Transmittal Letter



TO Raed Qahwash 34480 Capitol Livonia, MI 48150

ELECTRONIC COPIES TO Jeanne Schlaufman (EGLE) Todd Walton (Ford)

PROJECT NUMBER 30146655

Chuck Pinter (Ford)

FROM Kristoffer Hinskey 248-994-2240 <u>kristoffer.hinskey@arcadis.com</u>

DATE October 4, 2022

SUBJECT Operation, Monitoring, and Maintenance Field Notes - 34480 Capitol

We are sending you:

Copies	Delivery Date	Description
1	10/6/2022	Operation, monitoring, and maintenance field notes.

Action*

 A Approved AN Approved as Noted AS As Requested Other:	☐ CR ☐ F ☐ FA	Correct and Resubmit File For Approval	☐ Res ☐ Reti ☐ Rev	ubmit Copies urn Copies view and Comment
Mailing Method				
 □ U.S. Postal Service 1st Class □ Certified/Registered Mail ☑ Other: Email 	Courier/Hand De	livery	Priority Overnight Standard Overnight	 FedEx 2-Day Delivery FedEx Economy

Comments:

Attached are the interim preemptive mitigation (IPM) system Operation, Monitoring, and Maintenance (OM&M) field notes. These field notes were recorded during OM&M visits at the property between March 31, 2020 and March 31, 2022. Please let me know if you have any questions.

34480 Capitol, 2020-11-16, Full System Inspection

Created	2020-11-16 16:47:19 UTC by Seth Turner
Updated	2020-11-16 17:39:22 UTC by Seth Turner

General Information

System Inspector	Seth Turner
Date	2020-11-16
Time	11:47
System Details Link	34480 Capitol
Property Address	34480 Capitol
Check Inspection(s) to be Completed	Full System Inspection
Get weather data from National Weather Service Website for your current location?	N/A
Weather	Cloudy
Ambient Temperature	37.04
Barometric Pressure	29.98
Indoor Temperature	70

Design Components

Does the house have a basement?	No
Does the house have a sump?	No
Does the house have garage retrocoat?	Yes
Does the house have shed retrocoat?	No
Does the house have basement retrocoat?	No
Does the house have a crawlspace barrier?	Yes
Does the house have an inaccessible crawlspace?	No
Does the house have a water sensor?	No

System Inspection

Fan	
Fan(s) operating?	Yes
Are there any unusual fan noises?	No
Piping	
ls any caulking required around pipe penetrations, slab cracks, expansion joints, or foundation walls?	No
Are piping, piping joints, and brackets intact and secure?	Yes
ls the insulation and insulation jacket damaged or missing in garage or exterior piping?	No
Valves	
Upon arrival, are all valves in the same position as the prior visit (reference Power Bl)?	Yes

Drains

Do any drain seals need to be repaired or replaced?	No
Garage Retrocoat	
Is retrocoat damaged or missing?	No
Crawlspace Barrier	
ls water present on the vapor barrier?	No
Labels	
Are labels present at the pipe, control panel, u- tube, and breaker?	Yes
Garage Retrocoat Label Photos	<complex-block></complex-block>

Yes

Are labels present at the crawlspace barrier?



Vacuum Monitoring		
Is the u-tube accurate (test with micromanometer/manometer, rezero/replace as needed)?	Yes	
Is the vacuum switch accurate (test with micromanometer)?	Yes	
Do any monitoring points (MP/SSMP) need to be repaired or replaced?	No	
If multiple systems are present, were both inspected?	N/A	
Inspection Measurements		
Pre-Measurement Conditions		
Are vacuum readings being taken under closed building conditions?	Yes	
Do any monitoring points have transmitters?	Yes	
Measurements and Valve Positions		
MP-3, 12:26, -0.015		

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2020-11-16
Time	12:26
Vacuum Reading (in. w.c.)	-0.015

Number Vacuum Reading

-0.015

MP-1, 12:26, -0.026

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2020-11-16
Time	12:26
Vacuum Reading (in. w.c.)	-0.026
Number Vacuum Reading	-0.026

