 14:35

samplers	Korey Pearson, Sommer Guy
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-01-27
Time Vapor Barrier Installed	12:00

Sampling Information

Date Sampled	2022-02-07

Vapor Sampling

Sample ID	MH-1231A_020722
Canister Number	2117
Filter Number	7089
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:38
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	14:39
Digital Stop Pressure	-4.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_020722
Liquid Sample Time	14:35
Was a liquid DUP collected?	No

SL-21_020822, 09:22, 09:20

samplers	Korey Pearson, Sommer Guy
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-21_020822
Canister Number	2344
Filter Number	7068
PID (ppm)	2.3
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28

Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:23
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_020822
Liquid Sample Time	09:20
Was a liquid DUP collected?	No

SL-20_020822, 09:42, 09:40

samplers	Korey Pearson, Sommer Guy
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-20_020822
Canister Number	2093
Filter Number	7078
PID (ppm)	2.7
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:42
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:43
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_020822
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_020822, 10:18, 10:20

samplers	Korey Pearson, Sommer Guy
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-22_020822
Canister Number	2558
Filter Number	5054
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:18
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:19
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_020822
Liquid Sample Time	10:20
Was a liquid DUP collected?	No

SL-4_020822, 10:49, 10:40

samplers	Korey Pearson, Sommer Guy
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-4_020822
Canister Number	2524
Filter Number	7076
PID (ppm)	1.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:49
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:49
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_020822
DUP Canister Number	2294
DUP Filter Number	7070
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-3.5
DUP Analog Stop Pressure	-3.5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_020822
Liquid Sample Time	10:40
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01_020822
Able to collect sediment sample?	No

SL-18_020822, 12:16, 12:15

samplers	Korey Pearson, Sommer Guy
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-18_020822
Canister Number	2525
Filter Number	7087
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:16
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:16
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_020822
Liquid Sample Time	12:15
Was a liquid DUP collected?	No

SL-17_020822, 12:40, 12:40

samplers	Korey Pearson, Sommer Guy
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-17_020822
Canister Number	2240
Filter Number	5034
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:40
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:41
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_020822
Liquid Sample Time	12:40
Was a liquid DUP collected?	No

SL-16_020822, 12:59, 12:55

samplers	Korey Pearson, Sommer Guy
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-16_020822
Canister Number	2671
Filter Number	7058
PID (ppm)	0.5

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:00
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_020822
Liquid Sample Time	12:55
Was a liquid DUP collected?	No

SL-3_020822, 13:16, 13:15

samplers	Korey Pearson, Sommer Guy
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-08

Vapor Sampling

Sample ID	SL-3_020822
Canister Number	2300
Filter Number	7055
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:16

Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	13:17
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_020822
Liquid Sample Time	13:15
Was a liquid DUP collected?	No

SL-2_020922, 09:42, 09:40

samplers	Samantha Hindle, Korey Pearson, Sommer Guy
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-09
Sampling Notes	
	Portable sampler/composite sampler in manhole

Vapor Sampling

Sample ID	SL-2_020922
Canister Number	2623
Filter Number	7071
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:42
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:43

Digital Stop Pressure	-6
Vapor Sampling Notes	Portable sampler/composite sampler in manhole
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_020922
Liquid Sample Time	09:40
Liquid Sampling Notes	Portable sampler/composite sampler in manhole
Was a liquid DUP collected?	No

MH-1231_020922, 10:08, 10:05

samplers	Samantha Hindle, Korey Pearson, Sommer Guy
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-09

Vapor Sampling

Sample ID	MH-1231_020922
Canister Number	2651
Filter Number	7065
PID (ppm)	1.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:08
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:09
Digital Stop Pressure	-7
Vapor Sampling Notes	PID in breathing zone: 0
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_020922
DUP Canister Number	2615

DUP Filter Number	7050
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-3.5
DUP Analog Stop Pressure	-3.5
DUP Digital Stop Pressure	-4.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_020922
Liquid Sample Time	10:05
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02_020922

Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido, 2022-02-15, 2022-02-18

Created	2022-02-15 13:33:34 UTC by Sommer Guy
Updated	2022-02-24 14:47:41 UTC by Christian Garrido
Location	42.37303753387404, -83.39205471806544
Field Staff	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Project Number	30050315.701
Start Date	2022-02-15
End Date	2022-02-18

SL-15_021522, 09:26, 09:25

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-15_021522
Canister Number	2678
Filter Number	7048
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:26
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:27
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_021522
Liquid Sample Time	09:25
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-14_021522, 09:41, 09:40

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-14_021522
Canister Number	2646
Filter Number	7057
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:41
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:42
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_021522
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_021522, 09:53, 09:50

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-13_021522
Canister Number	2336
Filter Number	7043
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:53
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	09:54
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_021522
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_021522, 10:50, 10:50

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-7_021522
Canister Number	2296
Filter Number	7088

PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:51
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_021522
Liquid Sample Time	10:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_021522, 11:11, 11:10

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-6_021522
Canister Number	2569
Filter Number	7022
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:11
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6.5
Sample End Time	11:12
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_021522
Liquid Sample Time	11:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_021522, 11:28, 11:30

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-5_021522
Canister Number	2676
Filter Number	7072
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:28
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:29

Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_021522
Liquid Sample Time	11:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-8_021522, 12:18, 12:15

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-8_021522
Canister Number	2311
Filter Number	7044
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:18
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	12:19
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_021522
Liquid Sample Time	12:15
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-9_021522, 12:45, 12:45

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-9_021522
Canister Number	2633
Filter Number	5041
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:46
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_021522
Liquid Sample Time	12:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-21_021522, 13:24, 13:20

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-21_021522
Canister Number	2241
Filter Number	7023
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:24
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	13:25
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_021522
Liquid Sample Time	13:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_021522, 13:37, 13:40

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-15

Vapor Sampling

Sample ID	SL-20_021522
Canister Number	2664
Filter Number	7080

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:37
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-2
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:38
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_021522
Liquid Sample Time	13:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_021622, 09:00, 08:55

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-10_021622
Canister Number	2638
Filter Number	7042
PID (ppm)	2.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.

Sample Start Time	09:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:01
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_021622
Liquid Sample Time	08:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_021622, 09:18, 09:20

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-11_021622
Canister Number	2247
Filter Number	7038
PID (ppm)	2

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.

CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.

O2 (%) in breathing zone	21.3

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.

Sample Start Time	09:18
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7

Sample End Time	09:19
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_021622
Liquid Sample Time	09:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_021622, 09:35, 09:35

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-23_021622
Canister Number	2675
Filter Number	7086
PID (ppm)	1.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:35
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	09:36
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_021622
Liquid Sample Time	09:35

Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_021622, 10:05, 10:10

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-12_021622
Canister Number	2091
Filter Number	5033
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:06
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_021622
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_021622, 10:25, 10:30

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-19_021622
Canister Number	2312
Filter Number	7040
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	10:26
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_021622
Liquid Sample Time	10:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_021622, 10:43, 10:40

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-22_021622
Canister Number	2650

Filter Number	7049
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:43
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:44
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_021622
Liquid Sample Time	10:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_021622, 11:17, 11:10

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-4_021622
Canister Number	2668
Filter Number	7053
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:17
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:18
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_021622
DUP Canister Number	2111
DUP Filter Number	5042
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-4.5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_021622
Liquid Sample Time	11:10
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01_021622
Able to collect sediment sample?	No

SL-18_021622, 11:41, 11:45

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-18_021622
Canister Number	2096
Filter Number	7067

PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	11:42
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_021622
Liquid Sample Time	11:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_021622, 11:57, 12:00

samplers	Sommer Guy, Seth Turner, Dominic Hardman
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	SL-17_021622
Canister Number	2616
Filter Number	7052
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24.5
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	11:58
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_021622
Liquid Sample Time	12:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_021622, 13:07, 13:05

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-02-15
Time Vapor Barrier Installed	12:50

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	MH-1255_021622
Canister Number	2635
Filter Number	5055
PID (ppm)	1.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:07
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25

Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:08
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_021622
Liquid Sample Time	13:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_021622, 13:37, 13:40

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	MH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	MH-1259_021622
Canister Number	2551
Filter Number	7061
PID (ppm)	2.4
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:37
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	13:38
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_021622
Liquid Sample Time	13:40
Was a liquid DUP collected?	No

MH-1256_021622, 14:00, 14:00

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	MH-1256_021622
Canister Number	2115
Filter Number	4017
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	29.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:01
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_021622
Liquid Sample Time	14:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_021622, 14:26, 14:30

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	MH-1244_021622
Canister Number	2523
Filter Number	7041
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:26
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:27
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_021622
Liquid Sample Time	14:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_021622, 14:45, 14:45

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-02-15
Time Vapor Barrier Installed	14:42

Sampling Information

Date Sampled	2022-02-16

Vapor Sampling

Sample ID	MH-1231A_021622
Canister Number	2114
Filter Number	7047
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_021622
Liquid Sample Time	14:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_021822, 09:09, 09:10

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-18

Vapor Sampling

Sample ID	SL-16_021822
Canister Number	2642
Filter Number	5053
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:10
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_021822
Liquid Sample Time	09:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_021822, 09:27, 09:30

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-18

Vapor Sampling

Sample ID	SL-3_021822
Canister Number	2323
Filter Number	7063
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:27
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5.5
Sample End Time	09:28
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_021822
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

SL-2_021822, 09:47, 09:50

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-18

Vapor Sampling

Sample ID	SL-2_021822
Canister Number	2557
Filter Number	7026
PID (ppm)	2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:47
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:48
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_021822
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_021822, 10:13, 10:15

samplers	Sommer Guy, Seth Turner, Dominic Hardman, Christian Garrido
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-18

Vapor Sampling

Sample ID	MH-1231_021822
Canister Number	2644
Filter Number	7031
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:13
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-25.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4
Sample End Time	10:14
Digital Stop Pressure	-6
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_021822
DUP Canister Number	2538
DUP Filter Number	7029
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-24.5
DUP Suggested Analog Stop Pressure	-4
DUP Analog Stop Pressure	-4

DUP Digital Stop Pressure	-6
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_021822
Liquid Sample Time	10:15
Was a liquid DUP collected?	Yes
Able to collect sediment sample?	No

Seth Turner, Christian Garrido, 2022-02-21, 2022-02-21

Created	2022-02-21 16:40:20 UTC by Seth Turner
Updated	2022-02-24 14:56:47 UTC by Christian Garrido
Location	42.3682789, -83.3832523
Field Staff	Seth Turner, Christian Garrido
Project Number	30050315.701
Start Date	2022-02-21
End Date	2022-02-21

SL-4_022122, 11:50, 11:50

samplers	Seth Turner, Christian Garrido
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-21

Vapor Sampling

Sample ID	SL-4_022122
Canister Number	2554
Filter Number	5028
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:50
Digital Start Pressure	-29.2
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5.800000000000001
Analog Stop Pressure	-5.8
Sample End Time	11:51
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_022122
DUP Canister Number	2687
DUP Filter Number	5056
DUP Digital Start Pressure	-29

DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-27
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-4.5
DUP Digital Stop Pressure	-5.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_022122
Liquid Sample Time	11:50
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01_022122
Able to collect sediment sample?	No

SL-18_022122, 12:10, 12:15

samplers	Seth Turner, Christian Garrido
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-21

Vapor Sampling

Sample ID	SL-18_022122
Canister Number	2295
Filter Number	5062
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_022122
Liquid Sample Time	12:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_022122, 12:30, 12:30

samplers	Seth Turner, Christian Garrido
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-21

Vapor Sampling

Sample ID	SL-17_022122
Canister Number	2092
Filter Number	5008
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:31
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_022122
Liquid Sample Time	12:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_022122, 12:50, 12:50

samplers	Seth Turner, Christian Garrido
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-21

Vapor Sampling

Sample ID	SL-16_022122
Canister Number	2542
Filter Number	5054
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_022122
Liquid Sample Time	12:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_022122, 13:10, 13:10

samplers	Seth Turner, Christian Garrido
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-21

Vapor Sampling

Sample ID	SL-3_022122
Canister Number	2320
Filter Number	7032
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:10
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	13:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_022122
Liquid Sample Time	13:10
Was a liquid DUP collected?	No

Seth Turner, Christian Garrido, Korey Pearson, 2022-02-22, 2022-02-22

Created	2022-02-22 14:07:31 UTC by Seth Turner
Updated	2022-02-24 15:03:01 UTC by Christian Garrido
Location	42.3671044, -83.3817195
Field Staff	Seth Turner, Christian Garrido, Korey Pearson
Project Number	30050315.701
Start Date	2022-02-22
End Date	2022-02-22

SL-8_022222, 09:10, 09:10

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-8_022222
Canister Number	2102
Filter Number	5009
PID (ppm)	-2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2
Sample End Time	09:11
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_022222
Liquid Sample Time	09:10
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-9_022222, 09:35, 09:35

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-9_022222
Canister Number	2649
Filter Number	7034
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:36
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_022222
Liquid Sample Time	09:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_022222, 09:50, 09:50

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-10_022222
Canister Number	2672
Filter Number	4018
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:50
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:51
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_022222
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_022222, 10:15, 10:15

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-11_022222
Canister Number	2110
Filter Number	4012
PID (ppm)	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:15
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	10:16
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_022222
Liquid Sample Time	10:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_022222, 10:35, 10:35

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-23_022222
Canister Number	2529
Filter Number	5052
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:35
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:36
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_022222
Liquid Sample Time	10:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_022222, 10:55, 10:55

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-12_022222
Canister Number	2637
Filter Number	5025
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	10:56

Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_022222
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_022222, 11:10, 11:10

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	SL-19_022222
Canister Number	2302
Filter Number	7051
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_022222
Liquid Sample Time	11:10
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

MH-1256_022222, 13:10, 13:10

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	MH-1256_022222
Canister Number	2237
Filter Number	5006
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:11
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_022222
Liquid Sample Time	13:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_022222, 13:40, 13:40

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-22

Vapor Sampling

Sample ID	MH-1244_022222
Canister Number	2669
Filter Number	5020
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:41
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_022222
Liquid Sample Time	13:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_022422, 11:07, 11:05

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-02-23
Time Vapor Barrier Installed	11:00

Sampling Information

Date Sampled	2022-02-24

Vapor Sampling

Sample ID	MH-1255_022422
Canister Number	2639
Filter Number	5061
PID (ppm)	0.1

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:08
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_022422
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_022422, 11:46, 11:50

samplers	Seth Turner, Christian Garrido, Korey Pearson
Location	MH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-24

Vapor Sampling

Sample ID	MH-1259_022422
Canister Number	2119
Filter Number	5023
PID (ppm)	3.7
PID (ppm) in breathing zone	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.3

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.

Sample Start Time	11:46
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-20
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	1
Analog Stop Pressure	0
Sample End Time	11:47
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_022422
Liquid Sample Time	11:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Sommer Guy, Christian Garrido, Korey Pearsons, 2022-02-23, 2022-02-24

Created	2022-02-23 13:09:37 UTC by Sommer Guy
Updated	2022-02-24 15:41:04 UTC by Sommer Guy
Location	42.37303388774616, -83.39205245495158
Field Staff	Sommer Guy, Christian Garrido, Korey Pearsons
Project Number	30050315.701
Start Date	2022-02-23
End Date	2022-02-24

SL-15_022322, 09:10, 09:10

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-15_022322
Canister Number	2666
Filter Number	7030
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:11
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_022322
Liquid Sample Time	09:10
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-14_022322, 09:24, 09:25

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-14_022322
Canister Number	2679
Filter Number	736
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:24
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:25
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_022322
Liquid Sample Time	09:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_022322, 09:39, 09:35

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-13_022322
Canister Number	2631
Filter Number	5069
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	09:40
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_022322
Liquid Sample Time	09:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_022322, 10:14, 10:15

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-7_022322
Canister Number	2299
Filter Number	7055

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:14
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:15
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_022322
Liquid Sample Time	10:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_022322, 10:27, 10:25

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-6_022322
Canister Number	2315
Filter Number	7045
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:28
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_022322
Liquid Sample Time	10:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_022322, 10:50, 10:50

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-5_022322
Canister Number	2230
Filter Number	7078
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6

Sample End Time	10:51
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_022322
Liquid Sample Time	10:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-21_022322, 12:13, 12:10

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-21_022322
Canister Number	2645
Filter Number	7050
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:13
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	12:14
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_022322
Liquid Sample Time	12:10

Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_022322, 12:23, 12:25

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-20_022322
Canister Number	2341
Filter Number	7084
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:24
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_022322
Liquid Sample Time	12:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_022322, 12:40, 12:40

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-23

Vapor Sampling

Sample ID	SL-22_022322
Canister Number	2101
Filter Number	5039
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:40
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-8
Sample End Time	12:41
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_022322
Liquid Sample Time	12:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_022422, 08:55, 08:55

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-24

Vapor Sampling

Sample ID	SL-2_022422
Canister Number	2667
Filter Number	7083

PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	08:56
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_022422
Liquid Sample Time	08:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_022422, 09:14, 09:10

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-24

Vapor Sampling

Sample ID	MH-1231_022422
Canister Number	2100
Filter Number	7071
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.

Sample Start Time	09:14
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:15
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_022322
DUP Canister Number	2634
DUP Filter Number	7056
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-4.5
DUP Digital Stop Pressure	-5.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_022422
Liquid Sample Time	09:10
Was a liquid DUP collected?	Yes
Able to collect sediment sample?	No

MH-1231A_022422, 09:28, 09:30

samplers	Sommer Guy, Christian Garrido, Korey Pearsons
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-02-23
Time Vapor Barrier Installed	09:23

Sampling Information

Date Sampled	2022-02-24

Vapor Sampling

Sample ID	MH-1231A_022422
Canister Number	2515
Filter Number	7076
PID (ppm)	1

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:28
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:29
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_022422
Liquid Sample Time	09:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz, Christian Garrido, 2022-02-28, 2022-03-04

Created	2022-02-28 15:06:51 UTC by Seth Turner
Updated	2022-03-03 18:39:41 UTC by Samantha Szpaichler
Location	42.3730072, -83.3919074
Field Staff	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz, Christian Garrido
Project Number	30050315.701
Start Date	2022-02-28
End Date	2022-03-04

SL-18_022822, 14:40, 14:45

samplers	Seth Turner, Korey Pearson
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-28

Vapor Sampling

Sample ID	SL-18_022822
Canister Number	2572
Filter Number	7085
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:40
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:41
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_022822
Liquid Sample Time	14:45

Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_022822, 14:05, 13:55

samplers	Seth Turner, Korey Pearson
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-28

Vapor Sampling

Sample ID	SL-4_022822
Canister Number	2571
Filter Number	7025
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:05
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:06
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_022822
DUP Canister Number	2563
DUP Filter Number	7028
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-28.5
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-4.5
DUP Digital Stop Pressure	-4.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_022822
Liquid Sample Time	13:55
Was a liquid DUP collected?	Yes

SL-22_022822, 12:35, 12:30

samplers	Seth Turner, Korey Pearson
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-28

Vapor Sampling

Sample ID	SL-22_022822
Canister Number	2541
Filter Number	5060
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	12:36
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_022822
Liquid Sample Time	12:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-21_022822, 11:55, 11:55

samplers	Seth Turner, Korey Pearson
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-28

Vapor Sampling

Sample ID	SL-21_022822
Canister Number	2627
Filter Number	7062
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:56
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_022822
Liquid Sample Time	11:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_022822, 12:10, 12:10

samplers	Seth Turner, Korey Pearson
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-02-28

Vapor Sampling

Sample ID	SL-20_022822
Canister Number	2662

Filter Number	5068
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	12:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_022822
Liquid Sample Time	12:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-15_030122, 09:49, 09:45

samplers	Seth Turner, Korey Pearson
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-15_030122
Canister Number	2620
Filter Number	7077
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	09:50
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_030122
Liquid Sample Time	09:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_030122, 10:15, 10:15

samplers	Seth Turner, Korey Pearson
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-14_030122
Canister Number	2648
Filter Number	5040
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7

Analog Stop Pressure	-7
Sample End Time	10:16
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_030122
Liquid Sample Time	10:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_030122, 10:30, 10:30

samplers	Seth Turner, Korey Pearson
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-13_030122
Canister Number	2657
Filter Number	7079
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:31
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_030122

Liquid Sample Time	10:30
Liquid Sampling Notes	Strong sewer odor
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_030122, 11:31, 11:25

samplers	Seth Turner, Korey Pearson
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-7_030122
Canister Number	2256
Filter Number	7073
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:31
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2
Sample End Time	11:32
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_030122
Liquid Sample Time	11:25
Was a liquid DUP collected?	No

SL-6_030122, 11:47, 11:50

samplers	Seth Turner, Korey Pearson
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-6_030122
Canister Number	2636
Filter Number	5050
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:48
Digital Stop Pressure	-7
Vapor Sampling Notes	Abnormally slow, >30sec
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_030122
Liquid Sample Time	11:50
Was a liquid DUP collected?	No

SL-5_030122, 12:09, 12:10

samplers	Seth Turner, Korey Pearson
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-5_030122

Canister Number	2625
Filter Number	5051
PID (ppm)	1.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:10
Digital Stop Pressure	-5
Vapor Sampling Notes	Sample took longer than 30 seconds
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_030122
Liquid Sample Time	12:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-8_030122, 13:05, 13:00

samplers	Seth Turner, Korey Pearson
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-8_030122
Canister Number	2568
Filter Number	7089
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-30
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-6
Sample End Time	13:06
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_030122
Liquid Sample Time	13:00
Was a liquid DUP collected?	No

SL-9_030122, 13:44, 13:35

samplers	Seth Turner, Korey Pearson
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-01

Vapor Sampling

Sample ID	SL-9_030122
Canister Number	2665
Filter Number	7087
PID (ppm)	1.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25

Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:45
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_030122
Liquid Sample Time	13:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_030222, 09:33, 09:45

samplers	Seth Turner, Korey Pearson
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-10_030222
Canister Number	2566
Filter Number	5041
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:33
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:34
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_030222
Liquid Sample Time	09:45
Was a liquid DUP collected?	No

SL-11_030222, 09:52, 09:55

samplers	Seth Turner, Korey Pearson
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-11_030222
Canister Number	2643
Filter Number	5053
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:53
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_030222
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_030222, 10:12, 10:10

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittney Fagin, Darren Curincz
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-23_030222
Canister Number	2633
Filter Number	7066
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:12
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:13
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_030222
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_030222, 10:35, 10:30

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittney Fagin, Darren Curincz
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-12_030222

Canister Number	2652
Filter Number	7069
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	10:36
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_030222
Liquid Sample Time	10:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_030222, 10:51, 10:55

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittney Fagin, Darren Curincz
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-19_030222
Canister Number	2550
Filter Number	5070
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-20
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	2
Analog Stop Pressure	-2
Sample End Time	10:53
Digital Stop Pressure	-2
Vapor Sampling Notes	Took 1.5 minutes to sample. Digital reading at-1.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_030222
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_030222, 12:21, 12:20

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-17_030222
Canister Number	2659
Filter Number	7068
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28

Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:22
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_030222
Liquid Sample Time	12:20
Was a liquid DUP collected?	No

SL-16_030222, 12:41, 12:45

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-16_030222
Canister Number	2522
Filter Number	5024
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2.5
Sample End Time	12:42
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_030222
Liquid Sample Time	12:45
Liquid Sampling Notes	Slight sheen in sample in voas
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_030222, 12:58, 13:00

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-3_030222
Canister Number	2306
Filter Number	7027
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:58
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6
Sample End Time	12:59
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_030222
Liquid Sample Time	13:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_030222, 13:23, 13:20

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz

Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	SL-2_030222
Canister Number	2519
Filter Number	7043
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	13:24
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_030222
Liquid Sample Time	13:20
Was a liquid DUP collected?	No

MH-1231_030222, 13:55, 13:45

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz, Christian Garrido
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-02

Vapor Sampling

Sample ID	MH-1231_030222
Canister Number	2660
Filter Number	7047
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	13:56
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_030222
DUP Canister Number	2526
DUP Filter Number	7075
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-4
DUP Analog Stop Pressure	-4
DUP Digital Stop Pressure	-4
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_030222
Liquid Sample Time	13:45
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02_030222
Able to collect sediment sample?	No

MH-1259_030322, 11:40, 11:40

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz, Christian Garrido
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-03

Vapor Sampling

Sample ID	MH-1259_030322
Canister Number	2103
Filter Number	7026
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	11:41
Digital Stop Pressure	-5
Vapor Sampling Notes	Strong odor
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_030322
Liquid Sample Time	11:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_030322, 09:30, 09:30

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-03

Vapor Sampling

Sample ID	MH-1244_030322
Canister Number	2531
Filter Number	7037
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:31
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_030322
Liquid Sample Time	09:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_030322, 10:59, 11:00

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-02
Time Vapor Barrier Installed	12:45

Sampling Information

Date Sampled	2022-03-03

Vapor Sampling

Sample ID	MH-1255_030322
Canister Number	2632
Filter Number	7039
PID (ppm)	1.9

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:00
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_030322
Liquid Sample Time	11:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_030322, 10:34, 10:30

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-03

Vapor Sampling

Sample ID	MH-1256_030322
Canister Number	2685
Filter Number	7035
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:35
Digital Stop Pressure	-5
Vapor Sampling Notes	Smelly sewer
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_030322
Liquid Sample Time	10:30
Was a liquid DUP collected?	No

MH-1231A_030322, 09:51, 09:55

samplers	Seth Turner, Korey Pearson, Samantha Hindle, Brittany Fagin, Darren Curincz
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-02
Time Vapor Barrier Installed	12:45

Sampling Information

Date Sampled	2022-03-03

Vapor Sampling

Sample ID	MH-1231A_030322
Canister Number	2310
Filter Number	7031
PID (ppm)	1.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5

Analog Stop Pressure	-3
Sample End Time	09:52
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_030322
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Samantha Hindle, Christian Garrido, Gary Shafer, 2022-03-07, 2022-03-08

Created	2022-03-07 14:57:21 UTC by Samantha Szpaichler
Updated	2022-03-10 18:22:12 UTC by Samantha Szpaichler
Location	42.3602090729795, -83.37982535370008
Field Staff	Samantha Hindle, Christian Garrido, Gary Shafer
Project Number	30050315.701
Start Date	2022-03-07
End Date	2022-03-08

SL-21_030722, 10:05, 09:50

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-21_030722
Canister Number	2630
Filter Number	7080
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:06
Digital Stop Pressure	-7
Vapor Sampling Notes	Ford llU,
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_030722
Liquid Sample Time	09:50

Was a liquid DUP collected?	No

SL-20_030722, 10:22, 10:15

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-20_030722
Canister Number	2124
Filter Number	7041
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:23
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_030722
Liquid Sample Time	10:15
Was a liquid DUP collected?	No

SL-22_030722, 10:38, 10:35

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07
Sampling Notes	

Vapor Sampling

Sample ID	SL-22_030722
Canister Number	2681
Filter Number	5034
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	215
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:38
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:39
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_030722
Liquid Sample Time	10:35
Was a liquid DUP collected?	No

SL-4_030722, 11:01, 10:55

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-4_030722
Canister Number	2561
Filter Number	7072
PID (ppm)	0.7

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:01
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:02
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01_030722
DUP Canister Number	2333
DUP Filter Number	7048
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-23
DUP Suggested Analog Stop Pressure	-4
DUP Analog Stop Pressure	-4
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_030722
Liquid Sample Time	10:55
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01_030722
Able to collect sediment sample?	No

SL-18_030722, 11:18, 11:15

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-18_030722
Canister Number	2297
Filter Number	7052
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:18
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:19
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_030722
Liquid Sample Time	11:15
Was a liquid DUP collected?	No

SL-17_030722, 11:35, 11:30

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-17_030722
Canister Number	2307
Filter Number	7053.
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:36
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_030722
Liquid Sample Time	11:30
Was a liquid DUP collected?	No

SL-16_030722, 11:51, 11:45

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-16_030722
Canister Number	2653
Filter Number	7029
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25

Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:52
Digital Stop Pressure	-8
Vapor Sampling Notes	Strong odor
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_030722
Liquid Sample Time	11:45
Was a liquid DUP collected?	No

SL-3_030722, 12:05, 12:00

samplers	Samantha Hindle, Christian Garrido, Gary Shaferj
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-07

Vapor Sampling

Sample ID	SL-3_030722
Canister Number	2530
Filter Number	7049
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:06
Digital Stop Pressure	-7
Vapor Sampling Notes	Strong odor when opened
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_030722
Liquid Sample Time	12:00
Was a liquid DUP collected?	Yes

SL-15_030822, 09:44, 09:40

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-15_030822
Canister Number	2294
Filter Number	7044
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-22
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	0
Analog Stop Pressure	-3
Sample End Time	09:45
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_030822
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-14_030822, 10:01, 09:55

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-14_030822
Canister Number	2248
Filter Number	5062
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:01
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:02
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_030822
Liquid Sample Time	09:55
Was a liquid DUP collected?	No

SL-13_030822, 10:16, 10:10

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-13_030822
Canister Number	2558

Filter Number	7034
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:16
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:17
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_030822
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

SL-7_030822, 11:13, 11:10

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-7_030822
Canister Number	2122
Filter Number	7038
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:13
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	11:14
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_030822
Liquid Sample Time	11:10
Was a liquid DUP collected?	No

SL-6_030822, 11:26, 11:25

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-6_030822
Canister Number	2546
Filter Number	7033
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:26
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:27

Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_030822
Liquid Sample Time	11:25
Was a liquid DUP collected?	No

SL-5_030822, 11:39, 11:35

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-5_030822
Canister Number	2232
Filter Number	7036
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:39
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:40
Digital Stop Pressure	-10
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_030822
Liquid Sample Time	11:35
Was a liquid DUP collected?	No

SL-8_030822, 12:21, 12:20

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-8_030822
Canister Number	2244
Filter Number	4012
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:21
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-30
Suggested Analog Stop Pressure	-8.5
Analog Stop Pressure	-8.5
Sample End Time	12:22
Digital Stop Pressure	-5
Vapor Sampling Notes	Sample canister slower than average
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_030822
Liquid Sample Time	12:20
Was a liquid DUP collected?	No

SL-9_030822, 12:41, 12:40

samplers	Samantha Hindle, Christian Garrido, Gary Shafer
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-08

Vapor Sampling

Sample ID	SL-9_030822
Canister Number	2342
Filter Number	5061
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:41
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	12:42
Digital Stop Pressure	-7
Vapor Sampling Notes	PID is reading up to 0.4 ppm in breathing zone
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_030822
Liquid Sample Time	12:40
Was a liquid DUP collected?	No

Seth Turner. Christian Garrido, Gary Schafer, 2022-03-09, 2022-03-10

Created	2022-03-09 14:29:37 UTC by Seth Turner
Updated	2022-03-10 17:40:50 UTC by Seth Turner
Location	42.3636827, -83.3816306
Field Staff	Seth Turner. Christian Garrido, Gary Schafer
Project Number	30050315.701
Start Date	2022-03-09
End Date	2022-03-10

SL-10_030922, 09:32, 09:30

Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	SL-10_030922
Canister Number	2651
Filter Number	5052
PID (ppm)	2.6
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:32
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:33
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_030922
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-11_030922, 09:45, 09:45

Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	SL-11_030922
Canister Number	2677
Filter Number	5033
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_030922
Liquid Sample Time	09:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_030922, 10:00, 10:00

Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	SL-23_030922
Canister Number	2686
Filter Number	5056
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:00
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:01
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_030922
Liquid Sample Time	10:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_030922, 10:10, 10:10

Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	SL-12_030922
Canister Number	2629
Filter Number	7091
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:11
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_030922
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_030922, 10:20, 10:20

Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	SL-19_030922
Canister Number	2688
Filter Number	7040
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:20
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Suggested Analog Stop Pressure	-6.5

Analog Stop Pressure	-6.5
Sample End Time	10:21
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_030922
Liquid Sample Time	10:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_030922, 10:45

Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	SL-2_030922
Canister Number	2559
Filter Number	7022
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:46
Digital Stop Pressure	-5
Vapor Sampling Notes	Liquid sample: SL-2_030922 @ 1045
Was a Vapor DUP collected?	No

MH-1231_030922, 11:00

Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-09

Vapor Sampling

Sample ID	MH-1231_030922
Canister Number	2621
Filter Number	7070
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:00
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-20
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	2.5
Analog Stop Pressure	-3
Sample End Time	11:01
Digital Stop Pressure	-3.5
Vapor Sampling Notes	Liquid: MH-1231_030922 @1100
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_030922
DUP Canister Number	2615
DUP Filter Number	5023
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-20
DUP Analog Start Pressure (at start of sample)	-20
DUP Suggested Analog Stop Pressure	4.5
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-9.5

MH-1244_031022, 09:25, 09:30

samplers	Seth Turner. Christian Garrido, Gary Schafer
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-10

Vapor Sampling

Sample ID	MH-1244_031022
Canister Number	2309
Filter Number	7023
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	09:26
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_031022
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

MH-1231A_031022, 09:40, 09:40

samplers	Seth Turner. Christian Garrido, Gary Schafer
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-09
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-03-10

Vapor Sampling

Sample ID	MH-1231A_031022
Canister Number	2340
Filter Number	7063

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:41
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_031022
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

MH-1255_031022, 10:10, 10:10

samplers	Seth Turner. Christian Garrido, Gary Schafer
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-09
Time Vapor Barrier Installed	08:35

Sampling Information

Date Sampled	2022-03-10

Vapor Sampling

Sample ID	MH-1255_031022
Canister Number	2567
Filter Number	7057
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:11
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_031022
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_031022, 10:30, 10:30

samplers	Seth Turner. Christian Garrido, Gary Schafer
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-10

Vapor Sampling

Sample ID	MH-1256_031022
Canister Number	2516
Filter Number	7066
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:31

Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_031022
Liquid Sample Time	10:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_031022, 11:40, 11:30

samplers	Seth Turner. Christian Garrido, Gary Schafer
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-10

Vapor Sampling

Sample ID	MH-1259_031022
Canister Number	2682
Filter Number	7086
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:40
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	11:41
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_031022
Liquid Sample Time	11:30
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

Sommer Guy, Gary Schaffer, 2022-03-14, 2022-03-14

Created	2022-03-14 14:08:42 UTC by Sommer Guy
Updated	2022-03-17 17:25:39 UTC by Samantha Szpaichler
Location	42.36018388536047, -83.37960960351245
Field Staff	Sommer Guy, Gary Schaffer
Project Number	30050315.701
Start Date	2022-03-14
End Date	2022-03-14

SL-21_031422, 10:15, 10:15

samplers	Sommer Guy, Gary Schaffer
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-21_031422
Canister Number	2673
Filter Number	7051
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:16
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_031422
Liquid Sample Time	10:15
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-20_031422, 10:32, 10:35

samplers	Sommer Guy, Gary Schaffer
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-20_031422
Canister Number	2344
Filter Number	5028
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:32
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:33
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_031422
Liquid Sample Time	10:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_031422, 10:51, 10:55

samplers	Sommer Guy, Gary Schaffer
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-22_031422
Canister Number	2325
Filter Number	7078
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:52
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_031422
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_031422, 11:10, 11:10

samplers	Sommer Guy, Gary Schaffer
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-4_031422
Canister Number	2671
Filter Number	5054

PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	11:11
Digital Stop Pressure	-5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2626
DUP Filter Number	7032
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-3
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_031422
Liquid Sample Time	11:10
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-18_031422, 11:30, 11:30

samplers	Sommer Guy, Gary Schaffer
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-18_031422
Canister Number	2240
Filter Number	7042
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:31
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_031422
Liquid Sample Time	11:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_031422, 13:20, 13:00

samplers	Sommer Guy, Gary Schaffer
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-17_031422
Canister Number	2656
Filter Number	7076
PID (ppm)	1

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:21
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_031422
Liquid Sample Time	13:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_031422, 13:30, 13:35

samplers	Sommer Guy, Gary Schaffer
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-16_031422
Canister Number	2348
Filter Number	7088
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	13:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:31
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_031422
Liquid Sample Time	13:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_031422, 14:03, 14:05

samplers	Sommer Guy, Gary Schaffer
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-3_031422
Canister Number	2117
Filter Number	7083
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:03
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:04

Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_031422
Liquid Sample Time	14:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_031422, 14:20, 14:20

samplers	Sommer Guy, Gary Schaffer
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	SL-2_031422
Canister Number	2520
Filter Number	5025
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:21
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_031422
Liquid Sample Time	14:20
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

MH-1231_031422, 14:45, 14:45

samplers	Sommer Guy, Gary Schaffer
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-14

Vapor Sampling

Sample ID	MH-1231_031422
Canister Number	2524
Filter Number	7056
PID (ppm)	1.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	2654
DUP Filter Number	7084
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-27
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-7
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_031422
Liquid Sample Time	14:45
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02
Able to collect sediment sample?	No

Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy, 2022-03-15, 2022-03-17

Created	2022-03-15 12:30:36 UTC by Samantha Szpaichler
Updated	2022-03-17 17:33:20 UTC by Samantha Szpaichler
Location	42.372961593831306, -83.39202362120467
Field Staff	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Project Number	30050315.701
Start Date	2022-03-15
End Date	2022-03-17

SL-15_031522, 09:39, 09:40

samplers	Sam Hindle, Korey Pearson, Gary Schafer
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-15_031522
Canister Number	2529
Filter Number	7046
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.2
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:40
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_031522
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-14_031522, 09:52, 09:50

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-14_031522
Canister Number	2639
Filter Number	5029
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:52
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:53
Digital Stop Pressure	-7
Vapor Sampling Notes	Took longer than usual for sampling
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_031522
Liquid Sample Time	09:50
Was a liquid DUP collected?	No

SL-13_031522, 10:07, 10:05

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-13_031522
Canister Number	2538
Filter Number	5051
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:07
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.57
Sample End Time	10:08
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Slower canister than usual
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_031522
Liquid Sample Time	10:05
Was a liquid DUP collected?	No

SL-7_031522, 11:01, 11:00

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-7_031522
Canister Number	2645
Filter Number	5057
PID (ppm)	1.3

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:01
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	11:02
Digital Stop Pressure	-6
Vapor Sampling Notes	Sample took longer than usual to fill
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_031522
Liquid Sample Time	11:00
Was a liquid DUP collected?	No

SL-6_031522, 11:14, 11:13

samplers	Sam Hindle, Korey Pearson, Gary Schafer
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-6_031522
Canister Number	2523
Filter Number	7062
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	11:14
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:15
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_031522
Liquid Sample Time	11:13
Was a liquid DUP collected?	No

SL-5_031522, 11:30, 11:27

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-5_031522
Canister Number	2641
Filter Number	5070
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:30
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:31
Digital Stop Pressure	-7

Vapor Sampling Notes	Slower sample than usual
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_031522
Liquid Sample Time	11:27
Was a liquid DUP collected?	No

SL-8_031522, 12:51, 12:50

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-8_031522
Canister Number	2553
Filter Number	7047
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:52
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_031522
Liquid Sample Time	12:50
Was a liquid DUP collected?	No

SL-9_031522, 13:15, 13:12

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-15

Vapor Sampling

Sample ID	SL-9_031522
Canister Number	2300
Filter Number	7055
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:16
Digital Stop Pressure	-6
Vapor Sampling Notes	Strong odor when manhole opened
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_031522
Liquid Sample Time	13:12
Was a liquid DUP collected?	No

SL-10_031622, 09:07, 09:06

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-16

Vapor Sampling

Sample ID	SL-10_031622
Canister Number	2569
Filter Number	7043
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:07
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	09:08
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_031622
Liquid Sample Time	09:06
Was a liquid DUP collected?	No

SL-11_031622, 09:32, 09:25

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-16

Vapor Sampling

Sample ID	SL-11_031622
Canister Number	2674
Filter Number	5050
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:32
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:33
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Slower than usual to sample
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_031622
Liquid Sample Time	09:25
Was a liquid DUP collected?	No

SL-23_031622, 09:44, 09:43

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-16

Vapor Sampling

Sample ID	SL-23_031622
Canister Number	2517
Filter Number	5008
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:44
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:45
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_031622
Liquid Sample Time	09:43
Was a liquid DUP collected?	No

SL-12_031622, 09:59, 09:55

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-16

Vapor Sampling

Sample ID	SL-12_031622
Canister Number	2623
Filter Number	5020
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:00
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_031622
Liquid Sample Time	09:55
Was a liquid DUP collected?	No

SL-19_031622, 10:10, 10:07

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-16

Vapor Sampling

Sample ID	SL-19_031622
Canister Number	2252
Filter Number	7079
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:10
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:11
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_031622
Liquid Sample Time	10:07
Was a liquid DUP collected?	No

MH-1259_031622, 11:33, 11:27

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-16
DTW (ft below rim) During Sampling	11.25
Sampling Notes	Taken DTW 3/17

Vapor Sampling

Sample ID	MH-1259_031622
Canister Number	2114
Filter Number	7075
PID (ppm)	2.9
PID (ppm) in breathing zone	2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:33
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:34
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_031622
Liquid Sample Time	11:27
Was a liquid DUP collected?	No

MH-1255_031722, 09:44, 09:42

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-16
Time Vapor Barrier Installed	08:41

Sampling Information

Date Sampled	2022-03-17
DTW (ft below rim) During Sampling	9.22
Flow Notes During Sampling	Low flow

Vapor Sampling

Sample ID	MH-1255_031722
Canister Number	2551
Filter Number	7054
PID (ppm)	2.5
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:45
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_031722
Liquid Sample Time	09:42
Was a liquid DUP collected?	No

MH-1256_031722, 10:08, 10:05

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-17
DTW (ft below rim) During Sampling	9.1

Vapor Sampling

Sample ID	MH-1256_031722
Canister Number	2311

Filter Number	7064
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:08
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-4
Sample End Time	10:09
Digital Stop Pressure	-4
Vapor Sampling Notes	Very quick sampling
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_031722
Liquid Sample Time	10:05
Was a liquid DUP collected?	No

MH-1244_031722, 10:37, 10:31

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-17
DTW (ft below rim) During Sampling	11.88

Vapor Sampling

Sample ID	MH-1244_031722
Canister Number	2542
Filter Number	7050
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:37
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:38
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_031722
Liquid Sample Time	10:31
Was a liquid DUP collected?	No

MH-1231A_031722, 10:56, 10:53

samplers	Sam Hindle, Korey Pearson, Gary Schafer, Sommer Guy
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-16
Time Vapor Barrier Installed	08:40

Sampling Information

Date Sampled	2022-03-17
DTW (ft below rim) During Sampling	9.38

Vapor Sampling

Sample ID	MH-1231A_031722
Canister Number	2303
Filter Number	5053
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:56
Digital Start Pressure	-29.5

Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:57
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_031722
Liquid Sample Time	10:53
Was a liquid DUP collected?	No

Sommer Guy, Darrin Gurznic, 2022-03-21, 2022-03-23

Created	2022-03-21 14:01:39 UTC by Sommer Guy
Updated	2022-04-02 12:52:11 UTC by Sommer Guy
Location	42.36021359920721, -83.3795174863966
Field Staff	Sommer Guy, Darrin Gurznic
Project Number	30050315.701
Start Date	2022-03-21
End Date	2022-03-23

SL-21_032122, 10:09, 10:10

samplers	Sommer Guy, Darrin Gurznic
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-21_032122
Canister Number	2679
Filter Number	5068
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:10
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_032122
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-20_032122, 10:27, 10:25

samplers	Sommer Guy, Darrin Gurznic
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-20_032122
Canister Number	2676
Filter Number	5009
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:27
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:28
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_032122
Liquid Sample Time	10:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_032122, 10:44, 10:40

samplers	Sommer Guy, Darrin Gurznic
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-22_032122
Canister Number	2110
Filter Number	5060
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:45
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_032122
Liquid Sample Time	10:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_032122, 11:07, 11:00

samplers	Sommer Guy, Darrin Gurznic
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-4_032122
Canister Number	2557
Filter Number	5068

PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	11:08
Digital Stop Pressure	-5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2663
DUP Filter Number	703
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-4
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_032122
Liquid Sample Time	11:00
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-18_032122, 12:17, 12:20

samplers	Sommer Guy, Darrin Gurznic
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-18_032122
Canister Number	2237
Filter Number	7027
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:17
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:18
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_032122
Liquid Sample Time	12:20
Was a liquid DUP collected?	No

SL-17_032122, 12:41, 15:40

samplers	Sommer Guy, Darrin Gurznic
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-17_032122
Canister Number	2637
Filter Number	7085
PID (ppm)	1.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-6
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	12:42
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_032122
Liquid Sample Time	15:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_032122, 13:09, 13:10

samplers	Sommer Guy, Darrin Gurznic
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-16_032122
Canister Number	2302
Filter Number	4128
PID (ppm)	1.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:09
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:10
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_032122
Liquid Sample Time	13:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_032122, 13:38, 13:40

samplers	Sommer Guy, Darrin Gurznic
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-3_032122
Canister Number	2536
Filter Number	7058
PID (ppm)	2.1
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:38
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:39
Digital Stop Pressure	-6.5

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_032122
Liquid Sample Time	13:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_032122, 14:00, 14:00

samplers	Sommer Guy, Darrin Gurznic
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	SL-2_032122
Canister Number	2537
Filter Number	5071
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:01
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_032122
Liquid Sample Time	14:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_032122, 14:22, 14:20

samplers	Sommer Guy, Darrin Gurznic
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-21

Vapor Sampling

Sample ID	MH-1231_032122
Canister Number	2646
Filter Number	7089
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	14:23
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	2337
DUP Filter Number	7087
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-26
DUP Analog Start Pressure (at start of sample)	-20
DUP Suggested Analog Stop Pressure	-2
DUP Analog Stop Pressure	-2
DUP Digital Stop Pressure	-3
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_032122

Liquid Sample Time	14:20
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02

SL-15_032222, 09:24, 09:25

samplers	Sommer Guy, Darrin Gurznic
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	10.8

Vapor Sampling

Sample ID	SL-15_032222
Canister Number	2548
Filter Number	7039
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:24
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:25
Digital Stop Pressure	-6
Vapor Sampling Notes	DTB 10.75’
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_032222
Liquid Sample Time	09:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_032222, 09:39, 09:40

samplers	Sommer Guy, Darrin Gurznic
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	11.4

Vapor Sampling

Sample ID	SL-14_032222
Canister Number	2666
Filter Number	7036
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:40
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_032222
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_032222, 09:54, 09:55

samplers	Sommer Guy, Darrin Gurznic
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	10.9

Vapor Sampling

Sample ID	SL-13_032222
Canister Number	2652
Filter Number	7036
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:54
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:55
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_032222
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_032222, 10:34, 10:35

samplers	Sommer Guy, Darrin Gurznic
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	13

Vapor Sampling

Sample ID	SL-7_032222
Canister Number	2657

Filter Number	4017
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	10:35
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_032222
Liquid Sample Time	10:35
Was a liquid DUP collected?	No

SL-6_032222, 10:50, 10:50

samplers	Sommer Guy, Darrin Gurznic
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	12.5

Vapor Sampling

Sample ID	SL-6_032222
Canister Number	2115
Filter Number	5039
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	10:51
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_032222
Liquid Sample Time	10:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_032222, 11:04, 11:05

samplers	Sommer Guy, Darrin Gurznic
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	15.3

Vapor Sampling

Sample ID	SL-5_032222
Canister Number	2568
Filter Number	5023
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:04
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-22
Analog Start Pressure (at start of sample)	-29

Suggested Analog Stop Pressure	0
Analog Stop Pressure	0
Sample End Time	11:05
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_032222
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-8_032222, 11:50, 11:50

samplers	Sommer Guy, Darrin Gurznic
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	14.2

Vapor Sampling

Sample ID	SL-8_032222
Canister Number	2096
Filter Number	5063
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_032222
Liquid Sample Time	11:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_032222, 12:14, 12:15

samplers	Sommer Guy, Darrin Gurznic
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	16.3

Vapor Sampling

Sample ID	SL-9_032222
Canister Number	2332
Filter Number	7068
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:14
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:15
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_032222
Liquid Sample Time	12:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_032222, 12:34, 12:35

samplers	Sommer Guy, Darrin Gurznic
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	18.4

Vapor Sampling

Sample ID	SL-10_032222
Canister Number	2632
Filter Number	7049
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	12:35
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_032222
Liquid Sample Time	12:35
Was a liquid DUP collected?	No

SL-11_032222, 12:47, 12:50

samplers	Sommer Guy, Darrin Gurznic
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22

DTB (ft below rim) During Sampling	14

Vapor Sampling

Sample ID	SL-11_032222
Canister Number	2685
Filter Number	7048
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:48
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_032222
Liquid Sample Time	12:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_032222, 13:02, 13:00

samplers	Sommer Guy, Darrin Gurznic
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	11.1

Vapor Sampling

Sample ID	SL-23_032222
Canister Number	2550
Filter Number	7080
PID (ppm)	1.2

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:02
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:03
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_032222
Liquid Sample Time	13:00
Was a liquid DUP collected?	No

