District 1 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Incident ID	N35 1215637545
District RP	
Facility ID	
Application ID	

## NMOCD

DICTDICT III

# **Release Notification**

## NOV 0 5 2018

## **Responsible Party**

	UISINIU	
Responsible Party: BP America Production Co.	OGRID: 778	Subsequent Report
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # (assigned by OCD)	
Contact mailing address: 380 Airport Road, Durango CO, 81303	I	

### **Location of Release Source**

Latitude: 36.87354°

Longitude: <u>-107.87331°</u>

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Atlantic A LS 009A	Site Type: Natural Gas Production Well Pad
Date Release Discovered: May 15, 2012	API#: 30-045-22492

Unit Letter	Section	Township	Range	County	
С	27	T31N	R10W	San Juan	

Surface Owner: State Federal Tribal Private (Name: \_\_\_\_\_

## Nature and Volume of Release

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls): 13 bbls est.	Volume Recovered (bbls): <u>0 bbls</u>
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

A split load line release condensate to the soils beneath it. The tank contents were removed and the line repaired. A soil boring investigation determined the lateral and vertical extents of the spill. A soil vapor extraction unit was install and became active on March 9, 2015. An additional SVE point was installed in February of 2018. Attached is an update of the performance of the SVE system through October 2018.



#### Smith, Cory, EMNRD

From:Smith, Cory, EMNRDSent:Wednesday, November 14, 2018 11:54 AMTo:Steven Moskal - BP America (steven.moskal@BPX.com)Cc:Fields, Vanessa, EMNRDSubject:ATLANTIC A LS #009A Incident# NJK1215637545

Steve,

OCD has received the SVE update report on November 5, 2018 and has approved it with the following conditions of approval

- Continue Operating SVE and Reporting as previously directed.

Also for all future submittals this incident was assigned Incident# NJK1215637545 please make sure you include this in any future communication or submittals

Thanks,

Cory Smith Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115 cory.smith@state.nm.us

## State of New Mexico Oil Conservation Division

Incident ID	
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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
🗌 Yes 🖾 No	
)	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

### **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

The released water absorbed into the ground surface.

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name:	Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?		
Did this release impact groundwater or surface water?		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No	
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No	
Are the lateral extents of the release overlying a subsurface mine?		
Are the lateral extents of the release overlying an unstable area such as karst geology?		
Are the lateral extents of the release within a 100-year floodplain?		
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🖾 No	

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

#### Characterization Report Checklist: Each of the following items must be included in the report.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

Field data

Data table of soil contaminant concentration data

Depth to water determination

Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release

Boring or excavation logs

Photographs including date and GIS information

Topographic/Aerial maps

Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C+141 Page 4	State of New Mexico Oil Conservation Division	Incident ID District RP Facility ID Application ID	
regulations all operators are required to public health or the environment. The failed to adequately investigate and ren	iven above is true and complete to the best of my k o report and/or file certain release notifications and acceptance of a C-141 report by the OCD does no mediate contamination that pose a threat to ground report does not relieve the operator of responsibilit	I perform corrective actions for releases which m t relieve the operator of liability should their ope water, surface water, human health or the environ	ay endanger prations have nment. In
Printed Name:	Title:		
Signature:	Date:		
email:	Telephone:		
OCD Only			
Received by:	Da	te:	

Form C+141 Page 5 State of New Mexico Oil Conservation Division

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# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> <li>Continued Remediation operation and performance data</li> </ul>
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Steve Moskal</u> Title: <u>Environmental Coordinator</u>
Signature:
email: <u>steven.moskal@bpx.com</u> Telephone: <u>505-330-9179</u>
OCD Only       Received by:     OLT       Date:     11/5/18
Approved With Attached Conditions of Approval Denied Deferral Approved  Signature: Date: 11/14/16

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Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name:	Title:							
Signature:	Date:							
email:	Telephone:							
OCD Only								
Received by:	Date:							
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.								

