# Exhibit D

Exhibit D



# NDEP Bureau of Air Pollution Control Compliance Branch

### SOURCE TEST REVIEW

Company:

Reck Brothers, LLC Reck Brothers, LLC Date: 1/9/2024 By: Pete Pre-

Facility: Permit No.:

AP1611-0835.03

By: Pete Preciado, P.E. 7
Through: Nicholas Greer 16

FIN:

A0480

Through: Nicholas Greer Vo

Testing Firm:

Broadbent & Associates, Inc. Test Date(s):

11/4/2023

County:

....

Class: 2

White Pine

Street Address:

1502 Aultman Avenue Class:

NAICS Code:

324121

City:

Ely

**Zip Code:** 89315

System(s) Tested: System 03 - Drum Mixer (S2.001)

Fail/ Invalid

# Summary - Major Findings

The source testing for the above referenced system was not conducted according to the submitted protocol. According to the Source Test Report, a gaseous stratification test was not conducted due to limited production time. (See Attachment A.) Page two of the test protocol states, "All gaseous pollutant measurements will be done at a single point (to be verified by a stratification check) since the exhaust gases are well mixed having passed through a scrubber and ID fan." (See Attachment B.) Exceedances of Particulate Matter (PM) limits for mass emissions and concentrations were reported, and Run #2 was invalidated by the source testing firm (Broadbent & Associates, Inc.) due to a failed post-test leak check. BAPC used Equation 12.3(a) in EPA Reference Method (RM) 5 to adjust the volume sampled in Run #2. A leakage rate of 0.080 cfm, shown on Page A-22 of the Source Test Report, was used in the equation. (See Attachment C.) The maximum acceptable leakage rate was determined to be 0.020 cfm, and this maximum acceptable leakage rate was also utilized in the equation. Using test results from just Runs #1 & #3, PM emissions are approximately 438% of the permitted lb/hr limit. Utilizing test results from all three runs, PM emission are lower, but still 380% of the permitted lb/hr limit. Propane combustion amounts were not provided in the Source Test Report, but were emailed to BAPC on January 5, 2024. (See Attachment D.)

#### Introduction

Source testing was conducted to satisfy the initial testing as required by Class II Air Quality Operating Permit AP1611-0835.03.

The test protocol was received on October 16, 2023, with the testing being conducted on November 4, 2023. The final report was received on December 26, 2023. The source test results are summarized in the attached tables.



# NDEP Bureau of Air Pollution Control Compliance Branch SOURCE TEST REVIEW

# **Detailed Recommendations**

Invalidate the test results for the gaseous pollutants and retest for all pollutants within forty-five (45) days. Forward the failed PM test results to the Enforcement Branch for consideration as a possible violation.

		Source	ce Test Rev	iew Emi	ssions S	Summary		- 300			
Company Name:		Reck Bro		Unit Number:	\$2.001						
Facility Name:		Reck Bro	thers, LLC	-		ent & Associate	es, Inc.				
Facility ID Number:		A0	480		Test Date(s): 11/4/2023						
Permit Number:	Permit Number: AP1611-0835.03						Pete Preciado, P.E.				
System Description: Drum Mixer						Review Date:	12/28/2023				
System Number:	System Number: 03 Stack Height (ft.): 40					ic Flow (Averag	ge Absolute Null Angle): 4.3				
Equivalent Sta	76471		Cyclonic Flo	ow (Standard Deviation): N							
Street Address:	1502 Aultn	nan Avenue		T	NAICS Code:	324121 White Pine					
City:	E	ly	Zip Code:	893	315 County:						
Class:		Stack Test Status:		Fail							
Permi	tted Annua	al Hours of	Operation =	2040	Opacity (%):		6.4	Limit (%)	20		