MP-2, 12:26, -0.026

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2020-11-16
Time	12:26
Vacuum Reading (in. w.c.)	-0.026
Number Vacuum Reading	-0.026

U-Tube Manometer, 12:27, -2.0

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2020-11-16
Time	12:27
Vacuum Reading (in. w.c.)	-2.0
Number Vacuum Reading	-2.0

SSMP-2, 12:30, -0.010

Vacuum ID Link	34480 Capitol, SSMP-2	
Vacuum ID	SSMP-2	
Date	2020-11-16	
Time	12:30	
Vacuum Reading (in. w.c.)	-0.010	
Number Vacuum Reading	-0.01	

BV-3, 12:01, 100

Valve ID Link	34480 Capitol, BV-3	
Valve ID	BV-3	
Date	2020-11-16	
Time	12:01	
Valve Position at Arrival (% Open)	100	
Valve Position at Departure (% Open)	100	

BV-4, 12:01, 75

Valve ID Link	34480 Capitol, BV-4	
Valve ID	BV-4	
Date	2020-11-16	

Time	12:01
Valve Position at Arrival (% Open)	75
Valve Position at Departure (% Open)	75

BV-1, 12:05, 25

Valve ID Link	34480 Capitol, BV-1	
Valve ID	BV-1	
Date	2020-11-16	
Time	12:05	
Valve Position at Arrival (% Open)	25	
Valve Position at Departure (% Open)	25	

BV-2, 12:05, 100

Valve ID Link	34480 Capitol, BV-2
Valve ID	BV-2
Date	2020-11-16
Time	12:05
Valve Position at Arrival (% Open)	100
Valve Position at Departure (% Open)	100
Were interim vacuum readings taken between initial and final vacuum readings?	No

Inspection Reading Analysis

Manometer

Is the system manometer steady?	Yes
SSMP/MPs	
Were any vacuum monitoring points not accessible? Please specify.	No
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	No
Which ones don't and why?	SSMP-02, transmitter
Proposed modifications to address vacuum?	Transmitter is installed
Were any ball valve positions changed?	No

Alarm Testing

0	
Sensaphone Link	N/A
Does the vacuum switch alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the fan disconnect alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the transmitter alarm work? Test the alarm condition and verify an alarm registers.	Yes
Check the alarm history on the disconnect for the fan. Was it off for any length of time?	No
Is the cloud logging vacuum readings properly (log in to check)?	Yes

Repairs

Sample Delay	
Send Sample Delay Email	N/A
email body	
Repair Completion	
Were seam repairs completed during this visit?	No
Were system repairs completed during this visit?	No
Are there outstanding repairs to be completed?	No
Owner/Tenant Observations	
Have there been any changes to the fan noise level or vibration?	No
Have any structures been built or modified that require vapor mitigation?	No
Engineer Notification	
Send Inspection Completion Email	N/A
email body	
Engineer Notification	
Send Inspection Completion Email - add any repairs, repair needs, or critical communications in email text	N/A
email body	

34480 Capitol, 2020-12-03, System Check

Created	2020-12-03 14:11:57 UTC by Emma Witherspoon
Updated	2020-12-04 19:50:26 UTC by Emma Witherspoon

General Information

System Inspector	Emma Witherspoon
Date	2020-12-03
Time	09:11
System Details Link	34480 Capitol
Property Address	34480 Capitol
Check Inspection(s) to be Completed	System Check
Get weather data from National Weather Service Website for your current location?	N/A
Weather	Cloudy
Ambient Temperature	30.02
Barometric Pressure	30.14
Indoor Temperature	30

Inspection Measurements

Pre-Measurement Conditions

Are vacuum readings being taken under closed Yes building conditions?