Closure Approved by:	Date:
Printed Name:	Title:



gle Earth

# Legend

- Atlantic ALS 9A Wellhe
- Exisitng SVE Point
  - SVE Point Installed 2018 SVE Unit



VH53 SVE Unit VH-4 VH-5 -VH-7

3/9/2015         VH-5         1,264         20         80         -         -         Initial Startup at SVE VH-5           3/10/2015         VH-5         1,008         20         80         YES         NO           3/11/2015         VH-5         929         20         80         YES         YES         1.00           3/12/2015         VH-5         929         20         80         YES         YES         1.00           3/13/2015         VH-5         681         20         80         YES         YES         1.00           3/13/2015         VH-5         681         20         80         YES         YES         4.00           3/17/2015         VH-5         341         18         80         YES         YES         4.00           3/30/2015         VH-5         189         19         80         YES         YES         7.00           4/12/2015         VH-5         192         19         80         YES         YES         3.00           4/16/2015         VH-5         140         20         80         YES         YES         6.00           4/27/2015         VH-5         102         20         80 </th <th>Date</th> <th>SVE Pt.</th> <th>Exhaust OVM (ppm)</th> <th>Exhaust Vacuum (in)</th> <th>Exhaust Rate (cfm)</th> <th>System Operational at Time of Arrival?</th> <th>H<sub>2</sub>O Drained from drum?</th> <th>H<sub>2</sub>O Amt. Drained (Gal.)?</th> <th>Comments</th>	Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H <sub>2</sub> O Drained from drum?	H <sub>2</sub> O Amt. Drained (Gal.)?	Comments
3/10/2015         VH-5         1,008         20         80         YES         NO           3/11/2015         VH-5         929         20         80         YES         YES         1.00           3/13/2015         VH-5         920         19         80         YES         YES         1.00           3/13/2015         VH-5         681         20         80         YES         YES         1.00           3/13/2015         VH-5         469         19         80         YES         YES         4.00           3/17/2015         VH-5         341         18         80         YES         YES         4.00           3/13/2015         VH-5         341         18         80         YES         YES         4.00           3/23/2015         VH-5         189         19         80         YES         YES         3.00           4/12/15         VH-5         192         19         80         YES         YES         3.00           4/21/2015         VH-5         140         20         80         YES         YES         6.00           4/21/2015         VH-5         102         20         80         YES <td>2/0/0045</td> <td></td> <td>1 004</td> <td>00</td> <td>00</td> <td></td> <td></td> <td>1</td> <td>Initial Station at SV/E V/LLE</td>	2/0/0045		1 004	00	00			1	Initial Station at SV/E V/LLE
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4/21/2015       VH-5       111       20       80       YES       YES       6.00         4/27/2015       VH-5       102       20       80       YES       YES       3.00         5/7/2015       VH-5       82       19       80       YES       YES       2.00         5/11/2015       VH-5       72       19       80       YES       YES       2.00         5/20/2015       VH-5       64       19       80       YES       YES       3.00         5/26/2015       VH-5       57       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO       1.00         6/15/2015       VH-5       48       19       80       YES       NO       1.00         6/22/2015       VH-5       48       19       80       YES       NO       1.00         6/22/2015       VH-5       48       19       80       YES       NO       1.00         6/22/2015       VH-5       48       19       80<	4/6/2015	VH-5	192	19	80	YES		3.00	
4/27/2015       VH-5       102       20       80       YES       YES       3.00         5/7/2015       VH-5       82       19       80       YES       YES       2.00         5/11/2015       VH-5       72       19       80       YES       YES       2.00         5/20/2015       VH-5       64       19       80       YES       YES       2.00         5/20/2015       VH-5       64       19       80       YES       YES       3.00         5/26/2015       VH-5       57       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO       100         6/15/2015       VH-5       48       19       80       YES       NO       100         6/22/2015       VH-5       48       19       80       YES       NO       100         6/29/2015       VH-5       48       19       80       YES       NO       100         6/29/2015       VH-5       42       19       80	4/15/2015	VH-5	140	20	80	YES	YES	6.00	
5/7/2015         VH-5         82         19         80         YES         YES         2.00           5/11/2015         VH-5         72         19         80         YES         YES         2.00           5/20/2015         VH-5         64         19         80         YES         YES         3.00           5/26/2015         VH-5         57         19         80         YES         YES         1.00           6/2/2015         VH-5         55         19         80         YES         YES         1.00           6/8/2015         VH-5         48         19         80         YES         NO         1.00           6/15/2015         VH-5         48         19         80         YES         NO         1.00           6/22/2015         VH-5         48         19         80         YES         NO         1.00           6/22/2015         VH-5         48         19         80         YES         NO         1.00           6/29/2015         VH-5         48         19         80         YES         NO         1.00           6/29/2015         VH-5         42         19         80         YE	4/21/2015	VH-5	111	20	80	YES	YES	6.00	
5/11/2015       VH-5       72       19       80       YES       YES       2.00         5/20/2015       VH-5       64       19       80       YES       YES       3.00         5/26/2015       VH-5       57       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO       Image: Constant of the second	4/27/2015	VH-5	102	20	80	YES	YES	3.00	
5/20/2015       VH-5       64       19       80       YES       YES       3.00         5/26/2015       VH-5       57       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/2/2015       VH-5       48       19       80       YES       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO       1.00         6/15/2015       VH-5       44       19       80       YES       NO       1.00         6/22/2015       VH-5       48       19       80       YES       NO       1.00         6/22/2015       VH-5       48       19       80       YES       NO       1.00         6/22/2015       VH-5       48       19       80       YES       NO       1.00         6/29/2015       VH-5       42       19       80       YES       NO       1.00         7/6/2015       VH-5       40       19       80       YES       NO       1.00	5/7/2015	VH-5	82	19	80	YES	YES	2.00	
5/26/2015       VH-5       57       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO       100         6/15/2015       VH-5       44       19       80       YES       NO       100         6/22/2015       VH-5       44       19       80       YES       NO       100         6/22/2015       VH-5       48       19       80       YES       NO       100         6/29/2015       VH-5       42       19       80       YES       NO       100         7/6/2015       VH-5       40       19       80       YES       NO       100	5/11/2015	VH-5	72	19	80	YES	YES	2.00	
5/26/2015       VH-5       57       19       80       YES       YES       1.00         6/2/2015       VH-5       55       19       80       YES       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO       100         6/15/2015       VH-5       44       19       80       YES       NO       100         6/22/2015       VH-5       44       19       80       YES       NO       100         6/22/2015       VH-5       48       19       80       YES       NO       100         6/29/2015       VH-5       42       19       80       YES       NO       100         7/6/2015       VH-5       40       19       80       YES       NO       100	5/20/2015	VH-5	64	19	80	YES	YES	3.00	
6/2/2015       VH-5       55       19       80       YES       1.00         6/8/2015       VH-5       48       19       80       YES       NO         6/15/2015       VH-5       44       19       80       YES       NO         6/22/2015       VH-5       44       19       80       YES       NO         6/22/2015       VH-5       48       19       80       YES       NO         6/29/2015       VH-5       42       19       80       YES       NO         7/6/2015       VH-5       40       19       80       YES       NO	Comments of the second s	VH-5	57	19	80	YES	YES	1.00	
6/8/2015       VH-5       48       19       80       YES       NO         6/15/2015       VH-5       44       19       80       YES       NO         6/22/2015       VH-5       48       19       80       YES       NO         6/29/2015       VH-5       48       19       80       YES       NO         6/29/2015       VH-5       42       19       80       YES       NO         7/6/2015       VH-5       40       19       80       YES       NO					80				
6/15/2015         VH-5         44         19         80         YES         NO           6/22/2015         VH-5         48         19         80         YES         NO           6/29/2015         VH-5         42         19         80         YES         NO           7/6/2015         VH-5         40         19         80         YES         NO	and the second statement of th		and the second se		the second se				
6/22/2015         VH-5         48         19         80         YES         NO           6/29/2015         VH-5         42         19         80         YES         NO           7/6/2015         VH-5         40         19         80         YES         NO									
6/29/2015         VH-5         42         19         80         YES         NO           7/6/2015         VH-5         40         19         80         YES         NO									
		VH-5	42		80		NO		
7/13/2015 VH-5 35 19 80 YES NO	7/6/2015	VH-5	40		80	YES	NO		
	7/13/2015								
7/20/2015 VH-5 37 19 80 YES NO									
7/26/2015 VH-5 32 19 80 YES NO					and the second se				
8/5/2015 VH-5 32 19 80 YES NO									
8/12/2015 VH-5 26 19 80 YES NO									
8/19/2015 VH-5 26 19 80 YES NO									
8/24/2015 VH-5 24 19 80 YES NO									
8/26/2015 VH-2 1.1 22 75 YES NO Switched to VH-2. OVM reading after 10-min operation			and the second se				and the second se		
8/31/2015         VH-2         1.0         20         80         YES         NO         Collected reading then switched to VH-4           9/3/2015         VH-4         2.2         20         80         YES         NO         Collected reading then switched to VH-3									