Pollutant	Applicable Units	Run 1	Run 2	Run 3	Average	Permit Limit/ Operating Parameter	% of Limi		
	Test Date	11/4/2023	11/4/2023	11/4/2023		1000			
PM (RM 5/202)	Start Time	9:48	11:52	13:53		FAILED			
	End Time	10:56 13:02		15:03					
	gr/dscf	0.19	0.10	0.13	0.14	0.04	350.73		
	mg/dscm	440	225	298	321	90	356.87		
	lb/hr	10.11	5.47	7.92	7.83	2.06	380.23		
	tons/year	10.31	5.58	8.08	7.99	2.10	380.44		
	% Isokinetic	95.40	97.42	107.09	99.97	90%-110%	Valid		
	Stack Flow Rate (dscfm)	6,130	6,493	7,096	6,573	6019	N/A		
	Material Throughput (tons/hr)	75	75	75	75	150	50.00		
	Propane Combustion (gal/hr)	248	248	248	248	280	88.61		
	Stack Temperature (°F)	154	152	158	154	500	N/A		
	Test Date	11/4/2023	11/4/2023	11/4/2023	VI - I	193	-		
	Start Time	9:48	11:52	13:53	INVALID				
	End Time	10:58	13:02	15:03		42-2-			
SO2 (RM 6C)	lb/hr	0.00	0.00	0.00	0.00	0.51	0		
	tons/year	0.00	0.00	0.00	0.00	0.52	0		
	Stack Flow Rate (dscfm)	6130	6493	7096	6573	6019	N/A		
	Stack Temperature (°F)	154	152	158	154	500	N/A		
	Test Date	11/4/2023	11/4/2023	11/4/2023		1 1			
	Start Time	9:48	11:52	13:53		INVALID			
	End Time	10:58	13:02	15:03		1100000			
NOx (RM 7E)	lb/hr	2.71	2.50	3.16	2.79	3.90	71.50		
	tons/year	2.76	2.55	3.23	2.84	3.98	71.46		
	Stack Flow Rate (dscfm)	6,130	6,493	7,096	6,573	6019	N/A		
	Stack Temperature (°F)	154	152	158	154	500	N/A		

		Sourc	e Test Rev	iew Emi	ssions S	ummary					
Company Name:	L	Jnit Number:	S2.001								
Facility Name:	R	leck Brot	hers, LLC		Testing Firm: Broadbent & Associate						
Facility ID Number:		A04	180		Test Date(s): 11/4/2023						
Permit Number: AP1611-0835.03  System Description: Drum Mixer						iewer Name:	Pete Preciado, P.E.				
						Review Date:	12/28/2023				
System Number:	System Number: 03 Stack Height (ft.): 40					c Flow (Averag	ge Absolute Null Angle): 4.3				
Equivalent Sta	ck Diameter (	inches):	25.4117	6471		Cyclonic Flor	ow (Standard Deviation): N				
Street Address: 1502 Aultman Avenue						IAICS Code:	324121				
City:	Ely	Ely Zip Code:			315	15 County:		White Pine			
Class: 2						Stack Test Status:		Fail			
Permit	tted Annual H	ours of C	Operation =		Opacity (%):	6.4	Limit (%)	20			

Pollutant	Applicable Units	Run 1	Run 2	Run 3	Average	Permit Limit/ Operating Parameter	% of Limit		
	Test Date	11/4/2023	11/4/2023	11/4/2023	-	0.00			
	Start Time	9:48	11:52	13:53		INVALID			
CO (RM 10)	End Time	10:58	13:02	15:03					
	lb/hr	2.23	3.12	2.41	2,59	19.50	13.27		
	tons/year	2.28	3.18	2.46	2.64	19.89	13.27		
	Stack Flow Rate (dscfm)	6,130	6,493	7,096	6,573	6019	N/A		
	Stack Temperature (°F)	154	152	158	154	500	N/A		
	Test Date	11/4/2023	11/4/2023	11/4/2023		C-1000	-		
	Start Time	9:48	11:52	13:53					
	End Time	10:58	13:02	15:03	INVALID				
VOC (RM 18 and/or	lb/hr	4.07	3.87	4.55	4.16	4.80	86.77		
25A)	tons/year	4.15	3.95	4.64	4.25	4.90	86.70		
N 11	Stack Flow Rate (dscfm)	6,130	6,493	7,096	6,573	6019	N/A		
	Stack Temperature (°F)	154	152	158	154	500	N/A		

Source Test Report Reck Brothers, LLC 2023 Performance Testing Initial Compliance on System 03 Test Date: November 4, 2023

# SOURCE TEST DEVIATIONS

- A gaseous stratification check was not performed due to the limited production time.
   The exhaust gases from the drum drier pass through a centrifugal exhaust fan that thoroughly mixes the gases prior to discharge to the stack. Gaseous stratification is not expected to be present.
- There was a excessive leak rate found during the posttest leak check on run 2. Despite
  the run being invalid, the analysis of the sample was consistent with a mass emission
  rate in excess of the 2.06 lb/hr limit.

Source Test Protocol Reck Brothers, LLC 2023 Performance Testing Initial Compliance on System 03 Test Date: October 28, 2023

#### 2.0 SOURCE DESCRIPTION

# 2.1 Process and Control System Description

Reck Brothers, LLC owns and operates an asphalt plant in Ely, Nevada, which produces asphalt paving material. The propane gas fired drum mixer has a maximum throughput capacity of 150 tons/hour. Typical operation occurs at 75 tons/hour or less. Emissions are controlled by a wet scrubber using water as the scrubbing medium.