Measurements and Valve Positions

MP-1, 09:12, -0.032

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2020-12-03
Time	09:12
Vacuum Reading (in. w.c.)	-0.032
Number Vacuum Reading	-0.032

MP-3, 09:12, -0.013

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2020-12-03
Time	09:12
Vacuum Reading (in. w.c.)	-0.013
Number Vacuum Reading	-0.013

MP-2, 09:13, -0.021

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2020-12-03
Time	09:13

Vacuum Reading (in. w.c.)	-0.021
Number Vacuum Reading	-0.021

U-Tube Manometer, 09:15, -1.7

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2020-12-03
Time	09:15
Vacuum Reading (in. w.c.)	-1.7
Number Vacuum Reading	-1.7

MP-3, 09:41, -0.011

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2020-12-03
Time	09:41
Vacuum Reading (in. w.c.)	-0.011
Number Vacuum Reading	-0.011

MP-2, 09:42, -0.007

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2020-12-03
Time	09:42
Vacuum Reading (in. w.c.)	-0.007
Number Vacuum Reading	-0.007

MP-1, 09:43, -0.023

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2020-12-03
Time	09:43
Vacuum Reading (in. w.c.)	-0.023
Number Vacuum Reading	-0.023

U-Tube Manometer, 10:19, -1

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2020-12-03
Time	10:19
Vacuum Reading (in. w.c.)	-1
Number Vacuum Reading	-1

BV-1, 10:24, 100

Valve ID Link	34480 Capitol, BV-1
Valve ID	BV-1

Date	2020-12-03
Time	10:24
Valve Position at Departure (% Open)	100
Were interim vacuum readings taken between initial and final vacuum readings?	No
Inspection Reading Analysis	
Manometer	
Is the system manometer steady?	Yes
SSMP/MPs	
Were any vacuum monitoring points not accessible? Please specify.	No, all were accessible
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	Yes
Were any ball valve positions changed?	No
Alarm Testing	
Sensaphone Link	N/A
Repairs	
Sample Delay	
Send Sample Delay Email	N/A
email body	
Repair Completion	
Were seam repairs completed during this visit?	No
Were system repairs completed during this visit?	No
Are there outstanding repairs to be completed?	No
Engineer Notification	
Send Inspection Completion Email	N/A
email body	
Engineer Notification	
Send Inspection Completion Fmail - add any	N/A
repairs, repair needs, or critical communications in email text	· · · · ·
email body	

34480 Capitol, 2021-02-19, System Check

Created	2021-02-19 14:46:45 UTC by Seth Turner
Updated	2021-02-19 16:40:36 UTC by Andrew Banitt

General Information

System Inspector	Seth Turner
Date	2021-02-19
Time	10:00
System Details Link	34480 Capitol
Property Address	34480 Capitol
Check Inspection(s) to be Completed	System Check
Get weather data from National Weather Service Website for your current location?	N/A
Weather	21F sunny
Ambient Temperature	21F
Barometric Pressure	29.87
Indoor Temperature	70

Inspection Measurements

Pre-Measurement Conditions

Are vacuum readings being taken under closed Yes building conditions?

Measurements and Valve Positions

MP-2, 10:25, -0.011

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2021-02-19
Time	10:25
Vacuum Reading (in. w.c.)	-0.011
Number Vacuum Reading	-0.011

MP-3, 10:27, -0.011

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2021-02-19
Time	10:27
Vacuum Reading (in. w.c.)	-0.011
Number Vacuum Reading	-0.011

MP-1, 10:28, -0.020

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2021-02-19
Time	10:28

Vacuum Reading (in. w.c.)	-0.020
Number Vacuum Reading	-0.02

U-Tube Manometer, 10:30, -0.6

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2021-02-19
Time	10:30
Vacuum Reading (in. w.c.)	-0.6
Number Vacuum Reading	-0.6

SSMP-2, 10:44, -0.003

Vacuum ID Link	34480 Capitol, SSMP-2
Vacuum ID	SSMP-2
Date	2021-02-19
Time	10:44
Vacuum Reading (in. w.c.)	-0.003
Number Vacuum Reading	-0.003
Threshold pressure not met, troubleshoot and discuss with engineer as needed.	+/- 0.003, windy

BV-1, 10:16, 25

Valve ID Link	34480 Capitol, BV-1
Valve ID	BV-1
Date	2021-02-19
Time	10:16
Valve Position at Departure (% Open)	25