SL-12_032222, 13:15, 13:15

samplers	Sommer Guy, Darrin Gurznic
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	16

Vapor Sampling

Sample ID	SL-12_032222
Canister Number	2572
Filter Number	7070
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	13:16
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_032222
Liquid Sample Time	13:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_032222, 13:30, 13:30

samplers	Sommer Guy, Darrin Gurznic
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	10.3

Vapor Sampling

Sample ID	SL-19_032222
Canister Number	2522
Filter Number	7033
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:30
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5

Sample End Time	13:31
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_032222
Liquid Sample Time	13:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_032222, 14:18, 14:20

samplers	Sommer Guy, Darrin Gurznic
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-21
Time Vapor Barrier Installed	09:00

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	9.4

Vapor Sampling

Sample ID	MH-1255_032222
Canister Number	2643
Filter Number	7023
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:18
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:19
Digital Stop Pressure	-8.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_032222
Liquid Sample Time	14:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_032222, 14:41, 14:40

samplers	Sommer Guy, Darrin Gurznic
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-21
Time Vapor Barrier Installed	09:00

Sampling Information

Date Sampled	2022-03-22
DTB (ft below rim) During Sampling	9.7

Vapor Sampling

Sample ID	MH-1231A_032222
Canister Number	2104
Filter Number	7072
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	14:42
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_032222
Liquid Sample Time	14:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_032322, 09:38, 09:40

samplers	Sommer Guy, Darrin Gurznic
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-23
DTB (ft below rim) During Sampling	9.3

Vapor Sampling

Sample ID	MH-1256_032322
Canister Number	2533
Filter Number	7028
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:38
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:39
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_032322
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_032322, 09:58, 10:00

samplers	Sommer Guy, Darrin Gurznic
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-23
DTB (ft below rim) During Sampling	12

Vapor Sampling

Sample ID	MH-1259_032322
Canister Number	2633
Filter Number	7022
PID (ppm)	1.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:58
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:59
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_032322
Liquid Sample Time	10:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_032322, 10:19, 10:20

samplers	Sommer Guy, Darrin Gurznic
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-23
DTB (ft below rim) During Sampling	12.2

Vapor Sampling

Sample ID	MH-1244_032322
Canister Number	2647

Filter Number	7025
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:19
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:20
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_032322
Liquid Sample Time	10:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Seth Turner, Christian Garrido , 2022-03-28, 2022-03-31

Created	2022-03-28 14:49:51 UTC by Seth Turner
Updated	2022-04-02 00:14:36 UTC by Seth Turner
Location	42.3685266, -83.3838059
Field Staff	Seth Turner, Christian Garrido
Project Number	30050315.701
Start Date	2022-03-28
End Date	2022-03-31

SL-4_032822, 10:55, 10:55

samplers	Seth Turner, Christian Garrido
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-28

Vapor Sampling

Sample ID	SL-4_032822
Canister Number	2256
Filter Number	5040
PID (ppm)	1.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-27.2
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.199999999999999
Analog Stop Pressure	-6
Sample End Time	10:56
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-1_032822
DUP Canister Number	2659
DUP Filter Number	7066
DUP Digital Start Pressure	-29

DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-4
DUP Analog Stop Pressure	-4
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_032822
Liquid Sample Time	10:55
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-1_032822
Able to collect sediment sample?	No

SL-18_032822, 11:15, 11:15

samplers	Seth Turner, Christian Garrido
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-28

Vapor Sampling

Sample ID	SL-18_032822
Canister Number	2688
Filter Number	5057
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:16
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_032822
Liquid Sample Time	11:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_032822, 11:35, 11:35

samplers	Seth Turner, Christian Garrido
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-28

Vapor Sampling

Sample ID	SL-17_032822
Canister Number	2571
Filter Number	5033
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:36
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_032822
Liquid Sample Time	11:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_032822, 12:05, 12:05

samplers	Seth Turner, Christian Garrido
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-28

Vapor Sampling

Sample ID	SL-16_032822
Canister Number	2112
Filter Number	7074
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:06
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_032822
Liquid Sample Time	12:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-21_032922, 08:50, 08:50

samplers	Seth Turner, Christian Garrido
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-29

Vapor Sampling

Sample ID	SL-21_032922
Canister Number	2681
Filter Number	7061
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	08:51
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_032922
Liquid Sample Time	08:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_032922, 09:05, 09:05

samplers	Seth Turner, Christian Garrido
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-29

Vapor Sampling

Sample ID	SL-20_032922
Canister Number	2539
Filter Number	7052
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	09:06
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_032922
Liquid Sample Time	09:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_032922, 09:15, 09:15

samplers	Seth Turner, Christian Garrido
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-29

Vapor Sampling

Sample ID	SL-22_032922
Canister Number	2301
Filter Number	5053
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:16
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_032922
Liquid Sample Time	09:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_032922, 09:30, 09:30

samplers	Seth Turner, Christian Garrido
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-29

Vapor Sampling

Sample ID	SL-3_032922
Canister Number	2326
Filter Number	7065
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:31
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_032922
Liquid Sample Time	09:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_033022, 08:50, 08:50

samplers	Seth Turner, Christian Garrido
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-30

Vapor Sampling

Sample ID	MH-1244_033022
Canister Number	2515
Filter Number	7082
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	08:51
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_033022
Liquid Sample Time	08:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_033022, 09:00, 09:00

samplers	Seth Turner, Christian Garrido
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-29
Time Vapor Barrier Installed	08:00

Sampling Information

Date Sampled	2022-03-30

Vapor Sampling

Sample ID	MH-1231A_033022
Canister Number	2294
Filter Number	5070
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	09:01
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_033022
Liquid Sample Time	09:00
Was a liquid DUP collected?	No

MH-1255_033022, 09:20, 09:20

samplers	Seth Turner, Christian Garrido
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-03-29

Time Vapor Barrier Installed	08:15

Sampling Information

Date Sampled	2022-03-30

Vapor Sampling

Sample ID	MH-1255_033022
Canister Number	2665
Filter Number	7034
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:21
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_033022
Liquid Sample Time	09:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_033022, 09:30, 09:30

samplers	Seth Turner, Christian Garrido
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-30

Vapor Sampling

Sample ID	MH-1256_033022
Canister Number	2566

Filter Number	5034
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:31
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_033022
Liquid Sample Time	09:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_033022, 09:50, 09:50

samplers	Seth Turner, Christian Garrido
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-30

Vapor Sampling

Sample ID	MH-1259_033022
Canister Number	2124
Filter Number	7077
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:51
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_033022
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-15_033122, 09:30, 09:30

samplers	Seth Turner, Christian Garrido
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-15_033122
Canister Number	2625
Filter Number	5052
PID (ppm)	1.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5

Analog Stop Pressure	-5
Sample End Time	09:31
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_033122
Liquid Sample Time	09:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_033122, 09:40, 09:40

samplers	Seth Turner, Christian Garrido
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-14_033122
Canister Number	2341
Filter Number	4018
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:41
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_033122
Liquid Sample Time	09:40

Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_033122, 09:55, 09:55

samplers	Seth Turner, Christian Garrido
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-13_033122
Canister Number	2618
Filter Number	5056
PID (ppm)	2.3
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:56
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_033122
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_033122, 10:45, 10:45

samplers	Seth Turner, Christian Garrido
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-7_033122
Canister Number	2677
Filter Number	5062
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	10:46
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_033122
Liquid Sample Time	10:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_033122, 10:55, 10:55

samplers	Seth Turner, Christian Garrido
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-6_033122

Canister Number	2092
Filter Number	4028
PID (ppm)	2.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-21
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	0.5
Analog Stop Pressure	-3
Sample End Time	10:56
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_033122
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_033122, 11:05, 11:05

samplers	Seth Turner, Christian Garrido
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-5_033122
Canister Number	2623
Filter Number	7045
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:06
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_033122
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-8_033122, 11:50, 11:50

samplers	Seth Turner, Christian Garrido
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-8_033122
Canister Number	2648
Filter Number	5061
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4

Analog Stop Pressure	-4
Sample End Time	11:51
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_033122
Liquid Sample Time	11:50
Was a liquid DUP collected?	No

SL-9_033122, 12:15, 12:15

samplers	Seth Turner, Christian Garrido
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-9_033122
Canister Number	2531
Filter Number	7044
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:15
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-23
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2
Sample End Time	12:16
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_033122
Liquid Sample Time	12:15

Was a liquid DUP collected?	No

SL-10_033122, 12:35, 12:35

samplers	Seth Turner, Christian Garrido
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-10_033122
Canister Number	2236
Filter Number	7088
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:36
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_033122
Liquid Sample Time	12:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_033122, 12:45, 12:45

samplers	Seth Turner, Christian Garrido
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-11_033122
Canister Number	2687
Filter Number	7086
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	12:46
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_033122
Liquid Sample Time	12:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_033122, 12:55, 12:45

samplers	Seth Turner, Christian Garrido
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-23_033122
Canister Number	2129
Filter Number	5041

PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:56
Digital Stop Pressure	-2.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_033122
Liquid Sample Time	12:45
Was a liquid DUP collected?	No

SL-12_033122, 13:05, 13:05

samplers	Seth Turner, Christian Garrido
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-12_033122
Canister Number	2526
Filter Number	7040
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	13:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:06
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_033122
Liquid Sample Time	13:05
Was a liquid DUP collected?	No

SL-19_033122, 13:15, 13:15

samplers	Seth Turner, Christian Garrido
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-31

Vapor Sampling

Sample ID	SL-19_033122
Canister Number	2620
Filter Number	7041
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:16
Digital Stop Pressure	-6

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_033122
Liquid Sample Time	13:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_032922, 10:00, 10:00

samplers	Seth Turner, Christian Garrido
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-29

Vapor Sampling

Sample ID	MH-1231_032922
Canister Number	2624
Filter Number	7081
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:01
Digital Stop Pressure	-6.2
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-2_032922
DUP Canister Number	2310
DUP Filter Number	7057
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27.5

DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-3.5
DUP Analog Stop Pressure	-3.5
DUP Digital Stop Pressure	-5.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_032922
Liquid Sample Time	10:00
Was a liquid DUP collected?	Yes
Able to collect sediment sample?	No

SL- 2_032922, 09:45, 09:45

samplers	Seth Turner, Christian Garrido
Location	SL- 2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-03-29

Vapor Sampling

Sample ID	SL- 2_032922
Canister Number	2518
Filter Number	7053
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:46
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL- 2_032922

Liquid Sample Time	09:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Seth Turner, Gary Schafer, Brittany Fagin, 2022-04-04, 2022-04-04

Created	2022-04-04 14:36:16 UTC by Brittany Fagin
Updated	2022-04-07 14:14:28 UTC by Seth Turner
Location	42.3602165157729, -83.37957535086473
Field Staff	Seth Turner, Gary Schafer, Brittany Fagin
Project Number	30050315.701
Start Date	2022-04-04
End Date	2022-04-04

SL-21_040422, 10:40, 10:40

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-04

Vapor Sampling

Sample ID	SL-21_040422
Canister Number	2655
Filter Number	7071
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:41
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_040422
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

SL-20_040422, 10:55, 10:55

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-04

Vapor Sampling

Sample ID	SL-20_040422
Canister Number	2675
Filter Number	7083
PID (ppm)	2.1
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-21
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	0.5
Analog Stop Pressure	-3
Sample End Time	10:56
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_040422
Liquid Sample Time	10:55
Was a liquid DUP collected?	No

SL-22_040422, 11:10, 11:10

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-04

Vapor Sampling

Sample ID	SL-22_040422
Canister Number	2638
Filter Number	7084
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:11
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_040422
Liquid Sample Time	11:10
Was a liquid DUP collected?	No

SL-4_040422, 11:30, 11:30

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-04

Vapor Sampling

Sample ID	SL-4_040422
Canister Number	2670
Filter Number	5029
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:31
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-1_040422
DUP Canister Number	2628
DUP Filter Number	5058
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-26
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-2
DUP Analog Stop Pressure	-2
DUP Digital Stop Pressure	-3.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_040422
Liquid Sample Time	11:30
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-1_040422

SL-18_040422, 11:50, 11:50

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-04

Vapor Sampling

Sample ID	SL-18_040422

Canister Number	2541
Filter Number	5027
PID (ppm)	2.7
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:51
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_040422
Liquid Sample Time	11:50
Was a liquid DUP collected?	No

SL-15_040522, 09:15, 09:15

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-15_040522
Canister Number	2559
Filter Number	7024
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	09:16
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_040522
Liquid Sample Time	09:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_040522, 09:40, 09:40

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-14_040522
Canister Number	2090
Filter Number	5025
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27

Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:41
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_040522
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-13_040522, 09:50, 09:50

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-13_040522
Canister Number	2630
Filter Number	7046
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:51
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_040522

Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_040522, 10:10, 10:10

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-7_040522
Canister Number	2563
Filter Number	7026
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:10
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:11
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_040522
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_040522, 10:30, 10:30

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-6_040522
Canister Number	2651
Filter Number	5008
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:30
Sample End Time	10:31
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_040522
Liquid Sample Time	10:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_040522, 10:55, 10:55

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-5_040522
Canister Number	2306
Filter Number	5020
PID (ppm)	2.8
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:56
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_040522
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-8_040522, 11:30, 11:30

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-8_040522
Canister Number	2100
Filter Number	5042
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:30
Digital Start Pressure	-29.5

Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	11:31
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_040522
Liquid Sample Time	11:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_040522, 12:00, 12:00

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-9_040522
Canister Number	2615
Filter Number	5024
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	12:01
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_040522
Liquid Sample Time	12:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_040522, 12:15, 12:15

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-10_040522
Canister Number	2323
Filter Number	7051
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:16
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_040522
Liquid Sample Time	12:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	Yes

Sediment Sampling

Sample ID	SL-10_040522

SL-11_040522, 12:35, 12:35

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-11_040522
Canister Number	2661
Filter Number	5028
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:36
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_040522
Liquid Sample Time	12:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_040522, 12:55, 12:55

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-23_040522
Canister Number	2232
Filter Number	7035
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:56
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_040522
Liquid Sample Time	12:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_040522, 13:10, 13:10

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-12_040522
Canister Number	2111

Filter Number	7031
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:11
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_040522
Liquid Sample Time	13:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_040522, 13:30, 13:30

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-05

Vapor Sampling

Sample ID	SL-19_040522
Canister Number	2561
Filter Number	7047
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:31
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_040522
Liquid Sample Time	13:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_040622, 09:25, 09:25

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-06

Vapor Sampling

Sample ID	SL-17_040622
Canister Number	2682
Filter Number	5055
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5

Analog Stop Pressure	-5.5
Sample End Time	09:26
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_040622
Liquid Sample Time	09:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_040622, 09:45, 09:46

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-06

Vapor Sampling

Sample ID	SL-16_040622
Canister Number	2297
Filter Number	7054
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	09:46
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_040622

Liquid Sample Time	09:46
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_040622, 10:00, 10:00

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-06

Vapor Sampling

Sample ID	SL-3_040622
Canister Number	2248
Filter Number	7060
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:00
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:01
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_040622
Liquid Sample Time	10:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL- 2_040622, 10:20, 10:20

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SL- 2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-06

Vapor Sampling

Sample ID	SL- 2_040622
Canister Number	2546
Filter Number	5067
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	10:21
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL- 2_040622
Liquid Sample Time	10:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_040622, 10:40, 10:40

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-06

Vapor Sampling

Sample ID	MH-1231_040622

Canister Number	2122
Filter Number	7050
PID (ppm)	2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:41
Digital Stop Pressure	-5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-2_040622
DUP Canister Number	2113
DUP Filter Number	7032
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27.5
DUP Analog Start Pressure (at start of sample)	-27
DUP Suggested Analog Stop Pressure	-3.5
DUP Analog Stop Pressure	-3.5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_040622
Liquid Sample Time	10:40
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	MH-1231_040622
Able to collect sediment sample?	No

MH-1244_040622, 11:00, 11:00

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-06

Vapor Sampling

Sample ID	MH-1244_040622
Canister Number	2570
Filter Number	7043
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:01
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_040622
Liquid Sample Time	11:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_040722, 08:40, 08:40

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-06
Time Vapor Barrier Installed	08:08

Sampling Information

Date Sampled	2022-04-07

Vapor Sampling

Sample ID	MH-1231A_040722
Canister Number	2309

Filter Number	7055
PID (ppm)	2.1
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	08:41
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_040722
Liquid Sample Time	08:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_040722, 09:00, 09:00

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-06
Time Vapor Barrier Installed	08:00

Sampling Information

Date Sampled	2022-04-07

Vapor Sampling

Sample ID	MH-1255_040722
Canister Number	2530
Filter Number	7064
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:01
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_040722
Liquid Sample Time	09:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_040722, 09:15, 09:15

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-07

Vapor Sampling

Sample ID	MH-1256_040722
Canister Number	2333
Filter Number	7055
PID (ppm)	1.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:16
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_040722
Liquid Sample Time	09:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_040722, 09:40, 09:40

samplers	Seth Turner, Gary Schafer, Brittany Fagin
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-07

Vapor Sampling

Sample ID	MH-1259_040722
Canister Number	2653
Filter Number	7062
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	09:41
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_040722
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Sommer Guy, Gary Schafer, Samantha Hindle, 2022-04-11

Created	2022-04-11 14:17:30 UTC by Sommer Guy
Updated	2022-04-13 14:03:38 UTC by Sommer Guy
Location	42.360240505116394, -83.37942310616688
Field Staff	Sommer Guy, Gary Schafer, Samantha Hindle
Project Number	30050315.701
Start Date	2022-04-11

SL-21_041122, 10:21, 10:19

samplers	Sommer Guy, Gary Schafer
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-21_041122
Canister Number	2230
Filter Number	5051
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:22
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_041122
Liquid Sample Time	10:19
Was a liquid DUP collected?	No

SL-20_041122, 10:35, 10:35

samplers	Sommer Guy, Gary Schafer
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-20_041122
Canister Number	2629
Filter Number	7073
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25.5
Analog Start Pressure (at start of sample)	-22.5
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	10:36
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_041122
Liquid Sample Time	10:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_041122 , 10:47, 10:49

samplers	Sommer Guy, Gary Schafer
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-22_041122
Canister Number	2567
Filter Number	7076
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:48
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_041122
Liquid Sample Time	10:49
Was a liquid DUP collected?	No

SL-4_041122, 11:08, 11:04

samplers	Sommer Guy, Gary Schafer
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-4_041122
Canister Number	2521
Filter Number	7079
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:08
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-21.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:09
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2621
DUP Filter Number	7042
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27
DUP Analog Start Pressure (at start of sample)	-21
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-3
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_041122
Liquid Sample Time	11:04
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-18_041122, 11:21, 11:23

samplers	Sommer Guy, Gary Schafer
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-18_041122

Canister Number	2519
Filter Number	7075
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-19.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:22
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_041122
Liquid Sample Time	11:23
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_041122, 11:36, 11:35

samplers	Sommer Guy, Gary Schafer
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-17_041122
Canister Number	2342
Filter Number	7078
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:36
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-22.5
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:37
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_041122
Liquid Sample Time	11:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_041122, 11:49, 11:50

samplers	Sommer Guy, Gary Schafer
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-16_041122
Canister Number	2560
Filter Number	505
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27

Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:50
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_041122
Liquid Sample Time	11:50
Was a liquid DUP collected?	No

SL-3_041122, 12:32, 12:32

samplers	Sommer Guy, Gary Schafer
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-3_041122
Canister Number	2340
Filter Number	7030
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:32
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	12:33
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_041122

Liquid Sample Time	12:32
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_041122, 12:54, 12:55

samplers	Sommer Guy, Gary Schafer
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	SL-2_041122
Canister Number	2242
Filter Number	5009
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:54
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	12:55
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_041122
Liquid Sample Time	12:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_041122, 13:15, 13:14

samplers	Sommer Guy, Gary Schafer
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-11

Vapor Sampling

Sample ID	MH-1231_041122
Canister Number	2252
Filter Number	7080
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:16
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	2529
DUP Filter Number	5060
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_041122
Liquid Sample Time	13:14
Was a liquid DUP collected?	Yes

SL-15_041222, 09:44, 09:44

samplers	Sommer Guy, Gary Schafer
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-15_041222
Canister Number	2514
Filter Number	7033
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:45
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_041222
Liquid Sample Time	09:44
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_041222, 09:57, 09:55

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-14_041222
Canister Number	2314
Filter Number	7038
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-22.5
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	09:58
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_041222
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_041222, 10:16, 10:15

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-13_041222
Canister Number	2652
Filter Number	7070
PID (ppm)	2.5
PID (ppm) in breathing zone	0

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:16
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:17
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_041222
Liquid Sample Time	10:15
Was a liquid DUP collected?	No

SL-7_041222, 10:53, 10:51

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-7_041222
Canister Number	2239
Filter Number	5068
PID (ppm)	2.3
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:53
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	10:54
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_041222
Liquid Sample Time	10:51
Was a liquid DUP collected?	No

SL-6_041222, 11:04, 11:03

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-6_041222
Canister Number	2622
Filter Number	7025
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:04
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:05
Digital Stop Pressure	-6.5

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_041222
Liquid Sample Time	11:03
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_041222, 11:20, 11:21

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-5_041222
Canister Number	2632
Filter Number	5023
PID (ppm)	2.6
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-21.5
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	0.5
Analog Stop Pressure	1
Sample End Time	11:21
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_041222
Liquid Sample Time	11:21
Was a liquid DUP collected?	No

SL-8_041222, 11:47, 11:46

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-8_041222
Canister Number	2290
Filter Number	7049
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:48
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_041222
Liquid Sample Time	11:46
Was a liquid DUP collected?	No

SL-9_041222, 12:15, 12:14

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-9_041222
Canister Number	2235
Filter Number	7027
PID (ppm)	1.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2
Sample End Time	12:16
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_041222
Liquid Sample Time	12:14
Was a liquid DUP collected?	No

SL-10_041222, 12:52, 12:52

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-10_041222
Canister Number	2327
Filter Number	7048
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-4
Sample End Time	12:53
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_041222
Liquid Sample Time	12:52
Was a liquid DUP collected?	No

SL-11_041222, 13:07, 13:07

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-11_041222
Canister Number	2307
Filter Number	7085
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-21

Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:08
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_041222
Liquid Sample Time	13:07
Was a liquid DUP collected?	No

SL-23_041222, 13:21, 13:20

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-23_041222
Canister Number	2624
Filter Number	7028
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:22
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_041222

Liquid Sample Time	13:20
Was a liquid DUP collected?	No

SL-12_041222, 13:35, 13:34

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-12_041222
Canister Number	2259
Filter Number	5063
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:36
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_041222
Liquid Sample Time	13:34
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_041222, 13:48, 13:45

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-12

Vapor Sampling

Sample ID	SL-19_041222
Canister Number	2542
Filter Number	7087
PID (ppm)	1.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:48
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:49
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_041222
Liquid Sample Time	13:45
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_041322, 08:54, 08:52

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-12
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-04-13

Vapor Sampling

Sample ID	MH-1255_041322
Canister Number	2247
Filter Number	7072
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:54
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	08:55
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_041322
Liquid Sample Time	08:52
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_041322, 09:09, 09:07

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-13

Vapor Sampling

Sample ID	MH-1256_041322
Canister Number	2658
Filter Number	4012
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-9
Sample End Time	09:10
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_041322
Liquid Sample Time	09:07
Was a liquid DUP collected?	No

MH-1259_041322, 09:25, 09:25

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	MH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-13

Vapor Sampling

Sample ID	MH-1259_041322
Canister Number	2645
Filter Number	5071
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5

Sample End Time	09:26
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_041322
Liquid Sample Time	09:25
Was a liquid DUP collected?	No

MH-1244_041322, 09:45, 09:45

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	MH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-13

Vapor Sampling

Sample ID	MH-1244_041322
Canister Number	2320
Filter Number	7089
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:46
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_041322
Liquid Sample Time	09:45
Was a liquid DUP collected?	No

MH-1231A_041322, 10:00, 10:00

samplers	Sommer Guy, Gary Schafer, Samantha Hindle
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-12
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-04-13

Vapor Sampling

Sample ID	MH-1231A_041322
Canister Number	2547
Filter Number	4017
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-23.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:01
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_041322
Liquid Sample Time	10:00
Was a liquid DUP collected?	No

Christian Garrido Gary Schefler, 2022-04-18, 2022-04-20

Created	2022-04-18 14:31:37 UTC by Christian Garrido
Updated	2022-04-20 14:35:32 UTC by Christian Garrido
Location	42.35993, -83.379552
Field Staff	Christian Garrido Gary Schefler
Project Number	30050315.701
Start Date	2022-04-18
End Date	2022-04-20

SL-21_041822, 10:30, 10:30

samplers	Christian Garrido Gary Schefler
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-18

Vapor Sampling

Sample ID	SL-21_041822
Canister Number	2639
Filter Number	4128
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:31
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_041822
Liquid Sample Time	10:30

Was a liquid DUP collected?	No

SL-20_041822, 10:40, 10:40

samplers	Christian Garrido Gary Schefler
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-18

Vapor Sampling

Sample ID	SL-20_041822
Canister Number	2627
Filter Number	5069
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	10:41
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_041822
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

SL-22_041822, 10:55, 10:55

samplers	Christian Garrido Gary Schefler
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-18

Vapor Sampling

Sample ID	SL-22_041822
Canister Number	2128
Filter Number	7022
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:56
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_041822
Liquid Sample Time	10:55
Was a liquid DUP collected?	No

SL-4_041822, 11:10, 11:10

samplers	Christian Garrido Gary Schefler
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-18

Vapor Sampling

Sample ID	SL-4_041822
Canister Number	2106
Filter Number	5039

PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-19
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	3
Analog Stop Pressure	-2
Sample End Time	11:11
Digital Stop Pressure	-6
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2667
DUP Filter Number	7067
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-27
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_041822
Liquid Sample Time	11:10
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-18_042022, 09:05, 09:05

samplers	Christian Garrido Gary Schefler
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-20

Vapor Sampling

Sample ID	SL-18_042022
Canister Number	2569
Filter Number	7037
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:06
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_042022
Liquid Sample Time	09:05
Was a liquid DUP collected?	No

SL-17_042022, 09:15, 09:15

samplers	Christian Garrido Gary Schefler
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-20

Vapor Sampling

Sample ID	SL-17_042022
Canister Number	2332
Filter Number	5034
PID (ppm)	0.5

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:16
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_042022
Liquid Sample Time	09:15
Was a liquid DUP collected?	No

SL-16_042022, 09:30, 09:30

samplers	Christian Garrido Gary Schefler
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-20

Vapor Sampling

Sample ID	SL-16_042022
Canister Number	2522
Filter Number	7053
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30

Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:31
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_042022
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

SL-3_042022, 09:40, 09:40

samplers	Christian Garrido Gary Schefler
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-20

Vapor Sampling

Sample ID	SL-3_042022
Canister Number	2540
Filter Number	5053
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:41
Digital Stop Pressure	-7

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_042022
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-2_042022, 09:50

samplers	Christian Garrido Gary Schefler
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-20

Vapor Sampling

Sample ID	SL-2_042022
Canister Number	2680
Filter Number	7084
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:51
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No

MH-1231_042022, 10:10

samplers	Christian Garrido Gary Schefler
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-20

Vapor Sampling

Sample ID	MH-1231_042022
Canister Number	2572
Filter Number	7066
PID (ppm)	-2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	2311
DUP Filter Number	7052
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-27
DUP Analog Start Pressure (at start of sample)	-25
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-4

Christian Garrido Gary Schafer Lottie Jay, 2022-04-19, 2022-04-21

Created	2022-04-19 13:13:28 UTC by Christian Garrido
Updated	2022-04-21 14:13:40 UTC by Christian Garrido
Location	42.3731639, -83.3809203
Field Staff	Christian Garrido Gary Schafer Lottie Jay
Project Number	30050315.701
Start Date	2022-04-19
End Date	2022-04-21

SL-15_041922, 09:15, 09:15

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-15_041922
Canister Number	2109
Filter Number	7086
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	0.24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:16
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_041922
Liquid Sample Time	09:15
Was a liquid DUP collected?	No

SL-14_041922, 09:30, 09:30

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-14_041922
Canister Number	2663
Filter Number	7083
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:31
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_041922
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

SL-13_041922, 09:45, 09:45

samplers	Christian Garrido Gary Schafer Lottie Jay

Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-13_041922
Canister Number	2118
Filter Number	7074
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_041922
Liquid Sample Time	09:45
Was a liquid DUP collected?	No

SL-7_041922, 10:35, 10:35

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-7_041922
Canister Number	2626
Filter Number	7088
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:36
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_041922
Liquid Sample Time	10:35
Was a liquid DUP collected?	No

SL-6_041922, 10:45, 10:45

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-6_041922
Canister Number	2347
Filter Number	5025
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	10:46
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_041922
Liquid Sample Time	10:45
Was a liquid DUP collected?	No

SL-5_041922, 10:55, 10:55

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-5_041922
Canister Number	2240
Filter Number	7041
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:55
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:56
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_041922
Liquid Sample Time	10:55
Was a liquid DUP collected?	No

SL-8_041922, 11:45, 11:45

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-8_041922
Canister Number	2348
Filter Number	7077
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:45
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-6
Sample End Time	11:46
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_041922
Liquid Sample Time	11:45
Was a liquid DUP collected?	No

SL-9_041922, 12:10, 12:10

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-9_041922
Canister Number	2676
Filter Number	5061
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	12:11
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_041922
Liquid Sample Time	12:10
Was a liquid DUP collected?	No

SL-10_041922, 12:35, 12:35

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-10_041922
Canister Number	2666
Filter Number	7040
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	12:36
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_041922
Liquid Sample Time	12:35
Was a liquid DUP collected?	No

SL-11_041922, 12:45, 12:45

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-11_041922
Canister Number	2660
Filter Number	7068
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	12:46
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_041922
Liquid Sample Time	12:45
Was a liquid DUP collected?	No

SL-23_041922, 13:00, 13:00

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-23_041922
Canister Number	2520
Filter Number	7039

PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:01
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_041922
Liquid Sample Time	13:00
Was a liquid DUP collected?	No

SL-12_041922, 13:10, 13:10

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-12_041922
Canister Number	2641
Filter Number	7069
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:10
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:11
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_041922
Liquid Sample Time	13:10
Was a liquid DUP collected?	No

SL-19_041922, 13:20, 13:20

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-19

Vapor Sampling

Sample ID	SL-19_041922
Canister Number	2303
Filter Number	7023
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:20
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5

Sample End Time	13:21
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_041922
Liquid Sample Time	13:20
Was a liquid DUP collected?	No

MH-1244_042122, 08:55, 08:55

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-21

Vapor Sampling

Sample ID	MH-1244_042122
Canister Number	2516
Filter Number	5040
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	08:56
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_042122

Liquid Sample Time	08:55
Was a liquid DUP collected?	No

MH-1231A_042122, 09:05, 09:05

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-20
Time Vapor Barrier Installed	08:10

Sampling Information

Date Sampled	2022-04-21

Vapor Sampling

Sample ID	MH-1231A_042122
Canister Number	2295
Filter Number	5070
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:05
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:06
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_042122
Liquid Sample Time	09:05
Was a liquid DUP collected?	No

MH-1255_042122, 09:30, 09:30

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-20
Time Vapor Barrier Installed	08:15

Sampling Information

Date Sampled	2022-04-21

Vapor Sampling

Sample ID	MH-1255_042122
Canister Number	2533
Filter Number	5033
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:31
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_042122
Liquid Sample Time	09:30
Was a liquid DUP collected?	No

MH-1256_042122, 09:45, 09:45

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-21

Vapor Sampling

Sample ID	MH-1256_042122
Canister Number	2647
Filter Number	7059
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_042122
Liquid Sample Time	09:45
Was a liquid DUP collected?	No

MH-1259_042122, 10:00, 10:00

samplers	Christian Garrido Gary Schafer Lottie Jay
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-21

Vapor Sampling

Sample ID	MH-1259_042122
Canister Number	2325

Filter Number	7043
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:01
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_042122
Liquid Sample Time	10:00
Was a liquid DUP collected?	No

Sommer Guy, Lottie Jay, Samantha Hindle, 2022-04-25

Created	2022-04-25 17:11:21 UTC by Sommer Guy
Updated	2022-04-28 18:56:07 UTC by Sommer Guy
Location	42.36010438300889, -83.37962888188974
Field Staff	Sommer Guy, Lottie Jay, Samantha Hindle
Project Number	30050315.701
Start Date	2022-04-25

SL-21_042522, 13:24, 13:21

samplers	Sommer Guy, Lottie Jay
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-25

Vapor Sampling

Sample ID	SL-21_042522
Canister Number	2526
Filter Number	5055
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:24
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:25
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_042522
Liquid Sample Time	13:21
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_042522, 13:44, 13:45

samplers	Sommer Guy, Lottie Jay
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-25

Vapor Sampling

Sample ID	SL-20_042522
Canister Number	2515
Filter Number	5054
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:44
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:45
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_042522
Liquid Sample Time	13:45
Was a liquid DUP collected?	No

SL-22_042522, 14:00, 14:00

samplers	Sommer Guy, Lottie Jay
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-25

Vapor Sampling

Sample ID	SL-22_042522
Canister Number	2129
Filter Number	7054
PID (ppm)	1.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:01
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_042522
Liquid Sample Time	14:00
Was a liquid DUP collected?	No

SL-18_042522, 14:20, 14:20

samplers	Sommer Guy, Lottie Jay
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-25

Vapor Sampling

Sample ID	SL-18_042522
Canister Number	2528
Filter Number	7036
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-6
Sample End Time	14:21
Digital Stop Pressure	-10
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_042522
Liquid Sample Time	14:20
Was a liquid DUP collected?	No

SL-17_042522, 14:40, 14:40

samplers	Sommer Guy, Lottie Jay
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-25
Sampling Notes	O

Vapor Sampling

Sample ID	SL-17_042522
Canister Number	2524
Filter Number	5042
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:40
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29

Analog Start Pressure (at start of sample)	-21.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7.5
Sample End Time	14:41
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_042522
Liquid Sample Time	14:40
Was a liquid DUP collected?	No

SL-15_042622, 10:20, 10:19

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-15_042622
Canister Number	2654
Filter Number	5041
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:21
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_042622

Liquid Sample Time	10:19
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_042622, 10:39, 10:40

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-14_042622
Canister Number	2319
Filter Number	7071
PID (ppm)	1.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:40
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_042622
Liquid Sample Time	10:40
Was a liquid DUP collected?	No

SL-13_042622, 10:52, 10:50

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-13_042622
Canister Number	2254
Filter Number	5058
PID (ppm)	1.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:53
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_042622
Liquid Sample Time	10:50
Was a liquid DUP collected?	No

SL-7_042622, 11:11, 11:10

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-7_042622
Canister Number	2646
Filter Number	7047

PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:11
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:12
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_042622
Liquid Sample Time	11:10
Was a liquid DUP collected?	No

SL-6_042622, 11:25, 11:25

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-6_042622
Canister Number	2665
Filter Number	5008
PID (ppm)	1.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	11:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:26
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_042622
Liquid Sample Time	11:25
Was a liquid DUP collected?	No

SL-5_042622, 11:41, 11:40

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-5_042622
Canister Number	2119
Filter Number	5027
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:41
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-20
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:42
Digital Stop Pressure	-7.5

Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_042622
Liquid Sample Time	11:40
Was a liquid DUP collected?	No

SL-8_042622, 12:34, 12:35

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-8_042622
Canister Number	2617
Filter Number	5056
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	12:35
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_042622
Liquid Sample Time	12:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_042622, 12:57, 12:52

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-9_042622
Canister Number	2657
Filter Number	7045
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	12:58
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_042622
Liquid Sample Time	12:52
Was a liquid DUP collected?	No

SL-10_042622, 13:15, 13:15

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-10_042622
Canister Number	2685
Filter Number	5062
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	13:16
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_042622
Liquid Sample Time	13:15
Was a liquid DUP collected?	No

SL-11_042622, 13:29, 13:30

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-11_042622
Canister Number	2674
Filter Number	5052
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	13:30
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_042622
Liquid Sample Time	13:30
Was a liquid DUP collected?	No

SL-23_042622, 13:49, 13:50

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-23_042622
Canister Number	2337
Filter Number	5020
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22

Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:50
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_042622
Liquid Sample Time	13:50
Was a liquid DUP collected?	No

SL-12_042622, 14:00, 14:00

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-12_042622
Canister Number	2633
Filter Number	7044
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-23
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-1
Analog Stop Pressure	-1
Sample End Time	14:01
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_042622

Liquid Sample Time	14:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_042622, 14:13, 14:15

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-26

Vapor Sampling

Sample ID	SL-19_042622
Canister Number	2672
Filter Number	7026
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:13
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-21
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:14
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_042622
Liquid Sample Time	14:15
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_042722, 09:39, 09:40

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	SL-16_042722
Canister Number	2623
Filter Number	7031
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:40
Digital Stop Pressure	-8.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_042722
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_042722, 09:56, 09:55

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	SL-3_042722

Canister Number	2334
Filter Number	7035
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:56
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:57
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_042722
Liquid Sample Time	09:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-2_042722, 10:25, 10:25

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	SL-2_042722
Canister Number	2237
Filter Number	7062
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:25
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:26
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_042722
Liquid Sample Time	10:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231_042722, 10:49, 10:50

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	MH-1231_042722
Canister Number	2548
Filter Number	7034
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26

Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:50
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	2301
DUP Filter Number	7064
DUP Digital Start Pressure	-28
DUP Analog Start Pressure (before opening can)	-26
DUP Analog Start Pressure (at start of sample)	-14
DUP Suggested Analog Stop Pressure	-3
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-3
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_042722
Liquid Sample Time	10:50
Was a liquid DUP collected?	No

Liquid DUP Information

Liquid DUP ID	DUP-02
Able to collect sediment sample?	No

SL-4_042722, 11:17, 11:20

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	SL-4_042722
Canister Number	2294
Filter Number	7050
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:17
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	11:18
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2527
DUP Filter Number	7046
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-23
DUP Analog Start Pressure (at start of sample)	-13
DUP Suggested Analog Stop Pressure	1
DUP Analog Stop Pressure	0
DUP Digital Stop Pressure	-2
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_042722
Liquid Sample Time	11:20
Was a liquid DUP collected?	Yes
Able to collect sediment sample?	No

MH-1255_042722, 12:30, 12:30

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-26
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	MH-1255_042722
Canister Number	2310
Filter Number	7061

PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:31
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_042722
Liquid Sample Time	12:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_042722, 12:55, 12:55

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-04-26
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-04-27

Vapor Sampling

Sample ID	MH-1231A_042722
Canister Number	2648
Filter Number	7051
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0

LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:56
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_042722
Liquid Sample Time	12:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_042822, 13:30, 11:25

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-28

Vapor Sampling

Sample ID	MH-1256_042822
Canister Number	2090
Filter Number	7079
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-15

Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	13:31
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_042822
Liquid Sample Time	11:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_042822, 13:47, 11:40

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-28

Vapor Sampling

Sample ID	MH-1259_042822
Canister Number	2248
Filter Number	7096
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:47
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:48
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_042822
Liquid Sample Time	11:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_042822, 14:07, 11:55

samplers	Sommer Guy, Lottie Jay, Samantha Hindle
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-04-28

Vapor Sampling

Sample ID	MH-1244_042822
Canister Number	2553
Filter Number	7097
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6.5
Sample End Time	14:08
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_042822
Liquid Sample Time	11:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Sommer Guy, Gary Schafer, 2022-05-02

Created	2022-05-02 14:39:02 UTC by Sommer Guy
Updated	2022-05-04 14:26:02 UTC by Sommer Guy
Location	42.36013535414111, -83.37964522660093
Field Staff	Sommer Guy, Gary Schafer
Project Number	30050315.701
Start Date	2022-05-02

SL-21_050222, 10:42, 10:41

samplers	Sommer Guy, Gary Schafer
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-21_050222
Canister Number	2330
Filter Number	7075
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:42
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26.5
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-4.5
Analog Stop Pressure	-4.5
Sample End Time	10:43
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_050222
Liquid Sample Time	10:41
Was a liquid DUP collected?	No

SL-20_050222, 10:52, 10:54

samplers	Sommer Guy, Gary Schafer
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-20_050222
Canister Number	2255
Filter Number	7025
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-18.5
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	10:53
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_050222
Liquid Sample Time	10:54
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_050222, 11:06, 11:07

samplers	Sommer Guy, Gary Schafer
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-22_050222
Canister Number	2630
Filter Number	7098
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:06
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	11:07
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_050222
Liquid Sample Time	11:07
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-4_050222, 11:21, 11:23

samplers	Sommer Guy, Gary Schafer
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-4_050222
Canister Number	2620
Filter Number	7099
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5
Sample End Time	11:22
Digital Stop Pressure	-5.5
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2554
DUP Filter Number	7028
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-17
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_050222
Liquid Sample Time	11:23
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-01
Able to collect sediment sample?	No

SL-18_050222, 11:37, 11:39

samplers	Sommer Guy, Gary Schafer
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-18_050222
Canister Number	2655
Filter Number	5040
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:37
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	11:38
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_050222
Liquid Sample Time	11:39
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-17_050222, 11:57, 11:55

samplers	Sommer Guy, Gary Schafer
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-17_050222
Canister Number	2517
Filter Number	7049
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-13
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:58
Digital Stop Pressure	-10
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_050222
Liquid Sample Time	11:55
Was a liquid DUP collected?	No

SL-16_050222, 12:07, 12:08

samplers	Sommer Guy, Gary Schafer
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-16_050222
Canister Number	2104
Filter Number	7048
PID (ppm)	1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-10

Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-3
Sample End Time	12:08
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_050222
Liquid Sample Time	12:08
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_050222, 12:29, 12:30

samplers	Sommer Guy, Gary Schafer
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-3_050222
Canister Number	2551
Filter Number	7066
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	12:30
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_050222
Liquid Sample Time	12:30
Was a liquid DUP collected?	No

SL-2_050222, 12:50, 12:50

samplers	Sommer Guy, Gary Schafer
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	SL-2_050222
Canister Number	2300
Filter Number	5051
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5
Sample End Time	12:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_050222
Liquid Sample Time	12:50
Was a liquid DUP collected?	No

MH-1231_050222, 13:07, 13:05

samplers	Sommer Guy, Gary Schafer
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-02

Vapor Sampling

Sample ID	MH-1231_050222
Canister Number	2305
Filter Number	5050
PID (ppm)	0.8
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	13:08
Digital Stop Pressure	-7
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02
DUP Canister Number	2557
DUP Filter Number	7022
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-17
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-3
DUP Digital Stop Pressure	-4
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_050222
Liquid Sample Time	13:05
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02

MH-1255_050322, 08:49, 08:48

samplers	Sommer Guy, Gary Schafer
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-05-02

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	MH-1255_050322
Canister Number	2677
Filter Number	5030
PID (ppm)	2.1
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	08:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	08:50
Digital Stop Pressure	-8
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_050322
Liquid Sample Time	08:48
Was a liquid DUP collected?	No

MH-1231A_050322, 09:07, 09:08

samplers	Sommer Guy, Gary Schafer
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-05-02
Time Vapor Barrier Installed	09:00

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	MH-1231A_050322
Canister Number	2682
Filter Number	5059
PID (ppm)	0.6
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:07
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	09:08
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_050322
Liquid Sample Time	09:08
Was a liquid DUP collected?	No

SL-15_050322, 09:59, 10:00

samplers	Sommer Guy, Gary Schafer
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	SL-15_050322
Canister Number	2537
Filter Number	5033
PID (ppm)	0.7

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:00
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_050322
Liquid Sample Time	10:00
Was a liquid DUP collected?	No

SL-14_050322, 10:10, 10:10

samplers	Sommer Guy, Gary Schafer
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	SL-14_050322
Canister Number	2651
Filter Number	7059
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:10

Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-4
Sample End Time	10:11
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_050322
Liquid Sample Time	10:10
Was a liquid DUP collected?	No

SL-13_050322, 10:21, 10:22

samplers	Sommer Guy, Gary Schafer
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	SL-13_050322
Canister Number	2559
Filter Number	7094
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.1
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-17
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-4
Sample End Time	10:22
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_050322
Liquid Sample Time	10:22
Was a liquid DUP collected?	No

SL-7_050322, 11:02, 11:00

samplers	Sommer Guy, Gary Schafer
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	SL-7_050322
Canister Number	2518
Filter Number	7027
PID (ppm)	0.9
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:02
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-29
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	11:03
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_050322
Liquid Sample Time	11:00
Was a liquid DUP collected?	No

SL-6_050322, 11:15, 11:15

samplers	Sommer Guy, Gary Schafer
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	SL-6_050322
Canister Number	2096
Filter Number	7042
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:15
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-15
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	11:16
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_050322
Liquid Sample Time	11:15
Was a liquid DUP collected?	No

SL-5_050322, 11:30, 11:30

samplers	Sommer Guy, Gary Schafer
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	SL-5_050322
Canister Number	2539

Filter Number	7085
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:30
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	11:31
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_050322
Liquid Sample Time	11:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_050322, 12:22, 12:20

samplers	Sommer Guy, Gary Schafer
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	MH-1244_050322
Canister Number	2107
Filter Number	5053
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-18
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:21
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_050322
Liquid Sample Time	12:20
Was a liquid DUP collected?	No

MH-1256_050322, 12:39, 12:38

samplers	Sommer Guy, Gary Schafer
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	MH-1256_050322
Canister Number	2103
Filter Number	7100
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:39
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-14
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-4

Sample End Time	12:40
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_050322
Liquid Sample Time	12:38
Was a liquid DUP collected?	No

MH-1259_050322, 12:54, 12:50

samplers	Sommer Guy, Gary Schafer
Location	MH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-03

Vapor Sampling

Sample ID	MH-1259_050322
Canister Number	2615
Filter Number	7043
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:54
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-6
Sample End Time	12:55
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_050322
Liquid Sample Time	12:50
Was a liquid DUP collected?	No

SL-8_050422, 09:01, 09:00

samplers	Sommer Guy, Gary Schafer
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-8_050422
Canister Number	2341
Filter Number	7023
PID (ppm)	0.4
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:01
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5
Sample End Time	09:02
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_050422
Liquid Sample Time	09:00
Was a liquid DUP collected?	No

SL-9_050422, 09:17, 09:18

samplers	Sommer Guy, Gary Schafer
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-9_050422
Canister Number	2688
Filter Number	7072
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:17
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-19
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:18
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_050422
Liquid Sample Time	09:18
Was a liquid DUP collected?	No

SL-10_050422, 09:39, 09:40

samplers	Sommer Guy, Gary Schafer
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-10_050422
Canister Number	2236
Filter Number	7093
PID (ppm)	0.7
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-10.5
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-5
Sample End Time	09:40
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_050422
Liquid Sample Time	09:40
Was a liquid DUP collected?	No

SL-11_050422, 09:50, 09:50

samplers	Sommer Guy, Gary Schafer
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-11_050422
Canister Number	2550
Filter Number	4018
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22

Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:51
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_050422
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_050422, 10:01, 10:03

samplers	Sommer Guy, Gary Schafer
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-23_050422
Canister Number	2113
Filter Number	7092
PID (ppm)	0.1
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:01
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-12
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-4
Sample End Time	10:02
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_050422
Liquid Sample Time	10:03
Was a liquid DUP collected?	No

SL-12_050422, 10:12, 10:12

samplers	Sommer Guy, Gary Schafer
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-12_050422
Canister Number	2122
Filter Number	7101
PID (ppm)	0.5
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:12
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-16
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	10:13
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_050422
Liquid Sample Time	10:12
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_050422, 10:22, 10:23

samplers	Sommer Guy, Gary Schafer
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-04

Vapor Sampling

Sample ID	SL-19_050422
Canister Number	2659
Filter Number	7080
PID (ppm)	0.3
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:22
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-21.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-5
Sample End Time	10:23
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_050422
Liquid Sample Time	10:23
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Gary Schafer, Kaitlin Fleming, 2022-05-16, 2022-05-18

Created	2022-05-16 13:27:41 UTC by Gary Schafer
Updated	2022-05-18 15:58:42 UTC by Gary Schafer
Location	42.37295702569408, -83.39187995538431
Field Staff	Gary Schafer, Kaitlin Fleming
Project Number	30050315.701
Start Date	2022-05-16
End Date	2022-05-18

SL-21_051622, 10:59, 10:55

samplers	Gary Schafer Kaitlin Fleming
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-21_051622
Canister Number	2647
Filter Number	7079
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:01
Digital Stop Pressure	-7.3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_051622
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-20_051622, 11:18, 11:20

samplers	Gary Schafer Kaitlin Fleming
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-20_051622
Canister Number	2666
Filter Number	5042
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:18
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	11:19
Digital Stop Pressure	-7.8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_051622
Liquid Sample Time	11:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_051622, 11:38, 11:35