Date	SVE Pt.	Exhaust OVM (ppm)	Exhaust Vacuum (in)	Exhaust Rate (cfm)	System Operational at Time of Arrival?	H <sub>2</sub> O Drained from drum?	H <sub>2</sub> O Amt. Drained (Gal.)?	Comments
9/8/2015	VH-3	2.6	20	80	YES	NO		Collected reading then switched to VH-5
9/17/2015	VH-5	2.0	19	80	YES	NO		
9/22/2015	VH-5	10	19	80	YES	NO		Collected reading then switched to VH-1
9/23/2015	VH-3 VH-1	2	23	75	YES	NO		Collected reading then switched to VH-2
9/24/2015	VH-2	2	20	80	YES	NO		Collected reading then switched to VH-3
9/25/2015	VH-3	4	19	80	YES	NO		Collected reading then switched to VH-4
9/28/2015	VH-4	4	19	80	YES	NO		Collected readings then switched to VH-5
9/29/2015	VH-5	30	19	80	YES	NO		
10/8/2015	VH-5	26	20	80	YES	NO		
10/15/2015	VH-5	26	20	80	YES	YES	5.50	
10/23/2015	VH-5	44	20	80	YES	YES	12.00	
10/28/2015	VH-5	37	19	80	YES	NO	12:00	Did not check water level in drum
11/6/2015	VH-5	38.6	20	80	NO	YES	29.00	
11/13/2015	VH-5	38.6	20	80	YES	YES	17.00	
11/20/2015	VH-5	33.3	20	80	YES	YES	19.00	
11/27/2015	VH-5	31.1	20	80	YES	YES	17.00	
12/4/2015	VH-5	22	20	80	YES	YES	22.00	
12/11/2015	VH-5	38	20	80	YES	YES	17.00	
12/18/2015	VH-5	27	20	80	YES	YES	24.50	
12/24/2015	VH-5	23	20	80	YES	YES	16.50	
12/31/2015	VH-5	20	19	80	NO	YES	29.00	Collected readings after draining & restarting
1/7/2016	VH-5	16	20	80	YES	YES	21.00	
1/14/2016	VH-5	16	20	80	YES	YES	23.00	
1/21/2016	VH-5	20	20	80	YES	YES	21.00	
1/28/2016	VH-5	20	20	80	YES	YES	19.00	
2/5/2016	VH-5	18	21	80	YES	YES	21.00	
2/13/2016	VH-5	17	20	80	YES	YES	16.50	
2/19/2016	VH-5	14	21	80	YES	YES	10.00	
2/26/2016	VH-5	14	21	80	YES	YES	11.00	
3/3/2016	VH-5	14	20	80	YES	YES	7.00	
3/10/2016	VH-5	-	-	-	YES	YES	7.00	
3/17/2016	VH-5	17	21	80	YES	YES	7.00	
3/24/2016	VH-5	-	-	-	YES	NO	0.00	Measured ~ 3.0" H2O in drum
3/31/2016	VH-5	13	21	80	YES	YES	14.00	
4/8/2016	VH-5	-	-	-	YES	NO	0.00	Measured ~ 3.0" H2O in drum
4/15/2016	VH-5	13	21	80	YES	YES	7.00	