BV-2, 10:18, 100

Valve ID Link	34480 Capitol, BV-2
Valve ID	BV-2
Date	2021-02-19
Time	10:18
Valve Position at Departure (% Open)	100

BV-3, 10:18, 100

Valve ID Link	34480 Capitol, BV-3
Valve ID	BV-3
Date	2021-02-19
Time	10:18
Valve Position at Departure (% Open)	100

BV-4, 10:18, 75

Valve ID Link	34480 Capitol, BV-4
Valve ID	BV-4
Date	2021-02-19
Time	10:18

Valve Position at Departure (% Open)	75
Were interim vacuum readings taken between initial and final vacuum readings?	No
Inspection Reading Analysis	
Manometer	
ls the system manometer steady?	Yes
SSMP/MPs	
Were any vacuum monitoring points not accessible? Please specify.	None
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	No
Which ones don't and why?	ssmp-2, mp-2, mp-3
Proposed modifications to address vacuum?	Transmitter present at ssmp-2.
Were any ball valve positions changed?	No
Alarm Testing	
Sensaphone Link	N/A
Repairs	
Sample Delay	
Send Sample Delay Email	N/A
email body	
Repair Completion	
Were seam repairs completed during this visit?	No
Were system repairs completed during this visit?	Yes
System repairs completed:	Vacuum switch changed from 1" to 1/4".
System Repair Completion Date	2021-02-19



Are there outstanding repairs to be completed?	No
Engineer Notification	
Send Inspection Completion Email	N/A
email body	
Engineer Notification	
Send Inspection Completion Email - add any repairs, repair needs, or critical communications in email text	N/A
email body	

34480 Capitol, 2021-03-08, Full System Inspection

Created	2021-03-08 15:27:02 UTC by Emma Witherspoon
Updated	2021-03-08 18:09:39 UTC by Andrew Banitt

General Information

System Inspector	Emma Witherspoon
Date	2021-03-08
Time	10:20
System Details Link	34480 Capitol
Property Address	34480 Capitol
Check Inspection(s) to be Completed	Full System Inspection
Get weather data from National Weather Service Website for your current location?	N/A
Weather	Mostly Cloudy
Ambient Temperature	42.98
Barometric Pressure	30.33
Indoor Temperature	70

Design Components

Does the house have a basement?	No
Does the house have a sump?	No
Does the house have garage retrocoat?	Yes
Does the house have shed retrocoat?	No
Does the house have basement retrocoat?	No
Does the house have a crawlspace barrier?	Yes
Does the house have an inaccessible crawlspace?	No
Does the house have a water sensor?	No

System Inspection

Fan	
Fan(s) operating?	Yes
Are there any unusual fan noises?	No
Piping	
ls any caulking required around pipe penetrations, slab cracks, expansion joints, or foundation walls?	No
Are piping, piping joints, and brackets intact and secure?	Yes
Is the insulation and insulation jacket damaged or missing in garage or exterior piping?	No
Valves	
Upon arrival, are all valves in the same position as the prior visit (reference Power Bl)?	Yes

Drains

Do any drain seals need to be repaired or	No
replaced?	

Garage Retrocoat		
Is retrocoat damaged or missing?	No	
Crawlspace Barrier		
Is water present on the vapor barrier?	No	

Labels

Are labels present at the pipe, control panel, u-Yes tube, and breaker?

Common Label Photos





Garage Retrocoat Label Photos



Yes



Vacuum Monitoring

Vacuum Monitoring	
ls the u-tube accurate (test with micromanometer/manometer, rezero/replace as needed)?	Yes
ls the vacuum switch accurate (test with micromanometer)?	Yes
Do any monitoring points (MP/SSMP) need to be repaired or replaced?	No
If multiple systems are present, were both inspected?	No
Inspection Measurements	
Pre-Measurement Conditions	
Are vacuum readings being taken under closed building conditions?	Yes
Do any monitoring points have transmitters?	Yes
SSMP-2	
Monitoring Point with Transmitter?	SSMP-2
Transmitter Ambient Reading (iwc, transmitter inlet tubing disconnected)	0
Transmitter Reading (iwc, with fan operating)	-0.007
Micromanometer Ambient Reading (iwc, transmitter inlet tubing disconnected)	0