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-22_051622
Canister Number	2306
Filter Number	7051
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:38
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-7.5
Sample End Time	11:39
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_051622
Liquid Sample Time	11:35

SL-4_051622, 12:00, 00:00

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-4_051622
Canister Number	2676
Filter Number	7083
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:00
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:01
Digital Stop Pressure	-7.8
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-01
DUP Canister Number	2652
DUP Filter Number	7040
DUP Digital Start Pressure	-28
DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-24
DUP Suggested Analog Stop Pressure	-5
DUP Analog Stop Pressure	-5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_051622
Liquid Sample Time	00:00
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	Dup-01-051622
Able to collect sediment sample?	No

SL-18_051622, 12:20, 12:25

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-18_051622
Canister Number	2247
Filter Number	7041

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	12:21
Digital Stop Pressure	-6.9
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_051622
Liquid Sample Time	12:25
Able to collect sediment sample?	No

SL-17_051622, 12:34, 12:35

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-17_051622
Canister Number	2314
Filter Number	7031
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	12:34
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	12:35
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_051622
Liquid Sample Time	12:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-16_051622, 12:49, 12:50

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-16_051622
Canister Number	2660
Filter Number	7061
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-5
Sample End Time	12:50

Digital Stop Pressure	-3.4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_051622
Liquid Sample Time	12:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_051622, 13:04, 13:05

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-3_051622
Canister Number	2621
Filter Number	5062
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:04
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	13:05
Digital Stop Pressure	-3.2
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_051622
Liquid Sample Time	13:05
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-2_051622, 13:21, 13:25

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	SL-2_051622
Canister Number	2567
Filter Number	7084
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:21
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-6.5
Sample End Time	13:22
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_051622
Liquid Sample Time	13:25
Was a liquid DUP collected?	No

MH-1231_051622, 13:42, 13:45

samplers	Gary Schafer, Kaitlin Fleming
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-16

Vapor Sampling

Sample ID	MH-1231_051622
Canister Number	2327
Filter Number	7035
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:42
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:43
Digital Stop Pressure	-2.6
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	Dup-02-051622
DUP Canister Number	2311
DUP Filter Number	7034
DUP Digital Start Pressure	-29
DUP Analog Start Pressure (before opening can)	-28
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-4
DUP Analog Stop Pressure	-4
DUP Digital Stop Pressure	-2.6
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_051622
Liquid Sample Time	13:45
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	Dup-02-051622
Able to collect sediment sample?	No

SL-15_051722, 09:35, 09:35

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-15_051722
Canister Number	2520
Filter Number	7038
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	09:36
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_051722
Liquid Sample Time	09:35
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-14_051722, 09:46, 09:50

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-14_051722
Canister Number	2541
Filter Number	5034
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:46
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-4
Sample End Time	09:47
Digital Stop Pressure	-2.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_051722
Liquid Sample Time	09:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-13_051722, 09:59, 10:00

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-13_051722
Canister Number	2298
Filter Number	7046
PID (ppm)	0.1

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:00
Digital Stop Pressure	-3.6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_051722
Liquid Sample Time	10:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-7_051722, 10:51, 10:55

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-7_051722
Canister Number	2628
Filter Number	7045
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	10:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4.5
Sample End Time	10:52
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_051722
Liquid Sample Time	10:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_051722, 11:04, 11:05

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-6_051722
Canister Number	2513
Filter Number	4012
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:04
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:05

Digital Stop Pressure	-3.4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_051722
Liquid Sample Time	11:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-5_051722, 11:29, 11:30

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-5_051722
Canister Number	2514
Filter Number	7033
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:30
Digital Stop Pressure	-4.6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_051722
Liquid Sample Time	11:30
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

SL-8_051722, 12:22, 12:25

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-8_051722
Canister Number	2232
Filter Number	5041
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:22
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	12:23
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_051722
Liquid Sample Time	12:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-9_051722, 12:49, 12:50

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-9_051722
Canister Number	2680
Filter Number	4017
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:49
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	12:50
Digital Stop Pressure	-4.4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_051722
Liquid Sample Time	12:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-10_051722, 13:19, 13:20

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-10_051722
Canister Number	2529
Filter Number	7062

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:19
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:20
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_051722
Liquid Sample Time	13:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_051722, 13:36, 13:40

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-11_051722
Canister Number	2637
Filter Number	7090
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:36
Digital Start Pressure	-29

Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	13:37
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_051722
Liquid Sample Time	13:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_051722, 13:52, 13:55

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-23_051722
Canister Number	2307
Filter Number	7026
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:52
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:53
Digital Stop Pressure	-3
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_051722
Liquid Sample Time	13:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-12_051722, 14:06, 14:10

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-12_051722
Canister Number	2561
Filter Number	7064
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:06
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:07
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_051722
Liquid Sample Time	14:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_051722, 14:21, 14:25

samplers	Gary Schafer, Kaitlin Fleming
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-17

Vapor Sampling

Sample ID	SL-19_051722
Canister Number	2661
Filter Number	7071
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	22.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	14:22
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_051722
Liquid Sample Time	14:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_051822, 09:10, 09:10

samplers	Gary Schafer, Kaitlin Fleming
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-05-17
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-05-18

Vapor Sampling

Sample ID	MH-1255_051822
Canister Number	2235
Filter Number	5009
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:10
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:11
Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_051822
Liquid Sample Time	09:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1256_051822, 09:23, 09:25

samplers	Gary Schafer, Kaitlin Fleming
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-18

Vapor Sampling

Sample ID	MH-1256_051822
Canister Number	2562
Filter Number	7091

PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:23
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:24
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_051822
Liquid Sample Time	09:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1259_051822, 09:39, 09:40

samplers	Gary Schafer, Kaitlin Fleming
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-18

Vapor Sampling

Sample ID	MH-1259_051822
Canister Number	2091
Filter Number	5069
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5

The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	09:40
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_051822
Liquid Sample Time	09:40
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_051822, 10:09, 10:10

samplers	Gary Schafer, Kaitlin Fleming
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-18

Vapor Sampling

Sample ID	MH-1244_051822
Canister Number	2663
Filter Number	5056
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:09
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:10

Digital Stop Pressure	-4
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_051822
Liquid Sample Time	10:10
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_051822, 10:24, 10:25

samplers	Gary Schafer, Kaitlin Fleming
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-05-17
Time Vapor Barrier Installed	08:30

Sampling Information

Date Sampled	2022-05-18

Vapor Sampling

Sample ID	MH-1231A_051822
Canister Number	2242
Filter Number	7050
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:24
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	10:25
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_051822

Liquid Sample Time	10:25
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer, 2022-05-23, 2022-05-25

Created	2022-05-23 12:29:23 UTC by Samantha Szpaichler
Updated	2022-06-01 15:53:38 UTC by Samantha Szpaichler
Location	42.37302852332813, -83.39202093899566
Field Staff	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Project Number	30050315.701
Start Date	2022-05-23
End Date	2022-05-25

MH-1256_052322, 12:39, 00:28

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SAMH-1256

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	MH-1256_052322
Canister Number	2667
Filter Number	5028
PID (ppm)	0.2
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:39
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-6.5
Sample End Time	12:40
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1256_052322
Liquid Sample Time	00:28
Was a liquid DUP collected?	No

Able to collect sediment sample?	No

MH-1259_052322, 12:59, 12:55

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SAMH-1259

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	MH-1259_052322
Canister Number	2127
Filter Number	7032
PID (ppm)	0.25
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	12:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	13:00
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1259_052322
Liquid Sample Time	12:55
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1244_052322, 13:23, 13:20

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	Yes

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	MH-1244_052322
Canister Number	2569
Filter Number	7027
PID (ppm)	2.3
PID (ppm) in breathing zone	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:23
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	13:24
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1244_052322
Liquid Sample Time	13:20
Was a liquid DUP collected?	No

MH-1231_052322, 13:54, 13:40

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	MH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	MH-1231_052322
Canister Number	2618
Filter Number	7085

PID (ppm)	0.0225
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:54
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-8
Analog Stop Pressure	-8
Sample End Time	13:55
Digital Stop Pressure	-8
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

Vapor DUP ID	DUP-02_052322
DUP Canister Number	2641
DUP Filter Number	7023
DUP Digital Start Pressure	-29.5
DUP Analog Start Pressure (before opening can)	-29
DUP Analog Start Pressure (at start of sample)	-28
DUP Suggested Analog Stop Pressure	-4.5
DUP Analog Stop Pressure	-4.5
DUP Digital Stop Pressure	-7
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231_052322
Liquid Sample Time	13:40
Was a liquid DUP collected?	Yes

Liquid DUP Information

Liquid DUP ID	DUP-02_052322
Able to collect sediment sample?	No

SL-2_052322, 14:11, 14:20

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	SL-2_052322
Canister Number	2118
Filter Number	5024
PID (ppm)	0.053
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:11
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-23
Suggested Analog Stop Pressure	-2
Analog Stop Pressure	-2
Sample End Time	14:12
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-2_052322
Liquid Sample Time	14:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-21_052322, 14:38, 14:34

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-21

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	SL-21_052322
Canister Number	2331
Filter Number	7101
PID (ppm)	0.06

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.8
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:38
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	14:39
Digital Stop Pressure	-8
Vapor Sampling Notes	Smelly oil odor
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-21_052322
Liquid Sample Time	14:34
Was a liquid DUP collected?	No

SL-20_052322, 14:59, 14:51

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-20

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-23

Vapor Sampling

Sample ID	SL-20_052322
Canister Number	2654
Filter Number	7048
PID (ppm)	0.08
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	

Sample Start Time	14:59
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28.5
Analog Start Pressure (at start of sample)	-24.5
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	15:00
Digital Stop Pressure	-7.5
Vapor Sampling Notes	Smells like transmission oil
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-20_052322
Liquid Sample Time	14:51
Was a liquid DUP collected?	No

SL-15_052422, 09:29, 09:26

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-15

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-15_052422
Canister Number	2566
Filter Number	7049
PID (ppm)	0.21
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0.2
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:29
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:30

Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-15_052422
Liquid Sample Time	09:26
Was a liquid DUP collected?	No

SL-14_052422, 09:45, 09:41

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-14

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-14_052422
Canister Number	2626
Filter Number	7082
PID (ppm)	127
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:45
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:46
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-14_052422
Liquid Sample Time	09:41
Was a liquid DUP collected?	No

SL-13_052422, 09:57, 09:56

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-13

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-13_052422
Canister Number	2347
Filter Number	5020
PID (ppm)	0.125
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:57
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	09:58
Digital Stop Pressure	-6
Vapor Sampling Notes	Slower than usual sampling
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-13_052422
Liquid Sample Time	09:56
Was a liquid DUP collected?	No

SL-7_052422, 11:08, 11:04

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-7

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-7_052422
Canister Number	2310
Filter Number	5067
PID (ppm)	1.027
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	19.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:08
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-24
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-1.5
Analog Stop Pressure	-1.5
Sample End Time	11:09
Digital Stop Pressure	-2
Vapor Sampling Notes	Strong odor, sampling lower than normal
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-7_052422
Liquid Sample Time	11:04
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-6_052422, 11:20, 11:20

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-6

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-6_052422
Canister Number	2117
Filter Number	7100
PID (ppm)	0.743

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:20
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	21
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7.5
Sample End Time	11:21
Digital Stop Pressure	-8.8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-6_052422
Liquid Sample Time	11:20
Was a liquid DUP collected?	No

SL-5_052422, 11:36, 11:34

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-5

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-5_052422
Canister Number	2764
Filter Number	5054
PID (ppm)	1.91
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:36

Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-25
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-3
Analog Stop Pressure	-3
Sample End Time	11:37
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-5_052422
Liquid Sample Time	11:34
Was a liquid DUP collected?	No

SL-8_052422, 13:29, 13:00

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-8

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-8_052422
Canister Number	2672
Filter Number	5040
PID (ppm)	0.438
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:29
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-8
Sample End Time	01:30
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-8_052422
Liquid Sample Time	13:00
Was a liquid DUP collected?	No

SL-9_052422, 13:29, 13:20

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-9

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-9_052422
Canister Number	2295
Filter Number	7094
PID (ppm)	0.62
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	19.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:29
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-24.5
Suggested Analog Stop Pressure	-7.5
Analog Stop Pressure	-7
Sample End Time	13:30
Digital Stop Pressure	-8
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-9_052422
Liquid Sample Time	13:20
Was a liquid DUP collected?	No

SL-4_052522, 09:55, 09:45

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer

Location	SL-4

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-25

Vapor Sampling

Sample ID	SL-4_052522
Canister Number	2328
Filter Number	7092
PID (ppm)	0.998
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	09:55
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-22
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	09:56
Digital Stop Pressure	-4
Was a Vapor DUP collected?	Yes

Vapor Duplicate Information

DUP Canister Number	2516
DUP Filter Number	7099
DUP Digital Start Pressure	-30
DUP Analog Start Pressure (before opening can)	-28.5
DUP Analog Start Pressure (at start of sample)	-26
DUP Suggested Analog Stop Pressure	-3.5
DUP Analog Stop Pressure	-3.5
DUP Digital Stop Pressure	-5
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-4_052522
Liquid Sample Time	09:45
Liquid Sampling Notes	Could see water sheen
Was a liquid DUP collected?	No

SL-18_052522, 10:28, 10:30

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-18

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-25

Vapor Sampling

Sample ID	SL-18_052522
Canister Number	2323
Filter Number	7047
PID (ppm)	0.338
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:28
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-24.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:29
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-18_052522
Liquid Sample Time	10:30
Was a liquid DUP collected?	No

SL-17_052522, 10:51, 10:50

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-17

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-25

Vapor Sampling

Sample ID	SL-17_052522
Canister Number	2673
Filter Number	7063
PID (ppm)	0.178
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:51
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	10:52
Digital Stop Pressure	-7.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-17_052522
Liquid Sample Time	10:50
Was a liquid DUP collected?	No

SL-16_052522, 11:11, 11:10

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-16

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-25

Vapor Sampling

Sample ID	SL-16_052522
Canister Number	2643
Filter Number	7081
PID (ppm)	0.04
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	

CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.2
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:11
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5.5
Analog Stop Pressure	-5.5
Sample End Time	11:12
Digital Stop Pressure	-7
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-16_052522
Liquid Sample Time	11:10
Was a liquid DUP collected?	No

SL-10_052422, 13:49, 13:50

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-10

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-10_052422
Canister Number	2671
Filter Number	5068
PID (ppm)	0.72
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	19.3
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	13:49
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26

Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	13:50
Digital Stop Pressure	-7.5
Vapor Sampling Notes	Noticeable odor, collection sampling slow
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-10_052422
Liquid Sample Time	13:50
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-11_052422, 14:14, 14:05

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-11

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-11_052422
Canister Number	2515
Filter Number	5053
PID (ppm)	0.21
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	19.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:14
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-26.5
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	14:15
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Strong oil odor
Was a Vapor DUP collected?	No

Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-11_052422
Liquid Sample Time	14:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-23_052422, 14:35, 14:24

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-23

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-23_052422
Canister Number	2294
Filter Number	5052
PID (ppm)	0.42
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.1
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:35
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-26
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-3.5
Analog Stop Pressure	-3.5
Sample End Time	14:36
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-23_052422
Liquid Sample Time	14:24
Was a liquid DUP collected?	No

SL-12_052422, 14:50, 14:46

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-12

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-12_052422
Canister Number	2524
Filter Number	5057
PID (ppm)	0.25
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:50
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-25.5
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	14:51
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-12_052422
Liquid Sample Time	14:46
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-22_052422, 15:04, 15:00

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-22

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-22_052422
Canister Number	2685
Filter Number	5055
PID (ppm)	0.38
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.7
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:04
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-30
Analog Start Pressure (at start of sample)	-28.5
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	15:05
Digital Stop Pressure	-6.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-22_052422
Liquid Sample Time	15:00
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-19_052422, 15:21, 15:20

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-19

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	SL-19_052422
Canister Number	2536
Filter Number	7054
PID (ppm)	0.92
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	

The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:21
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-24
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-5
Sample End Time	15:22
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-19_052422
Liquid Sample Time	15:20
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1255_052422, 16:08, 16:05

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SAMH-1255

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-05-23
Time Vapor Barrier Installed	12:00
DTW (ft below rim) During Vapor Barrier Install	0
DTB (ft below rim) During Vapor Barrier Install	0

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	MH-1255_052422
Canister Number	2325
Filter Number	5050
PID (ppm)	2.05
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	

O2 (%) in breathing zone	21.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:08
Digital Start Pressure	-30
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6
Analog Stop Pressure	-6
Sample End Time	16:09
Digital Stop Pressure	-6.5
Vapor Sampling Notes	Very strong odor
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1255_052422
Liquid Sample Time	16:05
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

MH-1231A_052422, 16:32, 16:30

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	MH-1231A

Vapor Barrier Information

Vapor barrier installed?	Yes
Date Vapor Barrier Installed	2022-05-23
Time Vapor Barrier Installed	12:05

Sampling Information

Date Sampled	2022-05-24

Vapor Sampling

Sample ID	MH-1231A_052422
Canister Number	2239
Filter Number	5051
PID (ppm)	0.21
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:32
Digital Start Pressure	-30

Analog Start Pressure (before opening can)	-27
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-4
Analog Stop Pressure	-4
Sample End Time	16:33
Digital Stop Pressure	-5
Vapor Sampling Notes	Sampling slower than usual
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	MH-1231A_052422
Liquid Sample Time	16:30
Was a liquid DUP collected?	No
Able to collect sediment sample?	No

SL-3_052522, 11:35, 11:32

samplers	Sam Hindle, James Unsworth, Sam Sakura, Gary a Schafer
Location	SL-3

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-25

Vapor Sampling

Sample ID	SL-3_052522
Canister Number	2627
Filter Number	7098
PID (ppm)	0.293
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	21.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:35
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-7
Sample End Time	11:36
Digital Stop Pressure	-7.5

Vapor Sampling Notes	Strong sewer smell, oily smell
Was a Vapor DUP collected?	No
Able to collect liquid sample?	Yes

Liquid Sampling

Sample ID	SL-3_052522
Liquid Sample Time	11:32
Was a liquid DUP collected?	No

Christina Weaver, Sierra Sider, 2022-05-25, 2022-05-25

Created	2022-05-25 12:00:13 UTC by Christina Weaver
Updated	2022-05-25 22:22:47 UTC by Christina Weaver
Location	42.49350152031878, -83.43316538110632
Field Staff	Christina Weaver, Sierra Sider
Project Number	30050315.701
Start Date	2022-05-25
End Date	2022-05-25

SSVE-SL-2_052522, 11:33

samplers	Christina Weaver, Sierra Sider
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No
DTB (ft below rim) During Vapor Barrier Install	15.5

Sampling Information

Date Sampled	2022-05-25
DTW (ft below rim) During Sampling	15
Flow Notes During Sampling	Rapid flow
DTB (ft below rim) During Sampling	15.5

Vapor Sampling

Sample ID	SSVE-SL-2_052522
Canister Number	2096
Filter Number	7074
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.9
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	11:33
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	11:34
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

SSVE-MH-1231_052522, 10:57

samplers	Christina Weaver, Sierra Sider
Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No
DTB (ft below rim) During Vapor Barrier Install	16

Sampling Information

Date Sampled	2022-05-25
DTW (ft below rim) During Sampling	15.5
Flow Notes During Sampling	Rapid flow
DTB (ft below rim) During Sampling	16

Vapor Sampling

Sample ID	SSVE-MH-1231_052522
Canister Number	2300
Filter Number	7077
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.6
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:57
Digital Start Pressure	-28
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	10:58
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No

SSVE-MH-1244_052522, 10:25

samplers	Christina Weaver, Sierra Sider
Location	SAMH-1244

Vapor Barrier Information

Vapor barrier installed?	No
DTB (ft below rim) During Vapor Barrier Install	12.4

Sampling Information

Date Sampled	2022-05-25
DTW (ft below rim) During Sampling	11.5
Flow Notes During Sampling	Moderate flow

DTB (ft below rim) During Sampling	12.4

Vapor Sampling

Sample ID	SSVE-MH-1244_052522
Canister Number	2779
Filter Number	7074
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.5
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	10:25
Digital Start Pressure	-29
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-28
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	10:26
Digital Stop Pressure	-5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

Seth Turner , 2022-05-26, 2022-05-26

Created	2022-05-26 18:50:54 UTC by Seth Turner
Updated	2022-05-26 21:28:54 UTC by Seth Turner
Location	42.3692096, -83.3929
Field Staff	Seth Turner
Project Number	30050315.701
Start Date	2022-05-26
End Date	2022-05-26

SSVE-SL-2_052622, 14:50

samplers	Seth Turner
Location	SL-2

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-26
DTW (ft below rim) During Sampling	15
DTB (ft below rim) During Sampling	15.5
Sampling Notes	Tubing set at 14'.

Vapor Sampling

Sample ID	SSVE-SL-2_052622
Canister Number	2296
Filter Number	7087
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	14:50
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-27.5
Analog Start Pressure (at start of sample)	-25
Suggested Analog Stop Pressure	-5
Analog Stop Pressure	-7
Sample End Time	14:51
Digital Stop Pressure	-9
Was a Vapor DUP collected?	No

SSVE-MH-1231_052622, 15:35

samplers	Seth Turner

Location	SAMH-1231

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-26
DTW (ft below rim) During Sampling	15.5
DTB (ft below rim) During Sampling	16
Sampling Notes	Tubing set at 14'

Vapor Sampling

Sample ID	SSVE-MH-1231_052622
Canister Number	2322
Filter Number	7067
PID (ppm)	0
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
CH4 (%)	0
LEL in breathing zone is >10%, stop work and contact project team.	
O2 (%) in breathing zone	20.4
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	15:35
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29.5
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-7
Analog Stop Pressure	-5
Sample End Time	15:36
Digital Stop Pressure	-4.5
Was a Vapor DUP collected?	No

SSVE-EFF_052622, 16:48

samplers	Seth Turner
Location	SSVE-EFF

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-26

Vapor Sampling

Sample ID	SSVE-EFF_052622
Canister Number	2649
Filter Number	4128

The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	16:48
Digital Start Pressure	-28.5
Analog Start Pressure (before opening can)	-28
Analog Start Pressure (at start of sample)	-27
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	16:49
Digital Stop Pressure	-6
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No
Able to collect sediment sample?	No

SSVE-INF_052622, 17:25

samplers	Seth Turner
Location	SSVE-INF

Vapor Barrier Information

Vapor barrier installed?	No

Sampling Information

Date Sampled	2022-05-26

Vapor Sampling

Sample ID	SSVE-INF_052622
Canister Number	2630
Filter Number	7089
The PID in the breathing zone is between 2.087 and 4.174 . If it is sustained for >5 min continuous monitor, review engineering controls and PPE, proceed with caution.	
The PID in the breathing zone is above 4.174, if it is sustained for >5 min stop work and contact SSO.	
LEL in breathing zone is >10%, stop work and contact project team.	
The oxygen in the breathing zone is less than 19.5%, stop work, and contact the project team.	
Sample Start Time	17:25
Digital Start Pressure	-29.5
Analog Start Pressure (before opening can)	-29
Analog Start Pressure (at start of sample)	-26
Suggested Analog Stop Pressure	-6.5
Analog Stop Pressure	-6.5
Sample End Time	17:26
Digital Stop Pressure	-3.5
Was a Vapor DUP collected?	No
Able to collect liquid sample?	No

Able to collect sediment sample?	No

Appendix J

Deep Monitoring Well Location Map and Boring Logs

This document is a DRAFT document that has not received approval from EGLE. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of EGLE.

MW-15-59D

WASTEWATER PRE-TREATMENT PLANT

LIVONIA TRANSMISSION PLANT

TEST TRACK

ATNPC BUILDING

MW-15-61D

MW-15-60D

ROSATI AVE

BEACON ST

BOSTON POST ST

BELDEN CT

WADSWORTH ST

STANDISH ST

LEVAN RD

PLYMOUTH RD

ELMIRA AVE

0 350 700

SCALE IN FEET

LEGEND

MONITORING WELL

FORD PROPERTY BOUNDARY

NOTES:

ATNPC - AUTOMATIC TRANSMISSION NEW PRODUCT CENTER

EGLE - MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

DEEP MONITORING WELL LOCATIONS

ARCADIS

FIGURE 1

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: MEGAN MECKLEY PROJECT NUMBER: 30251157 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
T:_ENV\Novi\Brighton_MI\Ford\Livonia\GIS\docs\GEC\2025\Arc Pro\RIR Figures\Figure 1 - Deep Monitoring Well Locations.aprx PLOTTED: 10/10/2025 12:08 BY: sbi01179

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-59D

Sheet: 1 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/17/2015
Date Completed: 12/21/2015

Logger: T. Stevens
Editor: T. Stevens
Weather Conditions: 38F, Cloudy

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
1			60		0.1		(0.0-0.6') ASPHALT.	(0.0-94.0') 2" PVC riser	
2							(0.6-3.0') SAND, medium to coarse; and PEBBLES, small to medium, subrounded to subangular, little granules; poorly sorted; dry; (10YR 4/2) dark yellowish brown. Note: Fill.		
3					0.0				
4							(3.0-6.0') SAND, very fine to fine, subrounded; some silt, low plasticity; well sorted; moist; (10YR 5/4) yellowish brown.		
5					0.0				
6			36				(6.0-9.5') SAND, very fine to fine, rounded to subrounded; well sorted; moist; (10YR 5/4) yellowish brown.		
7					0.0				
8									
9					0.0				
10							(9.5-14.0') PEBBLES, granule to medium pebble; and SAND, medium to coarse, subrounded to angular; poorly sorted; wet; (10YR 4/3). Note: Wet at 13.6' bgs.		
11					0.0				
12									
13			108		0.0			(1.0-91.0') Bentonite grout	
14									
15							(14.0-20.5') SAND, very fine, rounded; some silt; well sorted; wet; (10YR 5/3) brown.		
16					0.0				
17									
18					0.0				
19									
20					0.0				
21							(20.5-24.0') SILT, non plasic; little very fine sand, rounded; well sorted; moist; (10YR 5/3) brown.		
22					0.0				
23			120						
24					0.0				
25									

Drilling Co.: Stock Drilling
Driller: Austin Goldsmith
Drilling Method: Sonic
Drilling Fluid: Water
Remarks: Hand Auger to 5.0' bgs.
Static water level = 21.91' btoc (1/20/2016).

Sampling Method: 4" Core Barrel
Sampling Interval: Continuous
Water Level Start (ft. bgs.): 13.2
Water Level Finish (ft. btoc.): 20.5
Converted to Well: ☒ Yes ☐ No
Surface Elev.: 675.5
North Coor: 320433.7
East Coor: 13384248.9

SOIL BORING LOG_2013 N:\COMMON\FORD\LIVONIA\03 NOTES AND DATA\BORING LOGS\FORD LTP BORING LOGS.GPJ ARCADIS.GDT 2/18/16

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-59D

Sheet: 2 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/17/2015
Date Completed: 12/21/2015

Logger: T. Stevens
Editor: T. Stevens
Weather Conditions: 38F, Cloudy

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
26					0.0		(24.0-72.5') CLAY, medium to high plasticity, slow dilatancy, trace silt; moist; medium stiff; (10YR 4/1) dark gray. Note: Lacustrine.		
27					0.0				
28									
29					0.0		NOTE: Some small to medium subrounded pebbles, little granules from 29.0-32.0' bgs.		
30									
31					0.0				
32									
33			120		0.0				
34									
35					0.0				
36									
37					0.0				
38									
39					0.0				
40									
41					0.0				
42									
43			102		0.0				
44									
45					0.0				
46									
47					0.0				
48									
49					0.0				
50									
51					0.0				

Remarks:

SOIL BORING LOG_2013 N:\COMMON\FORD\LIVONIA\03 NOTES AND DATA\BORING LOGS\FORD LTP BORING LOGS.GPJ ARCADIS.GDT 2/18/16

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-59D

Sheet: 3 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/17/2015
Date Completed: 12/21/2015

Logger: T. Stevens
Editor: T. Stevens
Weather Conditions: 38F, Cloudy

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
53			120		0.0		(24.0-72.5') CLAY, medium to high plasticity, slow dilatancy, trace silt; moist; medium stiff; (10YR 4/1) dark gray. Note: Lacustrine.		
54									
55					0.0				
56									
57					0.0				
58									
59					0.0				
60									
61					0.0				
62									
63			120		0.0		NOTE: Clay becomes very soft, sticky from 63.0-66.0' bgs.		
64									
65					0.0				
66									
67					0.0				
68									
69					0.0				
70									
71					0.0				
72									
73			120		0.0		(72.5-76.0') CLAY, low plasticity, no dilatancy; little silt; some granules to medium pebbles; dry; very stiff; (10YR 4/2) dark grayish brown.		
74									
75					0.0				
76									
77					0.0		(76.0-89.0') SAND, fine to medium, subrounded; and CLAY, low to non plastic, some silt; little to some granules to medium pebble; trace small cobble, rounded; poorly sorted; dry to moist; medium stiff; (10YR 4/2) dark grayish brown.		
78									

Remarks:

SOIL BORING LOG_2013 N:\COMMON\FORD\LIVONIA\03 NOTES AND DATA\BORING LOGS\FORD LTP BORING LOGS.GPJ ARCADIS.GDT 2/18/16

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-59D

Sheet: 4 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/17/2015
Date Completed: 12/21/2015

Logger: T. Stevens
Editor: T. Stevens
Weather Conditions: 38F, Cloudy

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
79					0.0		(76.0-89.0') SAND, fine to medium, subrounded; and CLAY, low to non plastic, some silt; little to some granules to medium pebble; trace small cobble, rounded; poorly sorted; dry to moist; medium stiff; (10YR 4/2) dark grayish brown.		
80									
81					0.0				
82									
83			120		0.0				
84									
85					0.0				
86									
87					0.0				
88									
89					0.0		(89.0-90.0') PEBBLES, small to medium, trace small cobble, sunangular to subrounded; and SAND, medium to granule, subrounded to subangular; poorly sorted; wet; variable color.		
90									
91					0.0		(90.0-91.2') CLAY, medium plasticity, no dilatancy, trace to little silt; trace very fine sand; dry; very stiff; (10YR 4/2).		
92							(91.2-94.0') SAND, very fine, rounded to subrounded; and SILT, non plastic, rapid dilatancy; well sorted; wet; (10YR 4/2).		
93			120		0.0			(91.0-100.8') K&E #7 filter sand	
94									
95					0.0		(94.0-97.5') SAND, fine to medium, subrounded; some granule to medium pebble, subrounded; little silt; poorly sorted; wet; (10YR 4/2).		
96								(94.0-99.0') 2" stainless 10-slot screen	
97									
98					0.0		(97.5-98.0') SHALE, laminated, fissile, compact; dark gray to black.		
99					0.0		(98.0-106.0') PEBBLES, small to large, some cobble, subrounded to subangular; little to trace medium to coarse sand; poorly sorted; wet; variable color. Note: sand washed out with casing advance.		
100									
101					0.0				
102									
103			36		0.0			(100.8-118.0') Bentonite backfill	
104									
105					0.0				

Remarks:

SOIL BORING LOG_2013 N:\COMMON\FORD\LIVONIA\03 NOTES AND DATA\BORING LOGS\FORD LTP BORING LOGS.GPJ ARCADIS.GDT 2/18/16

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-59D

Sheet: 5 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/17/2015
Date Completed: 12/21/2015

Logger: T. Stevens
Editor: T. Stevens
Weather Conditions: 38F, Cloudy

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
106									
107					0.0		(106.0-110.0') PEBBLES, small to large, little medium cobble; some silt and clay, compact; trace medium sand; poorly sorted, wet; variable color.		
108									
109					0.0				
110							(110.0-117.0') SHALE, laminated, fissile, compact; dark gray to black.		
111					0.0				
112								(100.8-118.0') Bentonite backfill	
113			72		0.0				
114									
115					0.0				
116									
117					0.0				
118							(117.0-118.0') CLAY, little silt, low plasticity; little medium sand; poorly sorted; soft; gray. End of Boring at 118.0' bgs.		
119									
120									
121									
122									
123									
124									
125									
126									
127									
128									
129									
130									
131									
132									

Remarks:

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ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-60D

Sheet: 1 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/21/2015
Date Completed: 12/22/2015

Logger: K. Trestrail
Editor: T. Stevens
Weather Conditions: Rain/Overcast, 40s

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
1					0.0		(0.0-0.6') ASPHALT.	(0.0-93.0') 2" PVC riser	
2			60				(0.6-4.0') SAND, fine to medium, subrounded to subangular; and PEBBLES, small to large, subrounded to subangular; poorly sorted; dry; dark yellowish brown (10 YR 4/6). Note: FILL.		
3					0.0				
4									
5					0.0		(4.0-5.0') SAND, very fine to medium, subrounded to subangular; well sorted; moist; yellowish brown (10 YR 5/4).		
6							(5.0-6.0') SAND, fine to medium, subrounded to subangular; trace granules, subangular; trace pebbles, large, subangular; poorly sorted; moist; dark yellowish brown (10 YR 4/6).		
7			36		0.0		(6.0-8.5') SAND, fine to medium, subrounded to subangular; trace to little silt; well sorted; moist; yellowish brown (10 YR 5/4).		
8									
9					0.0		(8.5-9.0') SAND, medium to coarse, subrounded to subangular; trace granules, subangular; poorly sorted; moist; dark yellowish brown (10 YR 3/4).		
10							(9.0-10.0') SILT; and SAND, very fine to fine; poorly sorted; moist; brown (10 YR 4/3). Note: Medium to coarse sand seam 10.0-10.2' bgs.		
11					0.0		(10.2-18.0') SAND, very fine to fine, subrounded to subangular; and SILT, low plasicity, rapid dilatancy; trace granules; well sorted; moist; dark gray (10 YR 4/1).	(1.0-91.0') Bentonite grout	
12									
13			118		0.0				
14									
15					0.0				
16									
17					0.0		Note: Wet at 17.0' bgs.		
18									
19					0.0		(18.0-19.0') SAND, fine to medium; trace granules, subrounded to subangular; well sorted; wet; dark gray (10 YR 4/1).		
20							(19.0-64.0') CLAY, high plasticity, no dilatancy; soft; sticky; moist; dark gray (10 YR 4/1).		
21					0.0				
22									

Drilling Co.: Stock Drilling
Driller: Austin Goldsmith
Drilling Method: Sonic Drilling
Drilling Fluid: Water
Remarks: Hand Auger to 5.0' bgs.
PID lamp failed during boring completion.
Static water level = 19.71' btoc (1/20/2016).

Sampling Method: 4" Core Barrel
Sampling Interval: Continuous
Water Level Start (ft. bgs.): 17.0
Water Level Finish (ft. btoc.): NA
Converted to Well: ☒ Yes ☐ No
Surface Elev.: 676.2
North Coor: 317906.3
East Coor: 13384491.1

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Soil Boring Log

Boring No.: MW-15-60D

Sheet: 2 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/21/2015
Date Completed: 12/22/2015

Logger: K. Trestrail
Editor: T. Stevens
Weather Conditions: Rain/Overcast, 40s

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
23			89		0.0		(19.0-64.0') CLAY, high plasticity, no dilatancy; soft; sticky; moist; dark gray (10 YR 4/1).	(1.0-91.0') Bentonite grout	
24									
25					0.0				
26							Note: Stiff at 26.0' bgs.		
27					0.0				
28									
29					0.0		Note: Trace pebbles (small to large, subrounded to subangular) and granules at 29.0' bgs.		
30									
31					0.0				
32									
33			108		0.0				
34									
35					0.0				
36									
37					0.0				
38									
39					0.0				
40									
41					0.0				
42									
43			102		0.0				
44									
45					0.0				

Remarks:

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ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-60D

Sheet: 3 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/21/2015
Date Completed: 12/22/2015

Logger: K. Trestrail
Editor: T. Stevens
Weather Conditions: Rain/Overcast, 40s

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
46							(19.0-64.0') CLAY, high plasticity, no dilatancy; soft; sticky; moist; dark gray (10 YR 4/1).		
47					0.0				
48									
49					0.0				
50									
51					0.0				
52									
53			120		0.0				
54									
55					0.0				
56									
57					0.0				
58									
59					0.0				
60									
61					0.0				
62									
63			120		0.0				
64									
65					0.0		(64.0-66.0') CLAY, little silt, high plasticity, slow dilatancy; soft; wet; dark gray (10 YR 4/1).		
66									
67					0.0		(66.0-69.0') CLAY, little silt, low plasticity, no dilatancy; and SAND, very fine to medium, subrounded to subangular; trace granules to small pebbles; poorly sorted; moist; dark dray (10 YR 4/1).		
68									
69					0.0				

Remarks:

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ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-60D

Sheet: 4 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/21/2015
Date Completed: 12/22/2015

Logger: K. Trestrail
Editor: T. Stevens
Weather Conditions: Rain/Overcast, 40s

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
70							(69.0-70.0') PEBBLES, small to large, subrounded to subangular; and SAND, fine to medium, subrounded to subangular; poorly sorted; dry; gray (10 YR 5/1).		
71					0.0		(70.0-81.0') CLAY, high plasticity, no dilatancy; trace to some small to medium pebbles, subrounded to subangular; stiff; dry; dark gray (10 YR 4/1).		
72									
73			120		0.0				
74									
75					0.0		Note: 2.0" pebble seam at 74.0' bgs and 75.0' bgs.		
76									
77					0.0				
78									
79					NA				
80									
81					0.0		(81.0-86.0') SAND, very fine to medium, subrounded to subangular; and CLAY, some silt, low to no plasticity; little to some granules to medium pebbles, trace small cobbles, rounded; poorly sorted; stiff; dry; dark grayish brown (10 YR 4/2). Note: Sandy clay lenses.		
82									
83			120		0.0				
84									
85					0.0				
86									
87					0.0		(86.0-91.5') CLAY, medium plasticity; no dilatancy; very stiff; dry; trace silt; dark grayish brown (10 YR 4/2). Note: 1.0-2.0" silt seams.		
88									
89					NA				
90									
91					NA				
92							(91.5-92.0') PEBBLES, small to medium, subrounded to subangular; and SILT; little sand, very fine to fine; trace medium; trace small cobbles, subrounded to subangular;	(91.0-100.8') K&E #7 filter sand	

Remarks:

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Soil Boring Log

Boring No.: MW-15-60D

Sheet: 5 of 5

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/21/2015
Date Completed: 12/22/2015

Logger: K. Trestrail
Editor: T. Stevens
Weather Conditions: Rain/Overcast, 40s

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
93			120		NA		poorly sorted; dry; very dark gray (10 YR 3/1).		
94							(92.0-96.0') SILT, little clay, low plasticity, no dilatancy; trace fine to medium sand, subrounded to subangular; poorly sorted; moist; dark gray (10 YR 4/1).		
95					NA			(93.0-98.0') 2" stainless 10-slot screen	
96									
97					NA		(96.0-97.0') SAND, medium to coarse, subrounded to subangular; trace small pebbles, subrounded to subangular; poorly sorted; wet; dark gray (10 YR 4/1).		
98							(97.0-99.0') SILT, low plasticity, no dilatancy; and SAND, very fine to medium, subrounded to subangular; trace pebbles, small to medium, subrounded to subangular; poorly sorted; moist; dark gray (10 YR 4/1).		
99					NA		(99.0-101.0') PEBBLES, small to large, rounded; and CLAY, low to medium plasticity; no dilatancy; trace cobbles, small, rounded; moist; very dark brown (10 YR 2/2).		
100									
101					NA		(101.0- 105.0') CLAY, high plasticity; no dilatancy; trace medium sand to small pebbles, subrounded to subangular; stiff to very stiff; moist; very dark gray (10 YR 3/1).		
102									
103			120		NA		Note: Transitional contact to shale at 103.0' bgs.		
104								(100.0-108.0') Bentonite backfill	
105					NA		(105.0-106.0') SHALE, laminated, fissile, compact; dry; very dark gray (10 YR 3/1) to black (10 YR 2/1).		
106									
107					NA		(106.0-108.0') PEBBLES, small to large, little small cobbles, rounded to subrounded; some silt and clay; poorly sorted; compact; moist; very dark gray (10 YR 3/1).		
108							End of Boring at 108.0' bgs.		
109									
110									
111									
112									
113									
114									
115									
116									

Remarks:

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Soil Boring Log

Boring No.: MW-15-61D

Sheet: 1 of 4

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/28/2015
Date Completed: 12/28/2015

Logger: A. DeGrandis
Editor: T. Stevens
Weather Conditions: Overcast, Sleet, 30F

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
1			60		NA		(0.0-0.4') ASPHALT. (0.4-5.0') SAND, fine to medium, rounded to subrounded; well sorted; dry; brown (10YR 4/3).	(0.0-94.0') 2" PVC riser	
2									
3									
4									
5									
6			36		NA		(5.0-8.5') SAND, fine to medium, subrounded to subangular; little clay; trace granules, subrounded; poorly sorted; moist; brown (10YR 4/3).		
7									
8									
9			92		NA		(8.5-10.5') SAND, fine to medium, subrounded to subangular; trace granules, subrounded; well sorted; moist; grayish brown (10YR 5/2).	(1.0-84.0') Bentonite grout	
10									
11							(10.5-11.5') PEBBLES, medium, subrounded to subangular; and SAND, medium to granules, subrounded to subangular; poorly sorted; moist; grayish brown (10YR 5/2).		
12							(11.5-14.0') SAND, fine to medium, subrounded to subangular; trace silt; well sorted; moist; grayish brown (10YR 5/2).		
13									
14									
15							(14.0-19.5') SAND, very fine; some silt; well sorted; moist to wet; gray (2.5Y 5/1).		
16									
17									
18									
19									
20							(19.5-23.5') SILT, little very fine sand; low plasticity; rapid dilatancy; moist to wet; dark gray (2.5Y 4/1).		
21									
22									
23			110		NA				
24				MW-15-61D_24			(23.5-60.0') CLAY, little silt; trace granules to small pebbles, subrounded to subangular; medium to high plasticity; slow dilatancy; moist; medium stiff; dark gray (2.5Y 4/1).		
25									

Drilling Co.: Stock Drilling
Driller: Austin Goldsmith
Drilling Method: Sonic Drilling
Drilling Fluid: Water
Remarks: Hand Auger to 6.0' bgs.
PID lamp failed during boring completion.
Static water level = 73.23' btoc (1/20/2016).

Sampling Method: 4" Core Barrel
Sampling Interval: Continuous
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA
Converted to Well: ☒ Yes ☐ No
Surface Elev.: 670.8
North Coor: 319089.3
East Coor: 13387240.3

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ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-61D

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/28/2015
Date Completed: 12/28/2015

Logger: A. DeGrandis
Editor: T. Stevens
Weather Conditions: Overcast, Sleet, 30F

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
26							(23.5-60.0') CLAY, little silt; trace granules to small pebbles, subrounded to subangular; medium to high plasticity; slow dilatancy; moist; medium stiff; dark gray (2.5Y 4/1).		
27									
28									
29							Note: Stiff to very stiff starting at 29.0' bgs.		
30									
31									
32									
33			84		NA				
34				MW-15-61D_34					
35									
36									
37									
38									
39									
40									
41									
42									
43			120		NA				
44				MW-15-61D_44					
45									
46									
47									
48									
49									
50									
51									

Remarks:

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ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-61D

Sheet: 3 of 4

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/28/2015
Date Completed: 12/28/2015

Logger: A. DeGrandis
Editor: T. Stevens
Weather Conditions: Overcast, Sleet, 30F

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
53			101	MW-15-61D_54	NA		(23.5-60.0') CLAY, little silt; trace granules to small pebbles, subrounded to subangular; medium to high plasticity; slow dilatancy; moist; medium stiff; dark gray (2.5Y 4/1).		
54									
55									
56									
57									
58									
59									
60									
61							(60.0-64.0') CLAY and SILT; no to low plasticity; no to slow dilatancy; dry to moist; stiff; gray (2.5Y 5/1).		
62									
63			110		NA				
64				MW-15-61D_64			(64.0-69.0') CLAY, little to some silt, no to low plasticity, no dilatancy; and SAND, fine, little granules to small pebbles, subrounded; dry; very stiff; dark grayish brown (10YR 4/2).		
65									
66									
67									
68				MW-15-61D_68					
69							(69.0-81.5') CLAY and SILT, no to low plasticity; no dilatancy; little granules to medium pebbles, subrounded to subangular; dry to moist; very stiff; dark gray (2.5Y 4/1).		
70									
71									
72									
73			120		NA				
74									
75									
76									
77									
78									

Remarks:

SOIL BORING LOG_2013 N:\COMMON\FORD\LIVONIA\03 NOTES AND DATA\BORING LOGS\FORD LTP BORING LOGS.GPJ ARCADIS.GDT 2/18/16

ARCADIS Design & Consultancy for natural and built assets

Soil Boring Log

Boring No.: MW-15-61D

Sheet: 4 of 4

Project Name: Ford Livonia Transmission Plant
Project Number: MI001304.0001
Project Location: Livonia, Michigan

Date Started: 12/28/2015
Date Completed: 12/28/2015

Logger: A. DeGrandis
Editor: T. Stevens
Weather Conditions: Overcast, Sleet, 30F

Depth (feet)	Sample Interval	Blow Counts	Recovery (in.)	Sample ID	PID (ppm)	USCS Class	Description	Construction Details	Well
79							(69.0-81.5') CLAY and SILT, no to low plasticity; no dilatancy; little granules to medium pebbles, subrounded to subangular; dry to moist; very stiff; dark gray (2.5Y 4/1).		
80									
81									
82							(81.5-85.0') PEBBLES, small to medium; and SAND, fine to medium, subrounded to subangular; some clay; poorly sorted; moist; very dark grayish brown (10YR 3/2).		
83			120		NA				
84									
85									
86							(85.0-88.0') PEBBLES, small to medium, subrounded to subangular; little fine to medium sand; poorly sorted; dry; variable color. Note: Shale fragments from 86.0 to 87.0' bgs. Moist to wet at 87.5' bgs.		
87									
88								(86.0-94.0') K&E #7 filter sand (88.0-93.0') 2" stainless 10-slot screen	
89							(88.0-91.5') SAND, fine; some small to medium pebbles, subrounded to subangular; poorly sorted; dry; brown (10YR 5/3).		
90									
91			60		NA				
92							(91.5-94.0') Weathered SHALE; dry; dark gray (2.5Y 4/1) to very dark gray (2.5Y 3/1).		
93									
94							End of Boring at 94.0' bgs.		
95									
96									
97									
98									
99									
100									
101									
102									
103									
104									
105									

Remarks:

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Appendix K

Stability Analysis

Trend Analysis Methodology

The Mann-Kendall trend test is a non-parametric test that determines trends based on ranked data. As such, it is relatively insensitive to small data sets, outlier values and non-detect concentrations and it does not require the data to fit a specific distribution. The basic Mann-Kendall trend test is performed by listing the concentrations of the constituent of interest in temporal order and computing the differences between a given measurement and earlier measurements (Gilbert 1987; USEPA 2009). Based on USEPA guidance (USEPA 2009), non-detect values are set to a single value less than that of any detections, and laboratory qualified concentrations are set equal to the laboratory reporting limit.

For each analyte and monitoring location, concentration data were arranged in chronological order. The Mann-Kendall test statistic (sum of trend [S]) was calculated by comparing all possible pairs of observations (each earlier relative to each later point) and assigning a value of +1 if the concentration of the later sample is higher, -1 if the concentration of the later sample is lower, and 0 if the concentrations are the same. The S is the difference between the number of positive differences and the number of negative differences. If S is positive, later concentrations are more frequently greater than earlier ones and an increasing trend direction is indicated; if S is negative, later concentrations are more frequently less than earlier ones, indicating a decreasing trend; and if S is near zero, no trend is apparent.

The statistical significance of the calculated S depends on the number of data points (n):

- For small sample sizes ($n \leq 10$), significance was evaluated by comparing the calculated S statistic to the critical range of S values expected under no-trend conditions, as described in USEPA 2009. If the magnitude of S exceeded the critical range, the trend was considered statistically significant at the 90% confidence level (alpha = 0.1).
- For larger sample sizes ($n>10$), the variance of S was calculated (accounting for ties) and a standardized test statistic (Z) was computed to derive the p-value. The corresponding p-value was obtained from the standard normal distribution to assess whether the observed trend was statistically significant at the 90% confidence level (alpha = 0.1).

For each well-analyte pair meeting screening criteria, a calculation sheet was prepared showing sampling dates and concentrations (including non-detect substitutions, if any), pairwise comparison results (-1, 0, or +1 rankings), and the computed values of S, Z, and p-value, along with the resulting trend direction and statistical interpretation as described in USEPA 2009.

