AIR QUALITY, HEALTH RISK, GREENHOUSE GAS, AND ENERGY IMPACT REPORT

KISS LOGISTICS CENTER PROJECT

HESPERIA, CALIFORNIA

LSA

April 2023

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Submitted to:

EPD Solutions, Inc.
2355 Main Street, Suite 100
Irvine, California 92614

Prepared by:

LSA
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666

Project No. ESL2201.52

LSA

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TABLE OF CONTENTS

TABLE OF CONTENTS i
FIGURES AND TABLES iv
LIST OF ABBREVIATIONS AND ACRONYMS v
PROJECT LOCATION AND DESCRIPTION 1
EXISTING LAND USES IN THE PROJECT AREA 4
AIR POLLUTANTS AND HEALTH EFFECTS 5
Ozone 6
Carbon Monoxide 6
Particulate Matter 6
Nitrogen Dioxide 6
Sulfur Dioxide 6
Lead 7
Volatile Organic Compounds 7
Toxic Air Contaminants 7
ENERGY 11
Electricity 11
Natural Gas 11
Fuel 12
GREENHOUSE GASES AND GLOBAL CLIMATE CHANGE 13
Carbon Dioxide 14
Methane 14
Nitrous Oxide 15
Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride 15
Black Carbon 15
Effects of Global Climate Change 16
AIR QUALITY REGULATIONS 18
Federal Regulations 18
Federal Clean Air Act 18
State Regulations 18
California Clean Air Act 18
California Air Resources Board 18
Regional Regulations 19
Mojave Desert Air Quality Management District 19
Southern California Association of Governments 20
Local Regulations 21
City of Hesperia General Plan Update 21
ENERGY REGULATORY SETTING 21
Federal Regulations 22
Energy Policy Act of 2005 22

State Regulations 22
Assembly Bill 1575, Warren-Alquist Act 22
Senate Bill 1389, Energy: Planning and Forecasting 23
Renewable Portfolio Standard 23
Title 24, California Building Code and CalGreen Code 24
California Energy Efficiency Strategic Plan. 24
Regional Regulations 25
Local Regulations 25
City of Hesperia General Plan Update 25
GLOBAL CLIMATE CHANGE REGULATORY SETTING 25
Federal Regulations 25
State Regulations 26
Assembly Bill 1493 (2002) 26
Executive Order S-3-05 (2005) 26
Assembly Bill 32 (2006), California Global Warming Solutions Act 27
Senate Bill 97 (2007) 29
Senate Bill 375 (2008) 29
Executive Order B-30-15 (2015) 30
Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act 30
Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197 30
Senate Bill 100 31
Executive Order B-55-18 31
Title 24, Part 11, Building Standards Code and CALGreen Code 31
Cap and Trade 31
Executive Order N-79-20 32
California Integrated Waste Management Act 32
Low Carbon Fuel Standard 33
Advanced Clean Cars Program 33
Executive Order B-48-18 33
Regional Regulations 34
Mojave Desert Air Quality Management District 34
Southern California Association of Governments 34
Local Regulations 34
County of San Bernardino Regional Greenhouse Gas Reduction Plan (GHGRP) 34
Hesperia Climate Action Plan 35
ATTAINMENT STATUS 36
EXISTING CLIMATE AND AIR QUALITY 36
AIR QUALITY MONITORING RESULTS 38
GREENHOUSE GAS EMISSIONS INVENTORY 38
Global Emissions 38
United States Emissions 40
State of California Emissions 40
City of Hesperia Emissions 40
CONSTRUCTION EMISSIONS 42
OPERATIONAL EMISSIONS 42

CONSTRUCTION HEALTH RISK ASSESSMENT 43
OPERATIONAL HEALTH RISK ASSESSMENT 43
ENERGY USE 44
GREENHOUSE GAS ANALYSIS 44
CRITERIA POLLUTANT THRESHOLDS 45
HEALTH RISK THRESHOLDS 46
LOCAL MICROSCALE CONCENTRATION STANDARDS 47
GLOBAL CLIMATE CHANGE 47
AIR QUALITY IMPACTS 49
Consistency with Applicable Air Quality Plans 49
Criteria Pollutant Analysis 50
Construction Emissions 50
Operational Air Quality Impacts 52
Long-Term Microscale (CO Hot Spot) Analysis 54
Health Risk on Nearby Sensitive Receptors 54
Construction Health Risk Assessment 55
Operational Health Risk Assessment 55
Odors 56
ENERGY IMPACTS 56
Energy Consumption 56
Construction Energy Use 56
Operational Energy Usage 58
Conflict with Renewable Energy or Energy Efficiency Plans 59
GREENHOUSE GAS IMPACTS 59
Generation of Greenhouse Gas Emissions 59
Short-Term Greenhouse Gas Emissions 60
Long-Term Greenhouse Gas Emissions 60
Consistency with Greenhouse Gas Emissions Reduction Plans 64
San Bernardino County Regional Greenhouse Gas Reduction Plan 64
Scoping Plan 68
2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) 69