Date	SVE Pt.	Exhaust OVM	Exhaust Vacuum	Exhaust Rate (cfm)	System Operational at Time of	H <sub>2</sub> O Drained	H <sub>2</sub> O Amt. Drained	Comments
		(ppm)	(in)	(ciiii)	Arrival?	from drum?	(Gal.)?	
						drum:	L	
4/22/2016	VH-5	10	21	80	YES	YES	4.00	
4/29/2016	VH-5	10	21	80	YES	YES	5.50	
5/14/2016	VH-5	10	22	80	YES	NO	0.00	Measured ~ 1.5" H2O in drum
5/26/2016	VH-5	8	21	80	YES	NO	0.00	Measured ~ 1.0" H2O in drum
6/10/2016	VH-5	8	20	80	YES	NO		
6/24/2016	VH-5	8	22	80	YES	NO		
7/21/2016	VH-5	8	22	80	YES	NO		
8/19/2016	VH-5	5	22	80	YES	NO		
9/26/2016	VH-5	8	22	80	YES	YES	2.50	
10/25/2016	VH-5	5	23	80	YES	YES	22.00	
11/8/2016	VH-5	-	-	-	YES	YES	15.50	
11/21/2016	VH-5	22	24	80	NO	YES	23.00	Collected readings after draining & restarting, commenced using Mini Rae PID
12/6/2016	VH-5	-	-	-	YES	YES	26.00	Restarted later in the day
12/14/2016	VH-5	17	21	80	YES	YES	27.00	
12/20/2016	VH-5	33	22	80	YES	YES	17.00	
12/28/2016	VH-5	21	21	80	YES	YES	23.00	
1/5/2017	VH-5	28	22	80	YES	YES	19.00	
1/11/2017	VH-5	23	21	80	YES	YES	15.50	
1/19/2017	VH-5	-	20	80	YES	YES	15.50	
1/25/2017	VH-5	22	20	80	YES	YES	15.50	
2/2/2017	VH-5	23	19	80	YES	YES	22.00	
2/9/2017	VH-5	16	19	80	YES	YES	11.50	
2/15/2017	VH-5	23	19	80	YES	YES	9.00	
2/22/2017	VH-5	21	19	80	YES	YES	9.00	
3/3/2017	VH-5	21	19	80	YES	YES	17.00	
3/9/2017	VH-5	19	19	80	YES	YES	9.00	
3/16/2017	VH-5	26	18	80	YES	YES	5.50	
3/31/2017	VH-5	24	18	80	YES	YES	8.00	
4/13/2017	VH-5	28	18	80	YES	YES	12.00	
4/26/2017	VH-5	19	18	80	YES	YES	5.00	
5/12/2017	VH-5	16	18	80	YES	YES	4.00	
6/12/2017	VH-5	22	19	80	YES	NO	0.00	Water in drum below drain port
7/11/2017	VH-5	15	18	80	YES	NO	0.00	Dry drum
8/14/2017	VH-5	24	18	80	YES	NO	0.00	Dry drum
9/15/2017	VH-5	83	19	80	YES	NO	0.00	Dry drum
10/13/2017	VH-5	21	19	80	YES	YES	14.00	