The coefficient of variation (CV) is a quantitative measure that can be used to evaluate if concentrations are stable in cases where a statistically significant trend is not apparent. The CV is calculated as the standard deviation of concentrations of each COC measured over time at a monitoring well divided by the mean (average) concentration over the same time period. CV values near or greater than 1 indicate variability in concentrations over time or suggest an underlying trend that is not statistically significant. Lower CV values indicate that concentrations are stable over time. Where no significant trend was found, the trend determination presented was based on the sign and magnitude of the S-statistic, the CV value, and visual examination of the pattern in concentrations over time.

References

Gilbert, R.O. 1987. *Statistical Methods for Environmental Pollution Monitoring*. John Wiley and Sons, Inc. New York. Hazen, T.C. 2010. Cometabolic Bioremediation. Handbook of Hydrocarbon and Lipid Microbiology. 2505-2514.

USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities. Office of Resource Conservation and Recovery. Unified Guidance. EPA 530-R-09-007.

TABLE K-1
Summary Statistics and Trend Results
Ford Motor Company, Livonia Transmission Plant
Livonia, Michigan

Well ID	Analyte	Date Range	Figure	FOD	Detected Results Summary [1]					Mann-Kendall Test [2]					
					Range	Mean	Median	SD	CV	Result [3, 4]	MK Result Note	P-Value	S Value	Trend Stability [6]	Notes on Data Availability
HCS to Eastern LTP Property Boundary															
MW-34	Vinyl Chloride	04/17 - 05/25	K-1	33 / 33	0.52 - 2.2	1.2	1.1	0.47	0.392	NST	--	0.451	-9	Stable	
MW-35	Vinyl Chloride	07/17 - 05/25	K-2	32 / 32	0.64 - 9.1	3.2	3	2	0.625	DWN	--	<0.001	-199	--	
MW-40	Vinyl Chloride	07/17 - 05/25	K-3	26 / 30	0.26 - 1.8	0.95	0.85	0.47	0.495	NST	--	0.429	11	Stable	
MW-41	Vinyl Chloride	04/17 - 05/25	K-4	32 / 33	0.48 - 5.3	1.8	1.8	1.1	0.611	DWN	--	<0.001	-267	--	
MW-42	Vinyl Chloride	04/17 - 05/25	K-5	33 / 33	0.49 - 1.1	0.76	0.7	0.15	0.197	NST	--	0.156	-66	Stable	
MW-45	Vinyl Chloride	04/17 - 05/25	K-6	33 / 33	33 - 7600	886	410	1530	1.7	DWN	--	<0.001	-308	--	
MW-46	Vinyl Chloride	04/17 - 05/25	K-7	32 / 33	0.87 - 150	29.6	22.5	29.6	1.000	DWN	--	<0.001	-203	--	
MW-47	Vinyl Chloride	04/17 - 05/25	K-8	32 / 32	0.76 - 220	61	40	52.2	0.856	DWN	--	<0.001	-291	--	
MW-48	Vinyl Chloride	04/17 - 08/21	K-9	16 / 18	0.22 - 11	3.2	1.8	3.1	0.969	DWN	--	0.041	-47	--	Data only available through 2021
MW-50	Vinyl Chloride	04/17 - 05/25	K-10	31 / 33	30 - 370	141	130	79.9	0.567	NST	--	0.463	7	Stable	
MW-52	Vinyl Chloride	07/17 - 05/25	K-11	32 / 32	0.86 - 9.1	3	2.5	1.9	0.633	DWN	--	<0.001	-387	--	
MW-54	Vinyl Chloride	07/17 - 05/25	K-12	31 / 31	0.34 - 1.5	0.99	0.98	0.24	0.242	NST	--	0.354	-23	Stable	
MW-57	Vinyl Chloride	07/17 - 05/25	K-13	28 / 32	0.39 - 1.6	0.76	0.67	0.27	0.355	NST	--	0.302	33	Stable	
MW-62	Vinyl Chloride	04/17 - 05/25	K-14	31 / 33	0.41 - 1.9	0.97	0.98	0.34	0.351	NST	--	0.304	34	Stable	
MW-64	Vinyl Chloride	04/17 - 05/25	K-15	33 / 33	0.69 - 11	4.1	3.6	2.4	0.585	NST	--	0.481	4	Stable	
MW-68	Vinyl Chloride	04/17 - 05/25	K-16	29 / 33	0.66 - 52	9	4.7	11.1	1.2	DWN	--	0.040	-114	--	
MW-69	Vinyl Chloride	04/17 - 05/25	K-17	25 / 32	0.46 - 7.9	2.8	3.2	1.7	0.607	DWN	--	0.006	-154	--	
MW-70	Vinyl Chloride	04/17 - 05/25	K-18	33 / 33	30 - 780	368	400	164	0.446	UP	--	<0.001	302	--	
MW-122	Vinyl Chloride	09/19 - 05/25	K-19	15 / 15	1.4 - 3.3	2.5	2.6	0.55	0.220	UP	--	0.030	39	--	
MW-209S	Vinyl Chloride	02/20 - 05/25	K-20	12 / 22	0.29 - 3	1.1	0.945	0.82	0.745	UP	--	<0.001	107	--	
MW-210S	Vinyl Chloride	02/20 - 05/25	K-21	22 / 22	3.5 - 17	8.8	6.5	4.1	0.466	NST	--	0.356	14	Stable	
MW-213S	Vinyl Chloride	02/20 - 05/25	K-22	14 / 22	0.48 - 1.3	0.87	0.835	0.24	0.276	DWN	--	0.007	-85	--	
MW-235	Vinyl Chloride	11/23 - 05/25	K-23	7 / 7	2.4 - 12	6	5.3	3.4	0.567	DWN	5	0.005	-17	--	
PW-16-01	Vinyl Chloride	08/17 - 05/25	K-24	32 / 32	0.92 - 5300	845	750	994	1.2	UP	--	0.081	87	--	
TW-16-01	Vinyl Chloride	08/17 - 05/21	K-25	15 / 15	120 - 830	431	380	230	0.534	DWN	--	0.037	-37	--	Data only available through 2021
TW-16-02	Vinyl Chloride	04/17 - 05/21	K-26	16 / 16	3700 - 15000	8120	7450	3370	0.415	DWN	--	<0.001	-90	--	Data only available through 2021
Belden Court															
MW-72	Vinyl Chloride	05/17 - 05/25	K-27	32 / 33	0.61 - 3.9	1.4	1.2	0.75	0.536	DWN	--	<0.001	-330	--	
MW-73S	Vinyl Chloride	05/17 - 10/18	K-28	7 / 7	0.62 - 1.9	1.2	1.2	0.42	0.350	DWN	5	0.035	-13	--	Data only available through 2018
MW-74	Vinyl Chloride	05/17 - 05/25	K-29	29 / 33	0.7 - 6.4	2.9	2.7	1.2	0.414	UP	--	<0.001	242	--	
MW-75D	Vinyl Chloride	05/17 - 05/25	K-30	33 / 33	1 - 6.4	2.1	1.9	1.1	0.524	NST	--	0.142	-70	Stable	
Alden Village Subdivsion															
MW-79D	Vinyl Chloride	05/17 - 05/25	K-31	32 / 33	1.3 - 4.1	2.1	1.85	0.73	0.348	DWN	--	0.019	-134	--	
MW-79SR	Vinyl Chloride	12/18 - 05/25	K-32	18 / 27	0.23 - 1.5	0.68	0.61	0.33	0.485	NST	--	0.432	9	Stable	
MW-80S	Vinyl Chloride	05/17 - 10/18	K-33	7 / 7	2.9 - 7.6	5.5	6.2	1.7	0.309	NST	5	0.281	-5	Stable	Data only available through 2018
MW-80SR	Vinyl Chloride	12/18 - 05/25	K-34	26 / 27	1.4 - 4.7	2.9	2.95	1.1	0.379	NST	--	0.385	15	Stable	
MW-85	Vinyl Chloride	05/17 - 05/25	K-35	33 / 33	3.1 - 8.6	5.3	5.3	1.4	0.264	DWN	--	<0.001	-295	--	
MW-85SR	Vinyl Chloride	04/19 - 05/25	K-36	25 / 25	0.33 - 2.6	1.4	1.4	0.55	0.393	DWN	--	0.055	-69	--	
MW-89S	Vinyl Chloride	12/18 - 05/25	K-37	14 / 25	0.23 - 2.3	1	0.815	0.63	0.630	DWN	--	0.009	-97	--	
MW-102	Vinyl Chloride	12/18 - 05/25	K-38	26 / 27	1 - 3	1.9	1.8	0.57	0.300	UP	--	0.045	82	--	
MW-115S	Vinyl Chloride	12/18 - 05/25	K-39	19 / 26	0.52 - 3.9	1.5	1	0.96	0.640	DWN	--	<0.001	-152	--	
MW-123S	Vinyl Chloride	12/18 - 05/25	K-40	20 / 25	0.74 - 4.6	2.8	2.9	1.1	0.393	DWN	--	0.002	-125	--	
MW-127S	Vinyl Chloride	12/18 - 05/25	K-41	23 / 26	0.43 - 2.8	1.7	1.7	0.6	0.353	NST	--	0.177	-43	Stable	
MW-130S	Vinyl Chloride	12/18 - 05/25	K-42	21 / 23	0.51 - 3.5	1.8	1.5	0.88	0.489	UP	--	0.003	104	--	
MW-131S	Vinyl Chloride	12/18 - 05/25	K-43	17 / 27	0.52 - 1.2	0.82	0.82	0.23	0.280	DWN	--	<0.001	-198	--	
MW-137S	Vinyl Chloride	02/19 - 05/25	K-44	15 / 26	0.27 - 1.2	0.64	0.56	0.26	0.406	DWN	--	0.054	-71	--	
MW-138S	Vinyl Chloride	02/19 - 05/25	K-45	25 / 26	0.75 - 2.8	1.5	1.4	0.5	0.333	DWN	--	<0.001	-145	--	
MW-147S	Vinyl Chloride	02/19 - 05/25	K-46	15 / 26	0.38 - 1.8	0.95	0.82	0.4	0.421	NST	--	0.150	-46	Stable	
MW-148S	Vinyl Chloride	02/19 - 05/25	K-47	20 / 25	0.22 - 2.3	1.3	1.1	0.66	0.508	DWN	--	0.058	-68	--	
MW-149S	Vinyl Chloride	02/19 - 05/25	K-48	21 / 23	0.91 - 3.6	1.8	1.6	0.65	0.361	DWN	--	0.040	-67	--	
MW-150S	Vinyl Chloride	02/19 - 05/25	K-49	16 / 25	0.32 - 1.1	0.65	0.64	0.26	0.400	UP	--	0.021	86	--	
MW-151S	Vinyl Chloride	02/19 - 05/25	K-50	20 / 24	0.58 - 2.2	1.1	0.985	0.44	0.400	NST	--	0.165	-40	Stable	

Abbreviations:

FOD = frequency of detection (# detects / # samples)
mean = arithmetic mean
SD = standard deviation
CV = coefficient of variation

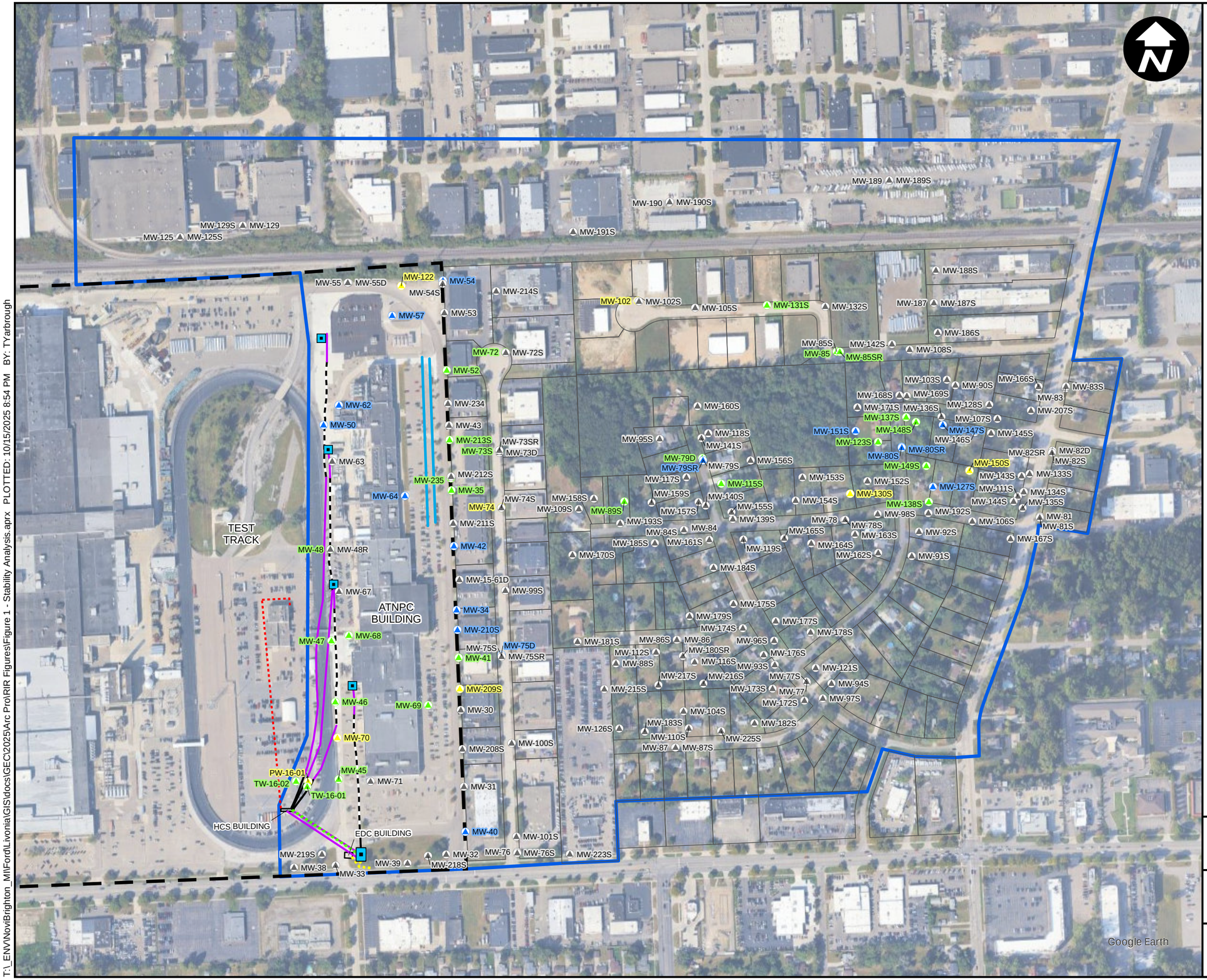
NST = no significant trend
DWN = downward trend
UP = upward trend

Notes:

1. All analytical results are in µg/L. Result values less than 10 are reported to 2 significant figures; values greater than 10 are reported to 3 significant figures.
   P-values are reported to 3 decimal places.
2. Trend results are presented when at least four samples and one detected value are available. Significance of trends evaluated at 90% confidence (alpha = 0.104).
3. Non-detects were assigned a common value less than the minimum detected value, equal to half the minimum reporting limit (RL) in the dataset (USEPA, 2009).
   If half the minimum RL was greater than the minimum detected value, then half the minimum detect was assigned.
4. Statistically significant trend defined as having p-value ≤ 0.1, or 90% confidence.
5. MK Trend results for datasets with fewer than 8 samples may not be reliable and should be treated with caution.
6. Trend stability is determined from the CV; if the CV is greater than 1 the trend is determined to be variable. Otherwise, the trend is stable. This metric is only computed for well-analyte pairs with no significant trends.

Reference:

USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities. Unified Guidance. EPA/530/R-09/007, 2009.



T:_ENV\NoviBrighton_MI\FordLivonia\GIS\docs\GEC2025\Arc Pro\RIR Figures\Figure 1 - Stability Analysis.aprx PLOTTED: 10/15/2025 8:54 PM BY: TYarbrough

LEGEND

- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- ESD-4 CARRIER PIPE
- HCS ELECTRICAL LINE
- EDC DISCHARGE LINE
- PERMEABLE REACTIVE BARRIER
- AREA OF CONCERN
- FORD PROPERTY BOUNDARY
- COMMERCIAL/RESIDENTIAL PROPERTY BOUNDARY

VINYL CHLORIDE TRENDS

- INCREASING TREND
- DECREASING TREND
- NO SIGNIFICANT TREND
- LOCATION DOES NOT MEET MANN-KENDALL CRITERIA

NOTES:

A STATISTICAL ANALYSIS OF CONCENTRATION TRENDS WAS PERFORMED USING HISTORICAL GROUNDWATER MONITORING DATA. MANN-KENDALL TREND ANALYSIS WAS PERFORMED ON SELECT DATASETS THAT MET THE FOLLOWING CRITERIA:

1. THE MONITORING WELL WAS SAMPLED DURING AT LEAST FOUR SAMPLING EVENTS,

2. THE FREQUENCY OF DETECTION WAS GREATER THAN 50 PERCENT, AND

3. THERE WAS AT LEAST ONE EXCEEDANCE OF THE EGLE PROVIDED RESIDENTIAL SITE-SPECIFIC VOLATILIZATION TO INDOOR AIR CRITERIA FOR VINYL CHLORIDE (1.0 µg/L) AT ANY POINT IN TIME (DATA COLLECTED BETWEEN 2017 AND 2025).

ATNPC = AUTOMATIC TRANSMISSION NEW PRODUCT CENTER

EGLE = MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

EDC = EASTERN DIVERSION CHAMBER

ESD = EASTERN STORM DRAIN

HDPE = HIGH-DENSITY POLYETHYLENE

HCS = HYDRAULIC CONTROL SYSTEM

SDR = STANDARD DIMENSIONAL RATIO

PW = PUMPING WELL

TW = TEST WELL

µg/L = MICROGRAMS PER LITER

0 400 800

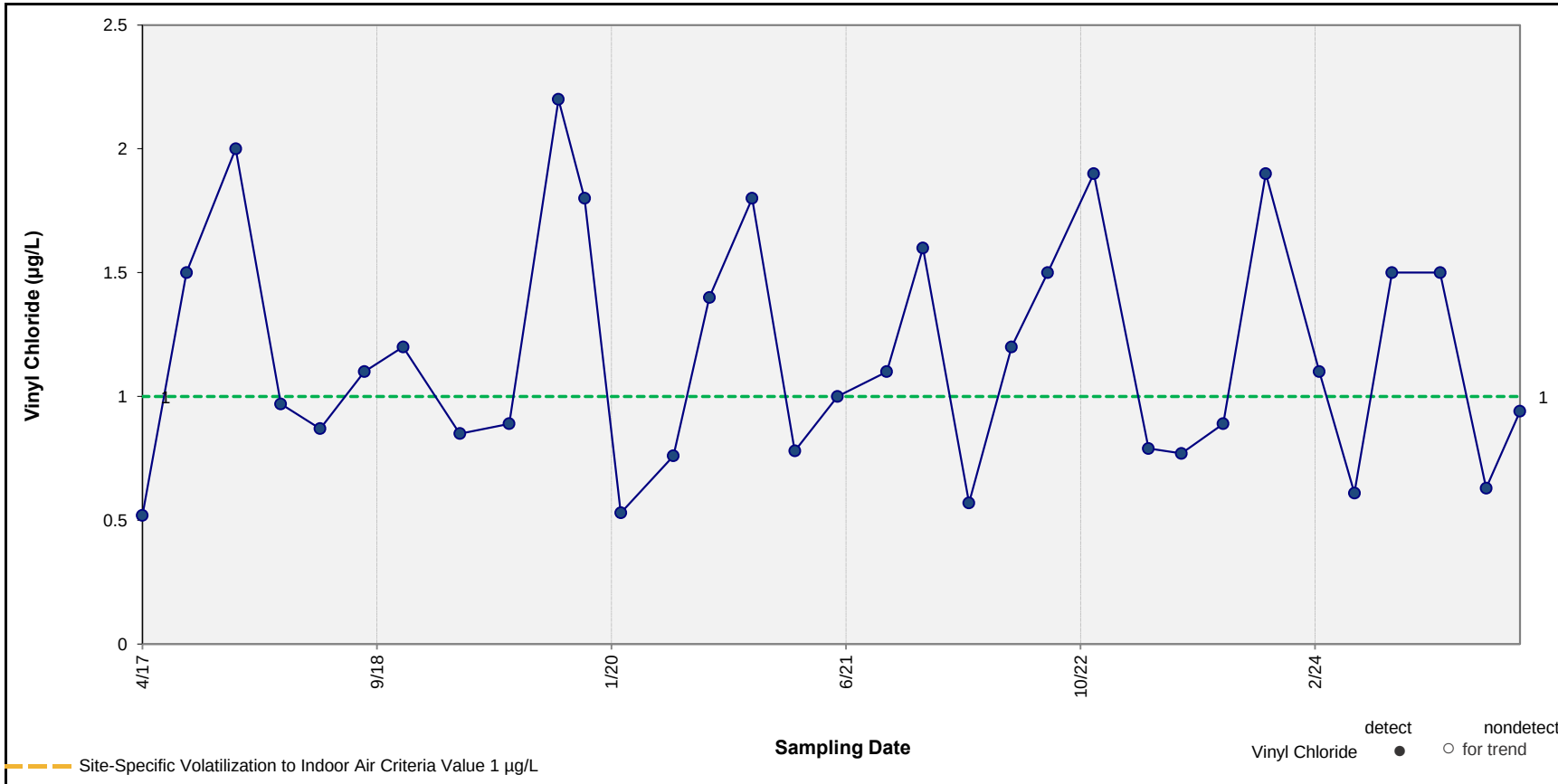
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

MANN-KENDALL STATISTICAL VINYL CHLORIDE TREND RESULTS

ARCADIS

FIGURE 1



Results of Mann-Kendall Test for Trend: **No Significant Trend**

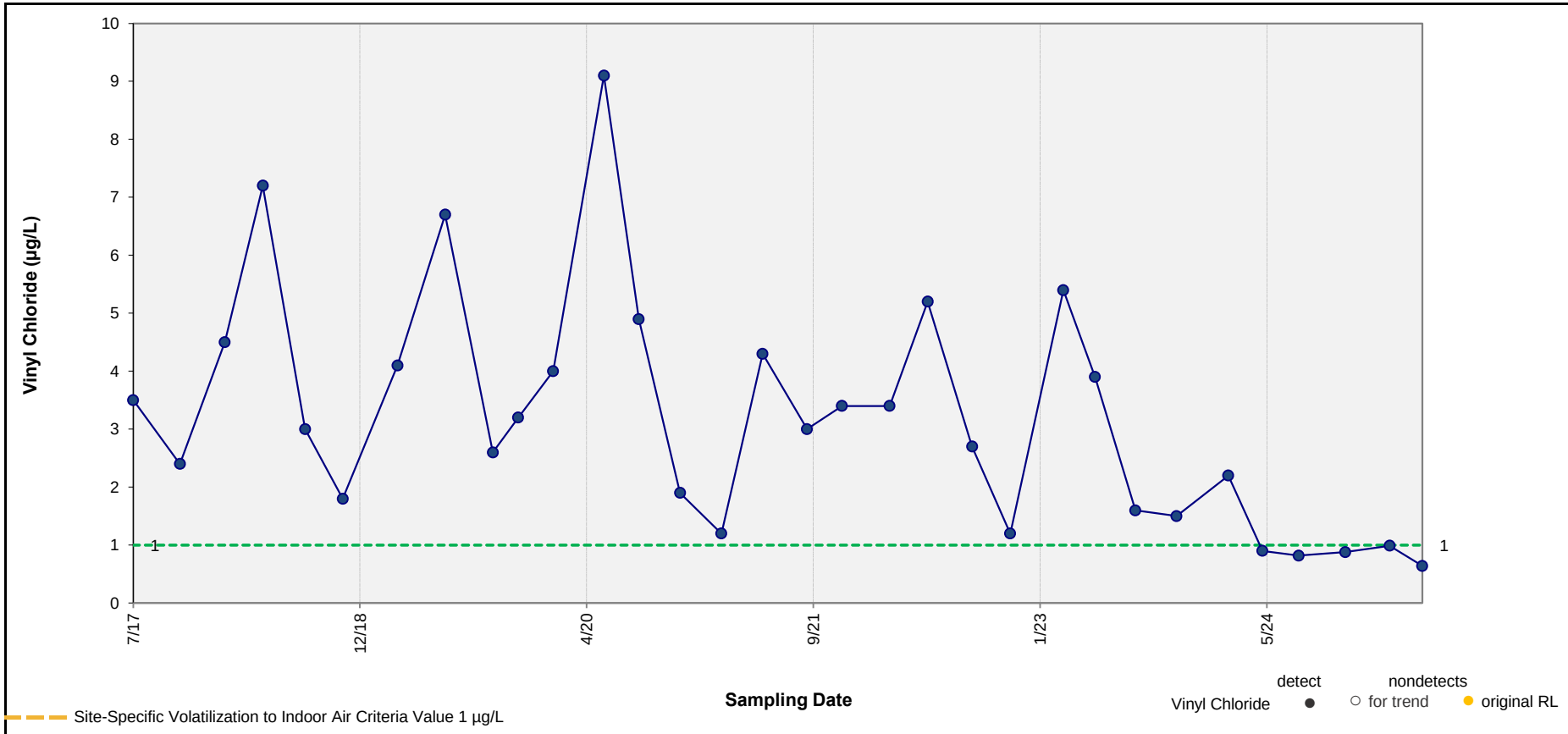
p value = 0.451 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-34

Ford LTP

Figure K-1



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

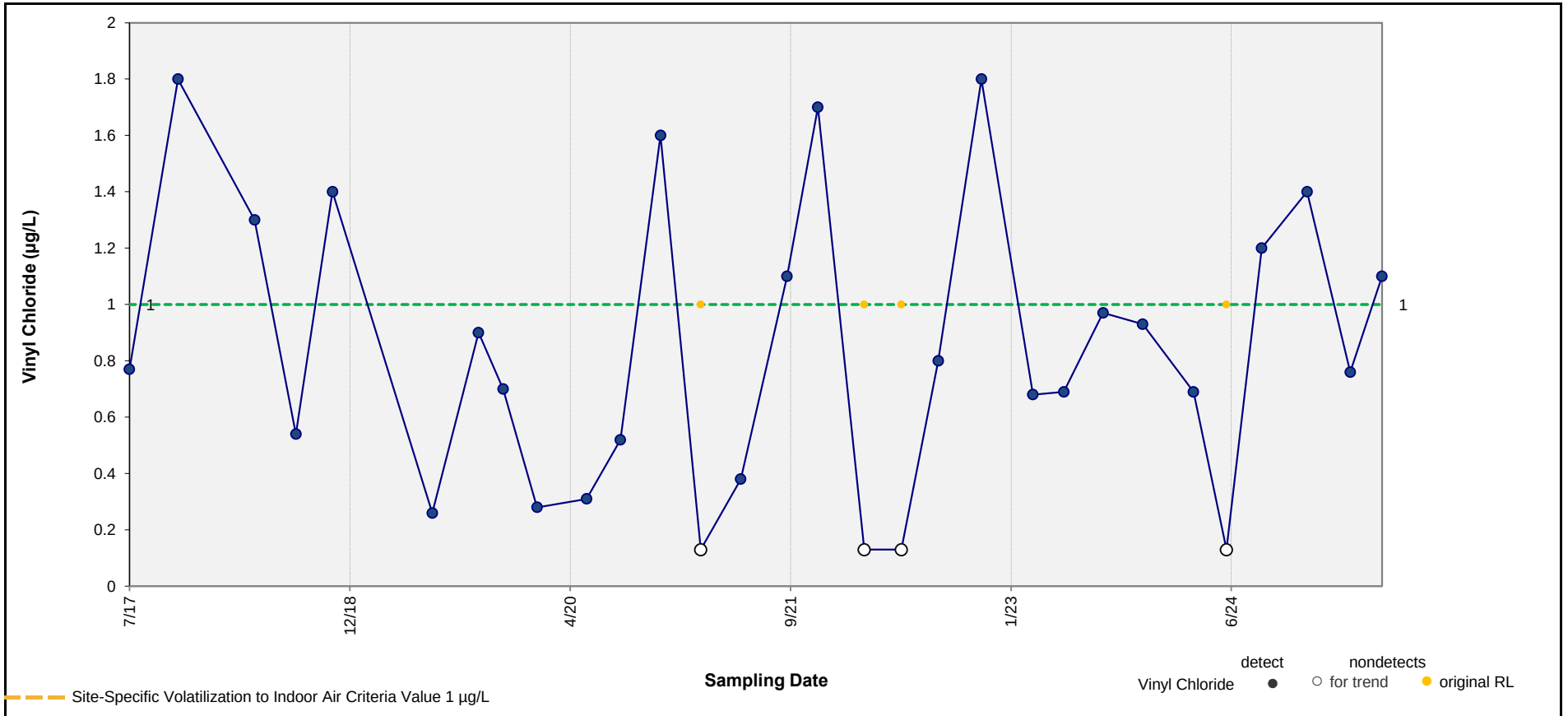
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-35

Ford LTP

Figure K-2



Results of Mann-Kendall Test for Trend: **No Significant Trend**

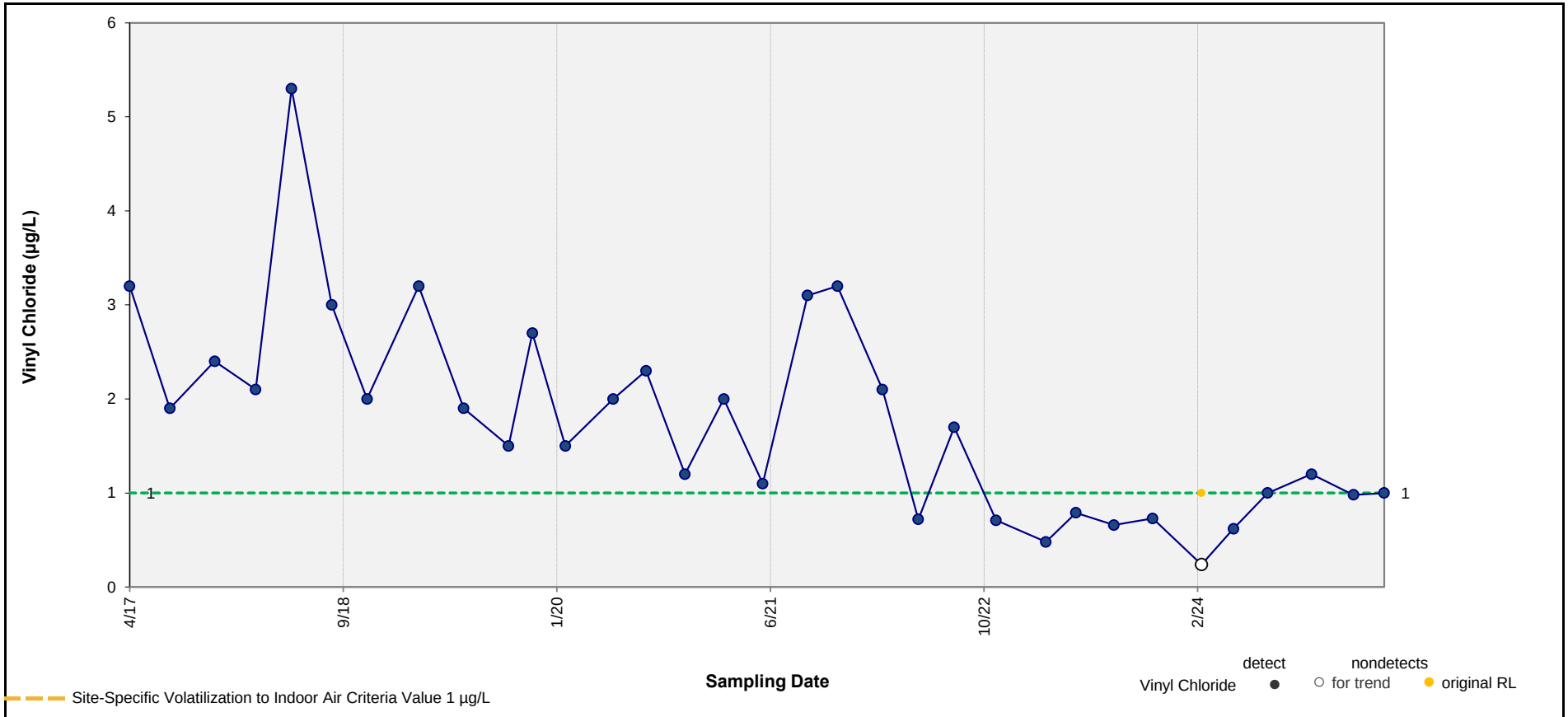
p value = 0.429 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-40

Ford LTP

Figure K-3



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

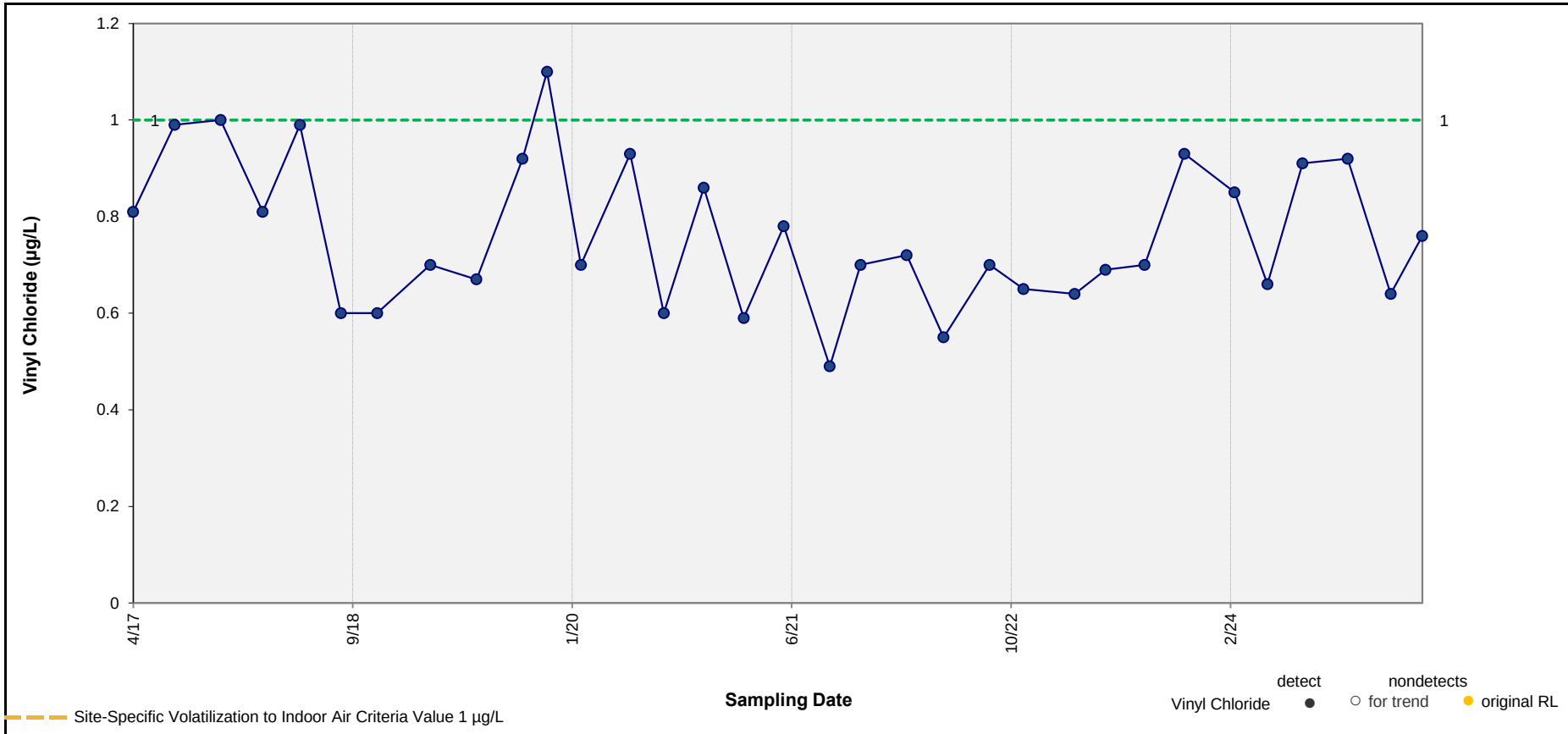
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-41

Ford LTP

Figure K-4



Results of Mann-Kendall Test for Trend: **No Significant Trend**

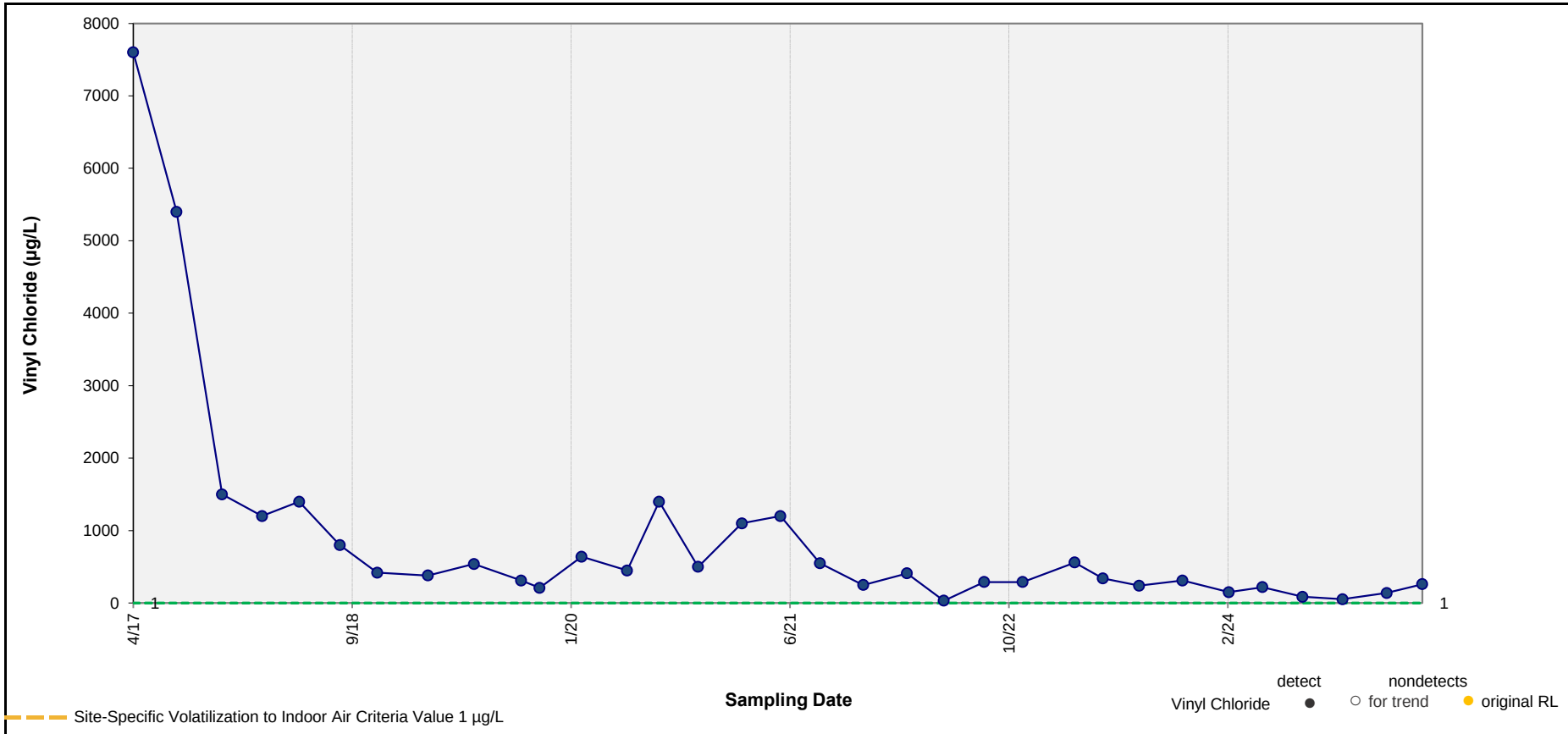
p value = 0.156 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-42

Ford LTP

Figure K-5



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

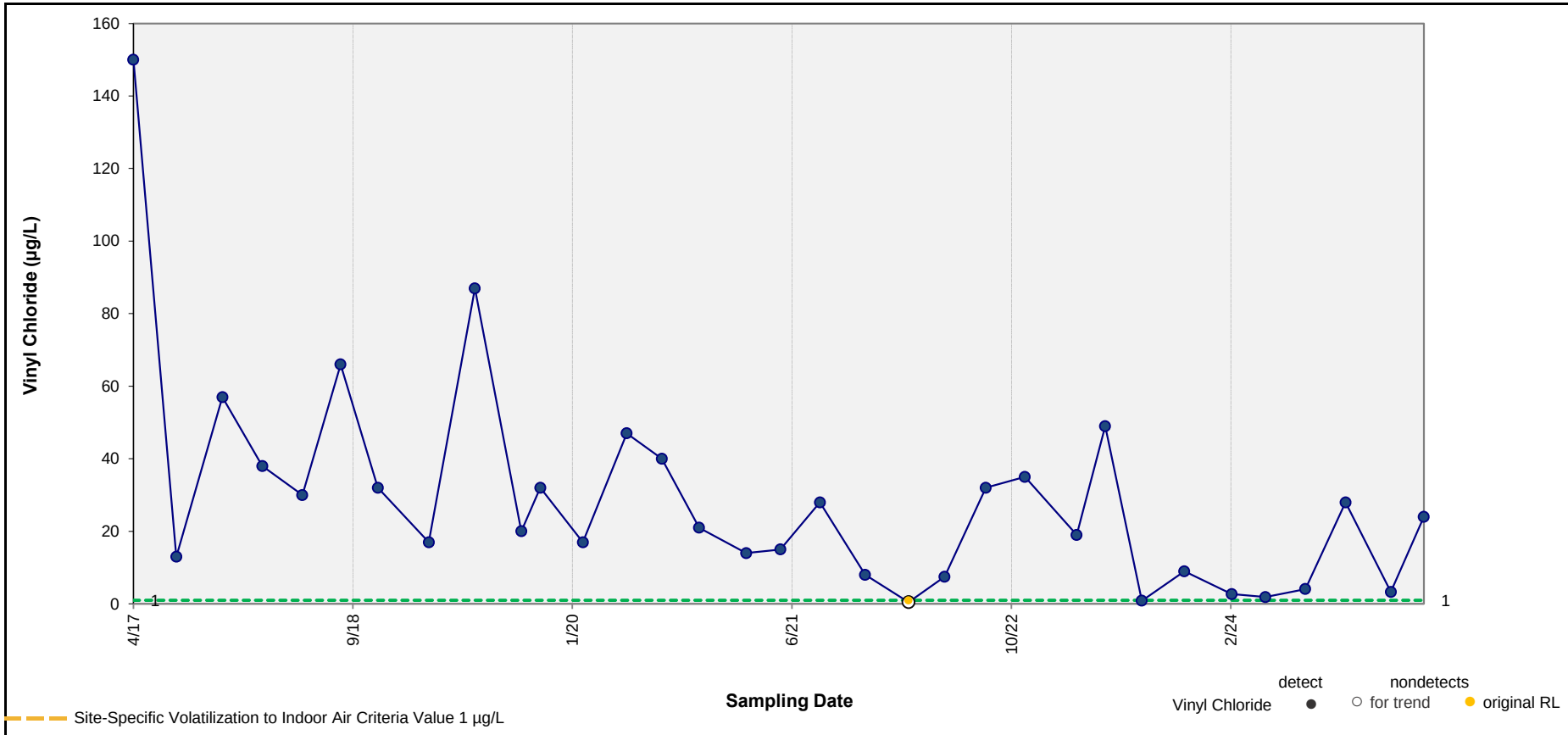
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-45

Ford LTP

Figure K-6



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

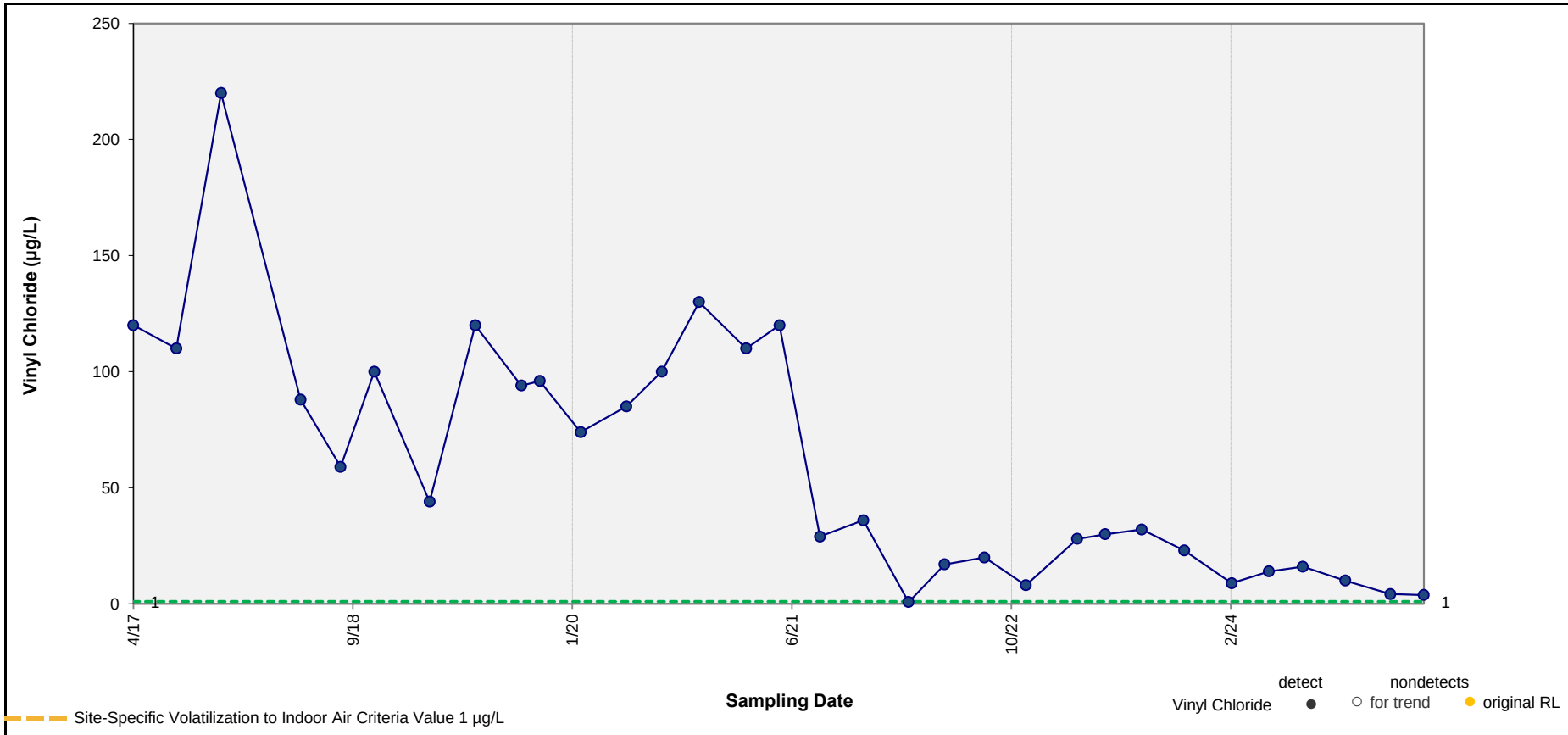
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-46