APPENDICES

A: CALEEMOD OUTPUT SHEETS
B: HRA MODEL OUTPUT
C: ENERGY CALCULATIONS

FIGURES AND TABLES

FIGURES

Figure 1: Project Location and Vicinity 2
Figure 2: Project Site Plan 3

TABLES

Table A: Sources and Health Effects of Air Pollutants 8
Table B: Federal and State Ambient Air Quality Standards 9
Table C: Global Warming Potential of Greenhouse Gases 14
Table D: Potential Impacts of Global Warming and Expected Consequences for California 17
Table E: Senate Bill 375 Regional Greenhouse Gas Emissions Reduction Targets 30
Table F: Attainment Status of Criteria Pollutants in the Mojave Desert Air Basin 36
Table G: Ambient Air Quality at Nearby Monitoring Stations 39
Table H: Emission Reductions by Sector for Hesperia 41
Table I: Regional Thresholds for Construction and Operational Emissions 46
Table J: Tentative Project Construction Schedule 51
Table K: Diesel Construction Equipment Utilized by Construction Phase 51
Table L: Project Construction Emissions 52
Table M: Project Operational Emissions 53
Table N: Health Risks from Project Construction to Off-Site Receptors 55
Table O: Health Risks from Project Operation to Off-Site Receptors 56
Table P: Proposed Project Energy Consumption Estimates during Construction 57
Table Q: Proposed Project Energy Consumption Estimates during Operation 58
Table R: Unmitigated Long-Term Operational Greenhouse Gas Emissions 61
Table S: Mitigated Long-Term Operational Greenhouse Gas Emissions 63
Table T: Project Consistency with City of Hesperia Greenhouse Gas Reduction Measures 65

LIST OF ABBREVIATIONS AND ACRONYMS

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BAU	business-as-usual
BTU	British thermal units
BWh	dry hot desert climate
BWhh	dry very hot desert climate
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CIBP	Commercial/Industrial Park

City	City of Hesperia
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of San Bernardino
CPUC	California Public Utilities Commission
DPM	diesel particulate matter
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMFAC	California Emissions Factor Model
EO	Executive Order
ft	foot/feet
GCC	global climate change
GHG	greenhouse gas
GHGRP	Greenhouse Gas Reduction Plan
GWh	gigawatt-hours
GWP	global warming potential
H_2S	hydrogen sulfide
HFCs	hydrofluorocarbons
HI	Hazard Index
HRA	Health Risk Assessment
I-395	Interstate 395
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
LOS	level of service
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MEI	maximally exposed individual
mg/m^3	milligrams per cubic meter

MICR	maximum individual cancer risk
MMT	million metric tons
MMT CO_2e	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MSFC SP	Main Street and Freeway Corridor Specific Plan
MT	metric tons
MT CO_2e	metric tons of carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	national ambient air quality standards
NC	Neighborhood Commercial
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
O_3	ozone (or smog)
OPR	Governor's Office of Planning and Research
PFCs	perfluorocarbons
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PM_{10}	particulate matter less than 10 microns in size
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
project	KISS Logistics Center Warehouse Project
ROCs	reactive organic compounds
ROGs	reactive organic gases
RPS	Renewables Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan

RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SAFE	Safer, Affordable, Fuel-Efficient (Vehicles)
SB	Senate Bill
SBCOG	San Bernardino Council of Governments
SBCTA	San Bernardino County Transportation Authority
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
sf	square foot/feet
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
SO_X	sulfur oxides
TAC	toxic air contaminant
UNFCCC	United Nations Framework Convention on Climate Change
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VMT	vehicle miles traveled
VOCs	volatile organic compounds
ZEV	zero-emission vehicle
ZNE	zero net energy

INTRODUCTION

This air quality, health risk, energy, and greenhouse gas (GHG) impact report has been prepared to evaluate the potential air quality and GHG emissions impacts associated with the KISS Logistics Center Project (project) in the City of Hesperia (City), San Bernardino County (County), California. This report follows the guidelines identified by the Mojave Desert Air Quality Management District (MDAQMD) in its California Environmental Quality Act (CEQA) and Federal Air Conformity Guidelines.[1] In keeping with these guidelines, this analysis describes existing air quality, air quality and GHG emissions generated from project-related sources, regional air pollution, and global climate change. In addition, this analysis discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

PROJECT LOCATION AND DESCRIPTION

The project site is located northwest of the intersection of Interstate 395 (I-395) and Main Street within the western portion of the City of Hesperia, County of San Bernardino, California. The total project site is approximately 29.61 acres and encompasses three parcels, identified as Assessor's Parcel Numbers (APNs) 3064-401-03, -04, and -05. The project site is currently undeveloped. Access to the project site would be provided via proposed public road "A", which would be accessible via Phelan Road to the south and newly proposed Yucca Terrace Drive to the north. The project applicant is expected to build out the future roadway on proposed "A" Street, extending from Phelan Road, and would build out the future roadway on Yucca Terrace Drive. See Figure 1, Project Location and Vicinity, and Figure 2, Project Site Plan, below.