Micromanometer Fan Reading (iwc, with fan operating)	-0.006
Calibration Calc	0.001
Transmitter off by >0.0003, recalibrate/fix transmitter	

Measurements and Valve Positions

MP-2, 10:33, -.012

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2021-03-08
Time	10:33
Vacuum Reading (in. w.c.)	012
Number Vacuum Reading	-0.012

MP-1, 10:33, -.014

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2021-03-08
Time	10:33
Vacuum Reading (in. w.c.)	014
Number Vacuum Reading	-0.014

MP-3, 10:33, -.012

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2021-03-08
Time	10:33
Vacuum Reading (in. w.c.)	012
Number Vacuum Reading	-0.012

U-Tube Manometer, 10:34, -1

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2021-03-08
Time	10:34
Vacuum Reading (in. w.c.)	-1
Number Vacuum Reading	-1

SSMP-2, 10:50, -.004

Vacuum ID Link	34480 Capitol, SSMP-2
Vacuum ID	SSMP-2
Date	2021-03-08
Time	10:50
Vacuum Reading (in. w.c.)	004
Number Vacuum Reading	-0.004

MP-1, 11:31, -.018

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2021-03-08
Time	11:31
Vacuum Reading (in. w.c.)	018
Number Vacuum Reading	-0.018

MP-2, 11:32, -.012

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2021-03-08
Time	11:32
Vacuum Reading (in. w.c.)	012
Number Vacuum Reading	-0.012

MP-3, 11:32, -.012

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2021-03-08
Time	11:32
Vacuum Reading (in. w.c.)	012
Number Vacuum Reading	-0.012

U-Tube Manometer, 11:33, -1

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2021-03-08
Time	11:33
Vacuum Reading (in. w.c.)	-1
Number Vacuum Reading	-1

SSMP-2, 11:33, -.006

Vacuum ID Link	34480 Capitol, SSMP-2
Vacuum ID	SSMP-2
Date	2021-03-08
Time	11:33
Vacuum Reading (in. w.c.)	006
Number Vacuum Reading	-0.006

BV-1, 11:00, 25

Valve ID Link	34480 Capitol, BV-1
Valve ID	BV-1
Date	2021-03-08
Time	11:00
Valve Position at Arrival (% Open)	25

BV-2, 11:00, 75

,, .	
Valve ID Link	34480 Capitol, BV-2
Valve ID	BV-2
Date	2021-03-08
Time	11:00
Valve Position at Arrival (% Open)	75
Valve Position at Departure (% Open)	75

BV-3, 11:02, 100

Valve ID Link	34480 Capitol, BV-3
Valve ID	BV-3
Date	2021-03-08
Time	11:02
Valve Position at Arrival (% Open)	100
Valve Position at Departure (% Open)	100

BV-4, 10:58, 75

Valve ID Link	34480 Capitol, BV-4
Valve ID	BV-4
Date	2021-03-08
Time	10:58
Valve Position at Arrival (% Open)	75
Valve Position at Departure (% Open)	75
Were interim vacuum readings taken between initial and final vacuum readings?	No

Inspection Reading Analysis

Manometer

SSMP/MPs

Were any vacuum monitoring points not accessible? Please specify.	No
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	No
Which ones don't and why?	All
Proposed modifications to address vacuum?	Transmitter is installed at SSMP-2
Were any ball valve positions changed?	No

Alarm Testing

Sensaphone Link	N/A
Does the vacuum switch alarm work? Test the alarm condition and verify an alarm registers.	Yes

Does the fan disconnect alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the transmitter alarm work? Test the alarm condition and verify an alarm registers.	Yes
Check the alarm history on the disconnect for the fan. Was it off for any length of time?	No
Is the cloud logging vacuum readings properly (log in to check)?	Yes