# 2.2 Flue Gas Sampling Location

Figure 1 shows the drum mixer scrubber exhaust sampling locations. The 13-foot vertical rectangular stack is 27 inches deep by 24 inches wide. The equivalent diameter of the stack is approximately 25.41 inches. The existing test ports (four 3-inch female ports and one 3-inch male center port) are located 4.7 equivalent diameters (120 inches) downstream of the centrifugal fan and 1.4 diameters (36 inches) upstream of the stack outlet. PM/PM<sub>10</sub>/PM<sub>2.5</sub> will be sampled at 25 points (5 points per traverse, 3 minutes per point, 5 traverses). This sampling location meets the EPA Method 1 sampling point location criteria.

All gaseous pollutant measurements will be done at a single point (to be verified by a stratification check) since the exhaust gases are well mixed having passed through a scrubber and ID fan. A cyclonic flow check will be conducted prior to testing to confirm the absence of cyclonic flow.



Plant	Reck Brothers		Test Type	M 5/202				Impinger Vo	lumes/Weights		Post-Test Calibration	
Test Location	Scrubber E	xhaust Sta	ick	Barometric Pressure	24.05			Contents	Final Wt	Initial Wt.	Net Wt.	Yqa
Date	11/4/2023 Number 2		Static in. Wg	-0.10			KO	580.5	366.5	214.0	0.997 0.2%	
Run Number			Probe Type/Length	GLASS	1	4 ft	DRY	618.0	615.4	2.6	0.2%	
Stack Diameter	24.0	0 .	27.00	Pitot Coefficient	0.84			FILTER	564.3	562.5	1.8	Pass
Operator Filter No.	KV			Meter Box No./y	No.: 1	1	0.9987	DI	694.9	697.9	-3.0	
Filter No.	82-765			Nozzie No./Size	No.: 9-3	1	0.3010					
initial Leak Rate	0.003	(cfm)	15	(in. Hg)	Initial Pitot √	OK						
								Silica Gel	930.4	914.9	15.5	1
Pinal Leak Rate	0.080	(cfm)	10	(in. Hg)	Final Pitot √	OK		Box No.:	5	Total:	230.9	

Γ	Desires	Dates There	ΔP, in.		pest a si	Temperature, #F								√∆P	Point	Cumulative	
L	Point	Time	Wg	ΔH, In. Wg	DGM, volume, ft <sup>3</sup>	Front Filter	Stack	Probe	Oven	Back Filter	Exit	Tm	in. Hg	VAD	Isokineto %	Isokinetc %	Comments
	Start time	11:52							1			×-	15		-	-	r070 -
L	1	0.0	0.410	2.62	593.878		129	251	252	66	56	75	7.0	0.6403	102.12	102.12	5870 STACK-2
	2	2.4	0.500	3.19	596.210		130	252	253	67	50	76	8.0	0.7071	102.02	102.07	SUACK- C
	3	4.8	0.440	2.81	598.781		132	253	254	68	52	77	6.0	0.6633	102.90	102.35	ACE
	4	7.2	0.390	2.44	601.217		144	254	255	68	53	78	5.0	0.6245	98.65	101.42	r071 -
	5	9.6	0.350	2.21	603.400		145	255	249	67	57	83	5.0	0.5916	103.09	101.75	5871
	3	12.0		F	605.581	-	100	-	-	-	- 1					-	SURFE-S
Γ	Start time	12:06		×	+	-	17.1		-	-	-	-		-	-		MF
Г	1	0.0	0.570	3.57	605,581		150	251	251	69	61	83	8.0	0.7550	101.99	101.79	F070
	2	2.4	0.480	2.99	608.312		150	249	252	70	57	81	7.0	0.6928	100.92	101.67	5872
	3	4.8	0.340	2.12	610,787		153	248	253	71	59	84	8.0	0.5831	101.26	101.62	STRUC-3
	4	7.2	0.270	1.69	612.889		153	247	251	72	59	86	4.0	0.5196	101.82	101.64	BAW
	5	9.6	0.240	1.51	614.782		153	245	254	71	60	87	4.0	0.4899	101.36	101.61	
T		12.0		- 2	616.563		A	- 5	- 4	-	9		+				
T	Start true	12:20		-		~	(e)	- k			-		- 1			-	
	1	0.0	0.610	3.82	616.563		152	243	255	72	61	85	9.0	0.7810	100.84	101.54	
	2	2.4	0.450	2.81	619.360		154	242	256	73	60	86	7.0	0.6708	98.87	101.32	
	3	4.8	0.300	1.88	621.723		154	253	254	74	54	87	4.0	0.5477	100.84	101.28	
	4	7.2	0.260	1.62	623.700		155	257	252	73	54	86	4.0	0.5099	101.66	101.31	
	5	9.6	0.240	1.50	625.552		151	254	251	73	52	85		0.4899	101.23	101.30	
		12.0			627,327	-	(4)	-		+.	-1	-		-	-		
	Start time	12:34								-	-		-	-	-		
Г	1	0.0	0.650	4.04	627.327		157	253	253	72	53	86	10.0	0.8062	102.25	101.36	
	2	2.4	0.460	2.86	630.246		159	252	252	71	52	87	7.0	0.6782	101.79	101.39	
	3	4.8	0.380	2.36	632.700		158	251	251	71	54	87	6.0	0.6164	101.63	101.40	
	4	7.2	0,350	2.18	634.932		157	247	253	72	54	86	6.0	0.5916	101.72	101.42	
Г	5	9.6	0.290	1.82	637.075		156	249	252	70	56	89	6.0	0.5385	99.44	101.32	
		12.0			638.996		-		-		-			-		+	
1	Start time	12:49			-		-	-	-	-			-		-		
	1	0.0	0.590	3.67	638.996		160	248	255	71	61	89	10.0	0.7681	100.21	101.27	
	2	2.4	0.510	3.17	641.733		160	249	251	73	57	89	8.0	0.7141	102.75	101.33	
T	3	4.8	0.360	2.24	644.346		161	247	248	72	57	89	5.0	0.6000	102.57	101.39	
1	4	7.2	0.330	2.05	646.542		160	250	249	74	56	88	5.0	0.5745	99.95	101.33	
T	5	9.6	0.300	1.86	648.590		159	251	250	75	57	86	5.0	0.5477	102.40	101.37	
1		12.0	-		650.586												
1		60		2.50	56.708		151.68					84.60		0.6281			