The project proposes to build an industrial building that would support warehouse, manufacturing, and office uses. The proposed building area would be 639,468 square feet (sf) of warehouse space, 11,000 sf of ground floor office space, and 5,000 sf of mezzanine office space for a total 655,468 sf industrial building. The proposed project includes 75 percent of warehouse uses, 5 percent of cold storage uses, and 20 percent of manufacturing uses. In addition, the proposed project would designate 16.8 percent or approximately 209,075 sf of the total project area to ornamental landscaping. Parking spaces required by City code would be maintained in a 374-space parking lot, including 49 electric vehicle/clean air/carpool spaces. In addition, the proposed project would include 60 loading dock doors and 82 trailer stalls. The proposed project would include an 800-kilowatt (1,073-horsepower) emergency backup generator.

[1] Mojave Desert Air Quality Management District (MDAQMD). 2020. California Environmental Quality Act (CEQA) and Federal Air Conformity Guidelines. Website: https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000 (accessed March 2023).

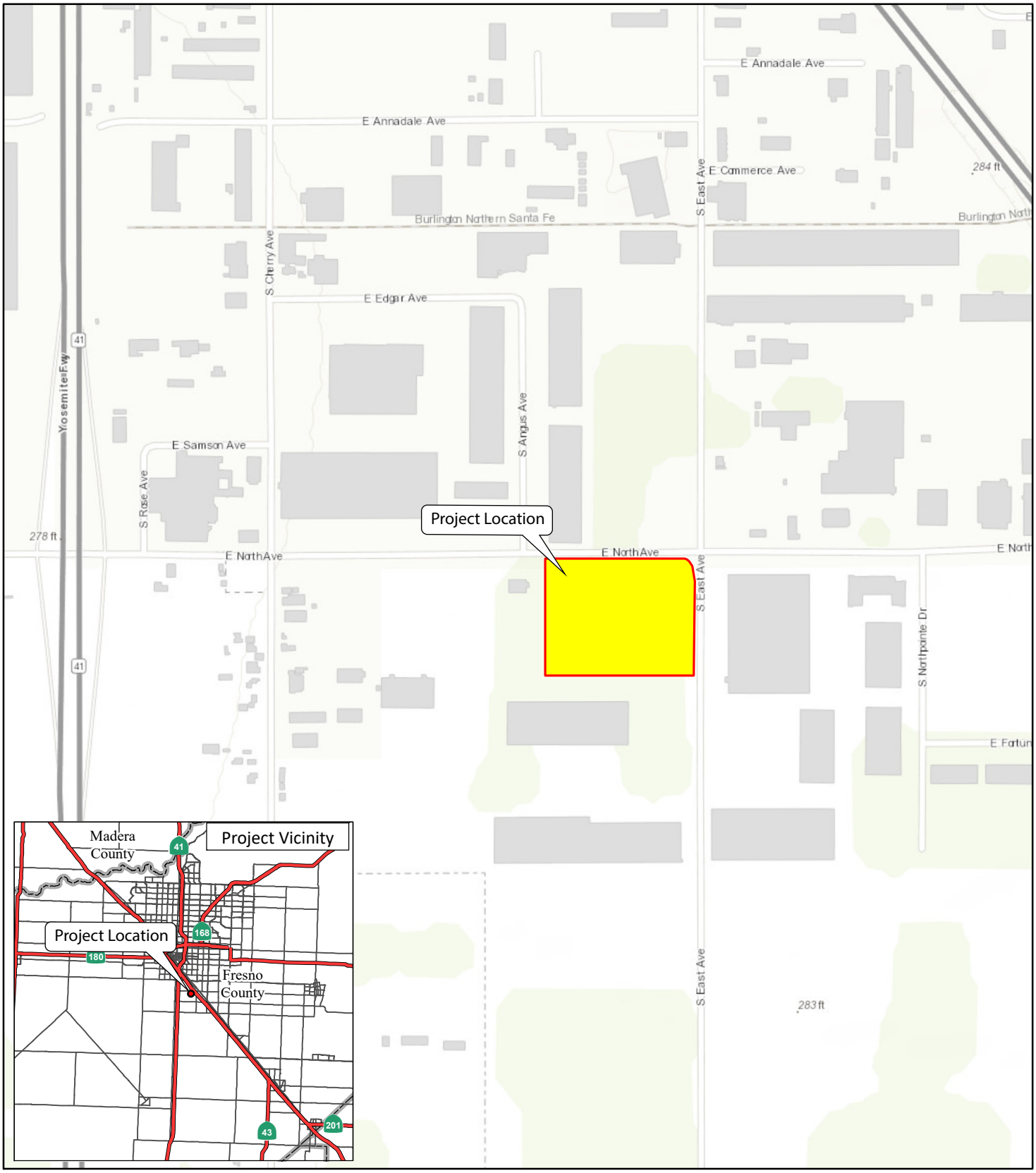

FIGURE 1

LEGEND

Project Site

City Boundary

N

0 400 800

FEET

SOURCE: ArcGIS Online Topographic Map (2020)

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Fresno Distribution Center Project

Project Location

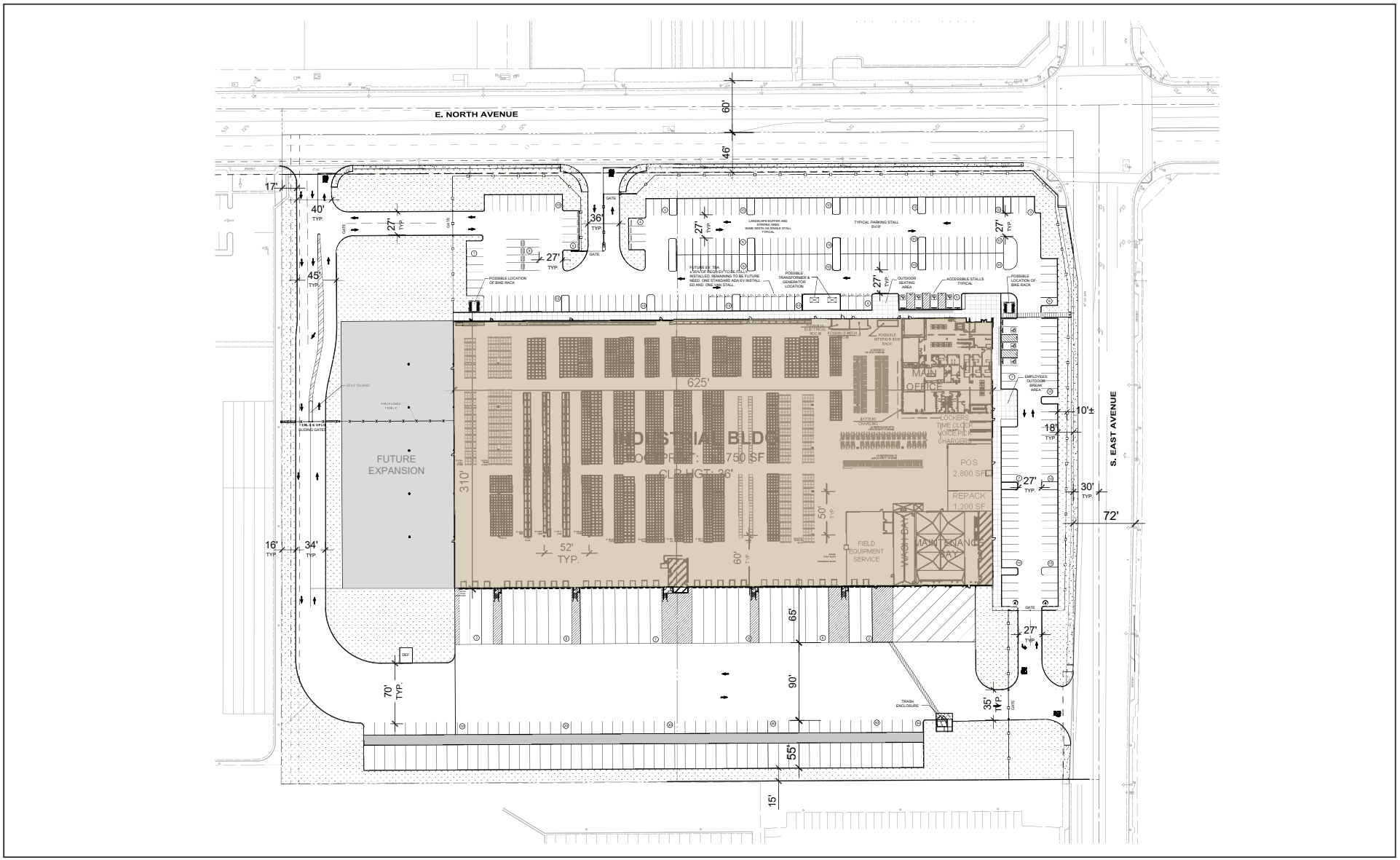

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FIGURE 2

0 25 80
FEET

SOURCE: Ware Malcomb

Fresno Distribution Center Project

Site Plan

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The project would be operated as a combination of warehouse, manufacturing, and office uses. Typical operational characteristics include employees traveling to and from the site, delivery of materials and supplies to the site, and truck loading and unloading. Operations are assumed to occur 27 hours per day, 7 days per week. Once operational, the proposed project would generate a total of approximately 1,357 average daily trips including 976 passenger vehicles, 68 2-axle truck trips, 77 3-axle truck trips, and 236 4+-axle truck trips.[2]