Repairs

Sample Delay			
Send Sample Delay Email	N/A		
email body			

Repair Completion

Were seam repairs completed during this visit?	Yes
Were system repairs completed during this visit?	Yes
Additional sealing completed:	Installed patches where needed
Sealing Completion Date	2021-03-08

Sealing Repair Photos









System repairs completed:

System Repair Completion Date

System Repair Photos

Fan cleaned





Are there outstanding repairs to be completed?	No
Owner/Tenant Observations	
Have there been any changes to the fan noise level or vibration?	No
Have any structures been built or modified that require vapor mitigation?	No
Engineer Notification	
Send Inspection Completion Email	N/A
email body	
Engineer Notification	
Send Inspection Completion Email - add any	N/A
repairs, repair needs, or critical communications in email text	
email body	

34480 Capitol, 2021-04-15, System Check

Created	2021-04-15 17:29:20 UTC by Emma Witherspoon
Updated	2022-01-31 16:08:26 UTC by Seth Turner

General Information

System Inspector	Emma Witherspoon
Date	2021-04-15
Time	13:29
System Details Link	34480 Capitol
Property Address	34480 Capitol
Check Inspection(s) to be Completed	System Check
Get weather data from National Weather Service Website for your current location?	N/A
Weather	Light Rain
Ambient Temperature	42.98
Barometric Pressure	29.86
Indoor Temperature	70

Inspection Measurements

Pre-Measurement Conditions

Are vacuum readings being taken under closed Yes building conditions?

Measurements and Valve Positions

MP-3, 13:29, -.007

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2021-04-15
Time	13:29
Vacuum Reading (in. w.c.)	007
Number Vacuum Reading	-0.007

MP-2, 13:30, -.011

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2021-04-15
Time	13:30
Vacuum Reading (in. w.c.)	011
Number Vacuum Reading	-0.011

MP-1, 13:31, -.016

34480 Capitol, MP-1
MP-1
2021-04-15
13:31

Vacuum Reading (in. w.c.)	016
Number Vacuum Reading	-0.016

SSMP-2, 13:33, -0.003

Vacuum ID Link	34480 Capitol, SSMP-2
Vacuum ID	SSMP-2
Date	2021-04-15
Time	13:33
Vacuum Reading (in. w.c.)	-0.003
Number Vacuum Reading	-0.003

U-Tube Manometer, 13:46, -1

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2021-04-15
Time	13:46
Vacuum Reading (in. w.c.)	-1
Number Vacuum Reading	-1

BV-1, 14:00, 25

Valve ID Link	34480 Capitol, BV-1
Valve ID	BV-1
Date	2021-04-15
Time	14:00
Valve Position at Departure (% Open)	25

BV-2, 14:00, 75

Valve ID Link	34480 Capitol, BV-2
Valve ID	BV-2
Date	2021-04-15
Time	14:00
Valve Position at Departure (% Open)	75

BV-3, 14:00, 100

Valve ID Link	34480 Capitol, BV-3
Valve ID	BV-3
Date	2021-04-15
Time	14:00
Valve Position at Departure (% Open)	100

BV-4, 14:00, 75

Valve ID Link	34480 Capitol, BV-4
Valve ID	BV-4
Date	2021-04-15
Time	14:00
Valve Position at Departure (% Open)	75

Were interim vacuum readings taken between	No
initial and final vacuum readings?	

Inspection Reading Analysis

Manometer

Manometer	
Is the system manometer steady?	Yes
SSMP/MPs	
Were any vacuum monitoring points not accessible? Please specify.	No
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	No
Which ones don't and why?	Transmitter at SSMP-2
Proposed modifications to address vacuum?	Transmitter at SSMP-2
Were any ball valve positions changed?	No
Alarm Testing	
Sensaphone Link	N/A
Repairs	
Sample Delay	
Send Sample Delay Email	N/A
email body	
Repair Completion	
Were seam repairs completed during this visit?	No
Were system repairs completed during this visit?	No
Are there outstanding repairs to be completed?	No
Engineer Notification	
Send Inspection Completion Email	N/A
email body	
Engineer Notification	
Send Inspection Completion Email - add any repairs, repair needs, or critical communications in email text	N/A
email body	
Additional Notes and Photos	
Notes	Transmitter calibrated. Repairs will need to be scheduled to address lower vacuum

readings.