Ford LTP

Figure K-7



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

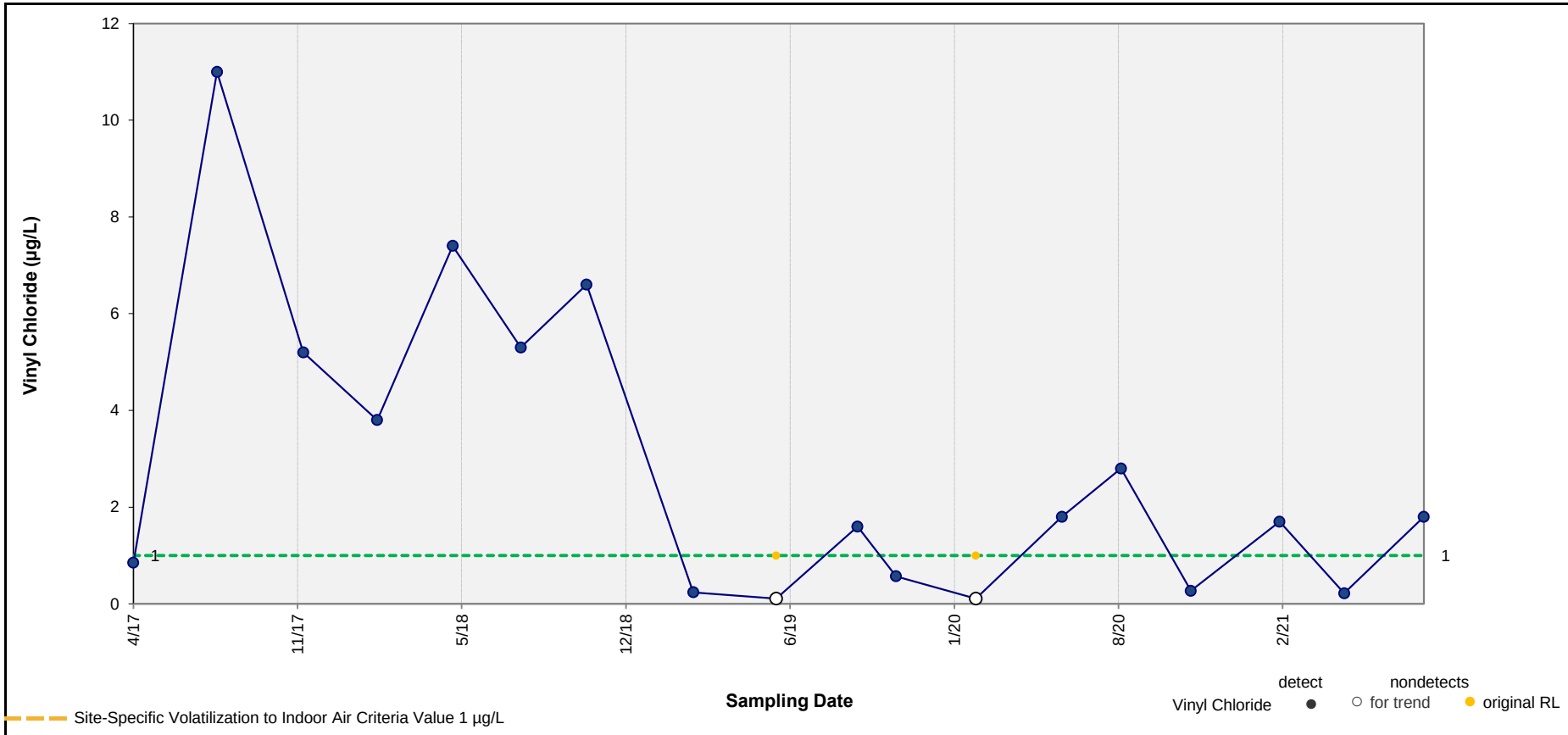
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-47

Ford LTP

Figure K-8



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

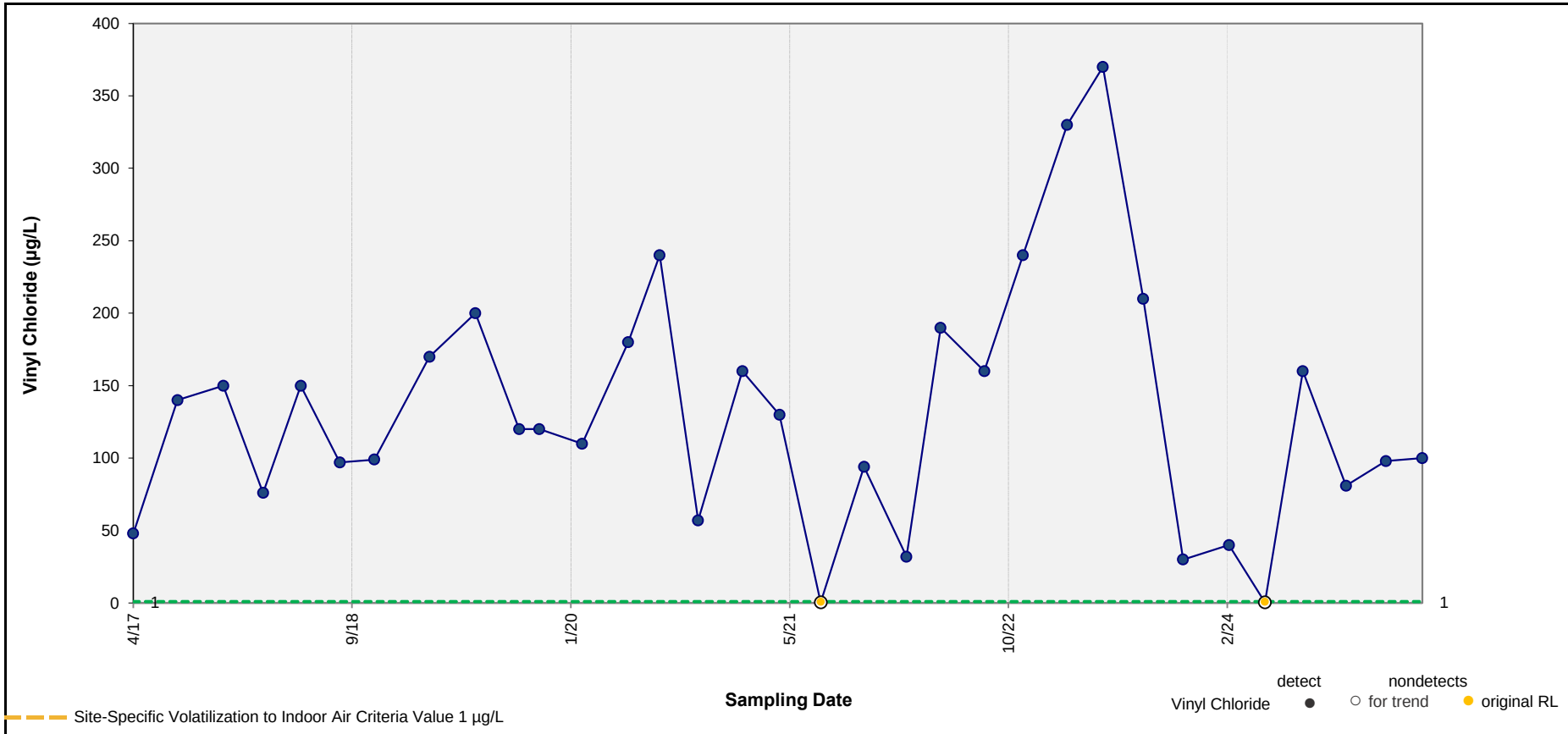
p value = 0.041 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-48

Ford LTP

Figure K-9



Results of Mann-Kendall Test for Trend: **No Significant Trend**

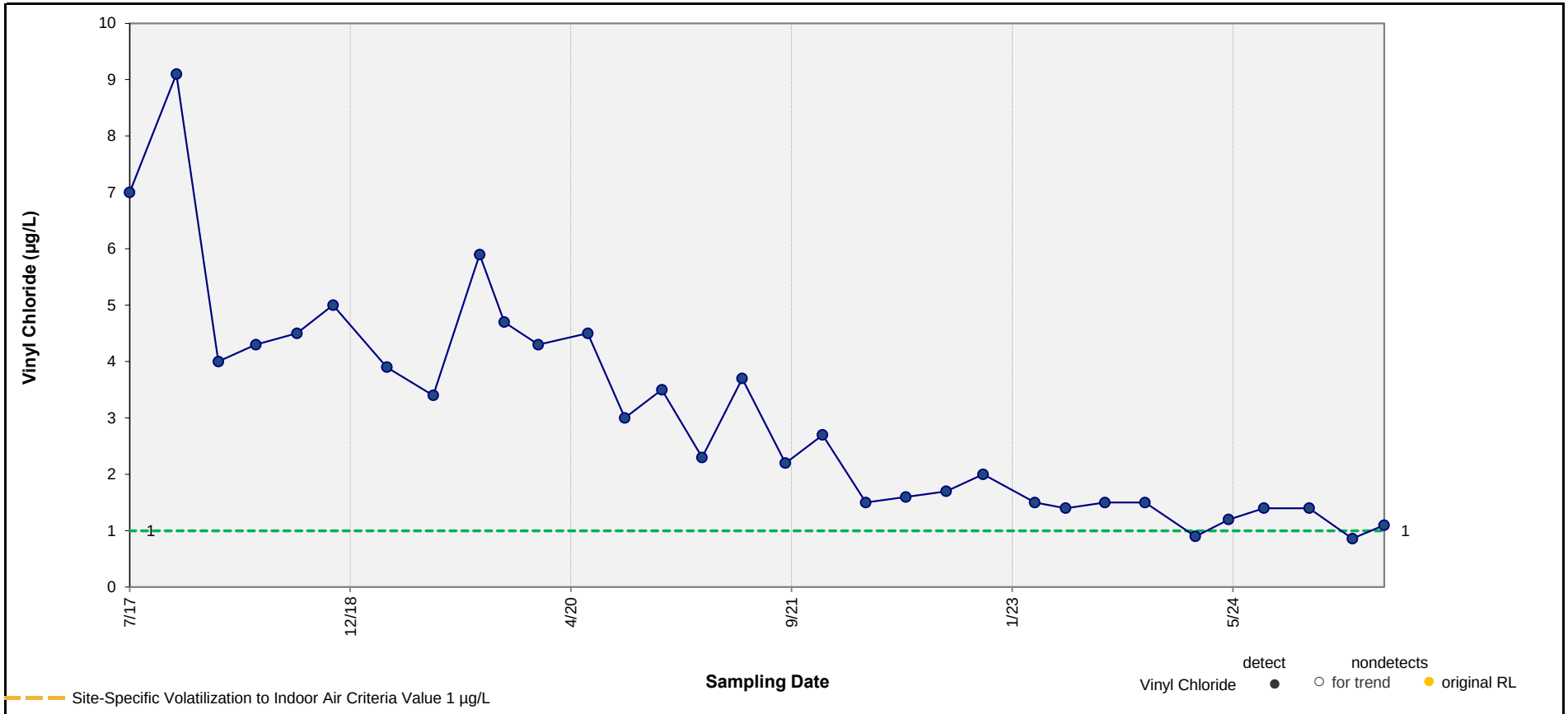
p value = 0.463 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-50

Ford LTP

Figure K-10



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

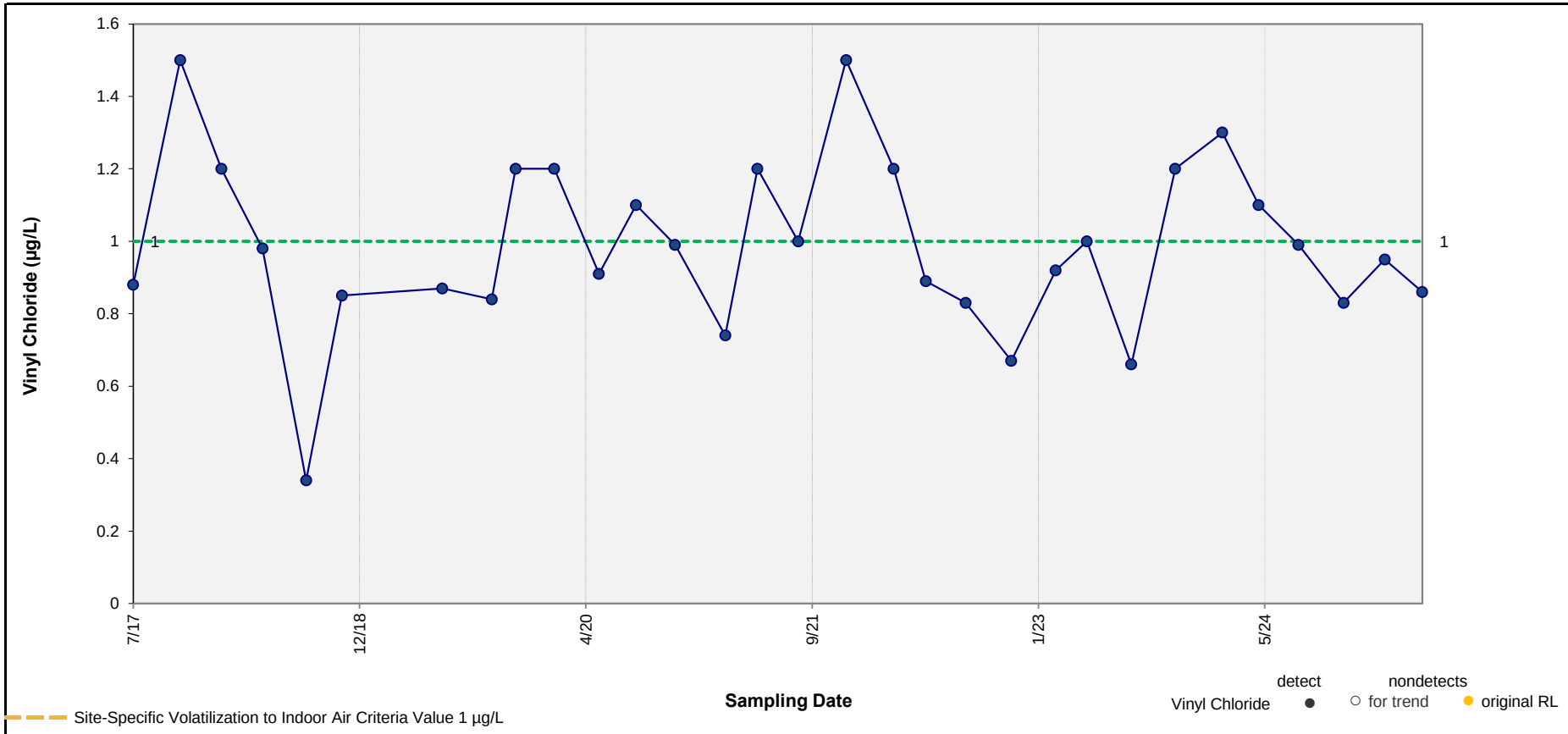
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-52

Ford LTP

Figure K-11



Results of Mann-Kendall Test for Trend: **No Significant Trend**

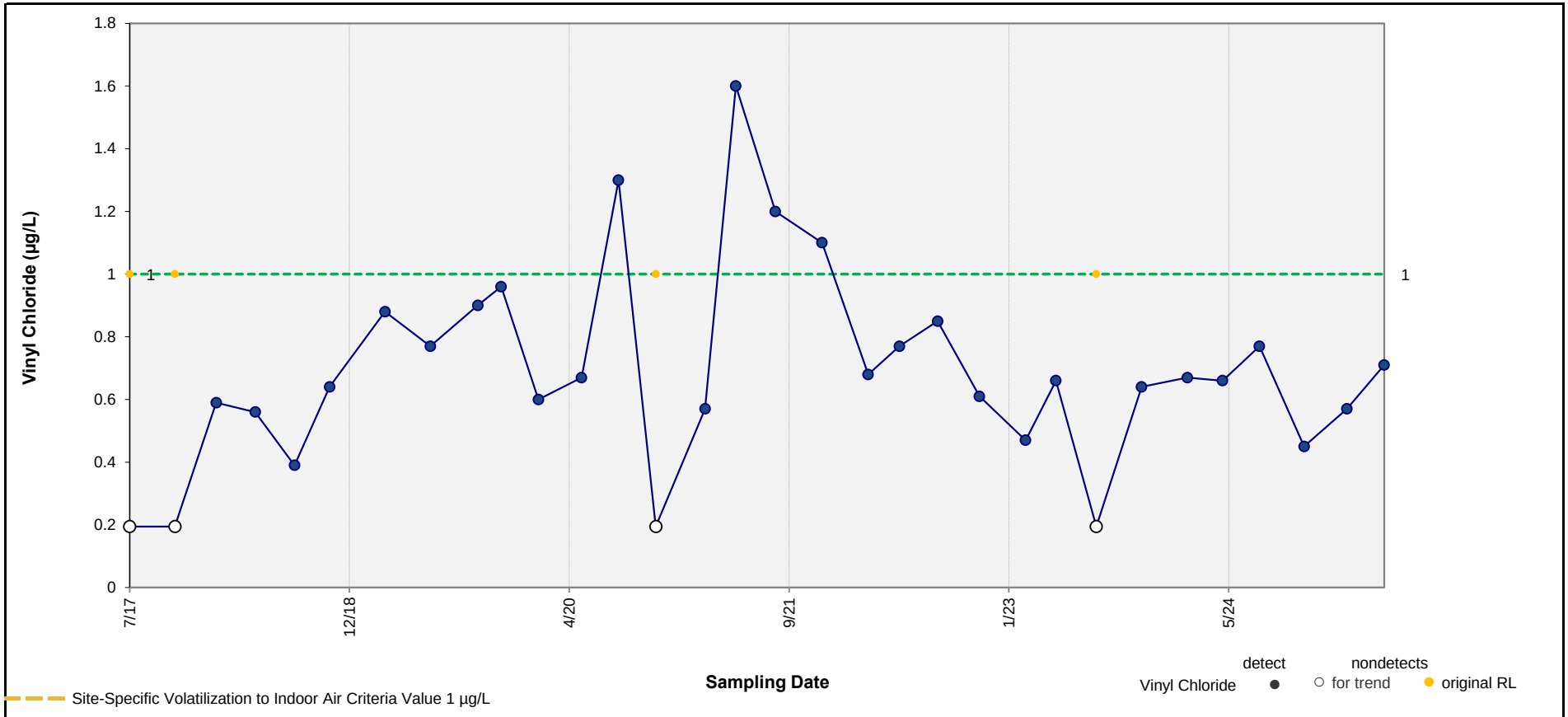
p value = 0.354 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-54

Ford LTP

Figure K-12



Results of Mann-Kendall Test for Trend: **No Significant Trend**

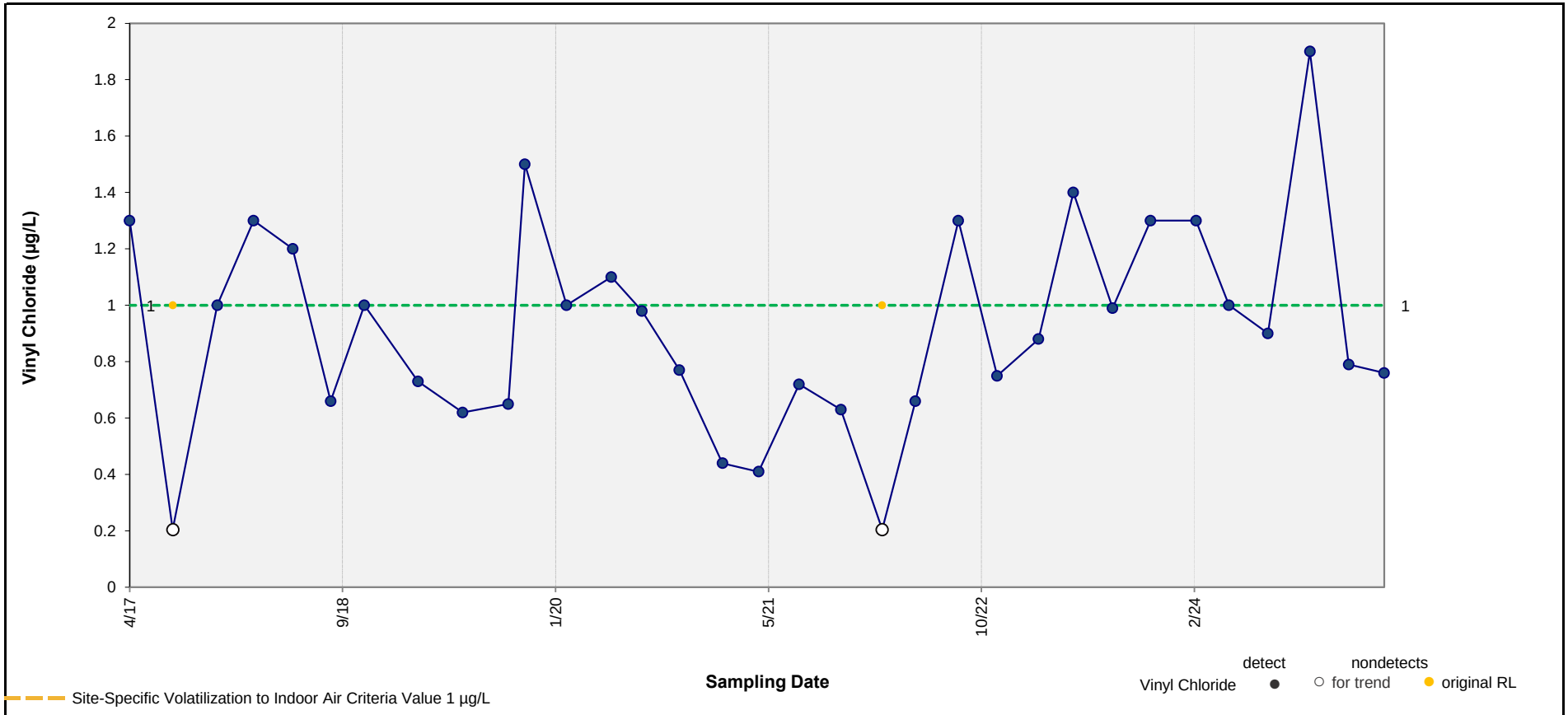
p value = 0.302 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-57

Ford LTP

Figure K-13



Results of Mann-Kendall Test for Trend: **No Significant Trend**

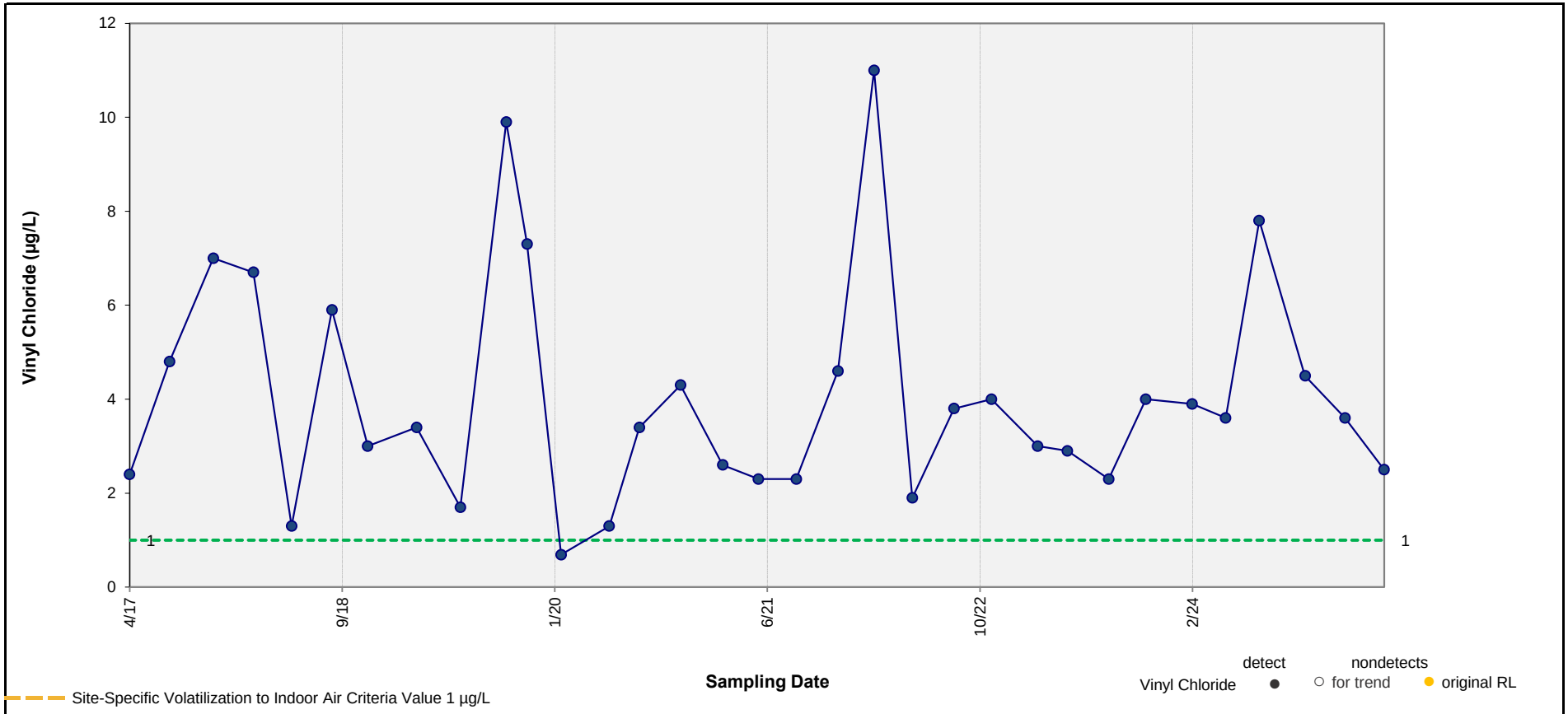
p value = 0.304 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-62

Ford LTP

Figure K-14



Results of Mann-Kendall Test for Trend: **No Significant Trend**

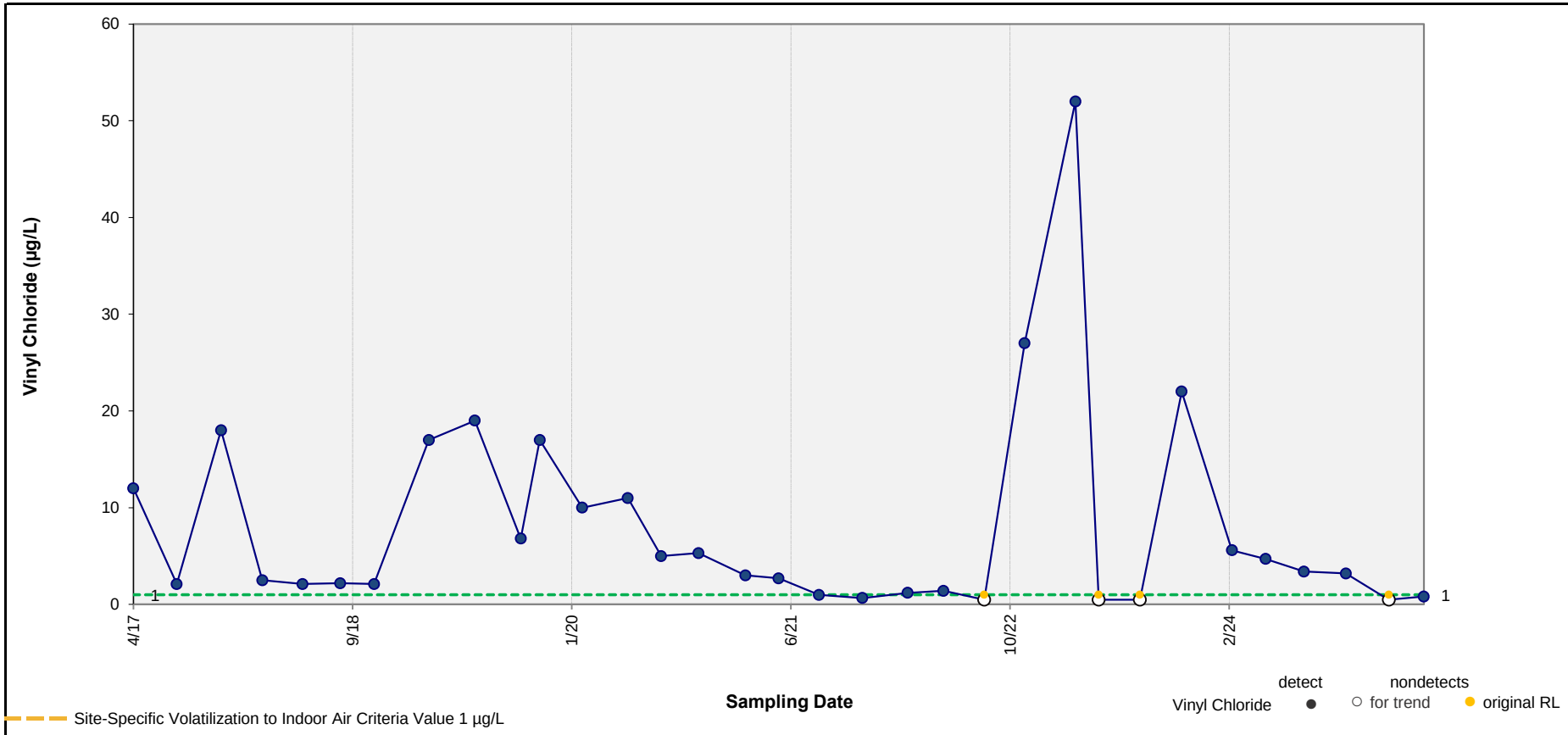
p value = 0.481 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-64

Ford LTP

Figure K-15



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

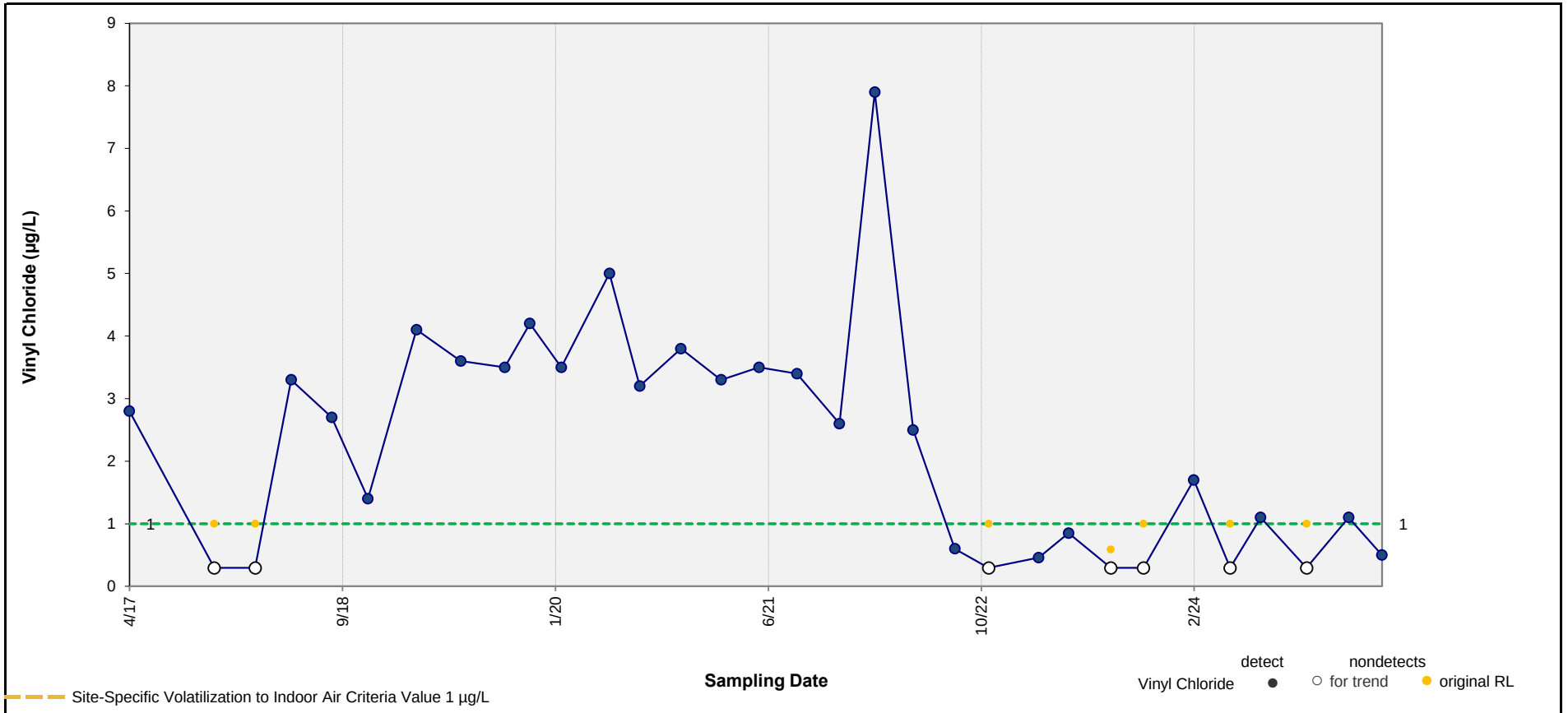
p value = 0.040 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-68

Ford LTP

Figure K-16



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

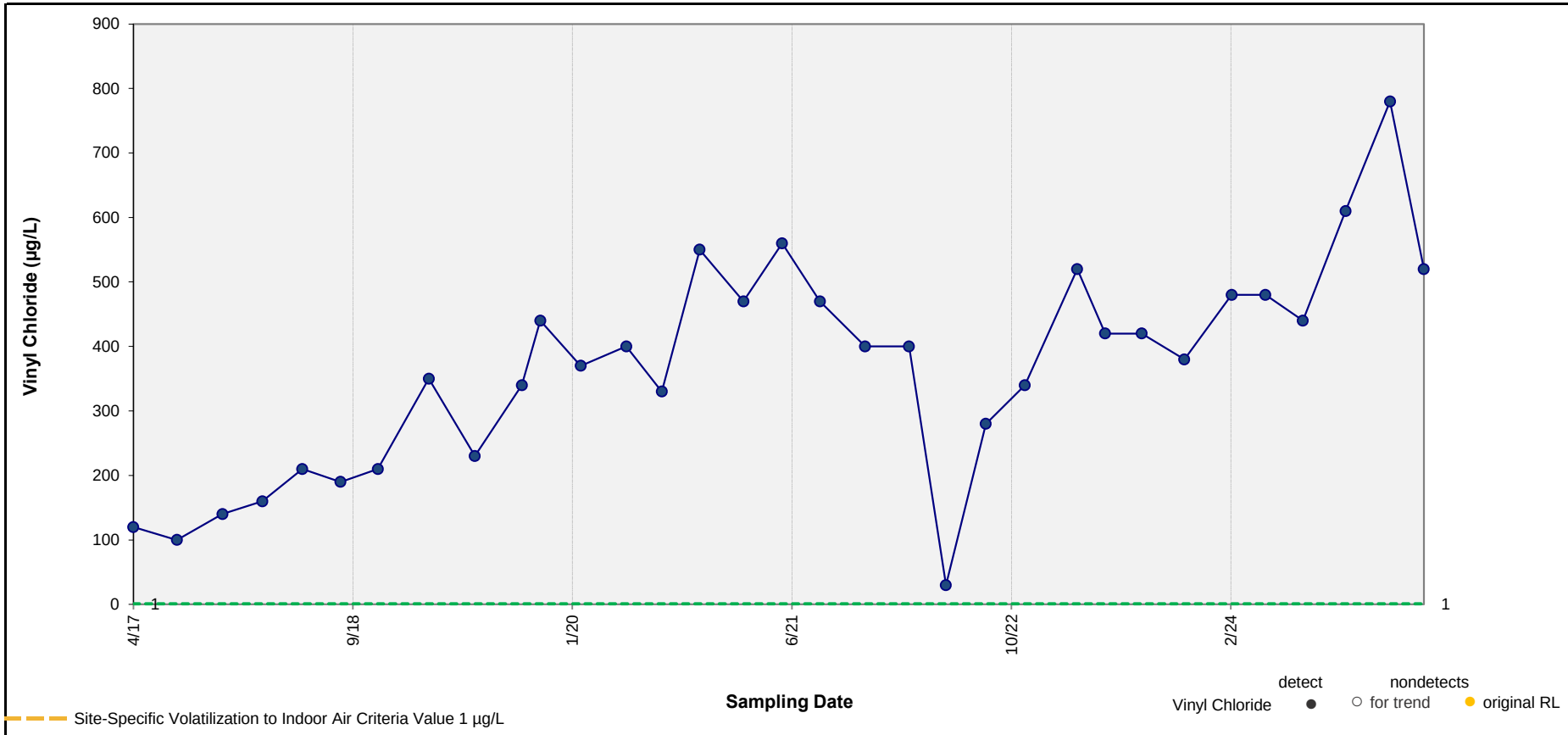
p value = 0.006 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-69

Ford LTP

Figure K-17



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

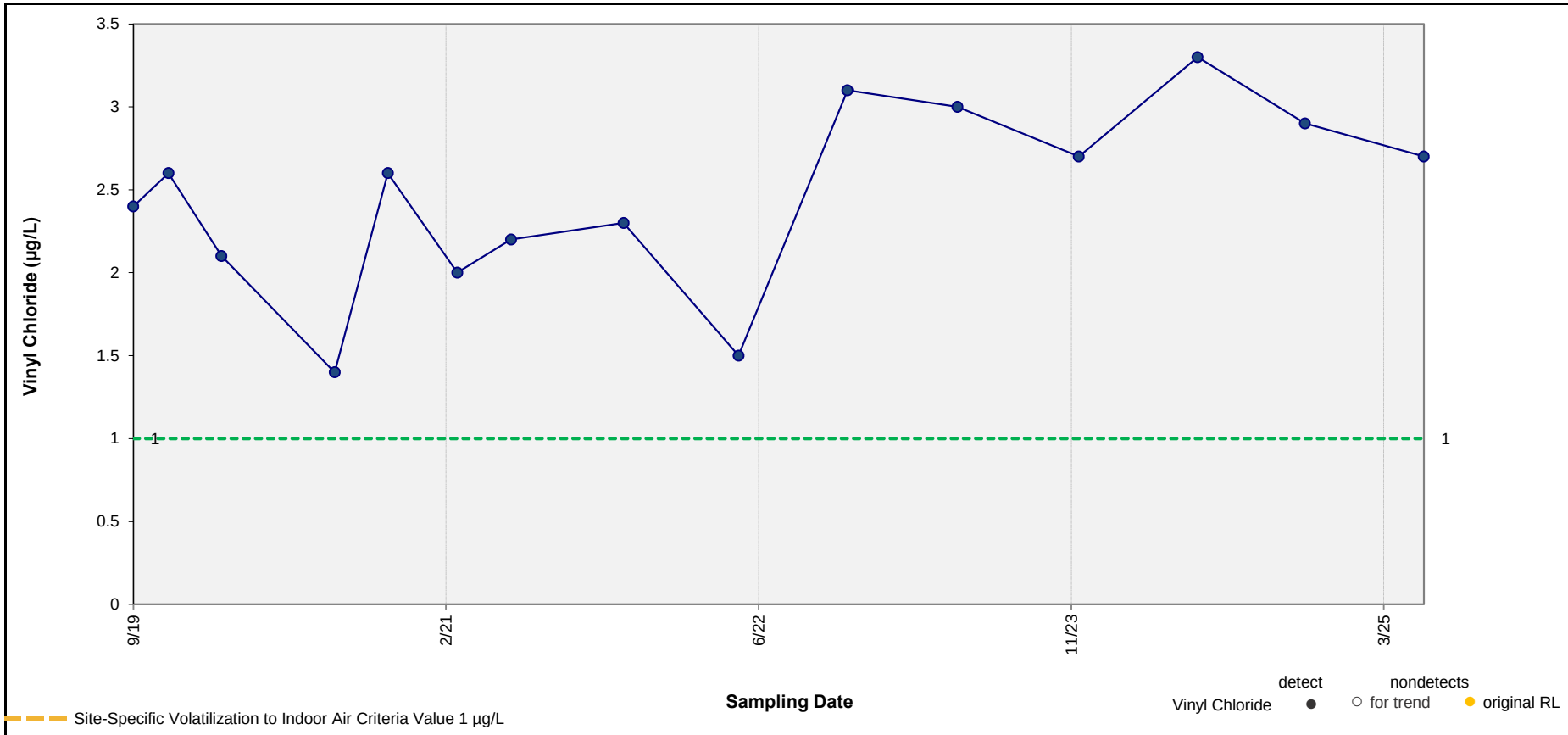
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-70

Ford LTP

Figure K-18



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

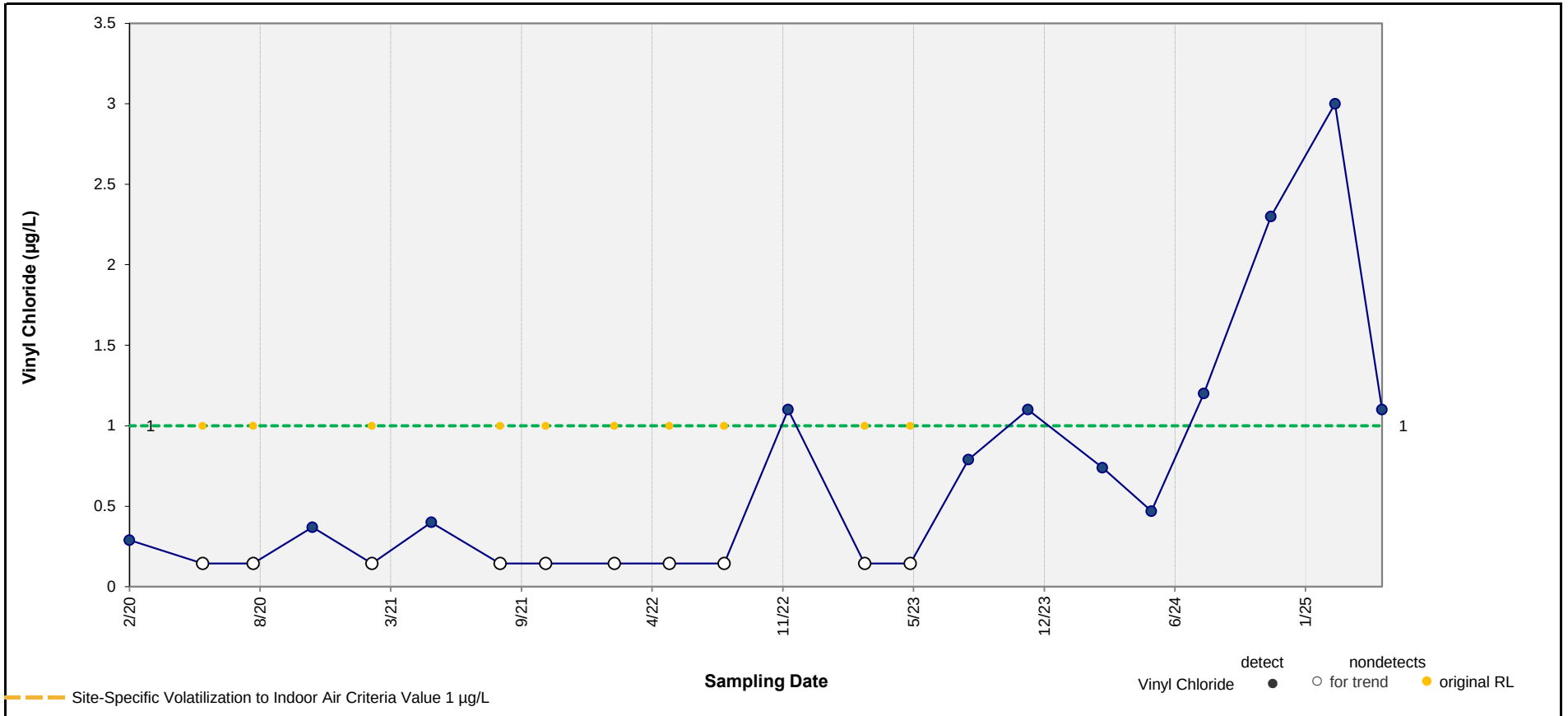
p value = 0.030 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-122

Ford LTP

Figure K-19



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

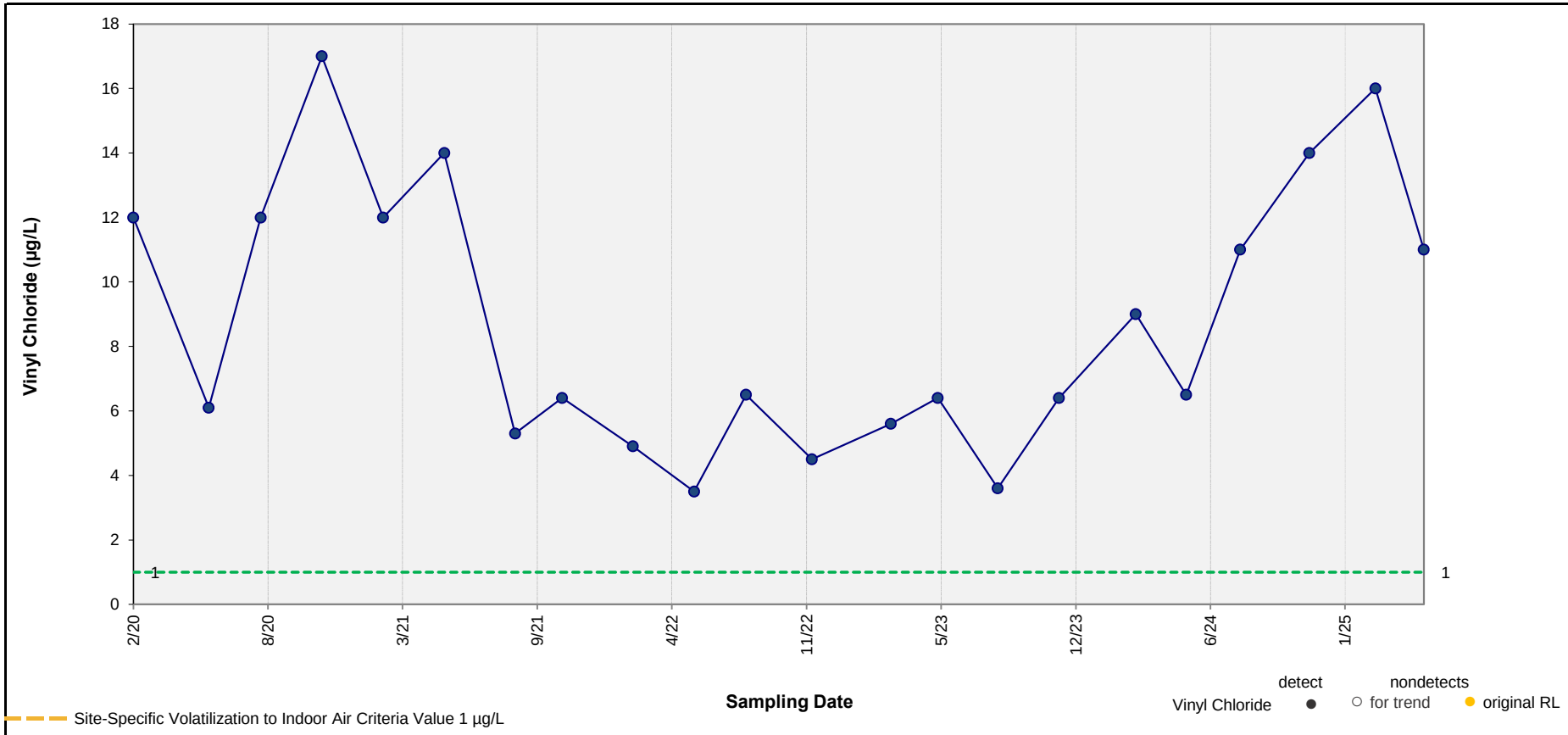
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-209S

Ford LTP

Figure K-20



Results of Mann-Kendall Test for Trend: **No Significant Trend**

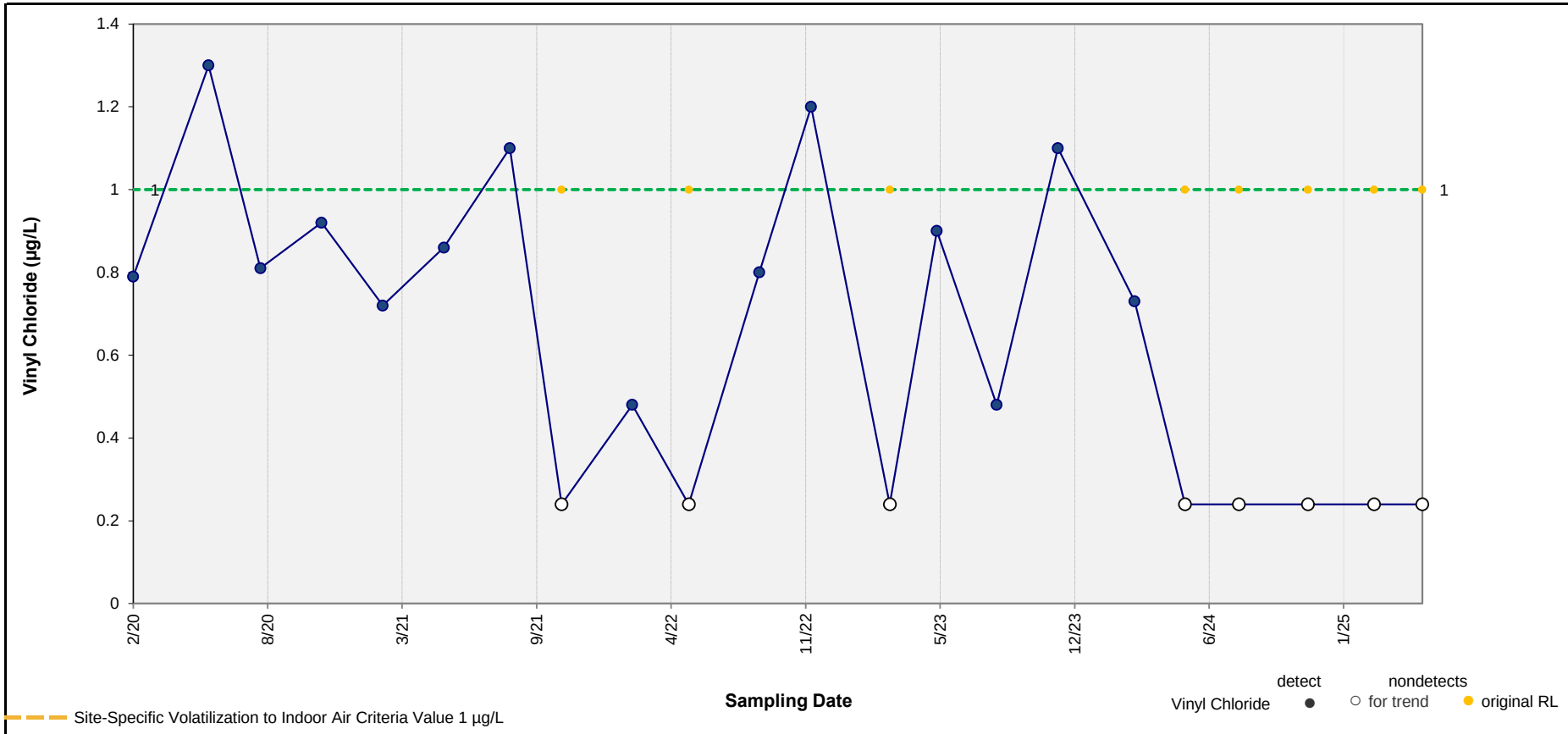
p value = 0.356 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-210S