Construction is anticipated to begin in the Fall of 2023 and be completed in 2024. Based on the preliminary grading plans, the project site would be balanced, and no import or export of soil would be required. The proposed project would not include the use of natural gas during construction or operation.

EXISTING LAND USES IN THE PROJECT AREA

For the purposes of this analysis, sensitive receptors are areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution. The project site is primarily surrounded by vacant land and is bound to I-395 to the east, Phelan Road to the south, and Caliente Road to the west. The closest sensitive receptors include residential uses including existing rural single-family residential uses approximately 1,100 feet (ft) southwest, opposite Phelan Road and an existing West Main Villas multifamily residential community located approximately 1,600 ft away.

[2] EPD Solutions, Inc. 2022. *KISS Logistics Center Warehouse Traffic Impact Analysis*. November 11.

BACKGROUND

This section provides current background information on air pollutants and GHG emissions and their health effects. It also provides current regulatory background information, including information from the California Air Resources Board's (CARB) Air Quality and Land Use Handbook[3] (CARB Handbook), a description of the general health risks of toxics, and the significance criteria for project evaluation. In addition, this section provides background information on energy usage in the project area and provides regulatory background information, including federal, State, and local energy regulations.

AIR POLLUTANTS AND HEALTH EFFECTS

Both State and federal governments have established health-based ambient air quality standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS], respectively) for six criteria air pollutants:[4] carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no known direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_X) and volatile organic compounds (VOCs).

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous outdoor work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses

[3] California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

[4] Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

Ozone

Rather than being directly emitted, ozone (O_3 or smog) is formed by photochemical reactions between NO_X and VOCs. Ozone is a pungent, colorless gas. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. Ozone levels peak during the summer and early fall months.

Carbon Monoxide

Carbon monoxide (CO) is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Particulate Matter

Particulate matter (PM) is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are 10 microns or less in diameter, or PM_{10}. Fine, suspended particulate matter with an aerodynamic diameter of 2.5 microns or less, or $PM_{2.5}$, is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as byproducts of fuel combustion; through abrasion, such as tire or brake lining wear; or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the region. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Lead

Leaded gasoline (phased out in the United States beginning in 1973), paint (on older houses and cars), smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead (Pb) released into the atmosphere. Lead has multiple adverse neurotoxic health effects, and children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California. On October 15, 2008, the United States Environmental Protection Agency (USEPA) strengthened the NAAQS for lead by lowering it from 1.5 to 0.15 micrograms per cubic meter ($\mu g/m^3$). The USEPA revised the monitoring requirements for lead in December 2010. These requirements focus on airports and large urban areas, resulting in an increase in 76 monitors nationally.

Volatile Organic Compounds

Volatile organic compounds (VOCs) (also known as reactive organic gases [ROGs] and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the USEPA and the CARB. Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

TACs do not have ambient air quality standards, but are regulated by the USEPA, CARB, and the MDAQMD. In 1998, the CARB identified PM from diesel-fueled engines as a TAC. The CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[5] High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Unlike TACs emitted from industrial and other stationary sources noted above, most diesel particulate matter (DPM) is emitted from mobile sources—primarily “off-road” sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as “on-road” sources such as trucks and buses traveling on freeways and local roadways.

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5 CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

Although not specifically monitored, recent studies indicate that exposure to DPM may contribute significantly to a cancer risk (a risk of approximately 500 to 700 in 1,000,000) that is greater than all other measured TACs combined.[6] The technology for reducing DPM emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions. The CARB anticipated that by 2020, average statewide DPM concentrations will decrease by 85 percent from levels in 2000 with full implementation of the CARB's Diesel Risk Reduction Plan,[7] meaning that the statewide health risk from DPM is expected to decrease from 540 cancer cases in 1,000,000 to 21.5 cancer cases in 1,000,000. The CARB 2000 Diesel Risk Reduction Plan is still the most recent version and has not been updated.

Table A summarizes the sources and health effects of air pollutants discussed in this section. Table B presents a summary of CAAQS and NAAQS.