34480 Capitol, 2022-01-31, Full System Inspection

Created	2022-01-31 15:09:08 UTC by Seth Turner
Updated	2022-02-01 14:30:29 UTC by Seth Turner

General Information

System Inspector	Seth Turner
Date	2022-01-31
Time	10:09
System Details Link	34480 Capitol
Property Address	34480 Capitol
Check Inspection(s) to be Completed	Full System Inspection
Get weather data from National Weather Service Website for your current location?	N/A
Weather	17F, sunny
Ambient Temperature	17F
Barometric Pressure	29.29
Indoor Temperature	70

Design Components

Does the house have a basement?	No
Does the house have a sump?	No
Does the house have garage retrocoat?	Yes
Does the house have shed retrocoat?	No
Does the house have basement retrocoat?	No
Does the house have a crawlspace barrier?	Yes
Does the house have an inaccessible crawlspace?	No
Does the house have a water sensor?	No

System Inspection

Fan	
Fan(s) operating?	Yes
Are there any unusual fan noises?	No
Piping	
ls any caulking required around pipe penetrations, slab cracks, expansion joints, or foundation walls?	No
Are piping, piping joints, and brackets intact and secure?	Yes
ls the insulation and insulation jacket damaged or missing in garage or exterior piping?	No
Valves	
Upon arrival, are all valves in the same position as the prior visit (reference Power Bl)?	Yes

Drains

Do any drain seals need to be repaired or replaced?	No
Garage Retrocoat	
ls retrocoat damaged or missing?	No
Crawlspace Barrier	
ls water present on the vapor barrier?	No
Labels	
Are labels present at the pipe, control panel, u- tube, and breaker?	Yes

Common Label Photos



Are labels present at the garage retrocoat?

Yes

Garage Retrocoat Label Photos



Are labels present at the crawlspace barrier?

Barrier Label Photos



Vacuum Monitoring

Is the u-tube accurate (test with micromanometer/manometer, rezero/replace as needed)?	Yes
Is the vacuum switch accurate (test with micromanometer)?	Yes
Do any monitoring points (MP/SSMP) need to be repaired or replaced?	No
If multiple systems are present, were both inspected?	N/A
Inspection Measurements	
Pre-Measurement Conditions	
Are vacuum readings being taken under closed building conditions?	Yes
Do any monitoring points have transmitters?	Yes
SSMP-2	
Monitoring Point with Transmitter?	SSMP-2
Transmitter Ambient Reading (iwc, transmitter inlet tubing disconnected)	0
Transmitter Reading (iwc, with fan operating)	-0.011
Micromanometer Ambient Reading (iwc, transmitter inlet tubing disconnected)	0
Micromanometer Fan Reading (iwc, with fan operating)	-0.002
Calibration Calc	0.009
Transmitter off by >0.0003, recalibrate/fix transmitte	r

Measurements and Valve Positions

MP-2, 10:12, -0.009

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2022-01-31
Time	10:12
Vacuum Reading (in. w.c.)	-0.009
Number Vacuum Reading	-0.009

MP-3, 10:12, -0.010

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2022-01-31
Time	10:12
Vacuum Reading (in. w.c.)	-0.010
Number Vacuum Reading	-0.01

MP-1, 10:13, -0.015

Vacuum ID	MP-1
Date	2022-01-31
Time	10:13
Vacuum Reading (in. w.c.)	-0.015
Number Vacuum Reading	-0.015

U-Tube Manometer, 10:13, -1.1

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2022-01-31
Time	10:13
Vacuum Reading (in. w.c.)	-1.1
Number Vacuum Reading	-1.1

SSMP-2, 10:17, -0.002

Vacuum ID Link	34480 Capitol, SSMP-2
Vacuum ID	SSMP-2
Date	2022-01-31
Time	10:17
Vacuum Reading (in. w.c.)	-0.002
Number Vacuum Reading	-0.002