Ford LTP

Figure K-21



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

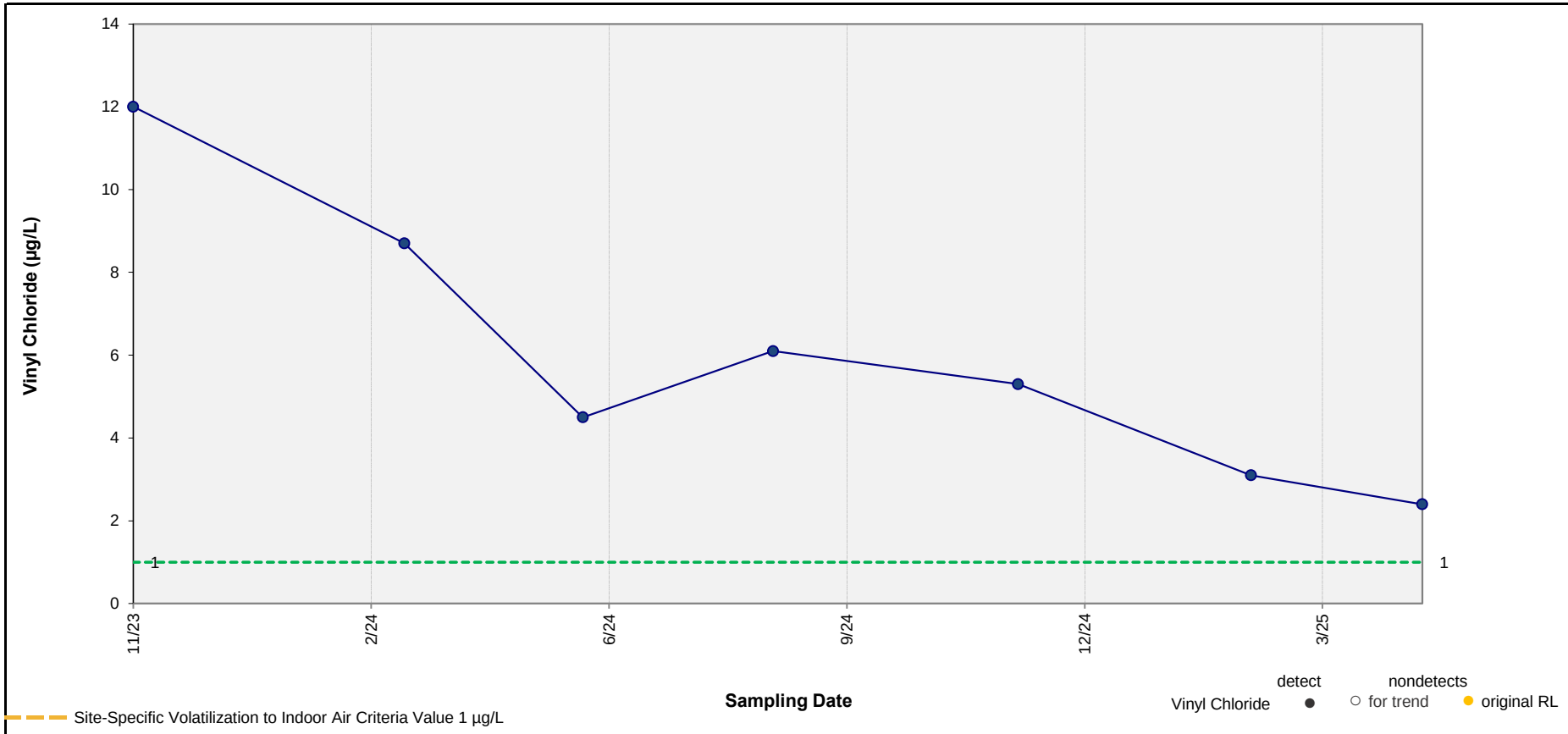
p value = 0.007 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-213S

Ford LTP

Figure K-22



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

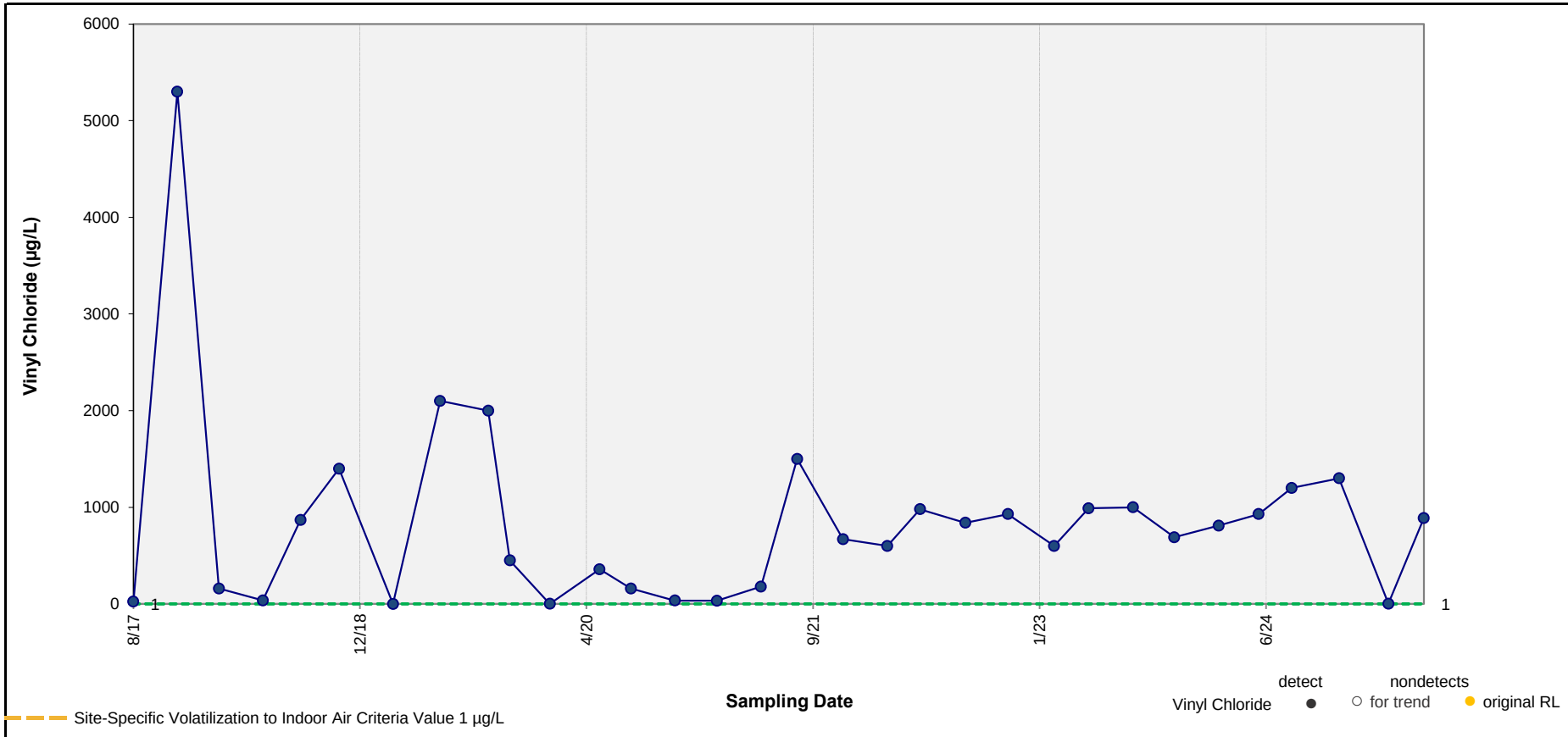
p value = 0.005 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-235

Ford LTP

Figure K-23



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

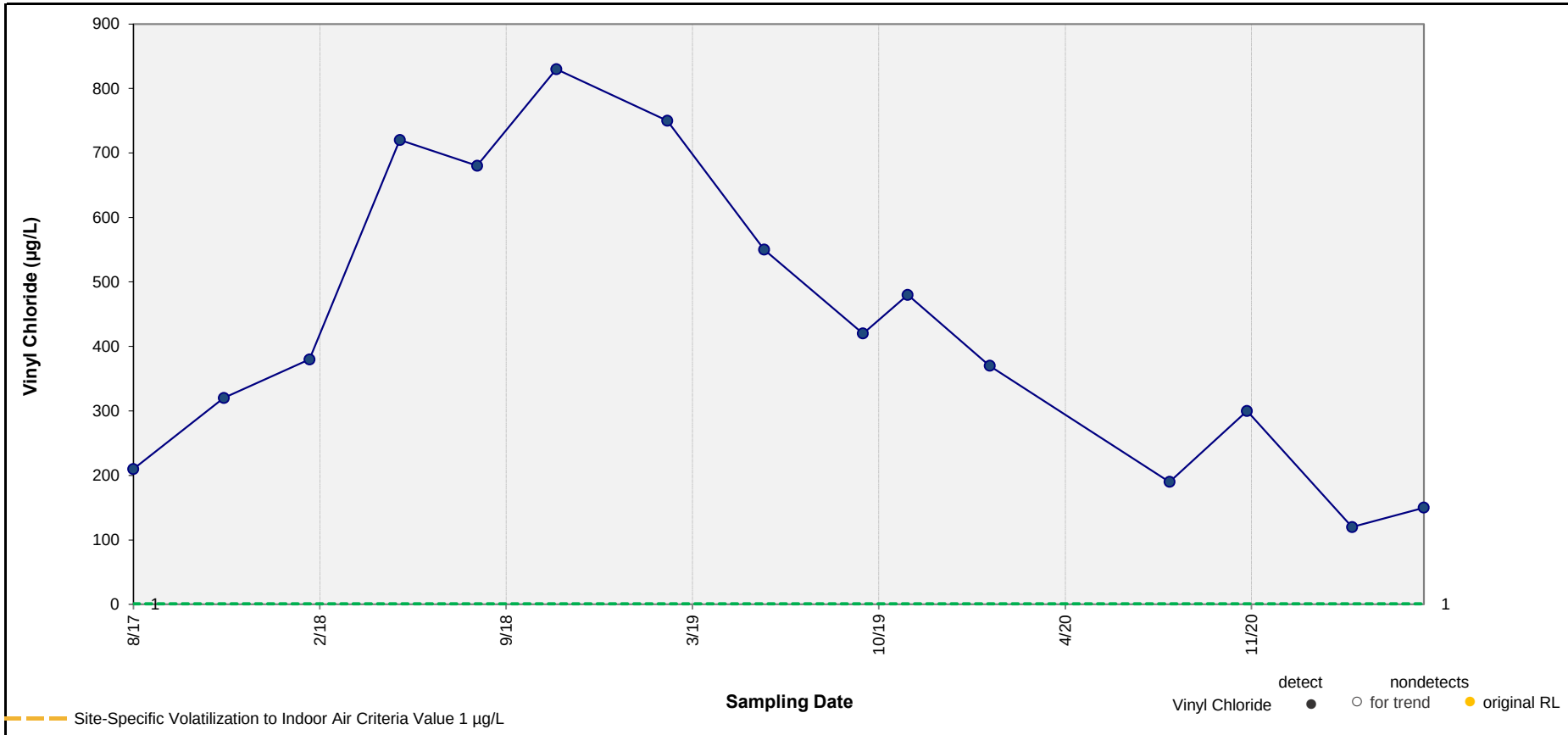
p value = 0.081 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well PW-16-01

Ford LTP

Figure K-24



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

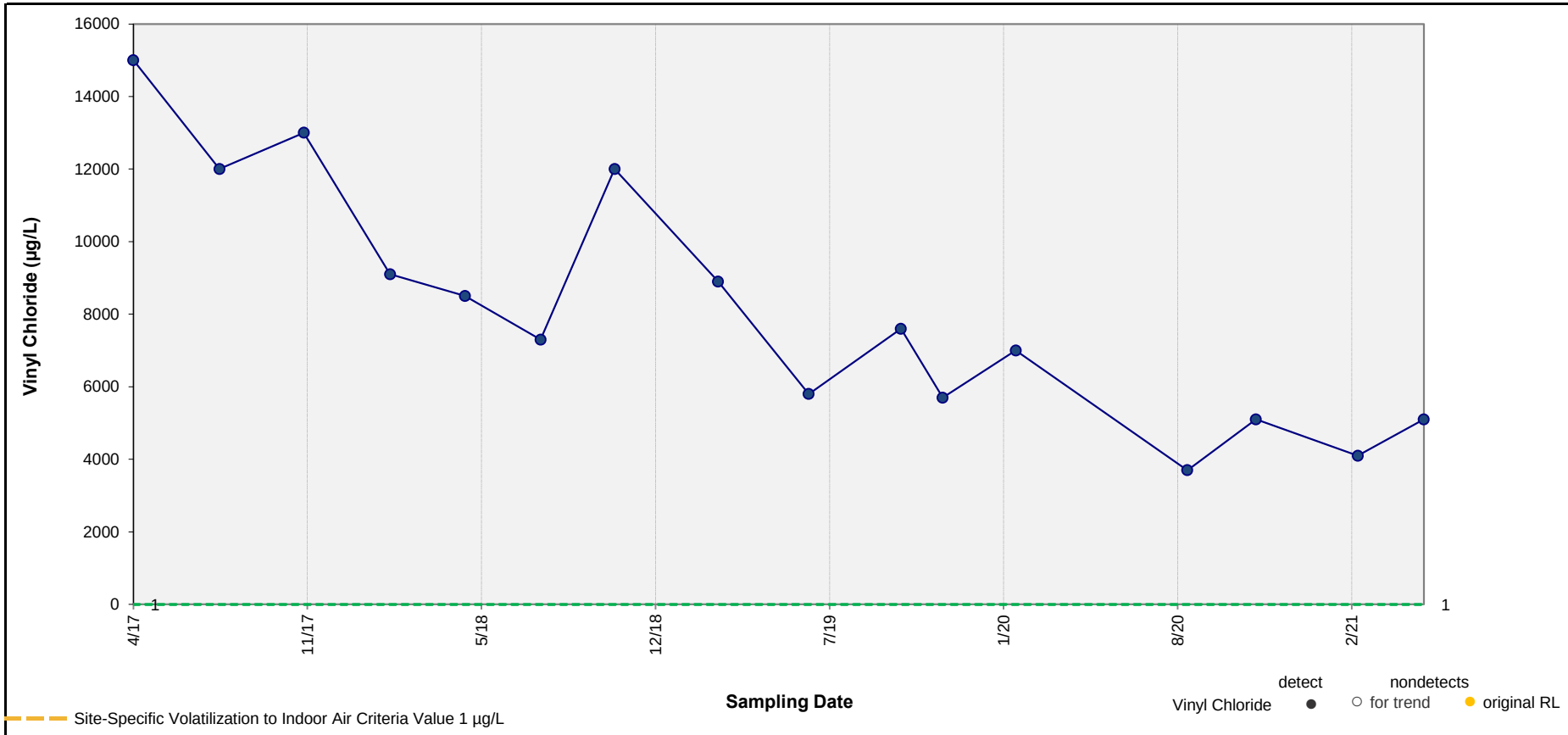
p value = 0.037 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well TW-16-01

Ford LTP

Figure K-25



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

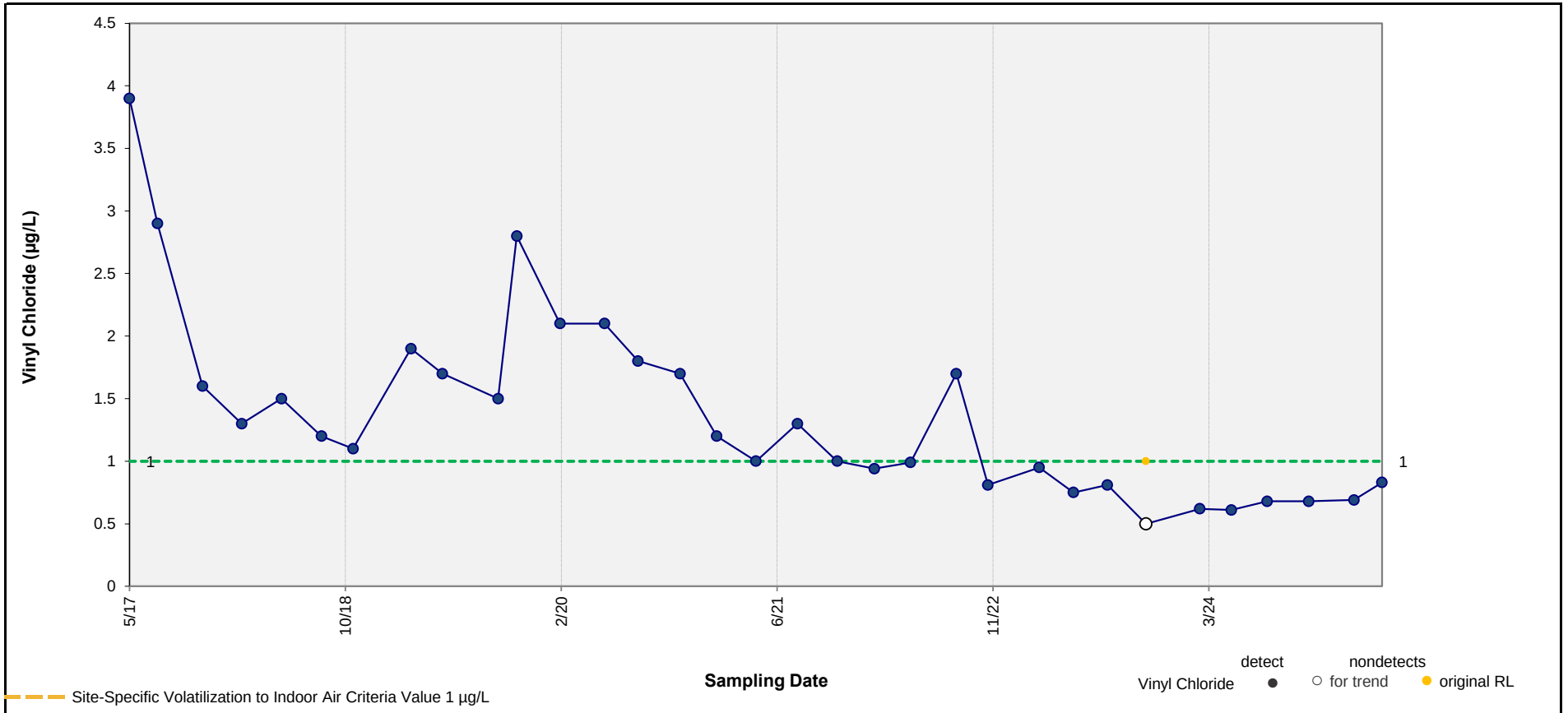
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well TW-16-02

Ford LTP

Figure K-26



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

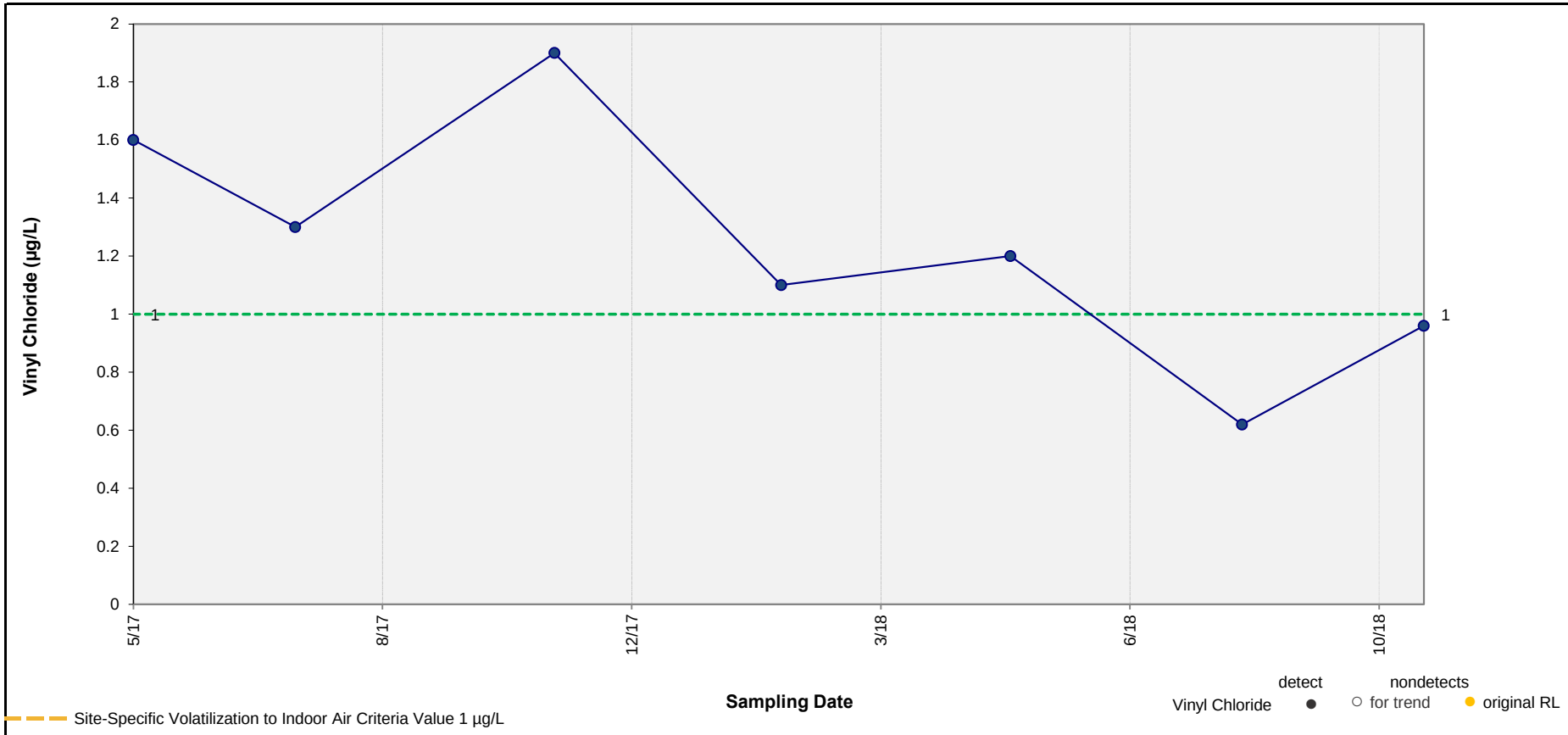
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-72

Ford LTP

Figure K-27



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

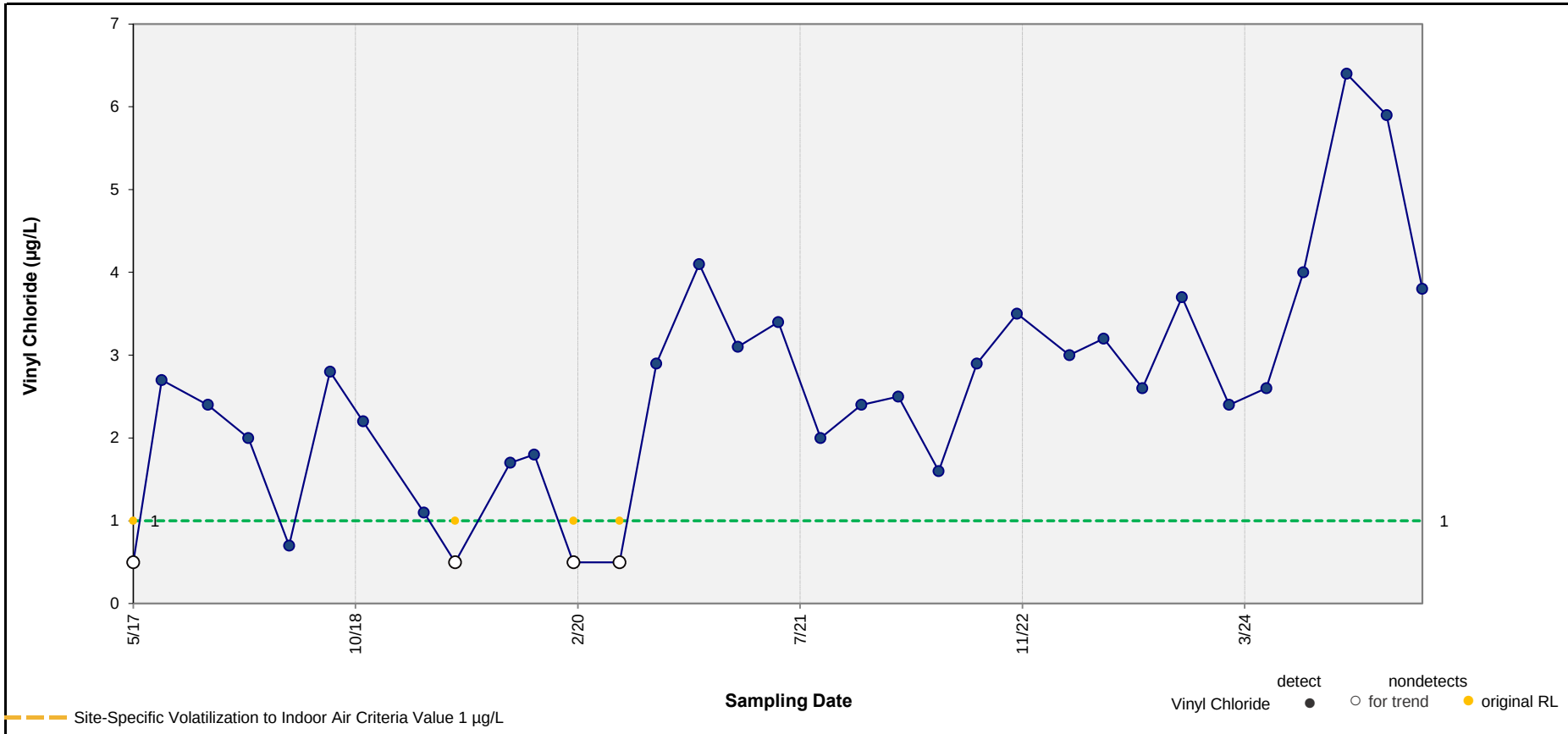
p value = 0.035 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-73S

Ford LTP

Figure K-28



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

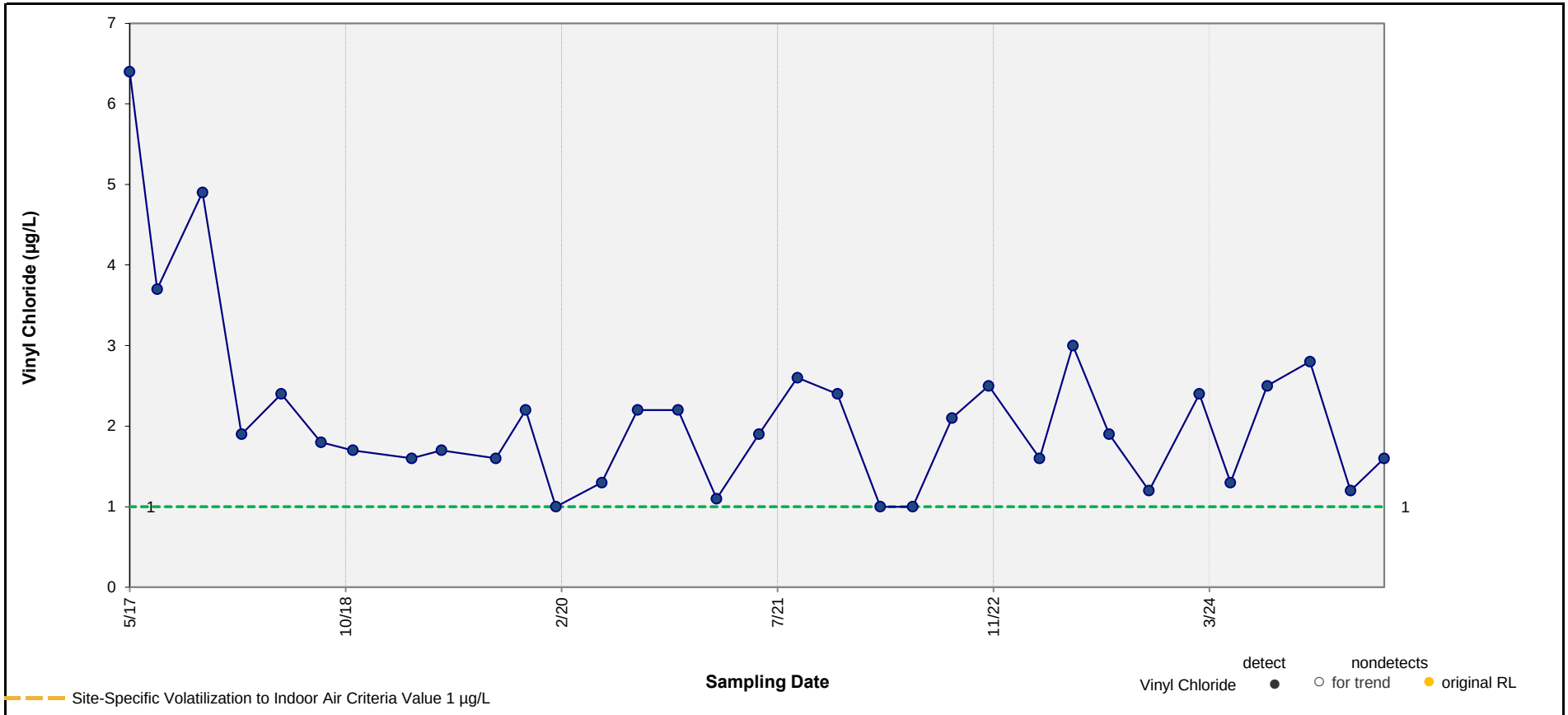
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-74

Ford LTP

Figure K-29



Results of Mann-Kendall Test for Trend: **No Significant Trend**

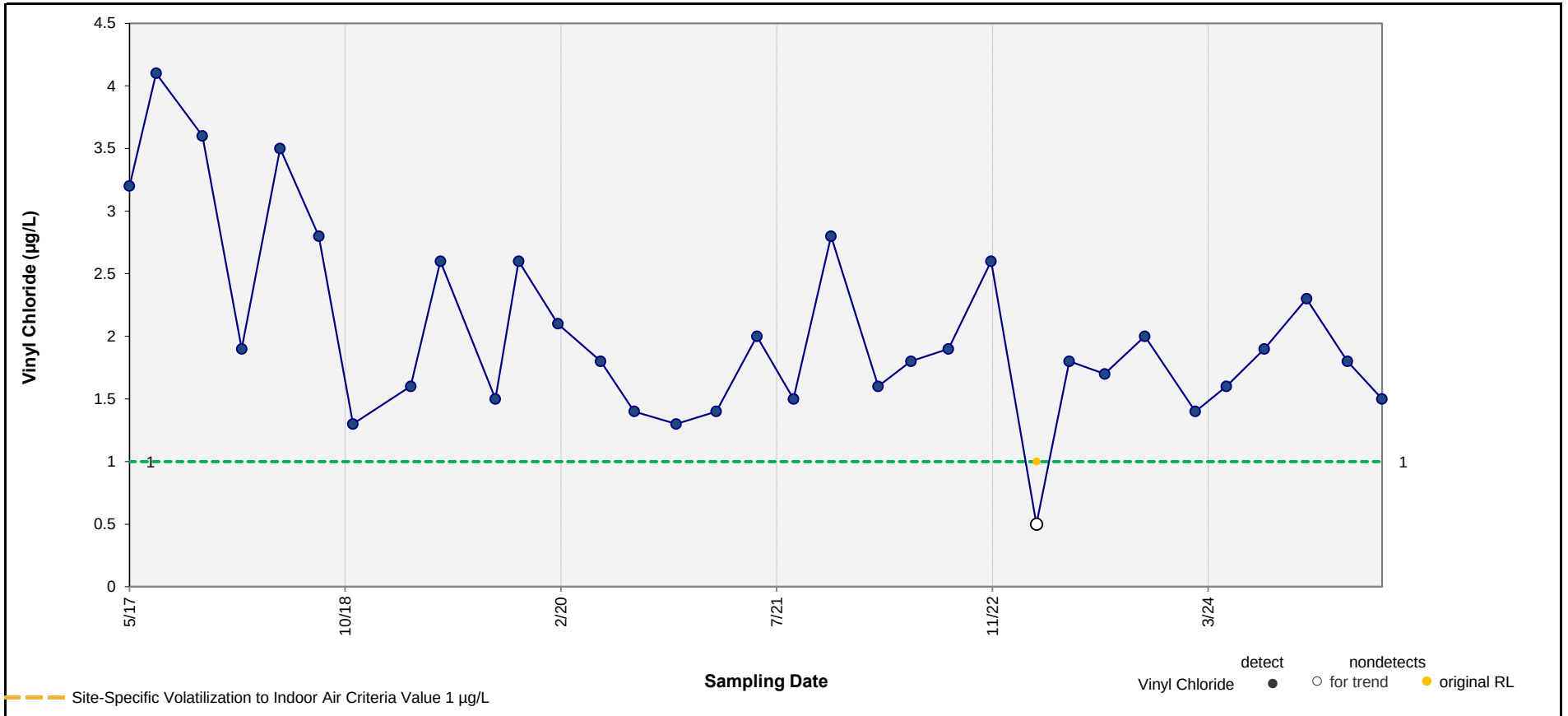
p value = 0.142 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-75D

Ford LTP

Figure K-30



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

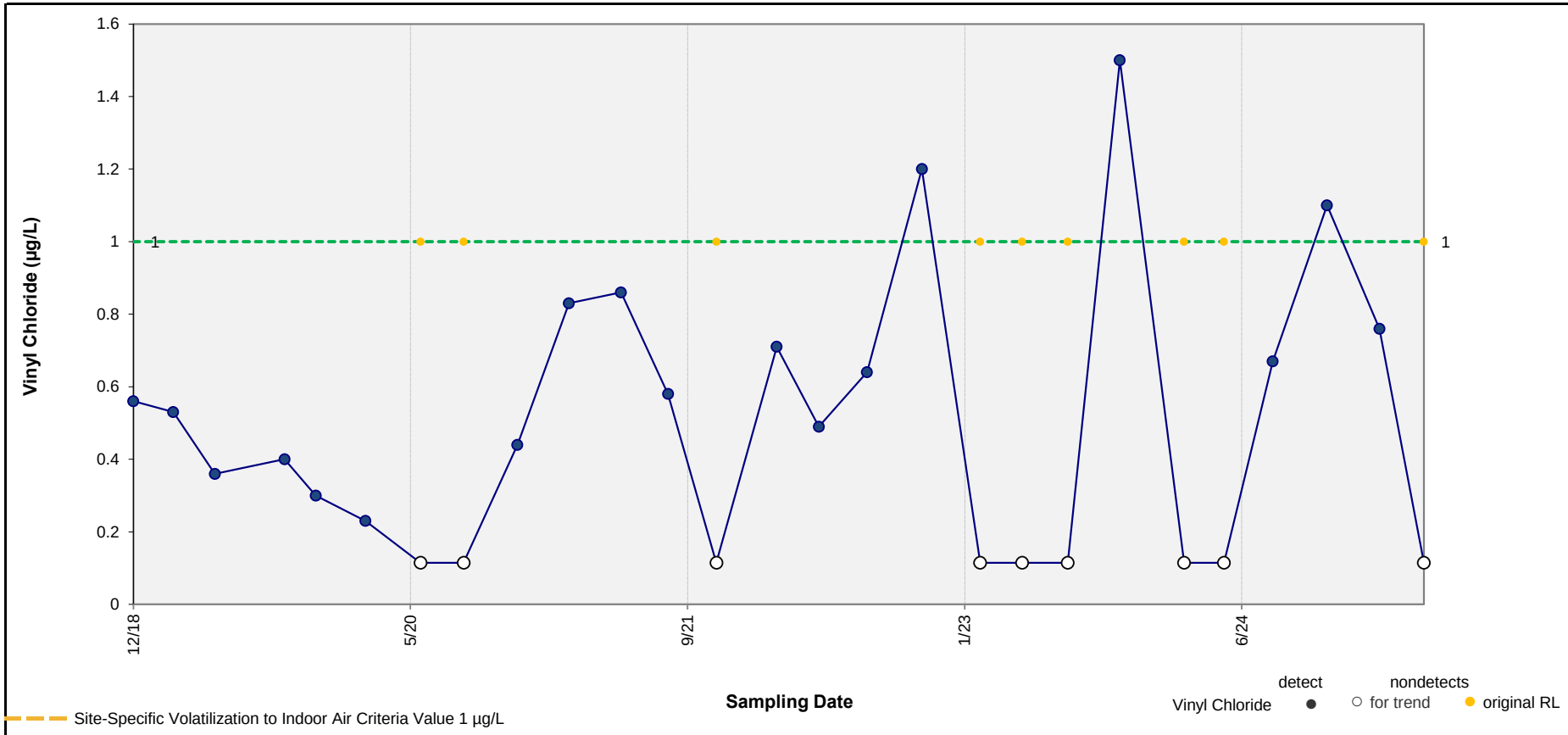
p value = 0.019 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-79D

Ford LTP

Figure K-31



Results of Mann-Kendall Test for Trend: **No Significant Trend**

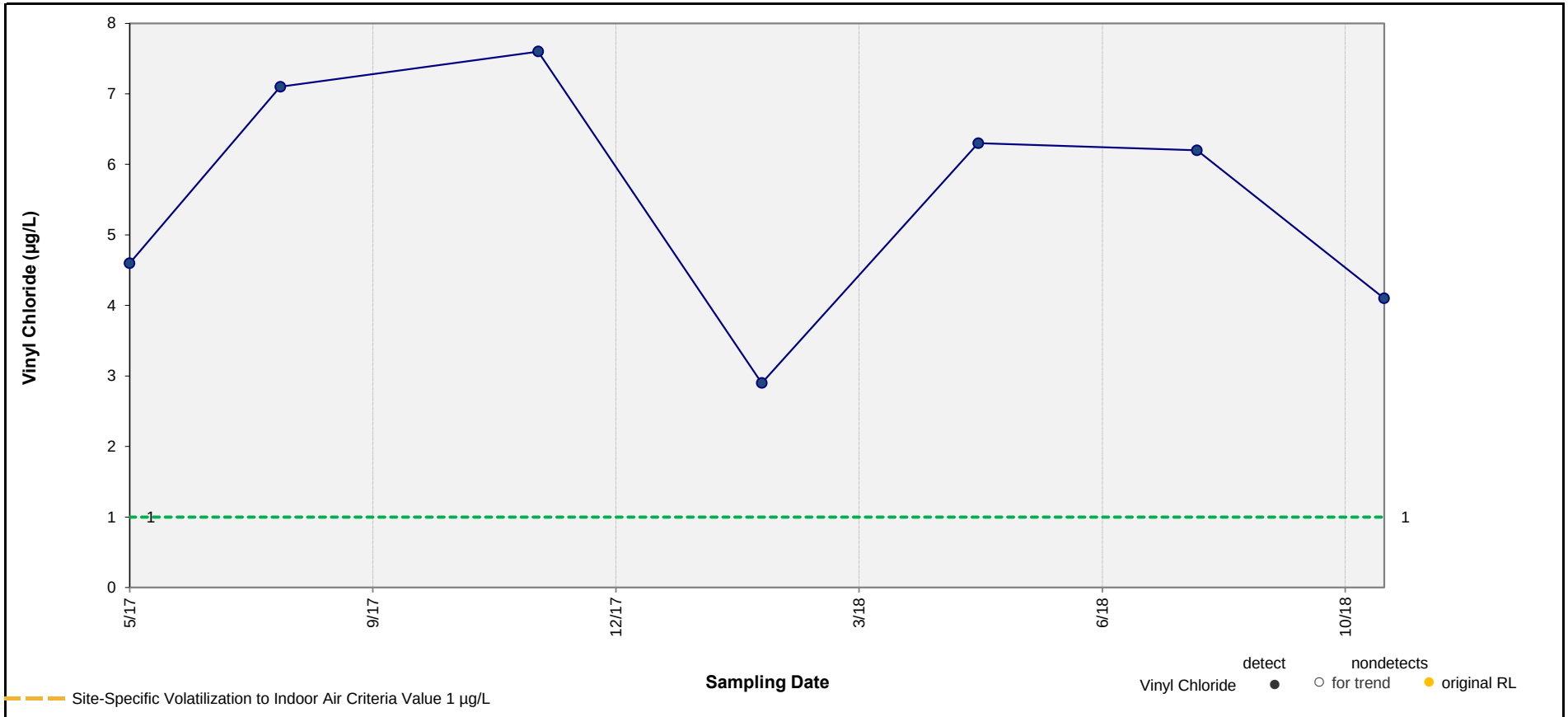
p value = 0.432 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-79SR

Ford LTP

Figure K-32



Results of Mann-Kendall Test for Trend: **No Significant Trend**

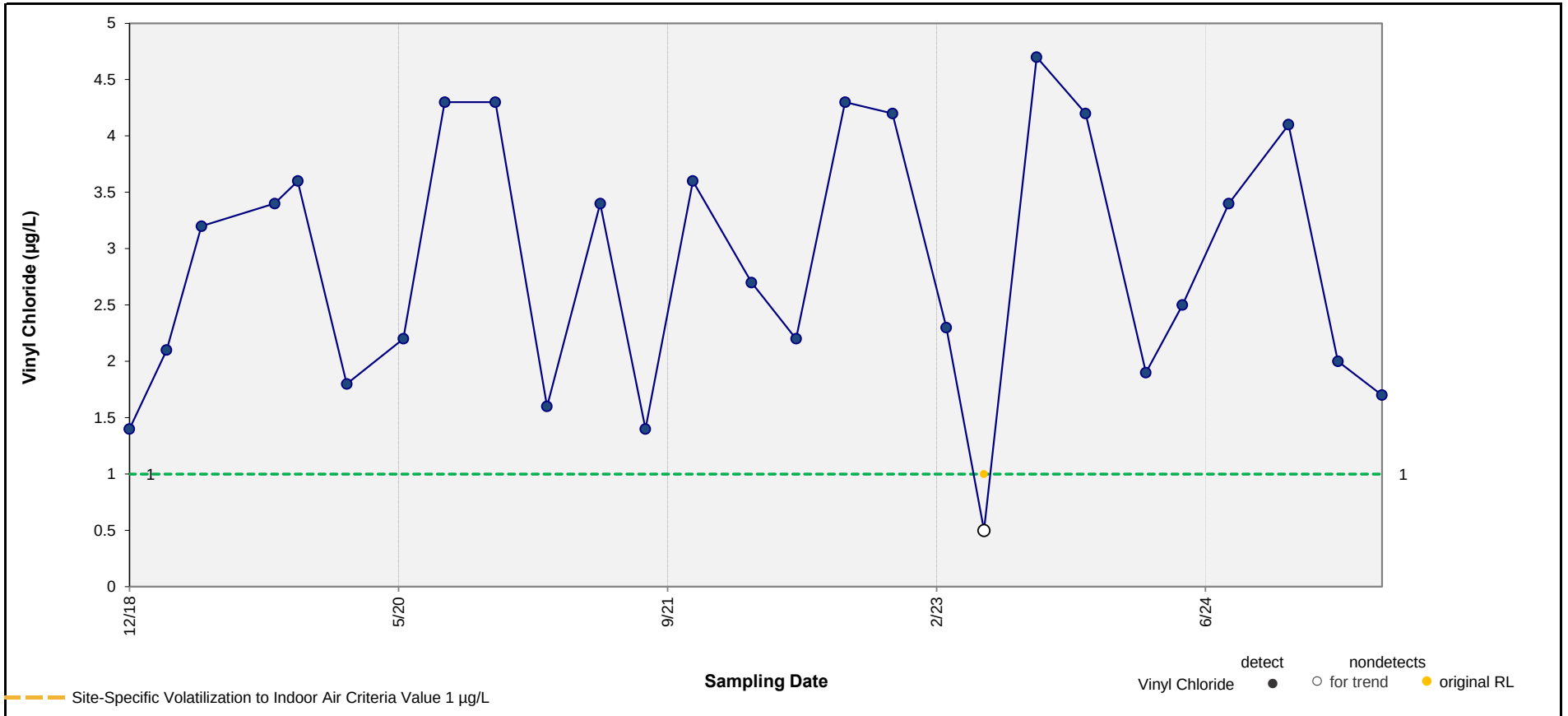
p value = 0.281 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-80S

Ford LTP

Figure K-33



Results of Mann-Kendall Test for Trend: **No Significant Trend**

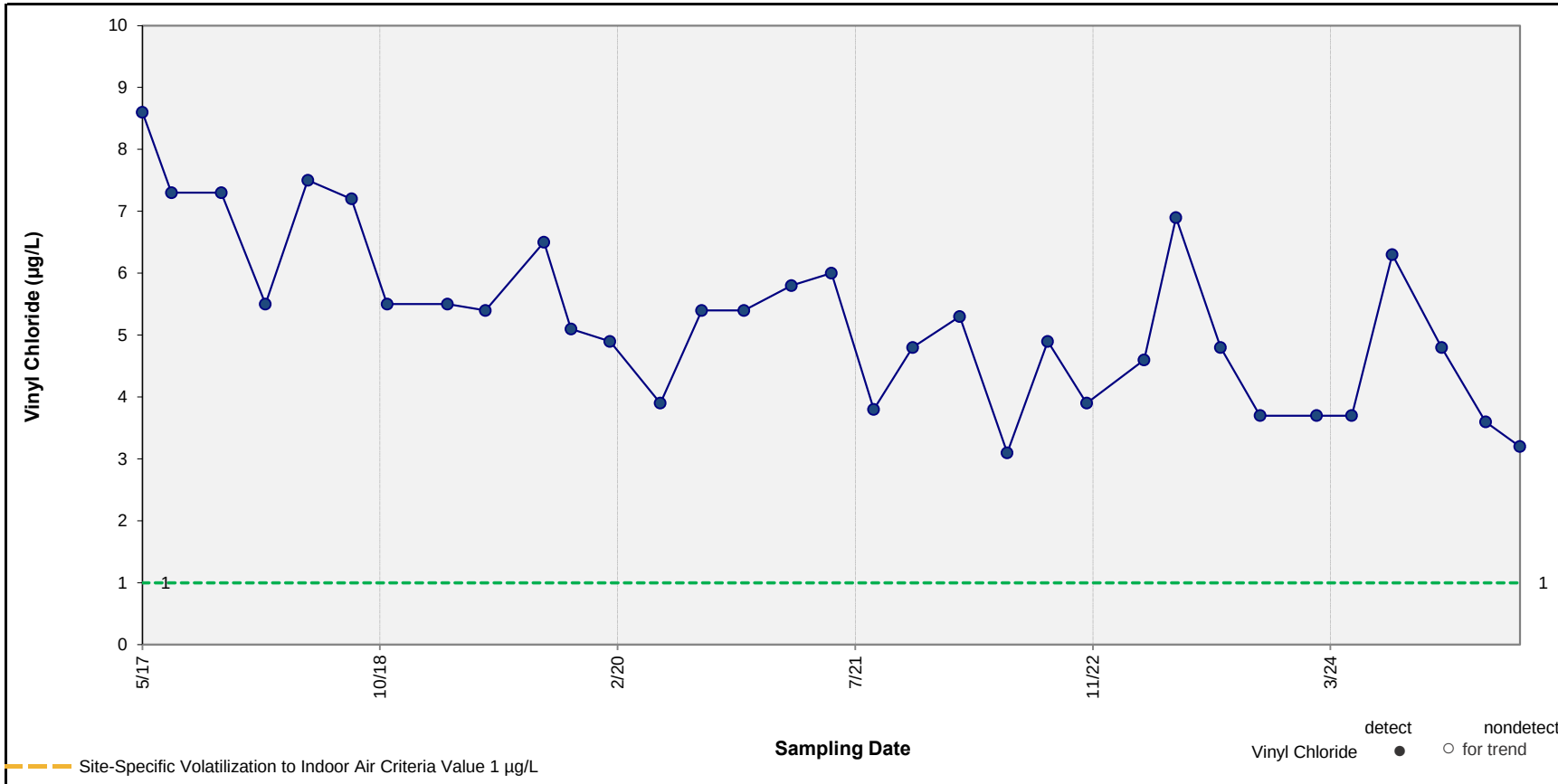
p value = 0.385 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-80SR