Table A: Sources and Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust • Natural events, such as decomposition of organic matter	• Reduced tolerance for exercise • Impairment of mental function • Impairment of fetal development • Death at high levels of exposure • Aggravation of some heart diseases (angina)
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust • High temperature stationary combustion • Atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility • Reduced plant growth • Formation of acid rain
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Impairment of cardiopulmonary function • Plant leaf injury
Lead (Pb)	• Contaminated soil	• Impairment of blood functions and nerve construction • Behavioral and hearing problems in children
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	• Stationary combustion of solid fuels • Construction activities • Industrial processes • Atmospheric chemical reactions	• Reduced lung function • Aggravation of the effects of gaseous pollutants • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Soiling • Reduced visibility
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels • Smelting of sulfur-bearing metal ores Industrial processes	• Aggravation of respiratory diseases (asthma, emphysema) • Reduced lung function • Irritation of eyes • Reduced visibility • Plant injury • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board (2015).

[6] CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

[7] Ibid.

Table B: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]		Federal Standards[b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
Ozone (O_3)[h]	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[i]	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter ($PM_{2.5}$)[i]	24-Hour	-		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	–	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO_2)[j]	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemi-luminescence	53 ppb (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemi-luminescence
	1-Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Lead (Pb)[l,m]	30-Day Average	1.5 µg/m^3	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[l]	Same as Primary Standard	
	Rolling 3-Month Average[i]	–		0.15 µg/m^3		
Sulfur Dioxide (SO_2)[k]	24-Hour	0.04 ppm (105 µg/m3)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3-Hour	–		–	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		75 ppb (196 µg/m^3)[k]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[k]	–	
Visibility-Reducing Particles[l]	8-Hour	See footnote n	Beta Attenuation and Transmittance through Filter Tape.	No Federal Standards		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[j]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board (2016) (Website: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf; accessed December 2022).

Table notes are provided on the following page.

[a] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact USEPA for further clarification and current national policies.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[e] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[f] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[g] Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

[h] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24- hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[k] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[l] The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[m] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[n] In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

°C = degrees Celsius
µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
mg/m^3 = milligrams per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

ENERGY

Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2021, California's electricity was generated primarily by natural gas (37.9 percent), renewable sources (33.6 percent), large hydroelectric (9.2 percent), nuclear (9.3 percent), coal (3.0 percent), and other unspecified sources. Total electric generation in California in 2021 was 277,764 gigawatt-hours (GWh), up 2 percent from the 2020 total generation of 272,576 GWh.[8]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile area of Central, Coastal, and Southern California.[9] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2021 was 103,045.2 GWh (36,375.8 GWh for the residential sector and 66,669.4 GWh for the non-residential sector). Total electricity consumption in San Bernardino County in 2021 was 16,180.8 GWh (16,180,811,158 kilowatt-hours (kWh).[10]

Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[11]

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8 California Energy Commission (CEC). 2022a. *2020 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation (accessed December 2022).

9 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed December 2022).

10 CEC. 2021a. Electricity Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed December 2022).

11 CEC. 2022b. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed December 2022).

The Southwest Gas Corporation is the natural gas service provider for the project site. Southwest Gas provides natural gas to approximately 2 million people in Arizona, Nevada and portions of California.[12] According to the CEC, total natural gas consumption in the Southwest Gas Corporation service area in 2021 was 6,755.6 million therms (2,308.9 million therms for the residential sector). Total natural gas consumption in San Bernardino County in 2021 was 561 million therms (561,360,617 therms).[13]

Fuel

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020.[14] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. The Act, which originally mandated a national fuel economy standard of 35 mpg by year 2020[15], applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, total gasoline consumption in California was 289,918 thousand barrels or 1,464.7 trillion British Thermal units (BTU) in 2020.[16] Of the total gasoline consumption, 273,289 thousand barrels or 1,380.7 trillion BTU were consumed for transportation.[17] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 321.6 million gallons of diesel and approximately 915.5 million gallons of gasoline will be consumed from vehicle trips in San Bernardino County in 2022.

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12 Southwest Gas Corporation. 2020. About Southwest Gas. Website: Southwest Gas: About Southwest Gas (swgas.com) (accessed December 2022).

13 CEC. 2021b. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed December 2022).

14 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed December 2022).

15 U.S. Department of Energy. 2007. Energy Independence & Security Act of 2007. Website: https://www.afdc.energy.gov/laws/eisa (accessed December 2022).

16 A British Thermal Unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

17 U.S. Department of Energy, Energy Information Administration (EIA). 2021a. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2020. Website: eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed December 2022).

GREENHOUSE GASES AND GLOBAL CLIMATE CHANGE

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ± 0.2 degrees Celsius (°C) or 1.1 ± 0.4 degrees Fahrenheit (°F) in the 20th century. The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[18]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- CO_2
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this air quality analysis, the term "GHGs" will refer collectively to the six gases listed above.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG; the

[18] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the heat escaping, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the naturally occurring greenhouse effect is necessary to keep our planet at a comfortable temperature.

definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e). Table C shows the GWP for each type of GHG. For example, SF_6 is 23,900 times more potent at contributing to global warming than CO_2.