Date	SVE Pt.	Exhaust	Exhaust	Exhaust	System	H <sub>2</sub> O	H <sub>2</sub> O Amt.	
		OVM	Vacuum	Rate	Operational	Drained	Drained	Comments
		(ppm)	(in)	(cfm)	at Time of	from	(Gal.)?	
					Arrival?	drum?		
40/05/0047	1 1 1 5	001	10	00		VEO	44.50	
10/25/2017	VH-5	20	19	80	YES	YES	14.50	
11/10/2017	VH-5	17	18	80	YES	YES	23.50	
11/22/2017	VH-5	19	19	80	YES	YES	23.00	
12/8/2017	VH-5	18	19	80	NO	YES	27.00	High water level shut off unit, drained, restarted, then collected data
12/15/2017	VH-5	14	20	80	YES	YES	25.50	
12/20/2017	VH-5	16	19	80	YES	YES	15.50	
1/5/2018	VH-5	16	11	80	YES	YES	25.50	
1/15/2018	VH-5	16	12	80	YES	YES	22.00	
1/25/2018	VH-5	8	7	80	YES	YES	25.50	
2/6/2018	VH-5	10	8	80	YES	YES	23.00	Collected data, shut down, drained, could not restart
2/26/2018	VH-6	NA	NA	NA	NO	NO	0.00	Start up initiated, no data collected
3/5/2018	VH-6	182	35	NA	YES	YES	15.50	Collected data, shut down, drained, could not restart
3/16/2018	VH-6	NA	NA	NA	NO	NO	0.00	SVE not operational upon arrival, could not restart
3/24/2018	VH-6	NA	NA	NA	NO	NO	0.00	SVE not operational upon arrival, could not restart
4/12/2018	VH-6	242	30	NA	YES	NO	0.00	Water in drum below drain port
4/28/2018	VH-6	177	31	NA	YES	NO	0.00	Water in drum below drain port
5/14/2018	VH-6	171	31	NA	YES	NO	0.00	Dry drum
6/21/2018	VH-6	143	31	NA	YES	NO	0.00	Dry drum
7/25/2018	VH-6	114	32	NA	YES	NO	0.00	Dry drum
8/21/2018	VH-6	NA	32	NA	YES	NO	0.00	Dry drum, PID inoperable
8/30/2018	VH-6	35.6	32	NA	YES	NO	0.00	Water in drum below drain port
9/26/2018	VH-6	23.7	32	NA	YES	NO		Dry drum
10/24/2018	VH-6	67	34	NA	YES	YES	2.50	