Ford LTP

Figure K-34



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

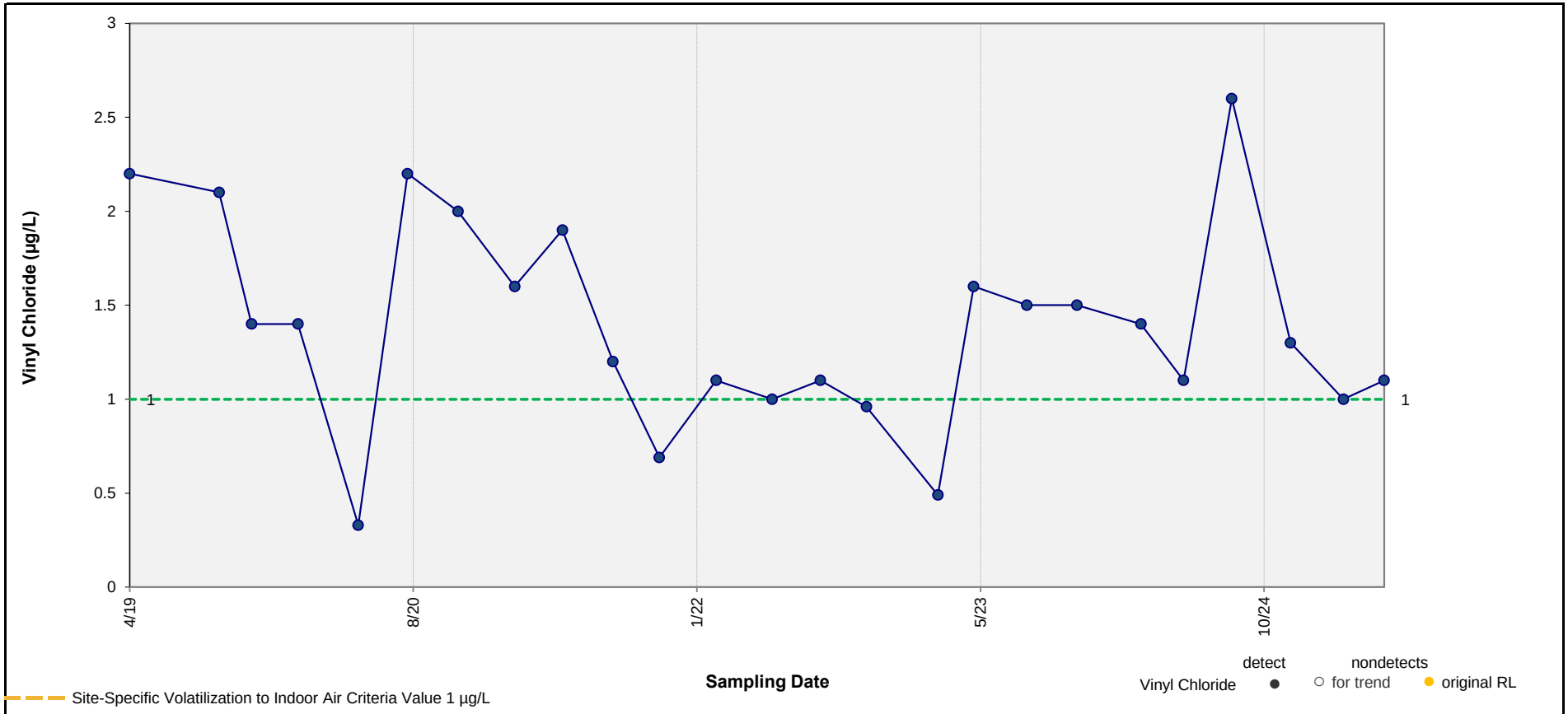
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-85

Ford LTP

Figure K-35



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

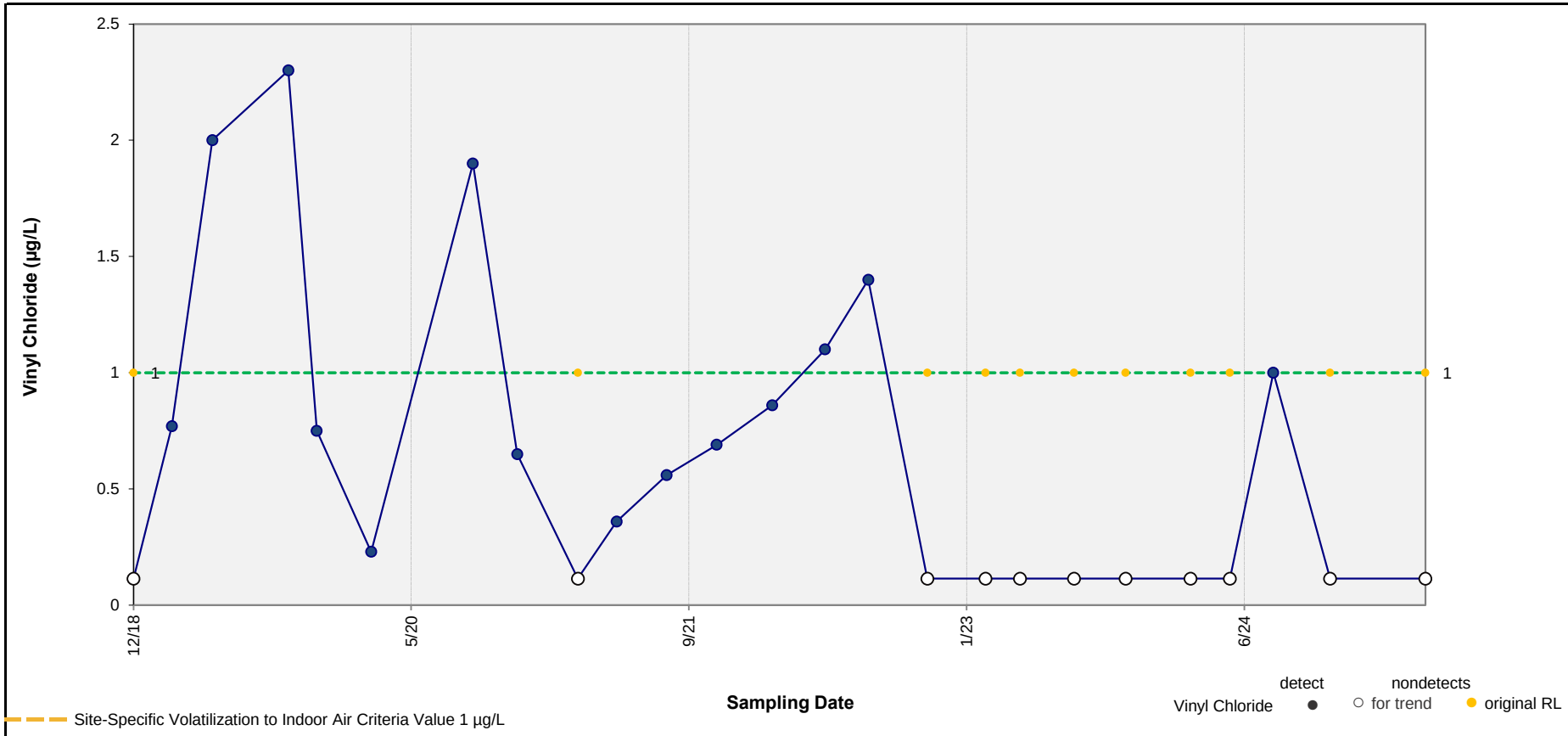
p value = 0.055 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-85SR

Ford LTP

Figure K-36



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

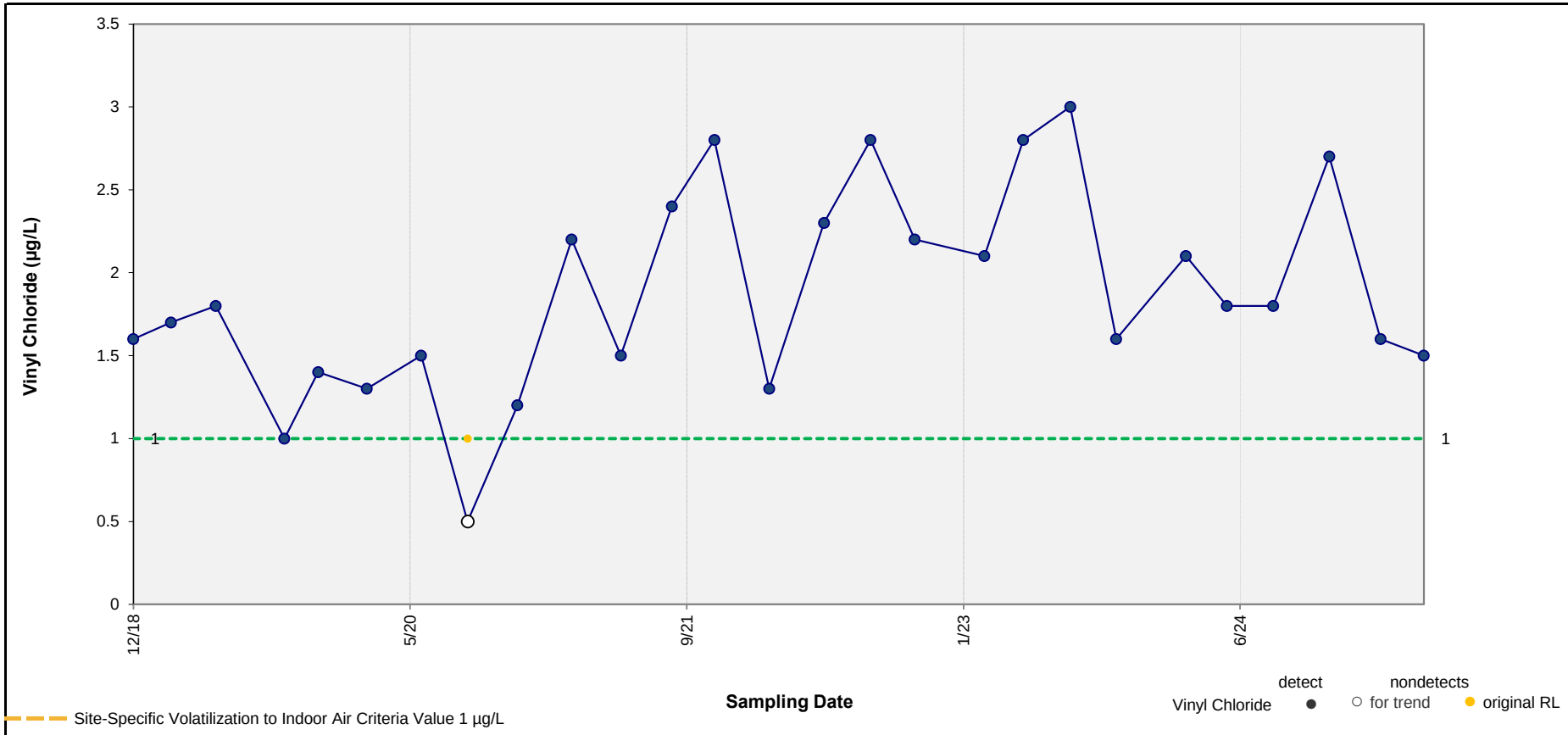
p value = 0.009 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-89S

Ford LTP

Figure K-37



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

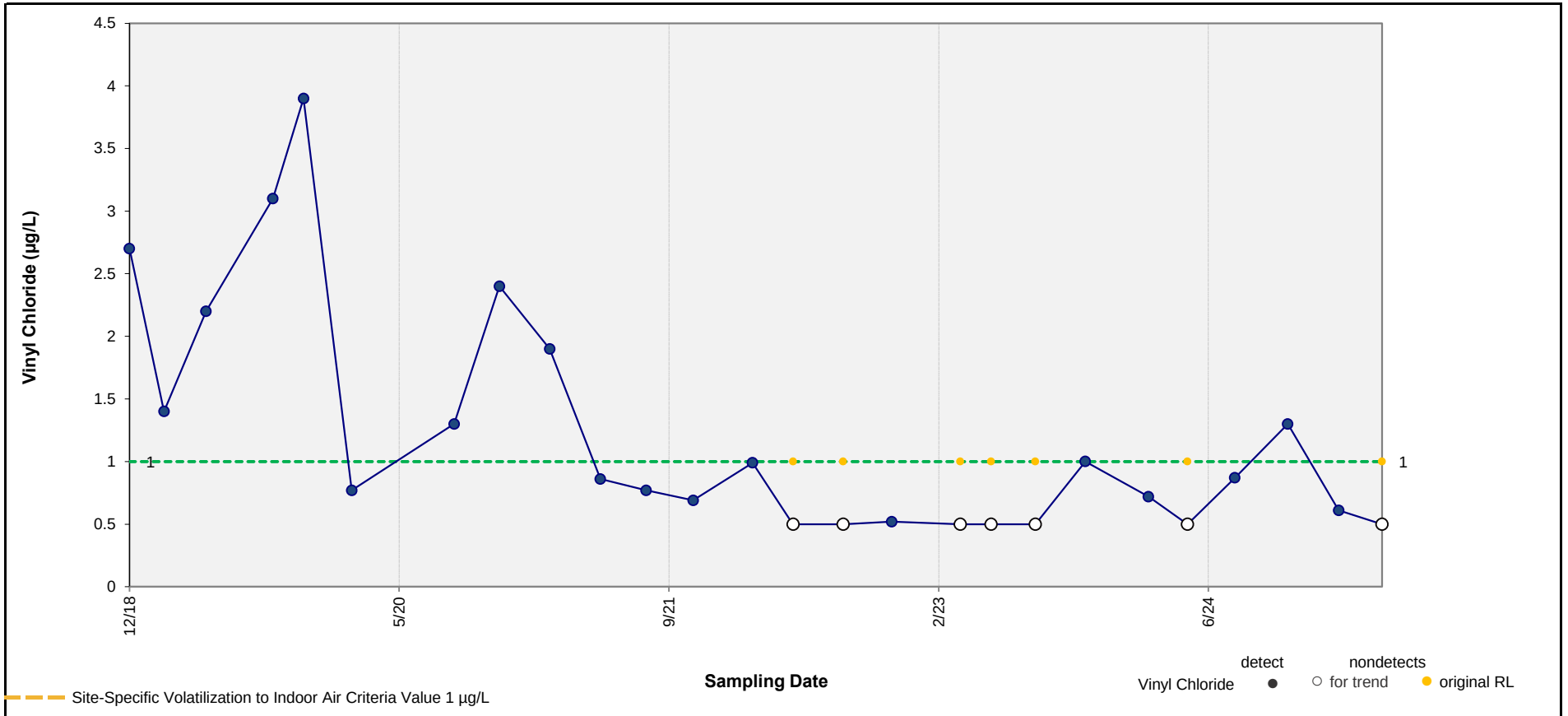
p value = 0.045 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-102

Ford LTP

Figure K-38



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

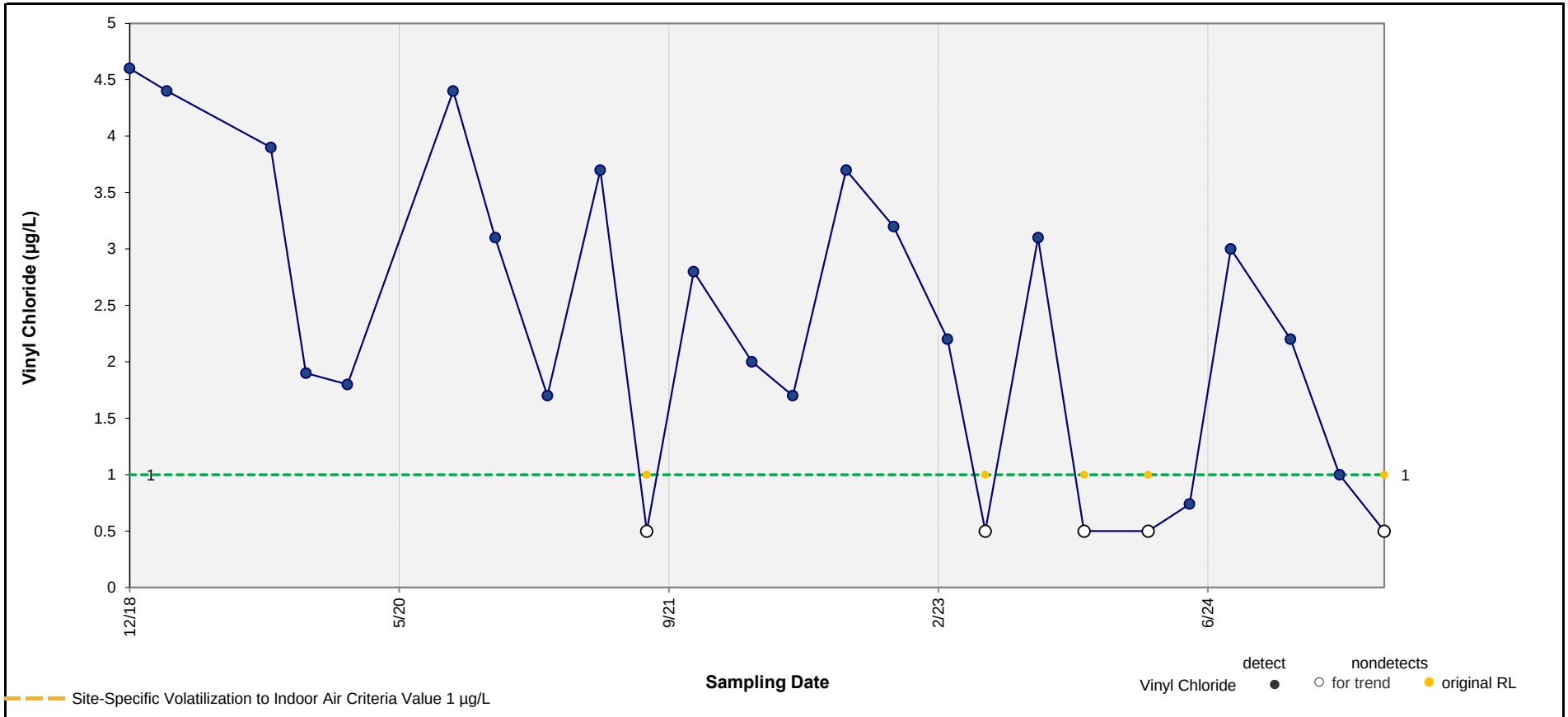
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-115S

Ford LTP

Figure K-39



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

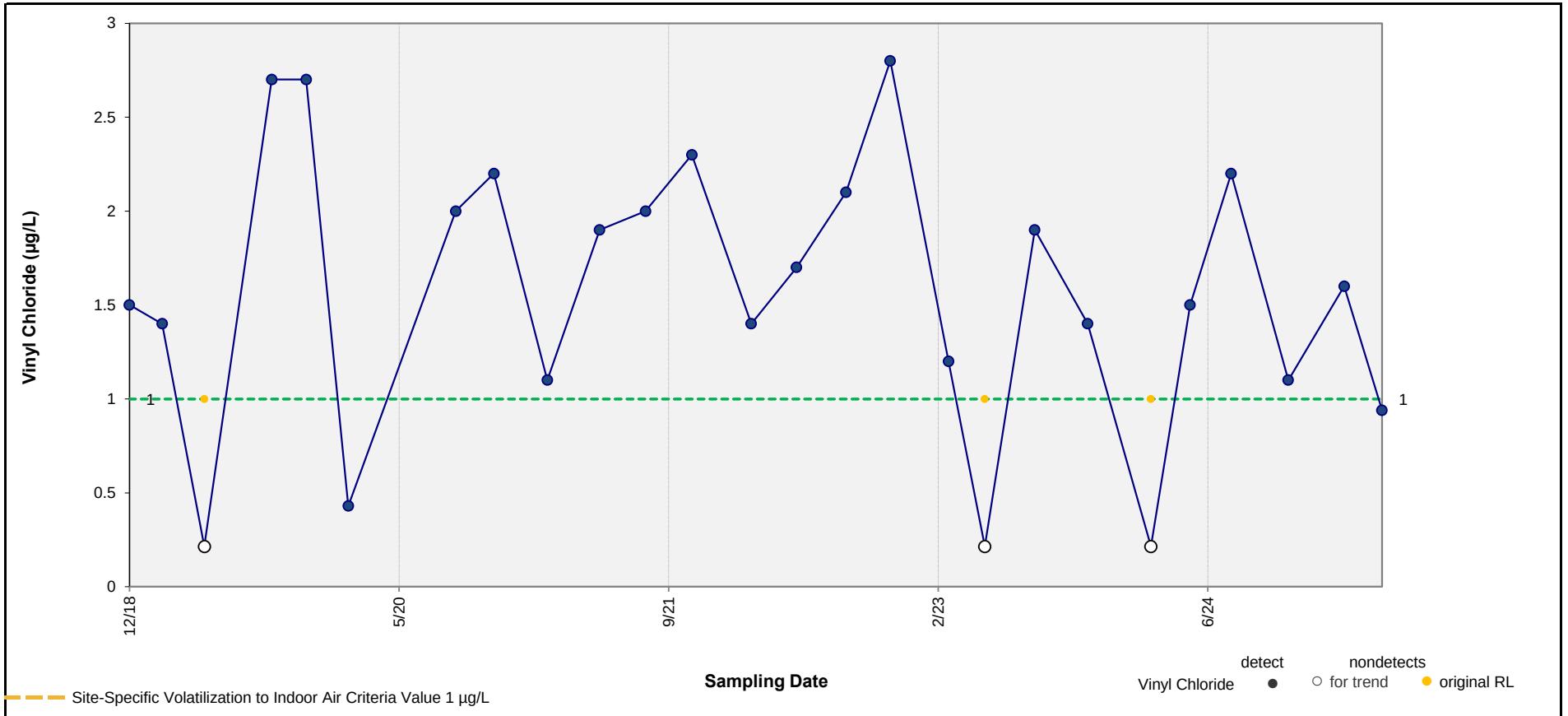
p value = 0.002 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-123S

Ford LTP

Figure K-40



Results of Mann-Kendall Test for Trend: **No Significant Trend**

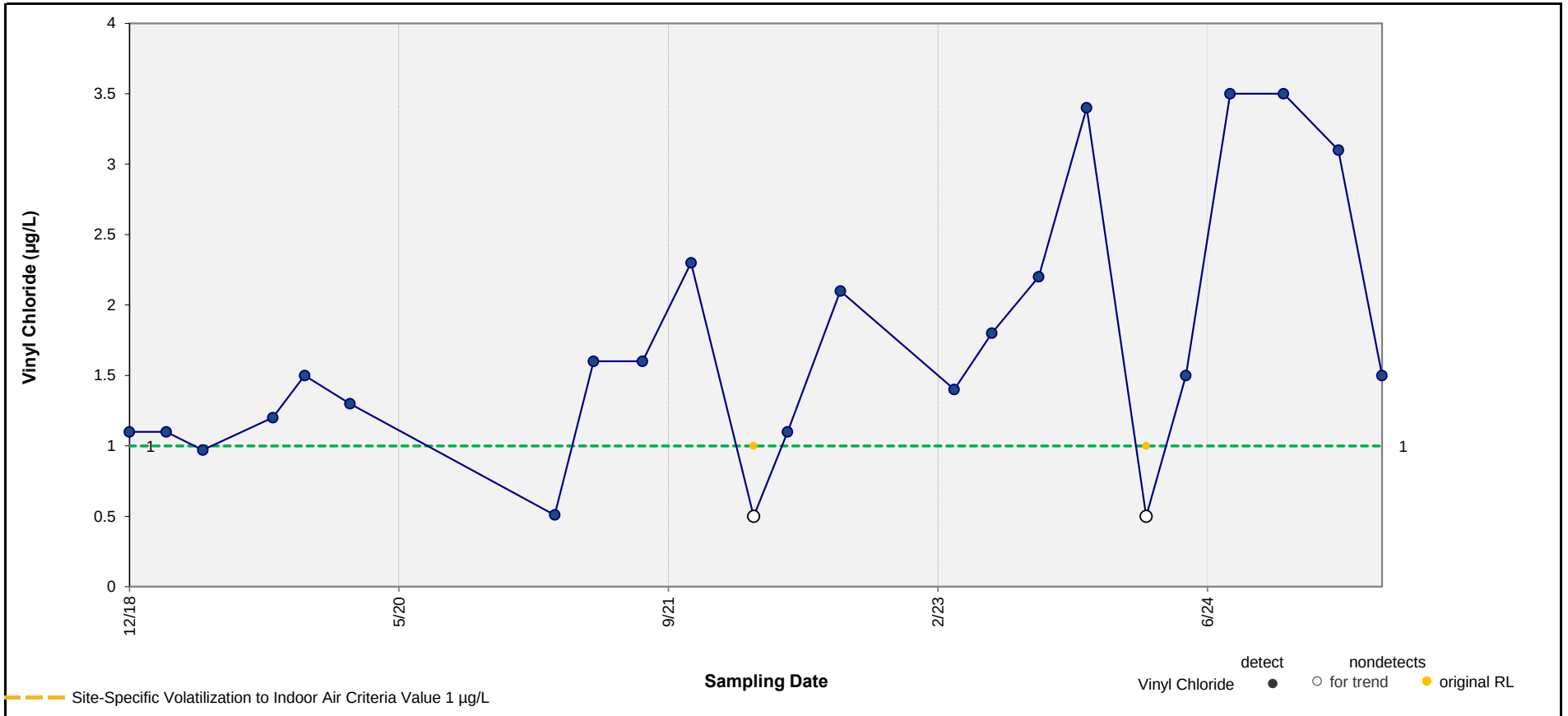
p value = 0.177 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-127S

Ford LTP

Figure K-41



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

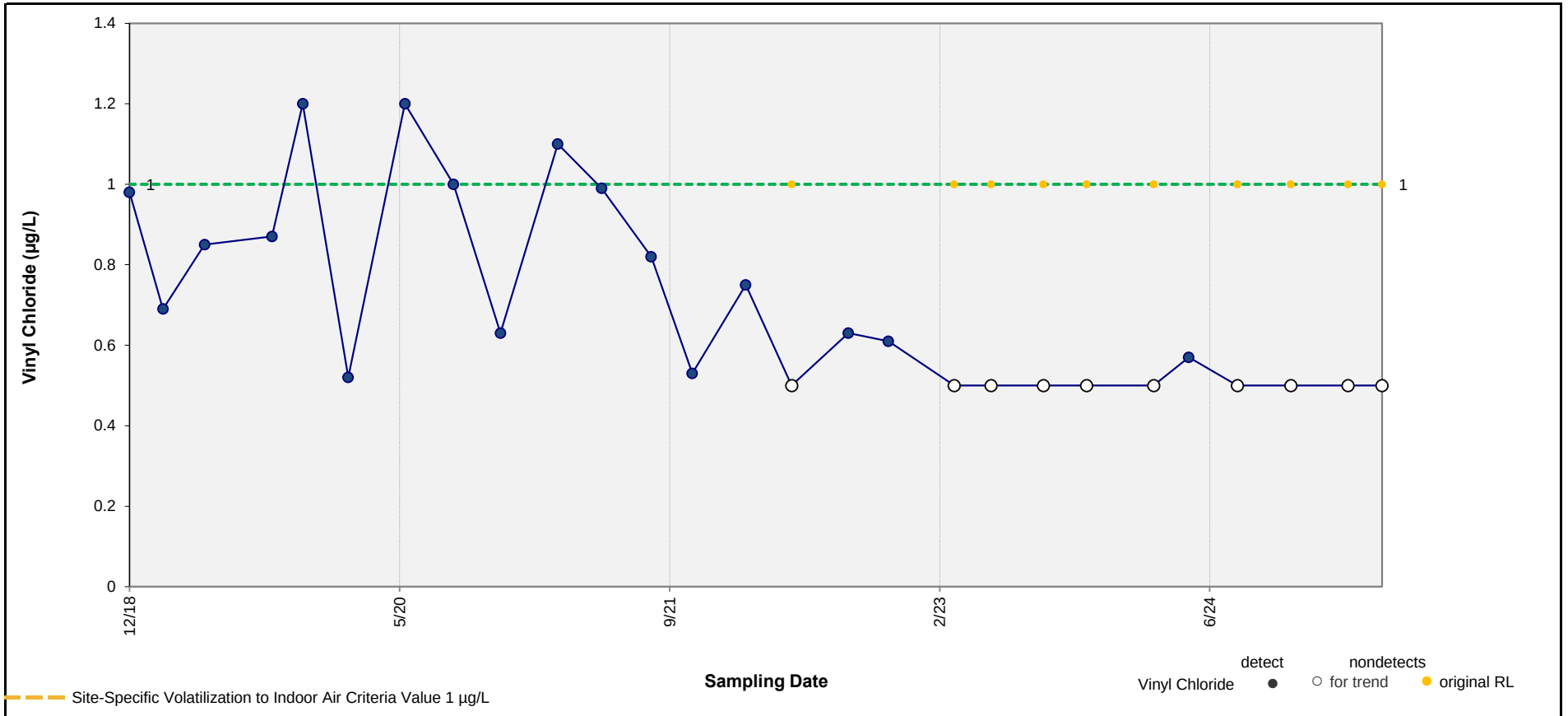
p value = 0.003 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-130S

Ford LTP

Figure K-42



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

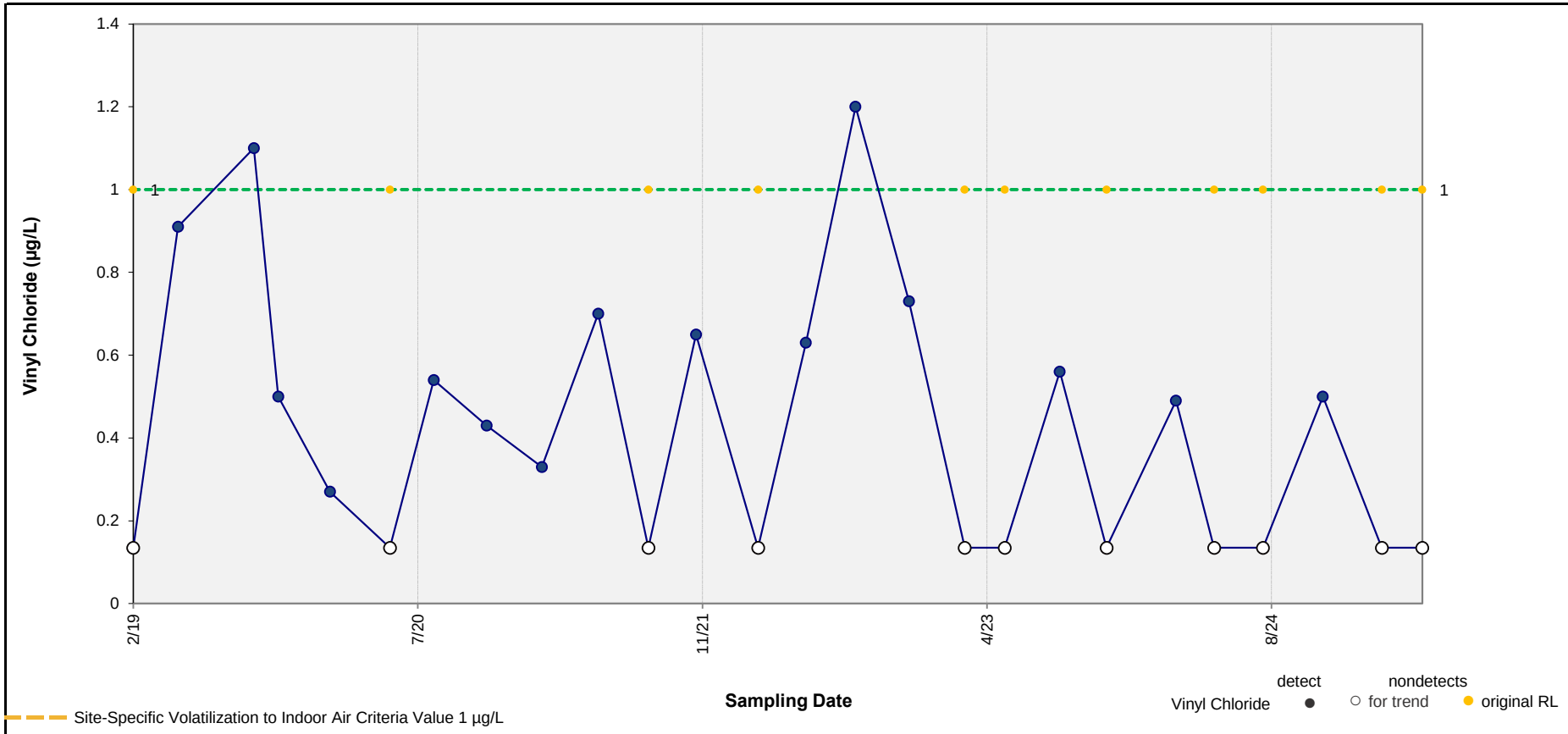
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-131S

Ford LTP

Figure K-43



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

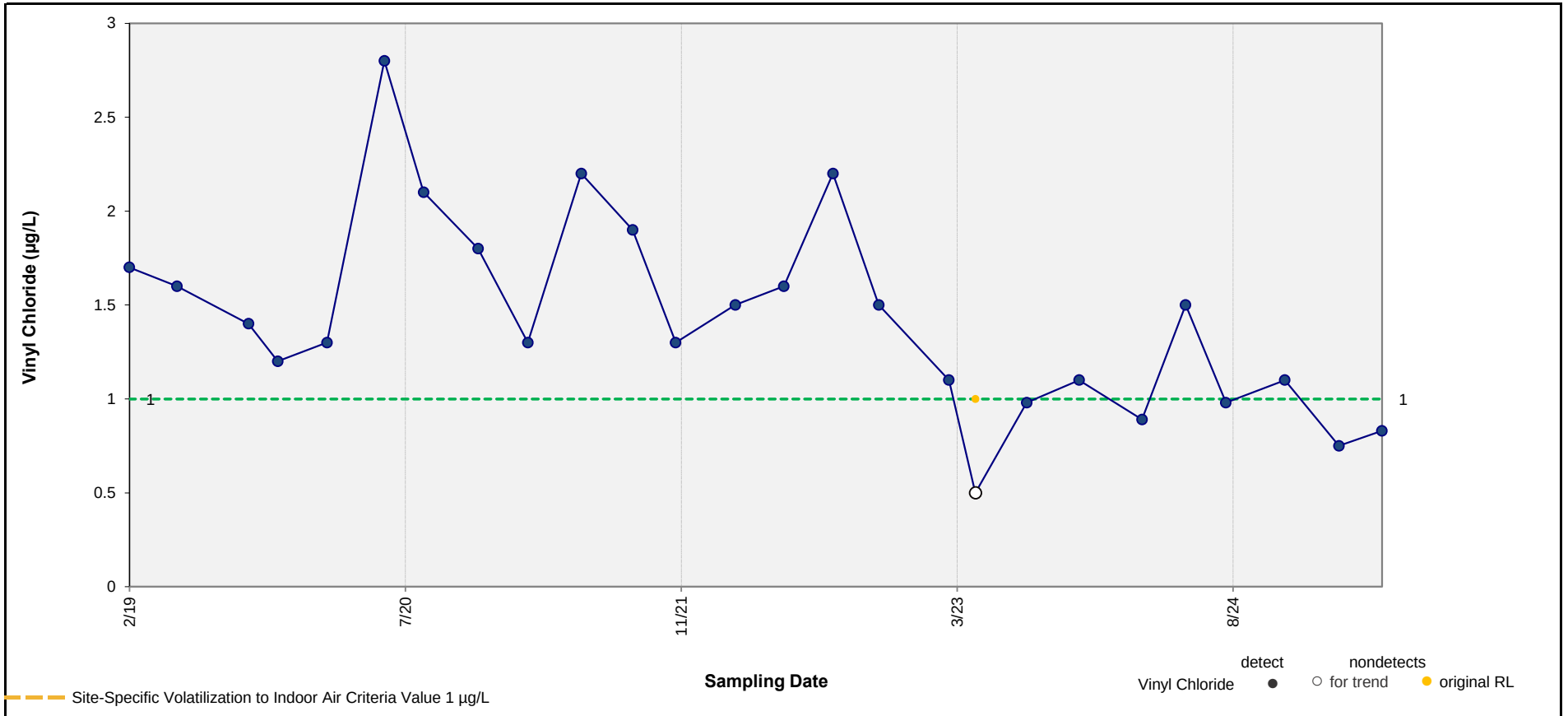
p value = 0.054 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-137S

Ford LTP

Figure K-44



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

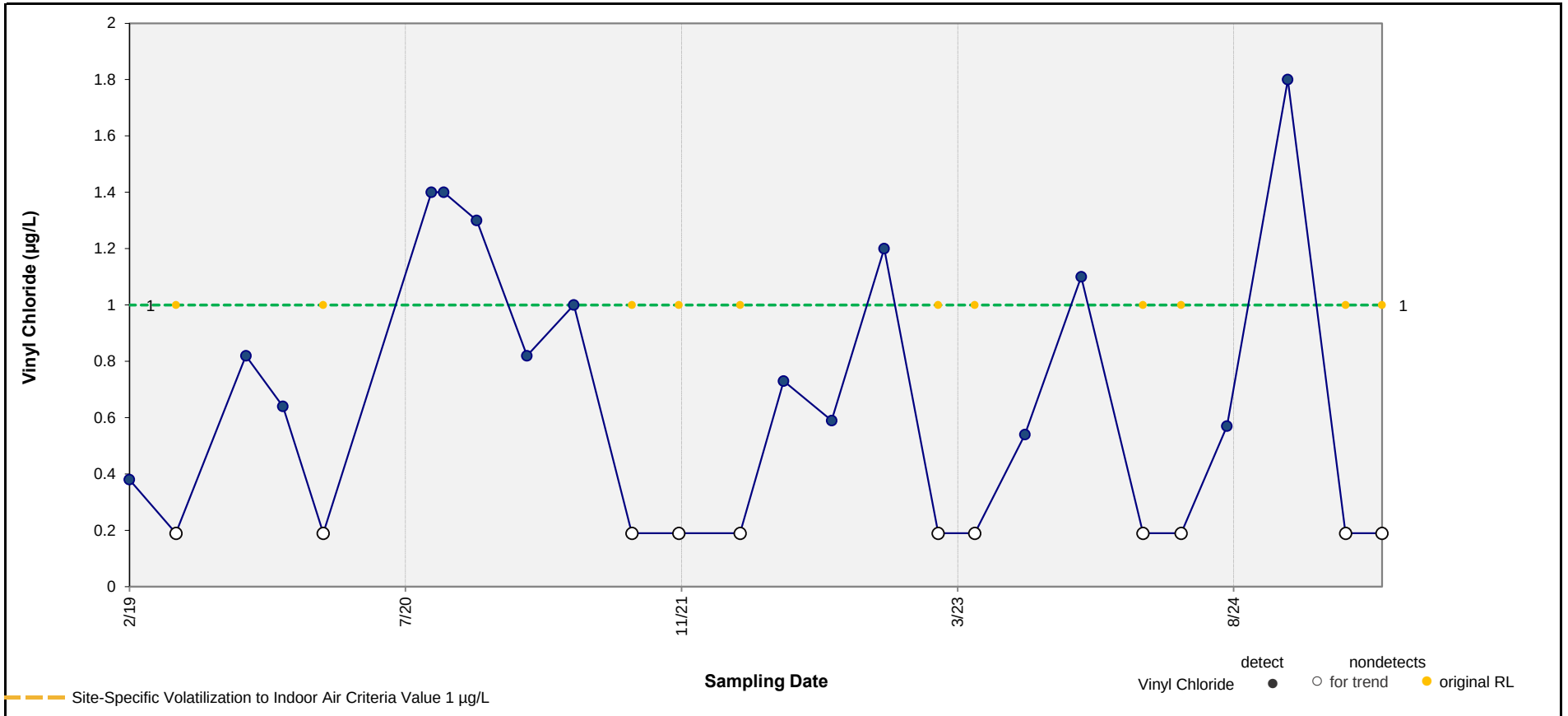
p value = <0.001 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-138S

Ford LTP

Figure K-45



Results of Mann-Kendall Test for Trend: **No Significant Trend**

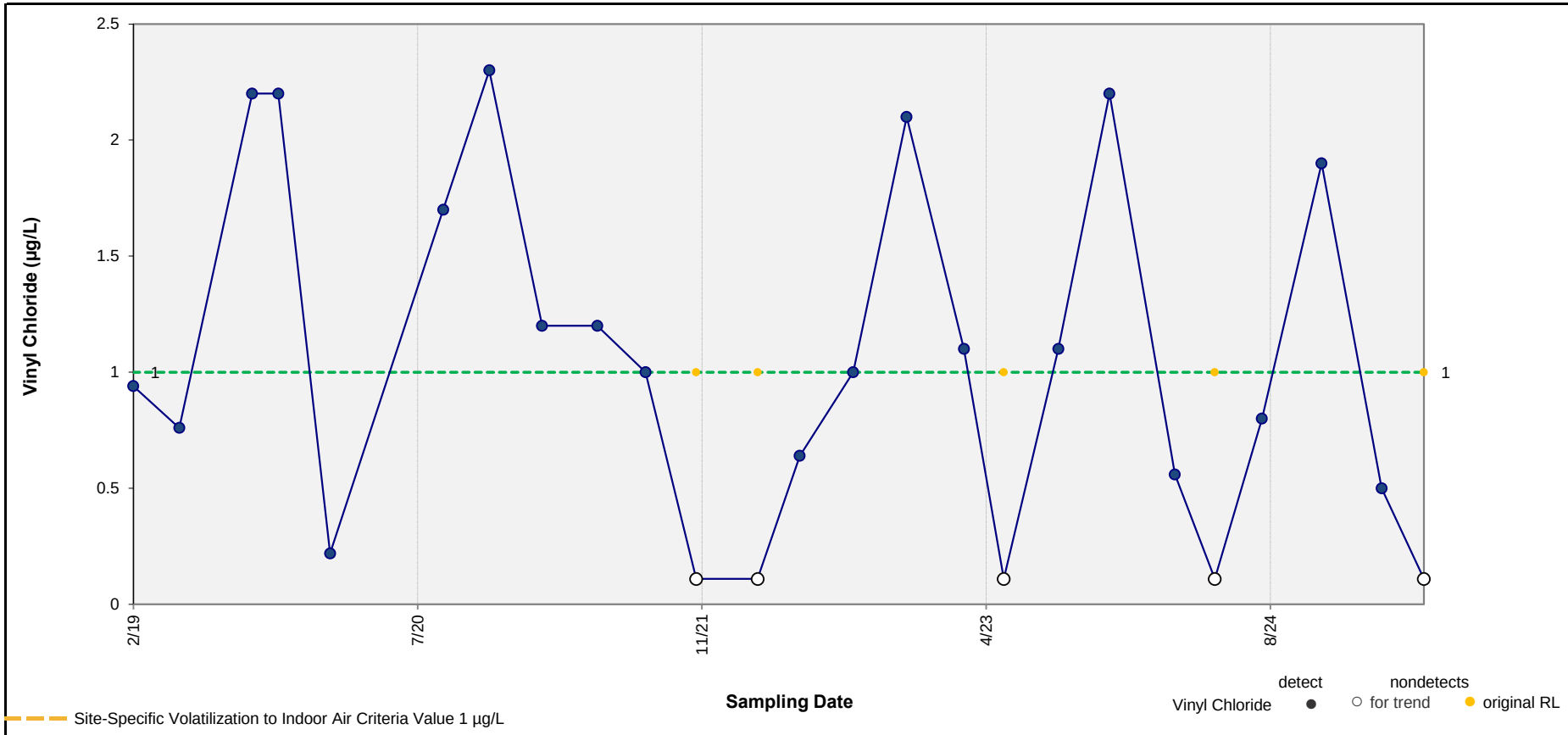
p value = 0.150 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-147S

Ford LTP

Figure K-46



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

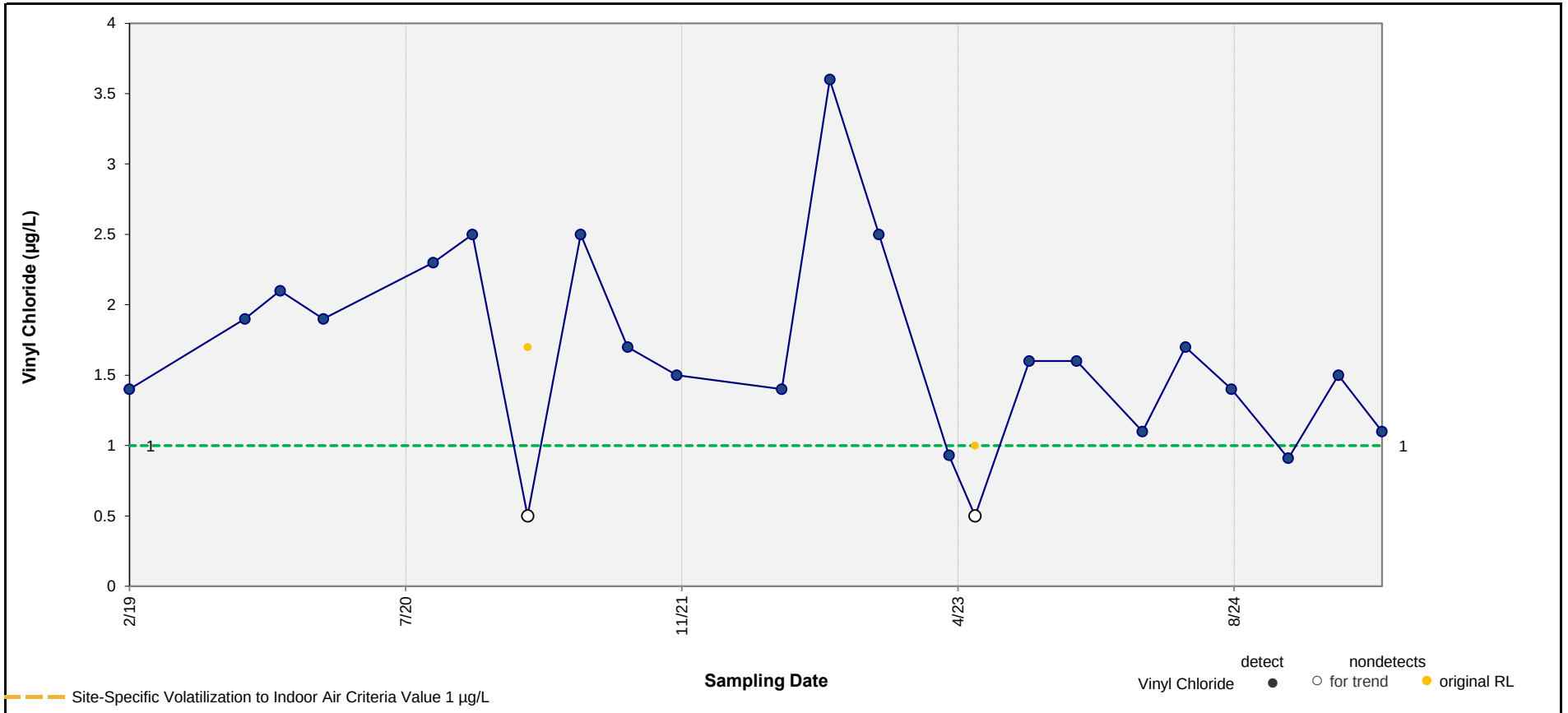
p value = 0.058 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-148S

Ford LTP

Figure K-47



Results of Mann-Kendall Test for Trend: **DECREASING TREND**

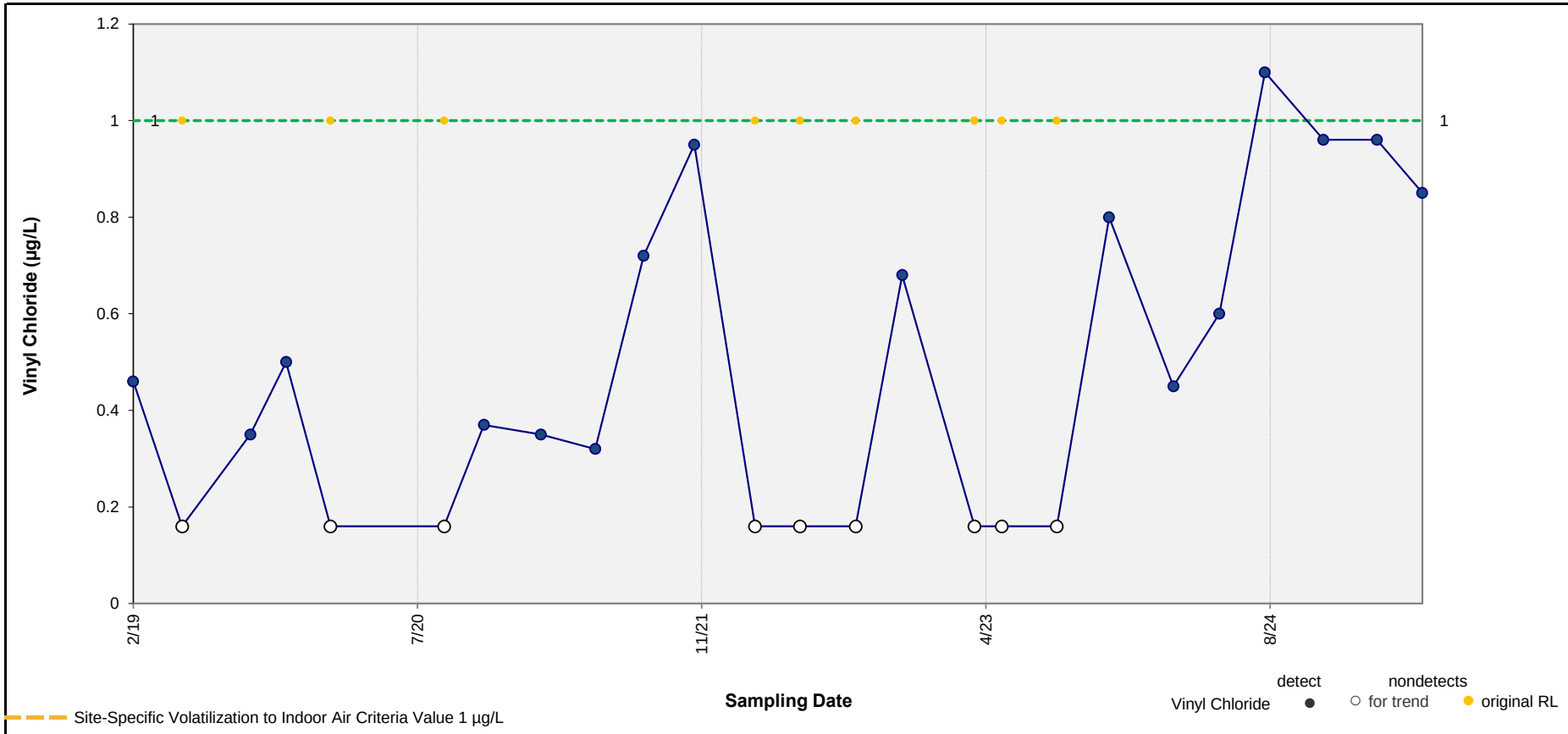
p value = 0.040 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-149S

Ford LTP

Figure K-48



Results of Mann-Kendall Test for Trend: **INCREASING TREND**

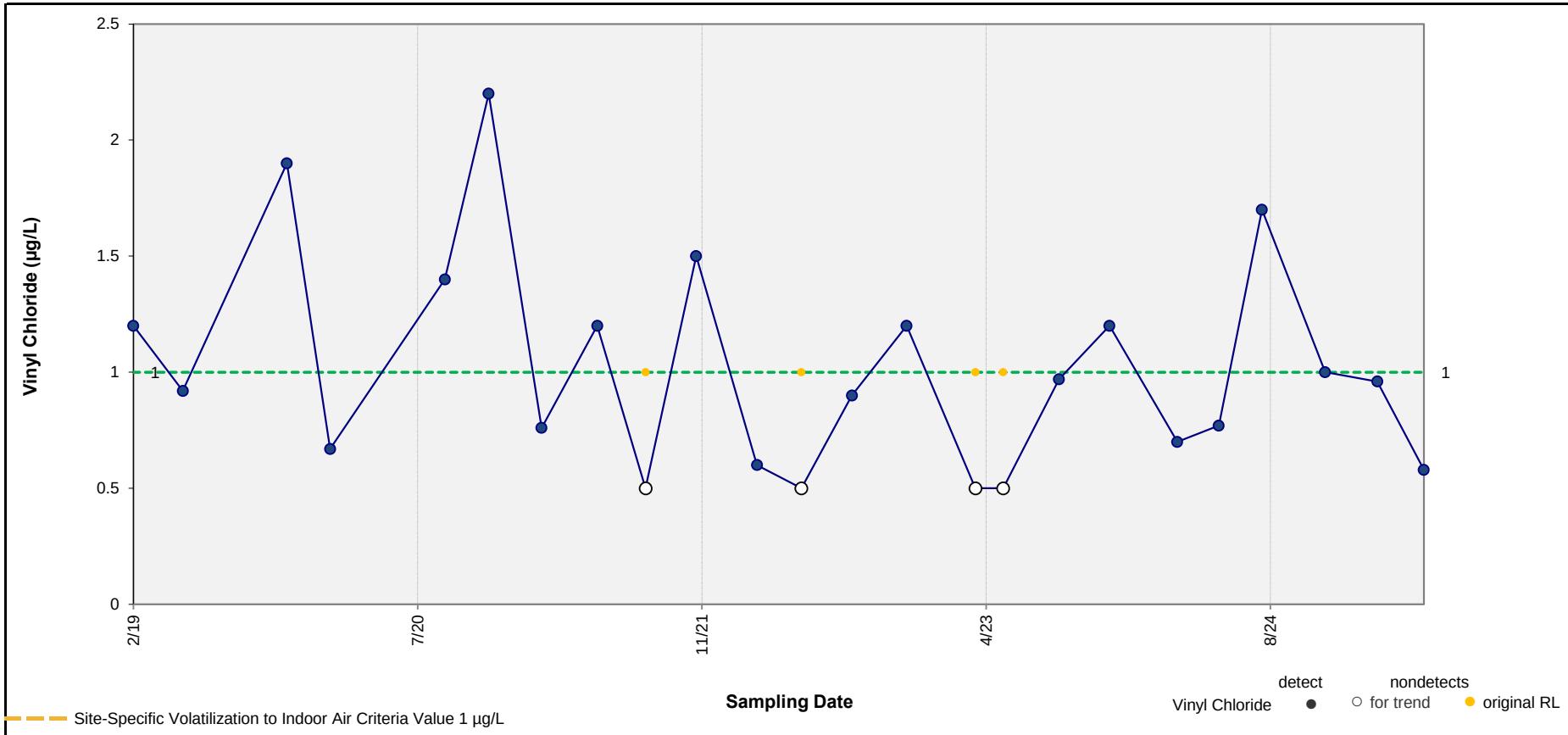
p value = 0.021 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-150S

Ford LTP

Figure K-49



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.165 Note: p value < 0.104 indicates a statistically significant trend (90% confidence level).