Table C: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-Year Time Horizon)
Carbon Dioxide	50-200	1
Methane	12	21
Nitrous Oxide	114	310
HFC-23	270	11,700
HFC-134a	14	140
HFC-152a	1.4	140
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoromethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: *Second Update to the Climate Change Scoping Plan: Building on the Framework* (CARB 2017). Website: www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents (accessed December 2022).

The following discussion summarizes the characteristics of the six GHGs and black carbon.

Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form, CO_2. Natural sources of CO_2 include the respiration (breathing) of humans, animals, and plants, volcanic out gassing, decomposition of organic matter and evaporation from the oceans. Human caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of CO_2 each year, far outweighing the 7 billion tons of man-made emissions of CO_2 each year. Nevertheless, natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of man-made CO_2, and consequently, the gas is building up in the atmosphere.

In 2020, total annual CO_2 accounted for approximately 80.2 percent of California's overall GHG emissions.[19] Transportation is the single largest source of CO_2 in California, which is primarily comprised of on-road travel. Electricity production, industrial and residential sources also make important contributions to CO_2 emissions in California.

Methane

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH_4 emissions in California and in the United States

[19] CARB. 2022. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed December 2022).

as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH_4 in California. Total annual emissions of CH_4 accounted for approximately 10.5 percent of GHG emissions in California in 2020.[20]

Nitrous Oxide

Nitrous oxide is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N_2O emissions in California. Nitrous oxide emissions accounted for approximately 3.5 percent of GHG emissions in California in 2020.[21]

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.[22] PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs. HFCs, PFCs, and SF_6 accounted for about 5.5 percent of GHG emissions in California in 2020.[23]

Black Carbon

Black carbon is the most strongly light-absorbing component of PM formed by burning fossil fuels such as coal, diesel, and biomass. Black carbon is emitted directly into the atmosphere in the form of $PM_{2.5}$ and is the most effective form of PM, by mass, at absorbing solar energy. Per unit of mass in the atmosphere, black carbon can absorb one million times more energy than CO_2.[24] Black carbon contributes to climate change both directly, such as absorbing sunlight, and indirectly, such as affecting cloud formation. However, because black carbon is short-lived in the atmosphere, it can be difficult to quantify its effect on global warming.

Most U.S. emissions of black carbon come from mobile sources (52 percent), particularly from diesel-fueled vehicles. The other major source of black carbon is open biomass burning, including wildfires,

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20 CARB. 2022. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed December 2022).

21 Ibid.

22 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

23 CARB. 2021. op. cit.

24 U.S. Environmental Protection Agency (USEPA). 2015. Black Carbon, Basic Information. February 14, 2017. Website: 19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html (accessed December 2022).

although residential heating and industry also contribute. The CARB estimates that the annual black carbon emissions in California will be reduced approximately 50 percent below 2013 levels by 2030.[25]

Effects of Global Climate Change

Effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme weather events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture. Global climate change may also contribute to air quality problems from increased frequency of smog and particulate air pollution.[26]

Additionally, according to the 2006 California Climate Action Team (CAT) Report,[27] the following applicable climate change effects, which are based on trends established by the United Nations Intergovernmental Panel on Climate Change (IPCC), can be expected in California over the course of the next century:

- The loss of sea ice and mountain snow-pack, resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures.[28]
- Rise in global average sea level, primarily due to thermal expansion and melting of glaciers and ice caps in the Greenland and Antarctic ice sheets.[29]
- Changes in weather that include widespread changes in precipitation, ocean salinity, wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones.[30]
- Decline of the Sierra snowpack, which accounts for approximately one-half of the surface water storage in California by 70 percent to as much as 90 percent over the next 100 years.[31]

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25 CARB. 2017. *Short-Lived Climate Pollutant Reduction Strategy.* March. Website: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf (accessed December 2022).

26 USEPA. 2016. Climate Impacts on Human Health. April. Website: https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-human-health_.html, last updated on February 24, 2017 (accessed December 2022).

27 California Environmental Protection Agency (CalEPA). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

28 Ibid.

29 Ibid.

30 Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis, Summary for Policymakers*. February.

31 CalEPA. 2006. op. cit.

- Increase in the number of days conducive to O_3 formation by 25–85 percent (depending on the future temperature scenario) in high O_3 areas by the end of the 21st century.[32]
- High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level.[33]

A summary of these potential effects is identified in Table D.

