

# Completing the Field Observation Form

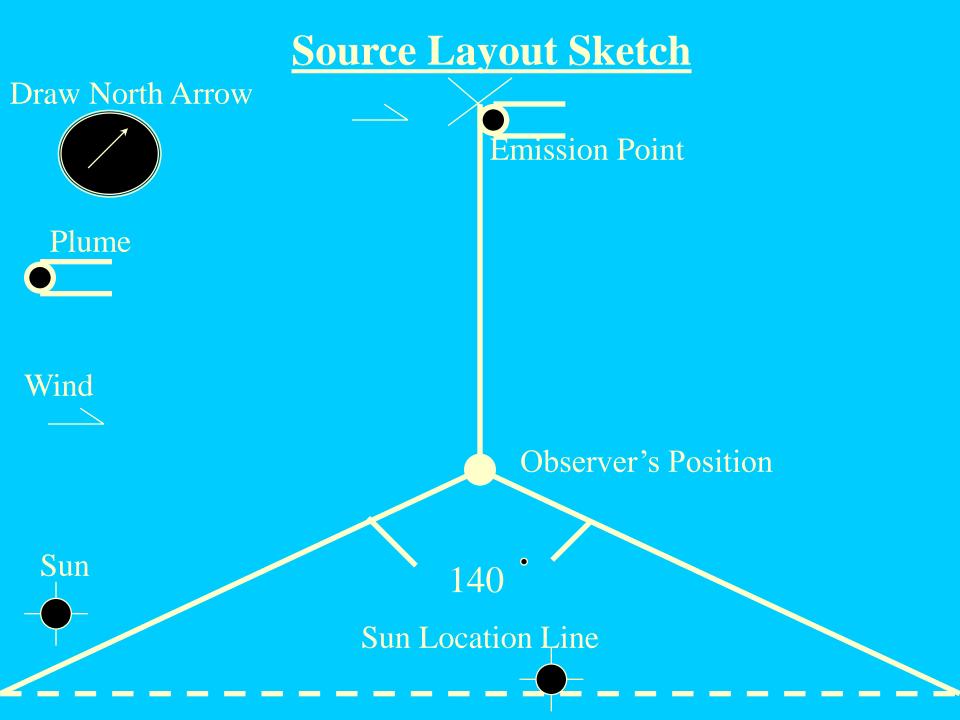
Carl Brookshire

## Certification Test Administration

- 50 (consecutive) Plumes 25 Black Plumes and 25 White Plumes
- Read in 5% Opacity Increments
- Test Readings Are Given in Random Order
- Individual Test, Using Provided Form which is 3 Part Carbonless: White, Yellow, and Pink)

## Certification Test Form

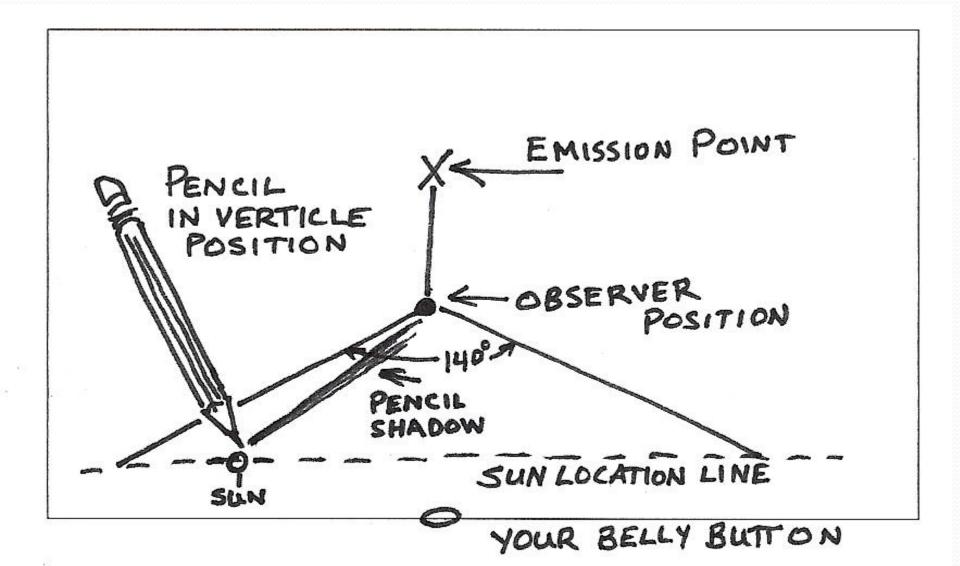
- Fill In All Observation Conditions
- Fill Out Form Completely Each Time
- Personal Form And Registration
   Information Should Be The Same
- Mark Only Relevant Information On The Form
- Make Sure The Form Is Completely Filled Out -Turn In Original (White) page.



# Certification Test Grading

 After Each Run Of 25 Readings We Will Provide The Actual Metered Values

## Position – Sun Angle



# Introduction

- Three-part, carbonless NCR form
- Fill it out completely
- Make sure your name is:
  - Printed <u>legibly</u>, as well as
  - -Signed
- Double- and triple-check your calculations!
- Fill out the (green) Certification form

# Preliminary Information

- Fill out the Smoke Color
- Fill out all conditions possible before the testing starts
- Enter the operator-given information (Temperature, Humidity & Start Time), and
- Start Test

## NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

	Signature
Observed with Naked E If No, list device type:	eye: □Yes □No
Location of Test:	
Business Affiliation	
and Mailing Address:	
	- T
Ob	
Observation Condition Background:	<u>s</u>
Sky Conditions: Distance from Plume:	Color:
Source Height: Viewing Angle:	
Wind Speed: Temperature:	
Relative Humidity:	<del>y v - 10 00 000</del> (
Start Time:	End Time:
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow  Emit	Draw North Arrow Emission Point  Emission Point
Plume Observer'	Plume  Cheever's Position  Observer's Position
Wind	Wind
Sun Location Line	Sun 140 °
Sun Location Line	Sui Location Line
Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	200 All Control of the Control of th
Wind Speed:	
Temperature:	
Relative Humidity:	T. 10"
Start Time:	End Time:

#### **Student Observation Record**

RUN NUMBER:				RUN NUMBER:				
Circle C	No.   Obs.   Met.   Eq.No.of   5%			Circle C	color: E	Black /	White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%	
1				1				
2				2				
3				3				
4				4				
5				5				
6				6				
7				7				
8				8				
9				9				
10				10				
11				11				
12				12			,	
13				13				
14				14				
15				15				
16				16				
17				17				
18				18				
19				19				
20				20				
21				21				
22				22				
23				23				
24		2		24				
25				25				

#### NOC NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

Wave	d Brower
, 4,,,,	Signature
Observed with Naked If No, list device type:	
ocation of Test:	3
Business Affiliation	
and Mailing Address:	
Observation Condition	<u>ıs</u>
Background: Sky Conditions:	
Distance from Plume:	Color:
Source Height: Viewing Angle:	
Wind Speed:	<u> </u>
Temperature:	
Relative Humidity:	
Start Time:	End Time:
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow Emission Point
Plume	Plume
Wind	r's Position Wind Observer's Position
Sun 140°	Sun 140 °
Sun Location Line	Sun Location Line
Background:	
Sky Conditions: Distance from Plume:	Color:
Source Height:	3
Viewing Angle:	8
Wind Speed:	7
Temperature:	
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN N	NUMBER	₹:		RUN NUMBER:				
Circle C	olor: B	lack / \	White	Circle C	olor:	Black /	White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%	
1				1				
2				2				
3				3				
4				4				
5				5				
6				6				
7				7				
8				8				
9				9				
10				10				
11				11				
12				12			,	
13				13				
14				14				
15				15				
16				16				
17				17				
18				18				
19				19				
20				20				
21				21				
22				22				
23				23				
24				24				
25				25				
	Number			000000000000000000000000000000000000000	Numbe	r _ x .2 =		

#### N.C NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

Signature

Observed with Naked	Eye:	Yes 🔻	ľNo
f No, list device type:		CONTAC	T LENSES
ocation of Test:			
Business Affiliation			
and Mailing Address:	-		
Observation Condition Background:	<u>ns</u>		
Sky Conditions:			•
Distance from Plume:		Со	lor:
Source Height:	-		
Viewing Angle: Wind Speed:			
Temperature:			
Relative Humidity:			
Start Time:	- Т	and Time:	
start Time:		nd Time: _	
Circle Color : Black	/ White	Circle Co	lor : Black / White
Source Layout Sket	<u>ch</u>	Se	ource Layout Sketch
Draw North Arrow		Draw North Arrow	×
	Emission Point	$\bigcirc$	Emission Point
Plume		Plume	
Wind	ver's Position	Wind	Observer's Position
Sun 140 °	20	Sun	140
Sun Location Line		0	Sun Location Line
	>		
Background:			
Sky Conditions:	·		
Distance from Plume:		Co	olor:
Source Height:			
Viewing Angle:			
Wind Speed:			
Γemperature:			
Relative Humidity:	7 <u></u>		-
Start Time:	F	and Time:	

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN I	NUMBER	₹:		RUN NUMBER:				
Circle C	olor: B	lack / \	White	Circle (	Color:	Black /	White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.o	
1				1				
2				2				
3				3				
4				4				
5				5				
6				6				
7				7				
8				8				
9				9				
10				10				
11				11				
12				12				
13				13				
14				14				
15				15				
16				16				
17				17				
18				18				
19				19				
20				20				
21				21				
22				22				
23				23				
24				24				
25				25				
Total Number of 5% x .2 =		-	Numbe	r _ x .2 =				

#### NOC NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

	/
Observed with Naked E	Eye: □Yes ☑No
If No, list device type:	CONTACT LENSES
Location of Test:	HILLSBORD, OR
Business Affiliation	
and Mailing Address:	
Observation Condition Background: Sky Conditions:	<u>s</u>
Distance from Plume:	Color:
Source Height: Viewing Angle: Wind Speed: Temperature:	
Relative Humidity: Start Time:	End Time:
Start Time:	
Circle Color : Black /	$White \qquad \textbf{Circle Color}: Black  /  White$
Source Layout Sketch	Source Layout Sketch
Draw North Arrow Em	Draw North Arrow Emission Point  Emission Point
Sun 140°	Plume Wind Wind Observer's Position
Sun Location Line	Sun Location Line
Background: Sky Conditions:	
Distance from Plume:	Color:
Source Height:	<u> </u>
Viewing Angle: Wind Speed:	
Temperature:	
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN N	NUMBER	₹:		RUN NUMBER:					
Circle C	olor: B	lack / \	White	Circle C	color:	Black /	White		
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of		
1				1					
2				2					
3				3					
4				4					
5				5					
6				6					
7				7					
8				8					
9				9					
10				10					
11				11					
12				12					
13				13					
14				14					
15				15					
16				16					
17				17					
18				18					
19				19					
20				20					
21				21					
22				22					
23				23					
24				24					
25				25					
Total	Number			Total	Numbe				
	Number				Numbe	_ x .2 =			

#### NOC NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby cer	tify that the readings are my own:
11/2	. 10
Wave	
•	Signature
Observed with Naked I	Eve: □Yes ☑No
	-,
If No, list device type:	CONTACT LENSES
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 1ST ST.
and maning made obt	YAKIMA, WA 98901
	JAKIMA, WA 48701
Observation Condition	<u>15</u>
Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	The second secon
Relative Humidity:	
Start Time:	End Time:
Ci i Ci Pleals /	White St. St. Dist. / White
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow Em	Draw North Arrow Emission Point
III AND	ASPARSANTAS.
Plume	Plume Observer's Position Observer's Position
Wind	Wind
Sun 140°	Sun 140°
Sun Location Line	Sun Location Line
Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN I	NUMBER	₹:		RUN NUMBER:					
Circle C	1			Circle C	color:	Black / Y	ick / White		
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.o		
1				1					
2				2					
3				3					
4				4					
5				5					
6				6					
7				7					
8				8					
9				9					
10				10					
11				11					
12				12					
13				13					
14				14					
15				15					
16				16					
17				17					
18				18					
19				19					
20				20					
21				21					
22				22					
23				23					
24				24					
25				25					
	Number				Numbe	r x .2 =			

## NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

T	harahu	certify	that	the	readings	gre	my	own:

Havid Brower Signature	
Signature	
Observed with Naked Eye: □Yes ☑No If No, list device type:	
Location of Test: HILLSBORO, OR	
Location of Tobi	_

Business Affiliation	Affiliation YRCAA			
and Mailing Address:	329	N.	1ST	ST.
				98901

Observation Condition	
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	
Relative Humidity:	

Circle Color : Black / Whit	e Circle Color : Black / Whit
Source Layout Sketch	Source Layout Sketch
	Down North America

Start Time:

End Time:

e Layout Sketch	Sou	rce Layout Sketch
Emission Point	Draw North Arrow	Emission Point
Observer's Position	Plume Wind Sun	Observer's Position
	Observer's Position	Emission Point  Draw North Arrow  Emission Point  Piume  Wind  Sun  140

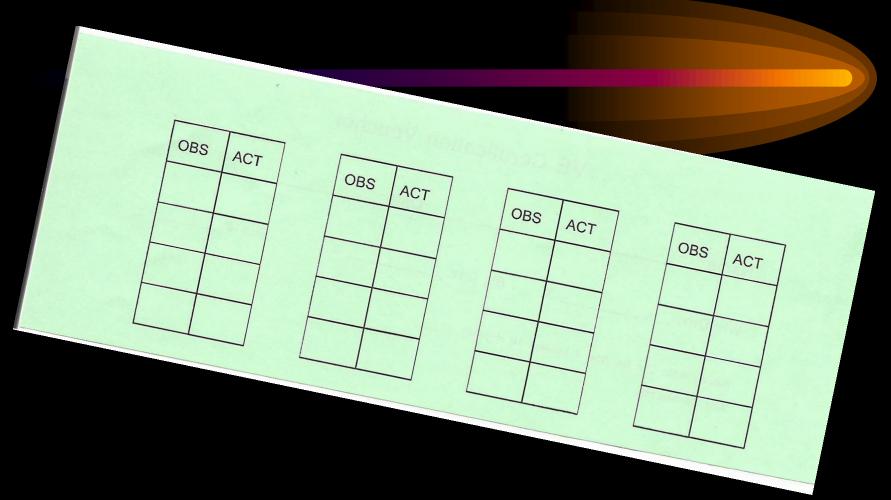
1	
Background:	00.00
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	- Valley
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

Name DAVID BROWER

	UMBEF				NUMBER		
Circle Co	olor: B	lack / \		Circle C	olor: E	lack /	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1				1			
2				2			
3				3			
4				4			
5				5			
6				6			
7				7			
8				8			
9				9			
10				10			
11				11			
12				12			
13				13			
14				14			
15				15			
16				16			
17				17			
18				18			
19				19			
20				20			
21				21			
22				22			
23				23			
24		-		24			
25				25			
<b>T</b> . ( . ) •				T-4-1	Mh		
	Number	_ x .2 =		\$100 miles	Number		

Remember not to put your Practice Sheet on top of your Observation Sheet, or it will transfer through!









OBS	ACT
5	
20	
50	
75	

OBS	ACT

OBS	ACT
ię – oi	

OBS	ACT

OBS	ACT
5	5
20	25
50	55
75	80

	<del></del>
OBS	ACT

OBS	ACT
the of	

OBS	ACT







### NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

A	Signature
Observed with Naked I	Eye: □Yes ☑No
If No, list device type:	
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 15 ST.
	YAKIMA, WA 98901
Observation Condition	S
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	720F
Relative Humidity:	40
	T 1 m:

Circle Color : Black / White Circle Color : Black / White

End Time:

Temperature: Relative Humidity:
Start Time: 0900

North Arrow Emission Point
Observer's Position

Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

DAVID BROWER

RUN NUMBER: / W			RUN NUMBER:				
Circle Color: Black White			Circle Color: Black / White			White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1				1			-
2				2			
3				3			
4				4			
5				5			
6				6			
7				7			
8				8			
9				9			
10				10			
11				11			
12				12			
13				13			
14				14			
15				15			
16				16			
17				17			
18				18			
19				19			
20				20			
21				21			
22				22			
23				23			
24				24			
25				25			
Total	Number			Total	Numbe	er	
of 5% x .2 =			of 5% x .2 =				

#### N.C

#### NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

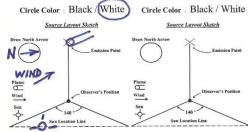
329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

	Signature
Observed with Naked I	Bye: □Yes ☑No
If No, list device type:	
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 1ST ST.

YAKIMA, WA 98901

Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time:



Background:	
Sky Conditions:	19
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

DAVID BROWER

RUN NUMBER: / W  Circle Color: Black White			RUN NUMBER:				
			Circle Color: Black / \				
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50			1			P.
2	75			2			
3	5			3			
4	20			4			
5	10			5			
6	50			6			
7	5			7			
8	25			8			
9				9			
10				10			
11				11			
12				12			
13				13			
14				14			
15				15			
16				16			
17				17			
18				18			
19				19			
20				20			
21				21			
22				22			
23				23			
24				24			
25				25			
Total Number of 5% x .2 =		Total Number of 5% x .2 =					

#### NOC NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

	Signature
Observed with Naked Ey	ve: □Yes ▼No
	CONTACT LENSES
ii ivo, nsi device type	CONTACT LE 11323
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 1ST ST.
_	YAKIMA, WA 98901
- C III	
Observation Conditions Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	15 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time:
Circle Color : Black	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
N D Emissi	ion Point Emission Point
WIND	
Plume	Plume
Wind Observer's	Position Wind Observer's Position
Sun 140°	Sun 140°
Sun Location Line	Sun Location Line
1	>
Background:	
Sky Conditions:	
Distance from Plume:	Color:

End Time:

Source Height: Viewing Angle: Wind Speed: Temperature: Relative Humidity:

Start Time:

#### **Student Observation Record**

DAVID BROWER
Print Name

Date: 02-1/-2015

RUN NUMBER: / W Circle Color: Black White			RUN NUMBER:  Circle Color: Black / White				
							No.
1	50			1			
2	75			2			
3	5			3			
4	20			4			
5	10			5			
6	50			6			
7	5			7			
8		45		8			
9				9			
10				10			
11				11			
12				12			
13				13			
14				14			
15				15			
16				16			
17				17			
18				18			
19				19			
20				20			
21				21			
22				22			
23				23			
24				24			
25				25			
Total	Number	x .2 =		-	Number		

#### NOC NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

Wa	vid Brower
A	Signature

- Wavi	of Brower
- Nun	Signature
Observed with Naked I	Eve: TYes PNo
If No, list device type:	CONTACT LENSES
ir i to, iist de rice type.	
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 1ST ST.
	YAKIMA, WA 98901
Observation Condition	s
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature: Relative Humidity:	72°F 40
Start Time: 0900	End Time: 0915
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
N(->)	ission Point Emission Point
WIND	Plume
Plume	
Wind	Wind Wind
Sun 140°	Sun 140°
Sun Location Line	Sun Location Line
-1	
Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	
Relative Humidity:	

End Time:

Start Time:

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN	NUMBER	R: / 1	N	RUN NUMBER:  Circle Color: Black / White			
Circle C	Color: B	lack (	White				
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50			1			
2	75			2			
3	5			3			
4	20			4			
5	10			5			
6	50			6			
7	5			7			
8	25	45		8			
9	80			9			
10	25			10			
11	5			11			
12	10			12			
13	25			13			
14	20			14			
15	5			15			
16	15			16			
17	75			17			
18	85			18			
19	100			19			
20	10			20			
21	25			21			
22	20			22			
23	5			23			
24	15			24			
25	0			25			
Total	Number			Total	Number		
		x 2=		+		x 2=	

# Completing 50 Consecutive Readings

- After completing 25 readings on the first color, hand in the top (white) copy.
- Record metered values for your first run on second (yellow) copy & compute your score
- If you passed the first color, continue testing the next color on the yellow sheet.
- (If you did not pass the first color, discard test and begin next color on a new test form.)

#### N.C NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

Grower

1	Signature
	/
Observed with Naked I	Eye: 🗆 Yes 🖾 No
If No, list device type:	
	11
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 15 ST.
and Maning Address.	YAKIMA, WA 98901
	7AK (MA, WA 1810)
Observation Condition	
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FFFT
Viewing Angle:	170
Wind Speed:	1-7 MPH
Temperature:	7705
Relative Humidity:	40
Start Time: 0900	End Time: 09/5
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
V ( En	nission Point Emission Point
WIND 7	
Plume	Plume
Wind	r's Position Wind Observer's Position
$\rightarrow$	Sun
Sun 140 °	140 *
Sun Location Line	Sun Location Line
. 1	
Background:	
Sky Conditions:	-
Distance from Plume:	Color:
Source Height:	Color
Viewing Angle:	
Wind Speed:	

End Time:

Relative Humidity:

Start Time:

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN NUMBER: / W				RUN NUMBER:			
Circle C	Circle Color: Black / White			Circle Color: Black / White			White
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1			
2	75	75		2			
3	5	10		3			
4	20	15		4			
5	10	10		5			
6	50	45		6			
7	5	5		7			
8	25	45 50		8			
9	80	75		9			
10	25	25		10			
11	5	5		11			
12	10	15		12			
13	25	25		13			140
14	20	20		14		-	
15	5	5		15			
16	15	10		16			
17	75	70		17			
18	85	80		18	-	47	
19	100	100		19			
20	10	5		20			
21	25	15		21			
22	20	10		22			
23	5	5		23			
24	15	15		24			
25	0	0		25			
Total	Number			Total	Number		
332253345	Number	v 2=		-	Mullibel	x 2=	

## NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

rower

	Signature
	/
Observed with Naked E	ve: DYes No
If No, list device type:	
in the first de ties type.	
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 15 ST.
	YAKIMA, WA 98901
	7.11.2.11.11.11.10.1-1
Observation Condition	ę
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-Z MPH
Temperature:	72.0F
Relative Humidity:	40
Start Time: 0900	End Time: 0915
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
N DE Emi	ssion Point Emission Point
WIND	
Plume	Plume
Wind	's Position Wind Observer's Position
Sun	Sun
Sun Location Line	Sun Location Line
~	>
Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	20101.
Viewing Angle:	

End Time:

Wind Speed: Temperature: Relative Humidity:

Start Time:

#### **Student Observation Record**

Name DAVID BROWER

Print Nam

RUN	NUMBER	R: / /	V	RUN N	IUMBEF	₹:	
Circle Color: Black / White			Circle Color: Black / White			White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1			
2	75	75		2			
3	5	10	1	3			
4	20	15	1	4			
5	10	10		5			
6	50	45	1	6			
7	5	5		7			
8	25	45 50	1	8			
9	80	75	1	9			1111
10	25	25		10			
11	5	5		11			
12	10	15	1	12		.v	4
13	25	25		13			191
14	20	20		14			
15	5	5		15			
16	15	10	1	16			
17	75	70	1	17			
18	85	80	1	18		1 75%	
19	100	100		19			
20	10	5	1	20			
21	25	15	2	21			
22	20	10	2	22			1
23	5	5		23			
24	15	15	-	24			
25	0	0		25			
Total	Number			Total I	Number		
of 5% x .2 =				of 5%		x .2 =	

#### N.C NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

	Signature
	/
Observed with Naked I	Eve: □Yes □No
If No, list device type:	CONTACT LENSES
ii ivo, list device type.	CIDNIFICI GEOGRA
Location of Test:	HILLSBORD, OR
	V0 - 4 4
Business Affiliation	YRCAA
and Mailing Address:	329 N. 1ST ST.
<b></b>	YAKIMA, WA 98901
	7110.0011 WIT 10101
01	
Observation Condition Background:	TOFES
Sky Conditions:	CIEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-Z MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time:
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
ALO TEN	nission Point Emission Point
NO	
WIND	100
Plume	Plume
Wind	r's Position Wind Observer's Position
Sun 140°	Sun 140°
Sun Location Line	Sun Location Line
1	
Background:	
Sky Conditions:	
Distance from Plume:	Color:

End Time:

Source Height: Viewing Angle: Wind Speed: Temperature: Relative Humidity: Start Time:

#### **Student Observation Record**

Name DAVID BROWER Print Name

Date: 03-16-2015							
RUN N	NUMBER	R: / /	V	RUN NUMBER:			
Circle Color: Black / White			Circle Color: Black / White			White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1		-	
2	75	75		2			
3	5	10	1	3			
4	20	15	1	4			
5	10	10		5			
6	50	45	ı	6			
7	5	5		7	240		
8	25	4550	1	8			
9	80	75	1	9			
10	25	25		10			
11	5	5		11			
12	10	15	1	12			
13	25	25		13			43
14	20	20		14			
15	5	5		15			
16	15	10	1	16			
17	75	70	1	17			
18	85	80	1	18		A STATE	
19	100	100		19		4	
20	10	5	1	20			
21	25	15	2	21			
22	20	10	2	22			
23	5	5		23			
24	15	15		24			
25	0	0		25			1.6
Total Number			+	Number			
of 5%	of 5% 14 x .2 =			of 5%		x .2 =	

#### N.C NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

	Signature
	/
Observed with Naked Ey	ve: □Yes □No
	CONTACT LENSES
ii ivo, list device type	CONTACT LENGES
Location of Test:	HILLSBORD, OR
Business Affiliation _	YRCAA
and Mailing Address:	329 N. 151 ST.
	YAKIMA, WA 98901
- Y	7116 11011, 1411 18101
_	
01 1 6 111	
Observation Conditions Background:	TOCTE
Sky Conditions:	CIEAD
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 EEET
Viewing Angle:	170
Wind Speed:	1-2 MPH
Temperature:	72 OF
Relative Humidity:	40
Start Time: 0900	End Time: 09/5
DI 1 6	DI LUMBI
Circle Color : Black / V	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
N Emissi	ion Point Emission Point
WIND =	
Plume	Plume
Wind Observer's	Position Wind Observer's Position
Sun	Sun
Sun Location Line	Sun Location Line
Sun Location Line	Sui Location Line
. 1	
Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	

End Time:

Viewing Angle: Wind Speed: Temperature: Relative Humidity:

Start Time:

#### **Student Observation Record**

DAVID BROWER

RUN NUMBER: / White				Circle Color: Black / White			White
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of
1	50	50	5%	1			3%
2	75	75		2		-	
3	5	10	1	3			
4	20	15	1	4			
5	10	10		5			
6	50	45	1	6			
7	5	5	•	7			
8	25	45 50	1	8			
9	80	75	1	9			
10	25	25		10			
11	5	5		11			
12	10	15	1	12			
13	25	25		13			nis
14	20	20		14			
15	5	5		15			
16	15	10	1	16			
17	75	70	1	17			
18	85	80	1	18		Wall of the same o	
19	100	100		19			
20	10	5	1	20			
21	25	15	2	21			
22	20	10	2	22			
23	5	5		23			
24	15	15		24	1		
25	0	0		25			
	Number			Total N	Number		
of 5% 14 x .2 = 2.8			of 5%		x .2 =		

# Test Scoring

• Average Deviation must be 7.4% or less (37 or fewer increments of 5%)

• No single answer can be off by 20% or more (4 increments of 5%)

#### NOC

#### NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

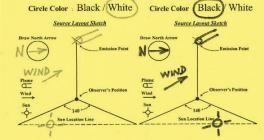
329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

Wavi	d Brower
, 6	Signature
Observed with Naked I	Eve: □Yes ☑No
If No list device type:	CONTACT LENSE
ii No, list device type.	CONTACT LENGE
Location of Test:	HILLSBORD, OR

Business Affiliation  $\frac{\text{YRCAA}}{\text{329 N. } 15^{\text{T}} \text{ Sr.}}$ and Mailing Address:  $\frac{329 \text{ N. } 15^{\text{T}} \text{ Sr.}}{\text{YAKIMA, WA } 98901}$ 

Observation Condition	ıs
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	720F
Relative Humidity:	40
Start Time: 0900	End Time: 0915



Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS 45 FEET Color: BLACK
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5mph
Temperature:	
Relative Humidity:	
Start Time:	End Time:

#### **Student Observation Record**

Name DAVID BROWER

	olor: B	' '	White		olor: (B	- Total	White
			Eq.No.of				Eq.No.of
No.	Obs.	Met.	5%	No.	Obs.	Met.	5%
1	50	50		1			
2	75	75		2			
3	5	10	1	3			
4	20	15	1	4			
5	10	10		5			
6	50	45	1	6			
7	5	5		7	-		
8	25	4550	1	8			
9	80	75	1	9			
10	25	25		10			
11	5	5		11			
12	10	15	1	12			
13	25	25		13			4.
14	20	20		14			
15	5	5		15		1134	
16	15	10	1	16			
17	75	70	1	17			
18	85	80	1	18		215	
19	100	100		19			
20	10	5	1	20			
21	25	15	2	21			
22	20	10	2	22			
23	5	5		23			
24	15	15		24			
25	0	0		25			
	Number		2.8	-	Number	v 2=	

## NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

IJ	hereby	certify	that	the	readings	are	my own:	
				-				

Thereby cer	tiry that the readings are my own.
Wave	of Brower
Num	Signature
	Signature
Observed with Naked I	Eye: □Yes ☑No
f No, list device type:	CONTACT LENSES
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 15T ST.
	YAKIMA, WA 98901
01	
Observation Condition Background:	<u>!S</u>
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	AMADE 100 100 100 100 100 100 100 100 100 10
Wind Speed:	7
Γemperature:	2 Programme and the contract of the contract o
Relative Humidity:	
Start Time:	End Time:
Circle Colon Black	White Circle Color : Black / White
Circle Color : Diack /	Willie Circle Color : Black / Willie
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
C Eu	ission Point Emission Point
Plume	Plume

Background:	
Sky Conditions:	
Distance from Plume:	Color:
Source Height:	
Viewing Angle:	
Wind Speed:	
Temperature:	
Relative Humidity:	
Start Time:	End Time:

Sun Location Line

Sun Location Line

#### **Student Observation Record**

DAVID BROWER

Print Name

RUN NUMBER:				RUN NUMBER:				
Circle Color: Black / White			Circle Color: B		Black /	lack / White		
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%	
1				1				
2				2				
3				3				
4				4				
5				5				
6				6				
7				7				
8				8				
9				9				
10				10				
11				11				
12				12				
13				13				
14				14				
15				15				
16				16				
17			-	17				
18				18				
19				19				
20				20				
21				21				
22				22				
23				23				
24				24				
25				25				
Total Number of 5% x .2 =		Total Number of 5% x .2 =						

#### NOC

#### NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

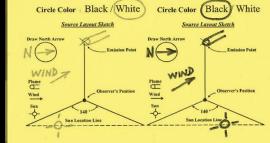
I hereby certify that the readings are my own:

Signature

Observed with Naked I	
If No, list device type:	CONTACT LENSE
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA

and Mailing Address: YAKIMA, WA 98901

Observation Condition	<u>15</u>
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	720F
Relative Humidity:	40
Start Time: 0900	End Time: 0915



Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5 mph
Temperature:	71°F'
Relative Humidity:	42%
Start Time: 092	End Time:

#### **Student Observation Record**

DAVID BROWER

RUN NUMBER: / W			RUN NUMBER: 18				
Circle Color: Black / White			Circle Color: Black/ White				
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1		-	
2	75	75		2			
3	5	10	1	3			
4	20	15	1	4			
5	10	10		5			
6	50	45	1	6			
7	5	5		7	11		
8	25	45 50	1	8			
9	80	75	1	9			
10	25	25		10			
11	5	5		11			
12	10	15	1	12			
13	25	25		13			146
14	20	20		14			
15	5	5		15			
16	15	10	1	16			
17	75	70	1	17			
18	85	80	1	18		S. Tall	
19	100	100		19			
20	10	5	1	20			
21	25	15	2	21			
22	20	10	2	22			
23	5	5		23			
24	15	15		24			
25	0	0		25			
Total of 5%	Number			Total	Number		

#### NOC

#### NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

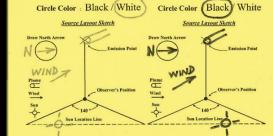
I hereby certify that the readings are my own:

Mavid Brower

Observed with Naked E	
If No, list device type:	CONTACT LENSES
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA

and Mailing Address: 329 N. 1<sup>ST</sup> ST. YAKIMA, WA 98901

#### 



Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5mph
Temperature:	71°F'
Relative Humidity:	42%
Start Time: 092	o End Time: 0935

#### **Student Observation Record**

Name DAVID BROWER

Date: 03-16-2015

Date: 03-16-2015  RUN NUMBER: 18							
Circle Color: Black / White			Circle Color: Black/ White				
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25		
2	75	75		2	10		
3	5	10	1	3	25		
4	20	15	1	4	5		
5	10	10		5	35		
6	50	45	1	6	45		
7	5	5		7	80		
8	25	4550	)	8	60		
9	80	75	1	9	30		
10	25	25		10	0		
11	5	5		11	10		
12	10	15	1	12	20		
13	25	25		13	5		- 12-
14	20	20		14	55		
15	5	5		15	90		
16	15	10	1	16	0		
17	75	70	1	17	5		
18	85	80	1	18	25	A ST	
19	100	100		19	35		
20	10	5	1	20	5		
21	25	15	2	21.	5		
22	20	10	2	22	0		
23	5	5		23	15		
24	15	15		24	20		
25	0	0		25	10		1
Total Number of 5% 14 x .2 = 2.8				Number			

# Completing 50 Consecutive Readings

- After completing 25 readings on the second color, hand in the top (yellow) copy.
- Record metered values for second run on the last (pink) copy & compute your score
- If you passed the second color, you're done!
- Retain pink copy for your own record.
- (If you did not pass the second color, discard test and begin again on new test form.)

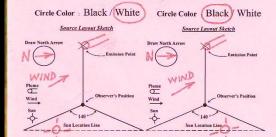
An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

Wave	desower						
Signature							
Observed with Naked E	Eye: DYes No						
	CONTACT LENSES						
Location of Test:	HILLSBORD, OR						
Business Affiliation	YRCAA						
and Mailing Address:	329 N. 15 ST.						
	YAKIMA, WA 98901						

Observation Condition	<u>18</u>
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time: 09/5



Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5 mph
Temperature:	71°F'
Relative Humidity:	42%
Start Time: 092	o End Time: 0935

#### **Student Observation Record**

DAVID BROWER
Print Name

Date: 03-16-2015							
RUN NUMBER: / W			RUN NUMBER: 18				
Circle Color: Black / White			Circle Color: Black/ White				
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25	25	
2	75	75		2	10	5	
3	5	10	1	3	25	10	
4	20	15	1	4	5	5	
5	10	10	4	5	35	20	
6	50	45	1	6	45	55	
7	5	5		7	80	65	
8	25	4550	1	8	60	50	
9	80	75	1	9	30	30	
10	25	25		10	0	0	
11	5	5		11	10	10	
12	10	15	1	12	20	25	
13	25	25		13	5	10	Tax -
14	20	20		14	55	50	
15	5	5		15	90	75	
16	15	10	1	16	0	0	
17	75	70	1	17	5	5	,
18	85	80	1	18	25	15	
19	100	100		19	35	20	
20	10	5	1	20	5	5	
21	25	15	2	21	5	10	
22	20	10	2	22	0	0	1
23	5	5		23	15	15	- !
24	15	15		24	20	25	
25	0	0		25	10	10	d
T-4-11	ll			T. (.)			
Total Number of 5% <u>/4</u> x .2 = 2.8				lumber			

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own: -10

h	laved Grower	
7-5-6	Signature	

Observed with Naked E If No, list device type:	Eye: TYes No  CONTACT LENSES
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 15 ST.
	YAKIMA. WA 98901
Observation Condition	<u>s</u>
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-2 MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time:9/5
Circle Color : Black /	White Circle Color Black White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow Siden Point Emission Point
Plume Wind	Plame Wind  Plame Observer's Position
Sun 140°	Sun 140 °
Sun Location Line	Sun Location Line

Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5 mph
Temperature:	71°F'
Relative Humidity:	42%
Start Time: 092	o End Time: 0935

#### **Student Observation Record**

Name DAVID BROWER
Print Name

RUN	NUMBER	R: //	V	RUN N	NUMBER	R: 11	3
Circle (	Color: B	lack / V	Vhite	Circle Color: Black/ White			
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25	25	
2	75	75		2	10	5	1
3	5	10	1	3	25	10	3
4	20	15	1	4	5	5	
5	10	10		5	35	20	3
6	50	45	1	6	45	55	2
7	5	5		7	80	65	3
8	25	4550	1	8	60	50	2
9	80	75	1	9	30	30	
10	25	25		10	0	0	
11	5	5		11	10	10	
12	10	15	1	12	20	25	1
13	25	25		13	5	10	1
14	20	20		14	55	50	1
15	5	5		15	90	75	3
16	15	10	1	16	0	0	
17	75	70	1	17	5	5	
18	85	80	1	18	25	15	2
19	100	100		19	35	20	3
20	10	5	1	20	5	5	
21	25	15	2	21	5	10	13
22	20	10	2	22	0	0	
23	5	5		23	15	15	
24	15	15		24	20	25	1
25	0	0		25	10	10	11/2
Total Number of 5%/			Total N	Number			

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own: Grower

	Signature
Observed with Naked H	eve: Tyes No
	CONTACT LENSES
ii ivo, list device type.	CONTACT LEGIS
Location of Test:	HILLSBORD, OR
	4.25
Business Affiliation	YRCAA
and Mailing Address:	329 N. 151 ST.
and Maning Madress.	YAKIMA. WA 98901
	7AK IMA, WA 18101
Observation Condition	<u>s</u>
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-Z MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time:
Circle Color : Black /	White Circle Color Black White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
	ission Point Emission Point
N C	Emission Point
WIND -	MIND
Plume	Plume
	C /

Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5 mph
Temperature:	71°F'
Relative Humidity:	42%
Start Time: A97	Find Time: 0935

Sun Location Line

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN N	NUMBER	R: / /	V	RUN NUMBER: 18			
Circle C	olor: B	lack / V	Vhite	Circle Color: Black/ White			
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25	25	
2	75	75		2	10	5	1
3	5	10	1	3	25	10	3
4	20	15	1	4	5	5	
5	10	10		5	35	20	3
6	50	45	1	6	45	55	2
7	5	5		7	80	65	3
8	25	4550	)	8	60	50	2
9	80	75	1	9	30	30	
10	25	25		10	0	0	
11	5	5		11	10	10	
12	10	15	1	12	20	25	1
13	25	25		13	5	10	1
14	20	20		14	55	50	1
15	5	5		15	90	75	3
16	15	10	1	16	0	0	
17	75	70	- 1	17	5	5	
18	85	80	1	18	25	15	2
19	100	100		19	35	20	3
20	10	5	1	20	5	5	
21	25	15	2	21	5	10	13
22	20	10	2	22	0	0	
23	5	5		23	15	15	
24	15	15		24	20	25	1
25	0	0		25	10	10	7
Total I	Total Number of 5% /4 x.2 = 7 - 8				Number 27	- 0-	

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

1	()	avid Brower	
1	6	Signature	Ī

Wave	d Grower
1	Signature
Observed with Naked E	ye: □Yes ☑No
If No, list device type:	CONTACT LENSES
	11
Location of Test:	HILLSBORD, OR
Business Affiliation	YRCAA
and Mailing Address:	329 N. 15 ST.
	YAKIMA, WA 98901
Observation Condition	S
Background:	TREES
Sky Conditions:	CLEAR
Distance from Plume:	45 FEET Color: WHITE
Source Height:	15 FEET
Viewing Angle:	120
Wind Speed:	1-Z MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time:
Circle Color : Black /	White Circle Color Black White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
N ( Emi	Emission Point
WIND =	MIND
Plume	Plume
Wind Observer'	s Position Wind Observer's Position
Sun	Sun
Sun Location Line	Sun Location Line

Background: Sky Conditions: Distance from Plume: 45 FEET Color: BL Source Height: 15 FEET Viewing Angle: Wind Speed: Temperature: Relative Humidity: End Time: Start Time: 09

Sun Location Line

Sun Location Line

#### **Student Observation Record**

DAVID BROWER
Print Name

RUN N	NUMBER	R: / /	V	RUN	IUMBEF	R: 11	3
Circle C	olor: B	lack / V	Vhite	Circle Color: Black/ White			White
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25	25	
2	75	75		2	10	5	1
3	5	10	1	3	25	10	3
4	20	15	1	4	5	5	
5	10	10		5	35	20	3
6	50	45	1	6	45	55	2
7	5	5		7	80	65	3
8	25	4550	1	8	60	50	2
9	80	75	1	9	30	30	
10	25	25		10	0	0	
11	5	5		11	10	10	
12	10	15	1	12	20	25	1
13	25	25		. 13	5	10	1
14	20	20		14	55	50	1
15	5	5		15	90	75	3
16	15	10	1	16	0	0	
17	75	70	1	17	5	5	* .
18	85	80	1	18	25	15	2
19	100	100		19	35	20	3
20	10	5	1	20	5	5	
21	25	15	2	21	5	10	1
22	20	10	2	22	0	0	
23	5	5		23	15	15	
24	15	15		24	20	25	1
25	0	0		25	10	10	
Total Number				-	Number 27		5.4

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

Wave	ify that the readings are my own:  Signature
Observed with Naked E If No, list device type:	Bye: DYes DNO  CONTACT LENSES
Location of Test:	HILLSBORD, OR
	YRCAA 329 N. 1 <sup>ST</sup> ST. YAKIMA, WA 98901
Observation Condition Background: Sky Conditions: Distance from Plume: Source Height: Viewing Angle: Wind Speed: Temperature: Relative Humidity: Start Time:	Color:
Circle Color : Black /	White Circle Color : Black / White
Source Layout Sketch	Source Layout Sketch
Piume Chierrer	Draw North Arrow  Emission Point  Plume  Observer's Position  Observer's Position
Sun Location Line	Sun 140 - Sun Lecation Line
Background: Sky Conditions: Distance from Plume: Source Height: Viewing Angle: Wind Speed: Temperature:	Color:
Relative Humidity: Start Time:	End Time:

#### **Student Observation Record**

Name DAVID BROWER

Date: 03-16-2015

	NUMBER		201	RUN NUMBER:				
Circle C	olor: B	lack / \	White	Circle C	Color: E	Black /	White	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%	
1				1				
2				2				
3				3				
4				4				
5				5				
6				6				
7				7				
8				8				
9				9				
10				10				
11				11				
12				12				
13				13				
14				14				
15				15				
16				16				
17				17				
18				18				
19				19				
20				20				
21				21				
22				22				
23				23				
24				24				
25				25				
	Number	2 -		100000000000000000000000000000000000000	Number	2-		

#### NOC

#### NORTHWEST OPACITY CERTIFICATION

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my own:

YRCAA

Observed with Naked Eye: Yes

CONTACT LENSES If No, list device type:

Location of Test:

Business Affiliation

and Mailing Address:

#### **Student Observation Record**

DAVID BROWER

Date: 03-16-7015

RUN I	NUMBER	R: //	V	RUN NUMBER: 18			
Circle C	Color: B	lack / V	Vhite	Circle C	color: (E	Black / N	White
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25	25	
2	75	75		2	10	5	1
3	5	10	1	3	25	10	3
4	20	15	1	4	5	-	
5	10	10					

VE Certification Voucher Name DAVID BROWER Date 03-16-2015

**Total Number** 

Please Rate Our Service, 1 Lowest 10 Highest \_\_\_\_\_

Any Comments:

	11	Emission Point
Plume Wind Observer's Position	Plume CE WIND Sun	Observer's Position
Sun Location Line	Sun Loca	tion Line

Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5 mph
Temperature:	71°F'
Dalativa Humiditus	1170/

Start Time: 0920 End Time:

					90	75	3	
	15	10	1	16	0	0		
17	75	70	1	17	5	5		
18	85	80	-	18	25	15	2	
19	100	100		19	35	20	3	
20	10	5	1	20	5	5		
21	25	15	2	21	5	10	13	
22	20	10	2	22	0	0		
23	5	5		23	15	15		
24	15	15		24	20	25	1	
25	0	0		25	10	10	, 1/2	
							56° at 1	

**Total Number** 

of 5% 27 x.2= 5.4

An Enterprise of Yakima Regional Clean Air

329 North 1st Street, Yakima, WA 98901 Phone: (509) 834-2050 Fax: (509) 834-2060 Website: http://www.yakimacleanair.org

I hereby certify that the readings are my

1.000	d Brower
Maria	Signature
Observed with Naked E	iye: DYes No
•	HILLSBORD, OR
Business Affiliation	YRCAA
nd Mailing Address:	329 N. 15 ST.
	YAKIMA. WA 98901
Observation Condition	<u>s</u>
Background:	TREES
Sky Conditions: Distance from Plume:	45 FEET Color: WHITE
Source Height:	IS EEET
Viewing Angle:	170
Wind Speed:	1-2 MPH
Temperature:	72°F
Relative Humidity:	40
Start Time: 0900	End Time: <u>0915</u>
Circle Color : Black /	White Circle Color Black White
Source Layout Sketch	Source Layout Sketch
Draw North Arrow	Draw North Arrow
Emi	Emission Point Emission Point
WIND	Plane
Wind	's Position Wind Observer's Position

Background:	BLUE SKY
Sky Conditions:	SCATTERED CLOUDS
Distance from Plume:	45 FEET Color: BLACK
Source Height:	15 FEET
Viewing Angle:	150
Wind Speed:	5 mph
Temperature:	71°F'
Relative Humidity:	42%
Start Time: 092	o End Time: 0935

#### **Student Observation Record**

RUN NUMBER:  Circle Color: Black / White				RUN NUMBER: 18  Circle Color: Black / White			
Circle C	Color: B	lack / V	THE REAL PROPERTY.	Circle C	olor: (E	Black / N	
No.	Obs.	Met.	Eq.No.of 5%	No.	Obs.	Met.	Eq.No.of 5%
1	50	50		1	25	25	
2	75	75		2	10	5	1
3	5	10	1	3	25	10	3
4	20	15	1	4	5	5	
5	10	10		5	35	20	3
6	50	45	1	6	45	55	2
7	5	5		7	80	65	3
8	25	4550	1	8	60	50	2
9	80	75	1	9	30	30	
10	25	25		10	0	0	
11	5	5		11	10	10	
12	10	15	1	12	20	25	1
13	25	25		13	5	10	1
14	20	20		14	55	50	1
15	5	5		15	90	75	3
16	15	10	1	16	0	0	
17	75	70	1	17	5	5	* 10
18	85	80	1	18	25	15	2
19	100	100		19	35	20	3
20	10	5	1	20	5	5	1 2
21	25	15	2	21	5	10	1
22	20	10	2	22	0	0	
23	5	5		23	15	15	
24	15	15		24	20	25	1
25	0	0		25	10	10	
	Number 14	0		Total I	Number 27		

#### **VE Certification Voucher**

Name <u>DAVID BROWER</u> Date <u>03-16-2015</u>
Wht Dev. <u>2.8</u> % Blk Dev. <u>5.4</u> % Run # <u>IW, IB</u>

Please Rate Our Service, 1 Lowest 10 Highest \_\_\_\_\_\_
Any Comments:

## Summary – To Certify

- 50 CONSECUTIVE readings
- 25 Black, 25 White (or vice-versa)
- No 4's or above
- Maximum of 37 total, or 7.4%
- Triple check your calculations
- Turn in with Signature & Green Slip

### Your Certification Card

- Will arrive in the mail within 2 weeks
- If not  $\rightarrow$  call our office

- Certificate is only valid for 6 months from the date on your card.
- To be current, you must re-certify every 6 months.

## Good Luck!!!

• See you on the field!!