ARCADIS

Concentration vs. Time Plot – Vinyl Chloride in Well MW-151S

Ford LTP

Figure K-50

Mann-Kendall Calculation Sheets

MW-34 Vinyl chloride

| Reference | EPA | | |

MW-35 Vinyl chloride

| Reference | EPA | | |

MW-40 Vinyl chloride

| Reference | EPA | | |

MW-41 Vinyl chloride

| Reference | EPA | | |

MW-42 Vinyl chloride

| Reference | EPA | | |

MW-45 Vinyl chloride

| Reference | EPA | | |

MW-46 Vinyl chloride

| Reference | EPA | | |

MW-47 Vinyl chloride

| Reference | EPA | | |

MW-48 Vinyl chloride

| Reference | EPA | | |

MW-50 Vinyl chloride

| Reference | EPA | | |

MW-52 Vinyl chloride

Reference	EPA								Sorted	Identifying Tie-Groups &			Summation
Data for Plot:						Data for Trend Analysis:				Number of Ties in Each			
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data				Terms
7/27/2017	7	#N/A	5/9/2025	#N/A	#N/A	7/27/2017	7	1	0.86	0	0	0	0
11/10/2017	9.1	#N/A	#N/A	#N/A	#N/A	11/10/2017	9.1	2	0.9	0	0	0	0
2/13/2018	4	#N/A	#N/A	#N/A	#N/A	2/13/2018	4	3	1.1	0	0	0	0
5/9/2018	4.3	#N/A	#N/A	#N/A	#N/A	5/9/2018	4.3	4	1.2	0	0	0	0
8/10/2018	4.5	#N/A	#N/A	#N/A	#N/A	8/10/2018	4.5	5	1.4	1	1	0	0
10/31/2018	5	#N/A	#N/A	#N/A	#N/A	10/31/2018	5	6	1.4	1	2	0	0
3/2/2019	3.9	#N/A	#N/A	#N/A	#N/A	3/2/2019	3.9	7	1.4	1	0	3	66
6/15/2019	3.4	#N/A	#N/A	#N/A	#N/A	6/15/2019	3.4	8	1.5	1	1	0	0
9/28/2019	5.9	#N/A	#N/A	#N/A	#N/A	9/28/2019	5.9	9	1.5	1	2	0	0
11/23/2019	4.7	#N/A	#N/A	#N/A	#N/A	11/23/2019	4.7	10	1.5	1	3	0	0
2/8/2020	4.3	#N/A	#N/A	#N/A	#N/A	2/8/2020	4.3	11	1.5	1	0	4	156
5/30/2020	4.5	#N/A	#N/A	#N/A	#N/A	5/30/2020	4.5	12	1.6	0	0	0	0
8/22/2020	3	#N/A	#N/A	#N/A	#N/A	8/22/2020	3	13	1.7	0	0	0	0
11/14/2020	3.5	#N/A	#N/A	#N/A	#N/A	11/14/2020	3.5	14	2	0	0	0	0
2/13/2021	2.3	#N/A	#N/A	#N/A	#N/A	2/13/2021	2.3	15	2.2	0	0	0	0
5/15/2021	3.7	#N/A	#N/A	#N/A	#N/A	5/15/2021	3.7	16	2.3	0	0	0	0
8/21/2021	2.2	#N/A	#N/A	#N/A	#N/A	8/21/2021	2.2	17	2.7	0	0	0	0
11/13/2021	2.7	#N/A	#N/A	#N/A	#N/A	11/13/2021	2.7	18	3	0	0	0	0
2/19/2022	1.5	#N/A	#N/A	#N/A	#N/A	2/19/2022	1.5	19	3.4	0	0	0	0
5/21/2022	1.6	#N/A	#N/A	#N/A	#N/A	5/21/2022	1.6	20	3.5	0	0	0	0
8/20/2022	1.7	#N/A	#N/A	#N/A	#N/A	8/20/2022	1.7	21	3.7	0	0	0	0
11/12/2022	2	#N/A	#N/A	#N/A	#N/A	11/12/2022	2	22	3.9	0	0	0	0
3/9/2023	1.5	#N/A	#N/A	#N/A	#N/A	3/9/2023	1.5	23	4	0	0	0	0
5/18/2023	1.4	#N/A	#N/A	#N/A	#N/A	5/18/2023	1.4	24	4.3	1	1	0	0
8/15/2023	1.5	#N/A	#N/A	#N/A	#N/A	8/15/2023	1.5	25	4.3	1	0	2	18
11/14/2023	1.5	#N/A	#N/A	#N/A	#N/A	11/14/2023	1.5	26	4.5	1	1	0	0
3/7/2024	0.9	#N/A	#N/A	#N/A	#N/A	3/7/2024	0.9	27	4.5	1	0	2	18
5/21/2024	1.2	#N/A	#N/A	#N/A	#N/A	5/21/2024	1.2	28	4.7	0	0	0	0
8/9/2024	1.4	#N/A	#N/A	#N/A	#N/A	8/9/2024	1.4	29	5	0	0	0	0
11/20/2024	1.4	#N/A	#N/A	#N/A	#N/A	11/20/2024	1.4	30	5.9	0	0	0	0
2/26/2025	0.86	#N/A	#N/A	#N/A	#N/A	2/26/2025	0.86	31	7	0	0	0	0
5/9/2025	1.1	#N/A	#N/A	#N/A	#N/A	5/9/2025	1.1	32	9.1	0	0	0	0
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		33	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–	–

alpha :	0.104
Zo :	1.626
n :	32
S :	-387
SD[S] :	61.549
Calcs for n_UG09 <= 10:	
x :	300
p-value :	—
Calcs for n_UG09 > 10:	
Z :	6.271
p-value :	1.78929E-10
M-K Results:	
p-value :	1.78929E-10
DECREASING TREND	

# + signs (1):	1	0	7	5	3	1	4	6	0	0	1	0	2	1	2	0	1	0	3	2	1	0	0	2	0	0	4	2	0	0	1
# - signs (-1):	30	30	22	22	23	25	21	18	23	22	20	20	17	17	15	16	14	14	7	10	10	10	7	4	6	6	1	2	2	2	0
SUM:	-29	-30	-15	-17	-20	-24	-17	-12	-23	-22	-19	-20	-15	-16	-13	-16	-13	-14	-4	-8	-9	-10	-7	-2	-6	-6	3	0	-2	-2	1

S Calculation:

1																															
-1	-1																														
-1	-1	1																													
-1	-1	1	1																												
-1	-1	1	1	1																											
-1	-1	-1	-1	-1	-1																										
-1	-1	-1	-1	-1	-1	-1																									
-1	-1	1	1	1	1	1	1																								
-1	-1	1	1	1	1	1	1	1																							
-1	-1	1	1	1	1	1	1	1	1																						
-1	-1	1	1	0	-1	-1	1	1	-1	-1																					
-1	-1	1	1	0	-1	-1	1	1	-1	-1	1																				
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1																			
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1																		
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1																	
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1																
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1															
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1														
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1													
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1												
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1											
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1										
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1									
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1								
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	0	1							
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	0	1	0						
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1					
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1				
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1			
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	1	1		
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	0	
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1	-1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1

MW-54 Vinyl chloride

| Reference | EPA | | |

MW-57 Vinyl chloride

| Reference | EPA | | |

MW-62 Vinyl chloride

| Reference | EPA | | |

MW-64 Vinyl chloride

| Reference | EPA | | |

MW-68 Vinyl chloride

| Reference | EPA | | |

MW-69 Vinyl chloride

| Reference | EPA | | |

MW-70 Vinyl chloride

| Reference | EPA | | |

MW-122 Vinyl chloride

| Reference | EPA | | |

MW-209S Vinyl chloride

| Reference | EPA | | |

MW-210S Vinyl chloride

| Reference | EPA | | |

MW-213S Vinyl chloride

| Reference | EPA | | |

MW-235 Vinyl chloride

| Reference | EPA | | |

PW-16-01 Vinyl chloride

| Reference | EPA | | |

TW-16-01 Vinyl chloride

| Reference | EPA | | |

TW-16-02 Vinyl chloride

| Reference | EPA | | |

MW-72 Vinyl chloride

| Reference | EPA | | |

MW-73S Vinyl chloride

Reference	EPA																							
		Data for Plot:					Data for Trend Analysis:			Sorted	Identifying Tie-Groups &			Summation	# + signs (1):	1	1	0	1	0	1			
															# - signs (-1):	5	4	4	2	2	0			
	Vinyl	Analyte	Secondary	Secondary	Secondary						Number of Ties in Each													
Analyte Date	Chloride	NDs	Analyte Date	Analyte	Analyte NDs		Date	All Data	i	Data				Terms	SUM:	-4	-3	-4	-1	-2	1			
5/22/2017	1.6	#N/A	10/22/2018	#N/A	#N/A		5/22/2017	1.6	1	0.62	0	0	0	0	alpha : 0.104	S Calculation:								
7/26/2017	1.3	#N/A	#N/A	#N/A	#N/A		7/26/2017	1.3	2	0.96	0	0	0	0	Zo : 1.626	-1								
11/7/2017	1.9	#N/A	#N/A	#N/A	#N/A		11/7/2017	1.9	3	1.1	0	0	0	0	n : 7	1	1							
2/6/2018	1.1	#N/A	#N/A	#N/A	#N/A		2/6/2018	1.1	4	1.2	0	0	0	0	S : -13	-1	-1	-1						
5/9/2018	1.2	#N/A	#N/A	#N/A	#N/A		5/9/2018	1.2	5	1.3	0	0	0	0	SD[S] : 6.658	-1	-1	-1	1					
8/10/2018	0.62	#N/A	#N/A	#N/A	#N/A		8/10/2018	0.62	6	1.6	0	0	0	0	Calcs for n_UG09 <= 10:	-1	-1	-1	-1	-1				
10/22/2018	0.96	#N/A	#N/A	#N/A	#N/A		10/22/2018	0.96	7	1.9	0	0	0	0	x : 13	-1	-1	-1	-1	-1	1			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		8	–	–	–	–	–	p-value : 0.035									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		9	–	–	–	–	–	Calcs for n_UG09 > 10:									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		10	–	–	–	–	–	Z : 1.802									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		11	–	–	–	–	–	p-value : 0.035752708									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		12	–	–	–	–	–	M-K Results:									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		13	–	–	–	–	–	p-value : 0.035									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		14	–	–	–	–	–	DECREASING TREND									
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		15	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		16	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		17	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		18	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		19	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		20	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		21	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		22	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		23	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		24	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		25	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		26	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		27	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		28	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		29	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		30	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		31	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		32	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		33	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		34	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		35	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		36	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		37	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		38	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		39	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		40	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		41	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		42	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		43	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		44	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		45	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		46	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		47	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		48	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		49	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		50	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		51	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		52	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		53	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		54	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		55	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		56	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		57	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		58	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		59	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		60	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		61	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		62	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		63	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		64	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		65	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		66	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		67	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		68	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		69	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		70	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		71	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		72	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		73	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		74	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		75	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		76	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		77	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		78	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		79	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		80	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		81	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		82	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		83	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		84	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		85	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		86	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		87	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		88	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		89	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		90	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		91	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		92	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		93	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		94	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		95	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		96	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		97	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		98	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		99	–	–	–	–	–										
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A		100	–	–	–	–	–										

MW-74 Vinyl chloride

Reference	EPA								Sorted	Identifying Tie-Groups &			Summation
	Data for Plot:					Data for Trend Analysis:							
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data	Number of Ties in Each			Terms
5/23/2017	1	1	5/1/2025	#N/A	#N/A	5/23/2017	0.5	1	0.5	1	1	0	0
7/26/2017	2.7	#N/A	#N/A	#N/A	#N/A	7/26/2017	2.7	2	0.5	1	2	0	0
11/7/2017	2.4	#N/A	#N/A	#N/A	#N/A	11/7/2017	2.4	3	0.5	1	3	0	0
2/6/2018	2	#N/A	#N/A	#N/A	#N/A	2/6/2018	2	4	0.5	1	0	4	156
5/9/2018	0.7	#N/A	#N/A	#N/A	#N/A	5/9/2018	0.7	5	0.7	0	0	0	0
8/9/2018	2.8	#N/A	#N/A	#N/A	#N/A	8/9/2018	2.8	6	1.1	0	0	0	0
10/22/2018	2.2	#N/A	#N/A	#N/A	#N/A	10/22/2018	2.2	7	1.6	0	0	0	0
3/8/2019	1.1	#N/A	#N/A	#N/A	#N/A	3/8/2019	1.1	8	1.7	0	0	0	0
5/17/2019	1	1	#N/A	#N/A	#N/A	5/17/2019	0.5	9	1.8	0	0	0	0
9/18/2019	1.7	#N/A	#N/A	#N/A	#N/A	9/18/2019	1.7	10	2	1	1	0	0
11/11/2019	1.8	#N/A	#N/A	#N/A	#N/A	11/11/2019	1.8	11	2	1	0	2	18
2/7/2020	1	1	#N/A	#N/A	#N/A	2/7/2020	0.5	12	2.2	0	0	0	0
5/21/2020	1	1	#N/A	#N/A	#N/A	5/21/2020	0.5	13	2.4	1	1	0	0
8/12/2020	2.9	#N/A	#N/A	#N/A	#N/A	8/12/2020	2.9	14	2.4	1	2	0	0
11/16/2020	4.1	#N/A	#N/A	#N/A	#N/A	11/16/2020	4.1	15	2.4	1	0	3	66
2/11/2021	3.1	#N/A	#N/A	#N/A	#N/A	2/11/2021	3.1	16	2.5	0	0	0	0
5/13/2021	3.4	#N/A	#N/A	#N/A	#N/A	5/13/2021	3.4	17	2.6	1	1	0	0
8/16/2021	2	#N/A	#N/A	#N/A	#N/A	8/16/2021	2	18	2.6	1	0	2	18
11/16/2021	2.4	#N/A	#N/A	#N/A	#N/A	11/16/2021	2.4	19	2.7	0	0	0	0
2/7/2022	2.5	#N/A	#N/A	#N/A	#N/A	2/7/2022	2.5	20	2.8	0	0	0	0
5/9/2022	1.6	#N/A	#N/A	#N/A	#N/A	5/9/2022	1.6	21	2.9	1	1	0	0
8/3/2022	2.9	#N/A	#N/A	#N/A	#N/A	8/3/2022	2.9	22	2.9	1	0	2	18
11/1/2022	3.5	#N/A	#N/A	#N/A	#N/A	11/1/2022	3.5	23	3	0	0	0	0
2/27/2023	3	#N/A	#N/A	#N/A	#N/A	2/27/2023	3	24	3.1	0	0	0	0
5/15/2023	3.2	#N/A	#N/A	#N/A	#N/A	5/15/2023	3.2	25	3.2	0	0	0	0
8/10/2023	2.6	#N/A	#N/A	#N/A	#N/A	8/10/2023	2.6	26	3.4	0	0	0	0
11/7/2023	3.7	#N/A	#N/A	#N/A	#N/A	11/7/2023	3.7	27	3.5	0	0	0	0
2/21/2024	2.4	#N/A	#N/A	#N/A	#N/A	2/21/2024	2.4	28	3.7	0	0	0	0
5/15/2024	2.6	#N/A	#N/A	#N/A	#N/A	5/15/2024	2.6	29	3.8	0	0	0	0
8/6/2024	4	#N/A	#N/A	#N/A	#N/A	8/6/2024	4	30	4	0	0	0	0
11/12/2024	6.4	#N/A	#N/A	#N/A	#N/A	11/12/2024	6.4	31	4.1	0	0	0	0
2/10/2025	5.9	#N/A	#N/A	#N/A	#N/A	2/10/2025	5.9	32	5.9	0	0	0	0
5/1/2025	3.8	#N/A	#N/A	#N/A	#N/A	5/1/2025	3.8	33	6.4	0	0	0	0
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–	–

alpha :	0.104
Zo :	1.626
n :	33
S :	242
SD[S] :	64.420
Calcs for n_UG09 <= 10:	
x :	242
p-value :	—
Calcs for n_UG09 > 10:	
Z :	3.741
p-value :	9.16282E-05
M-K Results:	
p-value :	9.16282E-05
INCREASING TREND	

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MW-75D Vinyl chloride

Reference	EPA													
Data for Plot:						Data for Trend Analysis:			Sorted	Identifying Tie-Groups &				Summation
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data	Number of Ties in Each				Terms
5/23/2017	6.4	#N/A	5/6/2025	#N/A	#N/A	5/23/2017	6.4	1	1	1	1	0		0
7/26/2017	3.7	#N/A	#N/A	#N/A	#N/A	7/26/2017	3.7	2	1	1	2	0		0
11/8/2017	4.9	#N/A	#N/A	#N/A	#N/A	11/8/2017	4.9	3	1	1	0	3		66
2/6/2018	1.9	#N/A	#N/A	#N/A	#N/A	2/6/2018	1.9	4	1.1	0	0	0		0
5/9/2018	2.4	#N/A	#N/A	#N/A	#N/A	5/9/2018	2.4	5	1.2	1	1	0		0
8/9/2018	1.8	#N/A	#N/A	#N/A	#N/A	8/9/2018	1.8	6	1.2	1	0	2		18
10/22/2018	1.7	#N/A	#N/A	#N/A	#N/A	10/22/2018	1.7	7	1.3	1	1	0		0
3/7/2019	1.6	#N/A	#N/A	#N/A	#N/A	3/7/2019	1.6	8	1.3	1	0	2		18
5/15/2019	1.7	#N/A	#N/A	#N/A	#N/A	5/15/2019	1.7	9	1.6	1	1	0		0
9/18/2019	1.6	#N/A	#N/A	#N/A	#N/A	9/18/2019	1.6	10	1.6	1	2	0		0
11/26/2019	2.2	#N/A	#N/A	#N/A	#N/A	11/26/2019	2.2	11	1.6	1	3	0		0
2/4/2020	1	#N/A	#N/A	#N/A	#N/A	2/4/2020	1	12	1.6	1	0	4		156
5/20/2020	1.3	#N/A	#N/A	#N/A	#N/A	5/20/2020	1.3	13	1.7	1	1	0		0
8/11/2020	2.2	#N/A	#N/A	#N/A	#N/A	8/11/2020	2.2	14	1.7	1	0	2		18
11/13/2020	2.2	#N/A	#N/A	#N/A	#N/A	11/13/2020	2.2	15	1.8	0	0	0		0
2/10/2021	1.1	#N/A	#N/A	#N/A	#N/A	2/10/2021	1.1	16	1.9	1	1	0		0
5/19/2021	1.9	#N/A	#N/A	#N/A	#N/A	5/19/2021	1.9	17	1.9	1	2	0		0
8/16/2021	2.6	#N/A	#N/A	#N/A	#N/A	8/16/2021	2.6	18	1.9	1	0	3		66
11/17/2021	2.4	#N/A	#N/A	#N/A	#N/A	11/17/2021	2.4	19	2.1	0	0	0		0
2/24/2022	1	#N/A	#N/A	#N/A	#N/A	2/24/2022	1	20	2.2	1	1	0		0
5/10/2022	1	#N/A	#N/A	#N/A	#N/A	5/10/2022	1	21	2.2	1	2	0		0
8/9/2022	2.1	#N/A	#N/A	#N/A	#N/A	8/9/2022	2.1	22	2.2	1	0	3		66
11/2/2022	2.5	#N/A	#N/A	#N/A	#N/A	11/2/2022	2.5	23	2.4	1	1	0		0
2/28/2023	1.6	#N/A	#N/A	#N/A	#N/A	2/28/2023	1.6	24	2.4	1	2	0		0
5/16/2023	3	#N/A	#N/A	#N/A	#N/A	5/16/2023	3	25	2.4	1	0	3		66
8/8/2023	1.9	#N/A	#N/A	#N/A	#N/A	8/8/2023	1.9	26	2.5	1	1	0		0
11/8/2023	1.2	#N/A	#N/A	#N/A	#N/A	11/8/2023	1.2	27	2.5	1	0	2		18
3/4/2024	2.4	#N/A	#N/A	#N/A	#N/A	3/4/2024	2.4	28	2.6	0	0	0		0
5/15/2024	1.3	#N/A	#N/A	#N/A	#N/A	5/15/2024	1.3	29	2.8	0	0	0		0
8/8/2024	2.5	#N/A	#N/A	#N/A	#N/A	8/8/2024	2.5	30	3	0	0	0		0
11/15/2024	2.8	#N/A	#N/A	#N/A	#N/A	11/15/2024	2.8	31	3.7	0	0	0		0
2/17/2025	1.2	#N/A	#N/A	#N/A	#N/A	2/17/2025	1.2	32	4.9	0	0	0		0
5/6/2025	1.6	#N/A	#N/A	#N/A	#N/A	5/6/2025	1.6	33	6.4	0	0	0		0
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–		–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–		–

| | | | | | | | | | | | | |

MW-79D Vinyl chloride

| Reference | EPA | | |

MW-79SR Vinyl chloride

| Reference | EPA | | |

MW-80S Vinyl chloride

| Reference | EPA | | |

MW-80SR Vinyl chloride

| Reference | EPA | | |

MW-85 Vinyl chloride

| Reference | EPA | | |

MW-85SR Vinyl chloride

| Reference | EPA | | |

MW-89S Vinyl chloride

| Reference | EPA | | |

MW-102 Vinyl chloride

Reference	EPA														
		Data for Plot:				Data for Trend Analysis:			Sorted	Identifying Tie-Groups &			Summation		
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data	Number of Ties in Each			Terms		
12/19/2018	1.6	#N/A	5/8/2025	#N/A	#N/A	12/19/2018	1.6	1	0.5	0	0	0	0	alpha : 0.104	
2/25/2019	1.7	#N/A	#N/A	#N/A	#N/A	2/25/2019	1.7	2	1	0	0	0	0	Zo : 1.626	
5/17/2019	1.8	#N/A	#N/A	#N/A	#N/A	5/17/2019	1.8	3	1.2	0	0	0	0	n : 27	
9/18/2019	1	#N/A	#N/A	#N/A	#N/A	9/18/2019	1	4	1.3	1	1	0	0	S : 82	
11/18/2019	1.4	#N/A	#N/A	#N/A	#N/A	11/18/2019	1.4	5	1.3	1	0	2	18	SD[S] : 47.784	
2/14/2020	1.3	#N/A	#N/A	#N/A	#N/A	2/14/2020	1.3	6	1.4	0	0	0	0	**Calcs for n_UG09 <= 10:**	
5/22/2020	1.5	#N/A	#N/A	#N/A	#N/A	5/22/2020	1.5	7	1.5	1	1	0	0	x : 82	
8/14/2020	1	1	#N/A	#N/A	#N/A	8/14/2020	0.5	8	1.5	1	2	0	0	p-value : —	
11/12/2020	1.2	#N/A	#N/A	#N/A	#N/A	11/12/2020	1.2	9	1.5	1	0	3	66	**Calcs for n_UG09 > 10:**	
2/18/2021	2.2	#N/A	#N/A	#N/A	#N/A	2/18/2021	2.2	10	1.6	1	1	0	0	Z : 1.695	
5/18/2021	1.5	#N/A	#N/A	#N/A	#N/A	5/18/2021	1.5	11	1.6	1	2	0	0	p-value : 0.045026362	
8/18/2021	2.4	#N/A	#N/A	#N/A	#N/A	8/18/2021	2.4	12	1.6	1	0	3	66	**M-K Results:**	
11/3/2021	2.8	#N/A	#N/A	#N/A	#N/A	11/3/2021	2.8	13	1.7	0	0	0	0	p-value : 0.045026362	
2/10/2022	1.3	#N/A	#N/A	#N/A	#N/A	2/10/2022	1.3	14	1.8	1	1	0	0	**INCREASING TREND**	
5/20/2022	2.3	#N/A	#N/A	#N/A	#N/A	5/20/2022	2.3	15	1.8	1	2	0	0		
8/12/2022	2.8	#N/A	#N/A	#N/A	#N/A	8/12/2022	2.8	16	1.8	1	0	3	66		
10/31/2022	2.2	#N/A	#N/A	#N/A	#N/A	10/31/2022	2.2	17	2.1	1	1	0	0		
3/6/2023	2.1	#N/A	#N/A	#N/A	#N/A	3/6/2023	2.1	18	2.1	1	0	2	18		
5/15/2023	2.8	#N/A	#N/A	#N/A	#N/A	5/15/2023	2.8	19	2.2	1	1	0	0		
8/8/2023	3	#N/A	#N/A	#N/A	#N/A	8/8/2023	3	20	2.2	1	0	2	18		
10/30/2023	1.6	#N/A	#N/A	#N/A	#N/A	10/30/2023	1.6	21	2.3	0	0	0	0		
3/4/2024	2.1	#N/A	#N/A	#N/A	#N/A	3/4/2024	2.1	22	2.4	0	0	0	0		
5/17/2024	1.8	#N/A	#N/A	#N/A	#N/A	5/17/2024	1.8	23	2.7	0	0	0	0		
8/9/2024	1.8	#N/A	#N/A	#N/A	#N/A	8/9/2024	1.8	24	2.8	1	1	0	0		
11/18/2024	2.7	#N/A	#N/A	#N/A	#N/A	11/18/2024	2.7	25	2.8	1	2	0	0		
2/19/2025	1.6	#N/A	#N/A	#N/A	#N/A	2/19/2025	1.6	26	2.8	1	0	3	66		
5/8/2025	1.5	#N/A	#N/A	#N/A	#N/A	5/8/2025	1.5	27	3	0	0	0	0		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		28	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		29	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		30	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		31	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		32	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		33	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–	–		
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–	–		

# + signs (1):	15	14	11	22	18	18	15	19	18	7	14	5	1	13	4	1	3	3	1	0	4	1	1	1	0	0
# - signs (-1):	9	11	11	1	4	2	3	0	0	9	1	10	11	0	8	9	7	5	7	7	1	4	2	2	2	1
SUM:	6	3	0	21	14	16	12	19	18	-2	13	-5	-10	13	-4	-8	-4	-2	-6	-7	3	-3	-1	-1	-2	-1

S Calculation:

1																										
1	1																									
-1	-1	-1																								
-1	-1	-1	1																							
-1	-1	-1	1	-1																						
-1	-1	-1	1	1	1																					
-1	-1	-1	-1	-1	-1	-1																				
-1	-1	-1	-1	-1	-1	-1	1																			
1	1	1	1	1	1	1	1	1																		
1	1	1	1	1	1	1	0	1	-1																	
-1	-1	-1	1	-1	-1	-1	1	1	1	1																
1	1	1	1	1	1	1	1	1	1	1	1															
1	1	1	1	1	1	1	1	1	1	1	1	1														
1	1	1	1	1	1	1	1	1	1	1	1	-1	-1													
1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	1												
1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	1	-1											
1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	1	-1	-1										
1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1								
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
0	-1	-1	1	1	1	1	1	1	1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1						
1	1	1	1	1	1	1	1	1	1	-1	1	-1	-1	1	-1	-1	-1	0	-1	-1	1					
1	1	0	1	1	1	1	1	1	1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1	1	-1				
1	1	0	1	1	1	1	1	1	1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1	1	-1	0			
1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	1	-1	-1	-1	1	-1	-1	1	1	1	1		
0	-1	-1	1	1	1	1	1	1	1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	
-1	-1	-1	1	1	1	1	0	1	1	-1	0	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

MW-115S Vinyl chloride

| Reference | EPA | | |

MW-123S Vinyl chloride

Reference	EPA								Sorted	Identifying Tie-Groups &			Summation
	Data for Plot:					Data for Trend Analysis:				Number of Ties in Each			
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data				Terms
12/28/2018	4.6	#N/A	5/12/2025	#N/A	#N/A	12/28/2018	4.6	1	0.5	1	1	0	0
3/7/2019	4.4	#N/A	#N/A	#N/A	#N/A	3/7/2019	4.4	2	0.5	1	2	0	0
9/16/2019	3.9	#N/A	#N/A	#N/A	#N/A	9/16/2019	3.9	3	0.5	1	3	0	0
11/20/2019	1.9	#N/A	#N/A	#N/A	#N/A	11/20/2019	1.9	4	0.5	1	4	0	0
2/5/2020	1.8	#N/A	#N/A	#N/A	#N/A	2/5/2020	1.8	5	0.5	1	0	5	300
8/19/2020	4.4	#N/A	#N/A	#N/A	#N/A	8/19/2020	4.4	6	0.74	0	0	0	0
11/5/2020	3.1	#N/A	#N/A	#N/A	#N/A	11/5/2020	3.1	7	1	0	0	0	0
2/10/2021	1.7	#N/A	#N/A	#N/A	#N/A	2/10/2021	1.7	8	1.7	1	1	0	0
5/19/2021	3.7	#N/A	#N/A	#N/A	#N/A	5/19/2021	3.7	9	1.7	1	0	2	18
8/13/2021	1	1	#N/A	#N/A	#N/A	8/13/2021	0.5	10	1.8	0	0	0	0
11/8/2021	2.8	#N/A	#N/A	#N/A	#N/A	11/8/2021	2.8	11	1.9	0	0	0	0
2/24/2022	2	#N/A	#N/A	#N/A	#N/A	2/24/2022	2	12	2	0	0	0	0
5/11/2022	1.7	#N/A	#N/A	#N/A	#N/A	5/11/2022	1.7	13	2.2	1	1	0	0
8/18/2022	3.7	#N/A	#N/A	#N/A	#N/A	8/18/2022	3.7	14	2.2	1	0	2	18
11/14/2022	3.2	#N/A	#N/A	#N/A	#N/A	11/14/2022	3.2	15	2.8	0	0	0	0
2/22/2023	2.2	#N/A	#N/A	#N/A	#N/A	2/22/2023	2.2	16	3	0	0	0	0
5/3/2023	1	1	#N/A	#N/A	#N/A	5/3/2023	0.5	17	3.1	1	1	0	0
8/9/2023	3.1	#N/A	#N/A	#N/A	#N/A	8/9/2023	3.1	18	3.1	1	0	2	18
11/2/2023	1	1	#N/A	#N/A	#N/A	11/2/2023	0.5	19	3.2	0	0	0	0
2/29/2024	1	1	#N/A	#N/A	#N/A	2/29/2024	0.5	20	3.7	1	1	0	0
5/16/2024	0.74	#N/A	#N/A	#N/A	#N/A	5/16/2024	0.74	21	3.7	1	0	2	18
7/31/2024	3	#N/A	#N/A	#N/A	#N/A	7/31/2024	3	22	3.9	0	0	0	0
11/19/2024	2.2	#N/A	#N/A	#N/A	#N/A	11/19/2024	2.2	23	4.4	1	1	0	0
2/18/2025	1	#N/A	#N/A	#N/A	#N/A	2/18/2025	1	24	4.4	1	0	2	18
5/12/2025	1	1	#N/A	#N/A	#N/A	5/12/2025	0.5	25	4.6	0	0	0	0
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		26	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		27	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		28	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		29	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		30	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		31	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		32	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		33	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–	–

alpha :	0.104
Zo :	1.626
n :	25
S :	-125
SD[S] :	42.564
Calcs for n_UG09 <= 10:	
x :	125
p-value :	—
Calcs for n_UG09 > 10:	
Z :	2.913
p-value :	0.001788257
M-K Results:	
p-value :	0.001788257
DECREASING TREND	

| | | | | | | | |

MW-127S Vinyl chloride

| Reference | EPA | | |

MW-130S Vinyl chloride

| Reference | EPA | | |

MW-131S Vinyl chloride

| Reference | EPA | | |

MW-137S Vinyl chloride

| Reference | EPA | | |

MW-138S Vinyl chloride

Reference	EPA								Sorted	Identifying Tie-Groups &			Summation
	Data for Plot:					Data for Trend Analysis:				Number of Ties in Each			
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data				Terms
2/19/2019	1.7	#N/A	5/8/2025	#N/A	#N/A	2/19/2019	1.7	1	0.5	0	0	0	0
5/16/2019	1.6	#N/A	#N/A	#N/A	#N/A	5/16/2019	1.6	2	0.75	0	0	0	0
9/23/2019	1.4	#N/A	#N/A	#N/A	#N/A	9/23/2019	1.4	3	0.83	0	0	0	0
11/15/2019	1.2	#N/A	#N/A	#N/A	#N/A	11/15/2019	1.2	4	0.89	0	0	0	0
2/12/2020	1.3	#N/A	#N/A	#N/A	#N/A	2/12/2020	1.3	5	0.98	1	1	0	0
5/26/2020	2.8	#N/A	#N/A	#N/A	#N/A	5/26/2020	2.8	6	0.98	1	0	2	18
8/5/2020	2.1	#N/A	#N/A	#N/A	#N/A	8/5/2020	2.1	7	1.1	1	1	0	0
11/12/2020	1.8	#N/A	#N/A	#N/A	#N/A	11/12/2020	1.8	8	1.1	1	2	0	0
2/10/2021	1.3	#N/A	#N/A	#N/A	#N/A	2/10/2021	1.3	9	1.1	1	0	3	66
5/18/2021	2.2	#N/A	#N/A	#N/A	#N/A	5/18/2021	2.2	10	1.2	0	0	0	0
8/19/2021	1.9	#N/A	#N/A	#N/A	#N/A	8/19/2021	1.9	11	1.3	1	1	0	0
11/5/2021	1.3	#N/A	#N/A	#N/A	#N/A	11/5/2021	1.3	12	1.3	1	2	0	0
2/21/2022	1.5	#N/A	#N/A	#N/A	#N/A	2/21/2022	1.5	13	1.3	1	0	3	66
5/20/2022	1.6	#N/A	#N/A	#N/A	#N/A	5/20/2022	1.6	14	1.4	0	0	0	0
8/17/2022	2.2	#N/A	#N/A	#N/A	#N/A	8/17/2022	2.2	15	1.5	1	1	0	0
11/8/2022	1.5	#N/A	#N/A	#N/A	#N/A	11/8/2022	1.5	16	1.5	1	2	0	0
3/15/2023	1.1	#N/A	#N/A	#N/A	#N/A	3/15/2023	1.1	17	1.5	1	0	3	66
5/2/2023	1	1	#N/A	#N/A	#N/A	5/2/2023	0.5	18	1.6	1	1	0	0
8/3/2023	0.98	#N/A	#N/A	#N/A	#N/A	8/3/2023	0.98	19	1.6	1	0	2	18
11/6/2023	1.1	#N/A	#N/A	#N/A	#N/A	11/6/2023	1.1	20	1.7	0	0	0	0
2/28/2024	0.89	#N/A	#N/A	#N/A	#N/A	2/28/2024	0.89	21	1.8	0	0	0	0
5/17/2024	1.5	#N/A	#N/A	#N/A	#N/A	5/17/2024	1.5	22	1.9	0	0	0	0
7/29/2024	0.98	#N/A	#N/A	#N/A	#N/A	7/29/2024	0.98	23	2.1	0	0	0	0
11/13/2024	1.1	#N/A	#N/A	#N/A	#N/A	11/13/2024	1.1	24	2.2	1	1	0	0
2/19/2025	0.75	#N/A	#N/A	#N/A	#N/A	2/19/2025	0.75	25	2.2	1	0	2	18
5/8/2025	0.83	#N/A	#N/A	#N/A	#N/A	5/8/2025	0.83	26	2.8	0	0	0	0
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		27	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		28	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		29	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		30	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		31	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		32	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		33	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–	–

| | | | | | | | |

MW-147S Vinyl chloride

| Reference | EPA | | |

MW-148S Vinyl chloride

| Reference | EPA | | |

MW-149S Vinyl chloride

Reference	EPA								Sorted	Identifying Tie-Groups &			Summation
	Data for Plot:					Data for Trend Analysis:				Number of Ties in Each			
Analyte Date	Vinyl Chloride	Analyte NDs	Secondary Analyte Date	Secondary Analyte	Secondary Analyte NDs	Date	All Data	i	Data				Terms
2/21/2019	1.4	#N/A	5/8/2025	#N/A	#N/A	2/21/2019	1.4	1	0.5	1	1	0	0
9/18/2019	1.9	#N/A	#N/A	#N/A	#N/A	9/18/2019	1.9	2	0.5	1	0	2	18
11/21/2019	2.1	#N/A	#N/A	#N/A	#N/A	11/21/2019	2.1	3	0.91	0	0	0	0
2/7/2020	1.9	#N/A	#N/A	#N/A	#N/A	2/7/2020	1.9	4	0.93	0	0	0	0
8/24/2020	2.3	#N/A	#N/A	#N/A	#N/A	8/24/2020	2.3	5	1.1	1	1	0	0
11/3/2020	2.5	#N/A	#N/A	#N/A	#N/A	11/3/2020	2.5	6	1.1	1	0	2	18
2/11/2021	1.7	1.7	#N/A	#N/A	#N/A	2/11/2021	0.5	7	1.4	1	1	0	0
5/18/2021	2.5	#N/A	#N/A	#N/A	#N/A	5/18/2021	2.5	8	1.4	1	2	0	0
8/11/2021	1.7	#N/A	#N/A	#N/A	#N/A	8/11/2021	1.7	9	1.4	1	0	3	66
11/8/2021	1.5	#N/A	#N/A	#N/A	#N/A	11/8/2021	1.5	10	1.5	1	1	0	0
5/17/2022	1.4	#N/A	#N/A	#N/A	#N/A	5/17/2022	1.4	11	1.5	1	0	2	18
8/12/2022	3.6	#N/A	#N/A	#N/A	#N/A	8/12/2022	3.6	12	1.6	1	1	0	0
11/9/2022	2.5	#N/A	#N/A	#N/A	#N/A	11/9/2022	2.5	13	1.6	1	0	2	18
3/16/2023	0.93	#N/A	#N/A	#N/A	#N/A	3/16/2023	0.93	14	1.7	1	1	0	0
5/2/2023	1	1	#N/A	#N/A	#N/A	5/2/2023	0.5	15	1.7	1	0	2	18
8/8/2023	1.6	#N/A	#N/A	#N/A	#N/A	8/8/2023	1.6	16	1.9	1	1	0	0
11/2/2023	1.6	#N/A	#N/A	#N/A	#N/A	11/2/2023	1.6	17	1.9	1	0	2	18
2/29/2024	1.1	#N/A	#N/A	#N/A	#N/A	2/29/2024	1.1	18	2.1	0	0	0	0
5/17/2024	1.7	#N/A	#N/A	#N/A	#N/A	5/17/2024	1.7	19	2.3	0	0	0	0
8/8/2024	1.4	#N/A	#N/A	#N/A	#N/A	8/8/2024	1.4	20	2.5	1	1	0	0
11/19/2024	0.91	#N/A	#N/A	#N/A	#N/A	11/19/2024	0.91	21	2.5	1	2	0	0
2/18/2025	1.5	#N/A	#N/A	#N/A	#N/A	2/18/2025	1.5	22	2.5	1	0	3	66
5/8/2025	1.1	#N/A	#N/A	#N/A	#N/A	5/8/2025	1.1	23	3.6	0	0	0	0
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		24	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		25	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		26	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		27	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		28	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		29	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		30	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		31	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		32	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		33	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		34	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		35	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		36	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		37	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		38	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		39	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		40	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		41	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		42	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		43	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		44	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		45	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		46	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		47	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		48	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		49	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		50	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		51	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		52	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		53	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		54	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		55	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		56	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		57	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		58	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		59	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		60	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		61	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		62	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		63	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		64	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		65	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		66	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		67	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		68	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		69	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		70	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		71	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		72	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		73	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		74	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		75	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		76	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		77	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		78	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		79	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		80	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		81	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		82	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		83	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		84	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		85	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		86	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		87	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		88	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		89	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		90	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		91	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		92	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		93	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		94	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		95	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		96	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		97	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		98	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		99	–	–	–	–	–
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		100	–	–	–	–	–

# + signs (1):	14	6	5	5	4	1	15	1	2	5	6	0	0	7	8	1	1	3	0	1	2	0								
# - signs (-1):	6	14	15	14	14	14	0	13	11	7	5	11	10	2	0	5	5	1	4	2	0	1								
SUM:	8	-8	-10	-9	-10	-13	15	-12	-9	-2	1	-11	-10	5	8	-4	-4	2	-4	-1	2	-1								
alpha : 0.104	S Calculation:																													
Zo : 1.626	1																													
n : 23	1	1																												
S : -67	1	0	-1																											
SD[S] : 37.687	1	1	1	1																										
Calcs for n_UG09 <= 10:	1	1	1	1	1																									
x : 67	-1	-1	-1	-1	-1	-1																								
p-value : —	1	1	1	1	1	0	1																							
Calcs for n_UG09 > 10:	1	-1	-1	-1	-1	-1	1	-1																						
Z : 1.751	1	-1	-1	-1	-1	-1	1	-1	-1																					
p-value : 0.039951203	0	-1	-1	-1	-1	-1	1	-1	-1	-1																				
M-K Results:	1	1	1	1	1	1	1	1	1	1	1																			
p-value : 0.039951203	1	1	1	1	1	0	1	0	1	1	1	-1																		
DECREASING TREND	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1																	
	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1																
	1	-1	-1	-1	-1	-1	1	-1	-1	1	1	-1	-1	1	1															
	1	-1	-1	-1	-1	-1	1	-1	-1	1	1	-1	-1	1	1	0														
	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	1	1	-1	-1													
	1	-1	-1	-1	-1	-1	1	-1	0	1	1	-1	-1	1	1	1	1	1												
	0	-1	-1	-1	-1	-1	1	-1	-1	-1	0	-1	-1	1	1	-1	-1	1	-1											
	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1										
	1	-1	-1	-1	-1	-1	1	-1	-1	0	1	-1	-1	1	1	-1	-1	1	-1	1	1									
	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	1	1	-1	-1	0	-1	-1	0	-1								

MW-150S Vinyl chloride

| Reference | EPA | | |

MW-151S Vinyl chloride

| Reference | EPA | | |