# **Pete Preciado**

From: Scott McNulty <smcnulty@broadbentinc.com>

Sent: Friday, January 5, 2024 11:26 AM

To: Pete Preciado; Jennifer Schumacher; Gregg Rosenberg;

'reckbrothersfrontdesk@gmail.com'; 'reckterry1@gmail.com'; Nathan Robertson; Tara

Reck; Carol Adams; Wayne Johnson

Cc: Jeff Kinder; Danilo Dragoni; Chad Myers; Michelle Grover; Ashley Taylor; Andrew Tucker

Subject: RE: System 03 Source Test Report

WARNING - This email originated from outside the State of Nevada. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Pete,

I got ahold of Terry just now and they got us the numbers on propane use during that operation. The unit combusted 745 gallons of propane during that day. There was almost no operation that wasn't part of that 3 hour test period so I think it is safe to say 745 gallons is the number.

Scott McNulty, PG, CEM, CHG Principal Geologist | Air Quality Division Manager 8 W Pacific Ave, Henderson, NV 89015 t:702.563.0600 | m:702.497.9743 smcnulty@broadbentinc.com | broadbentinc.com





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From: Pete Preciado < PPRECIADO@ndep.nv.gov>

Sent: Wednesday, January 3, 2024 2:58 PM

To: Jennifer Schumacher <jschumacher@ndep.nv.gov>; Scott McNulty <smcnulty@broadbentinc.com>; Gregg Rosenberg <grosenberg@ndep.nv.gov>; 'reckbrothersfrontdesk@gmail.com' <reckbrothersfrontdesk@gmail.com'; 'reckterry1@gmail.com' <reckterry1@gmail.com>; Nathan Robertson <vwnathan@hotmail.com>; Tara Reck <tara@recklaw.com>; Carol Adams <cadams@broadbentinc.com>; Wayne Johnson <wjohnson@broadbentinc.com> Cc: Jeff Kinder <jkinder@ndep.nv.gov>; Danilo Dragoni <ddragoni@ndep.nv.gov>; Chad Myers <cmyers@ndep.nv.gov>; Michelle Grover <m.grover@ndep.nv.gov>; Ashley Taylor <ashley.taylor@ndep.nv.gov>; Andrew Tucker <atucker@ndep.nv.gov>

Subject: System 03 Source Test Report

Hi Terry,

We're in the process of reviewing the source test report submitted by Broadbent for System 03. The report does not appear to include the propane usage during the testing. Please provide the number of gallons of propane combusted during the approximately 3 hours of source testing by 1/12/24.



Thank you,

# Pete Preciado, P.E.

Compliance Officer
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Nevada Division of Environmental Protection
Department of Conservation and Natural Resources
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