SSMP-2, 10:29, -0.003

Vacuum ID Link	34480 Capitol, SSMP-2
Vacuum ID	SSMP-2
Date	2022-01-31
Time	10:29
Vacuum Reading (in. w.c.)	-0.003
Number Vacuum Reading	-0.003

MP-3, 10:33, -0.018

Vacuum ID Link	34480 Capitol, MP-3
Vacuum ID	MP-3
Date	2022-01-31
Time	10:33
Vacuum Reading (in. w.c.)	-0.018
Number Vacuum Reading	-0.018

MP-1, 10:33, -0.034

Vacuum ID Link	34480 Capitol, MP-1
Vacuum ID	MP-1
Date	2022-01-31
Time	10:33
Vacuum Reading (in. w.c.)	-0.034
Number Vacuum Reading	-0.034

MP-2, 10:33, -0.024

Vacuum ID Link	34480 Capitol, MP-2
Vacuum ID	MP-2
Date	2022-01-31
Time	10:33
Vacuum Reading (in. w.c.)	-0.024
Number Vacuum Reading	-0.024

U-Tube Manometer, 10:33, -1.1

Vacuum ID Link	34480 Capitol, U-Tube Manometer
Vacuum ID	U-Tube Manometer
Date	2022-01-31
Time	10:33
Vacuum Reading (in. w.c.)	-1.1
Number Vacuum Reading	-1.1

BV-1, 10:34, 25

Valve ID Link	34480 Capitol, BV-1
Valve ID	BV-1
Date	2022-01-31
Time	10:34
Valve Position at Arrival (% Open)	25
Valve Position at Departure (% Open)	25

BV-2, 10:35, 75

Valve ID Link	34480 Capitol, BV-2
Valve ID	BV-2
Date	2022-01-31
Time	10:35
Valve Position at Arrival (% Open)	75
Valve Position at Departure (% Open)	75

BV-3, 10:35, 100

Valve ID Link	34480 Capitol, BV-3
Valve ID	BV-3
Date	2022-01-31
Time	10:35
Valve Position at Arrival (% Open)	100
Valve Position at Departure (% Open)	100

BV-4, 10:35, 75

Valve ID Link	34480 Capitol, BV-4
Valve ID	BV-4
Date	2022-01-31
Time	10:35
Valve Position at Arrival (% Open)	75

Valve Position at Departure (% Open)	75
Were interim vacuum readings taken between initial and final vacuum readings?	No
Inspection Reading Analysis	
Manometer	
Is the system manometer steady?	Yes
SSMP/MPs	
Were any vacuum monitoring points not accessible? Please specify.	No
Do all vacuum monitoring points meet -0.02 in w.c. threshold?	No
Which ones don't and why?	Ssmp-2, has transmitter
Proposed modifications to address vacuum?	Transmitter installed
Were any ball valve positions changed?	No
Alarm Testing	
Sensaphone Link	N/A
Does the vacuum switch alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the fan disconnect alarm work? Test the alarm condition and verify an alarm registers.	Yes
Does the transmitter alarm work? Test the alarm condition and verify an alarm registers.	Yes
Check the alarm history on the disconnect for the fan. Was it off for any length of time?	No
Is the cloud logging vacuum readings properly (log in to check)?	Yes
Repairs	
Sample Delay	
Send Sample Delay Email	N/A
email body	
Repair Completion	
Were seam repairs completed during this visit?	No
Were system repairs completed during this visit?	Yes
System repairs completed:	Fan cleaned.
System Repair Completion Date	2022-01-31



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Are there outstanding repairs to be completed?	No
Owner/Tenant Observations	
Have there been any changes to the fan noise level or vibration?	No
Have any structures been built or modified that require vapor mitigation?	No
Engineer Notification	
Send Inspection Completion Email	N/A
email body	
Engineer Notification	
Send Inspection Completion Email - add any repairs, repair needs, or critical communications in email text	N/A

email body