Table D: Potential Impacts of Global Warming and Expected Consequences for California

Potential Water Resource Impacts	Anticipated Consequences Statewide
Reduction of the State's average annual snowpack	• Specifically, the decline of the Sierra snowpack would lead to a loss in half of the surface water storage in California by 70% to 90% over the next 100 years • Potential loss of 5 million acre-feet or more of average annual water storage in the State's snowpack • Increased challenges for reservoir management and balancing the competing concerns of flood protection and water supply • Higher surface evaporation rates with a corresponding increase in tropospheric water vapor
Rise in average sea level	• Potential economic impacts related to coastal tourism, commercial fisheries, coastal agriculture, and ports • Increased risk of flooding, coastal erosion along the State's coastline, seawater intrusion into the Delta and levee systems
Changes in weather	• Changes in precipitation, ocean salinity, and wind patterns • Increased likelihood for extreme weather events, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones
Changes in the timing, intensity, location, amount, and variability of precipitation	• Potential increased storm intensity and increased potential for flooding • Possible increased potential for droughts • Long-term changes in vegetation and increased incidence of wildfires • Changes in the intensity and timing of runoff • Possible increased incidence of flooding and increased sedimentation • Sea level rise and inundation of coastal marshes and estuaries • Increased potential for salinity intrusion into coastal aquifers (groundwater) • Increased potential for flooding near the mouths of rivers due to backwater effects
Increased water temperatures	• Increased environmental water demand for temperature control • Possible increased problems with foreign invasive species in aquatic ecosystems • Potential adverse changes in water quality, including the reduction of dissolved oxygen levels • Possible critical effects on listed and endangered aquatic species
Changes in urban and agricultural water demand	• Changes in demand patterns and evapotranspiration
Increase in the number of days conducive to O_3 formation	• Increased temperatures • Potential health effects, including adverse impacts to respiratory systems

Source: United States Department of the Interior, Environmental Water Account, Draft Supplemental EIS/EIR to the Environmental Water Account Final EIS/EIR, Bureau of Reclamation Mid-Pacific Region, Sacramento, California (October 2007).
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
O_3 = ozone

32 CalEPA. 2006. op. cit.
33 Ibid.

REGULATORY SETTING

AIR QUALITY REGULATIONS

The USEPA and the CARB regulate direct emissions from motor vehicles. The MDAQMD is the regional agency primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as monitoring ambient pollutant concentrations.

Federal Regulations

Federal Clean Air Act

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The Federal Clean Air Act Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the Clean Air Act, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

California Clean Air Act

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain CAAQS for CO, O_3, SO_2, and NO_2 by the earliest practical date. The California Clean Air Act provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

California Air Resources Board

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

The California Air Resources Board Handbook. The CARB has developed an Air Quality and Land Use Handbook[34] which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

Land uses that can produce air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 ft of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 ft of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 ft of any dry cleaning operation (for operations with two or more machines, provide 500 ft); and
- Within 300 ft of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to help land use agencies determine when to further examine project sites for actual health risk associated with the location of new sensitive land uses.

Regional Regulations

Mojave Desert Air Quality Management District

The MDAQMD is the regional agency responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards in the San Bernardino County portion of the Mojave Desert Air Basin (MDAB). Programs include air quality rules and regulations that regulate stationary sources, area sources,

[34] CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

point sources, and certain mobile source emissions. The MDAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

All areas designated as nonattainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The most recent air quality plans are the PM_{10} Attainment Demonstration and Attainment Plan and the O_3 Attainment Plan.

In addition, emissions that would result from mobile, area, and stationary sources during construction and operation of the project are subject to the rules and regulations of the MDAQMD. The MDAQMD rules applicable to the project may include, but are not limited to, the following:

- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402 – Nuisance:** This rule prohibits the discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403.2 – Fugitive Dust Control for the Mojave Desert Planning Area:** This rule ensures that the NAAQS for PM_{10} will not be exceeded due to anthropogenic sources of fugitive dust within the Mojave Desert Planning Area and implements the control measures contained in the Mojave Desert Planning Area Federal PM_{10} Attainment Plan.
- **Rule 442 – Usage of Solvents:** The purpose of this rule is to reduce VOC emissions from VOC-containing materials or equipment that is not subject to limits of any rule found in District Regulation XI – Source Specific Standards.
- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Southern California Association of Governments

Southern California Association of Governments (SCAG) is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the Air Quality Management Plan (AQMP) and are utilized in the preparation of the air quality forecasts and

consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the MDAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) on September 3, 2020. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

Local Regulations

City of Hesperia General Plan Update

The City of Hesperia addresses air quality in the Conservation Element of the City of Hesperia General Plan Update.[35] The Conservation Element contains goals and policies that work to reduce air pollution and emissions of pollutants. The following policies are applicable to the proposed project:

- Policy CN-8.1: Implement measures to reduce fugitive dust from unpaved areas, parking lots, and construction sites.
- Policy CN-8.2: Implement measures to reduce exhaust emissions from construction equipment.
- Policy CN-8.4: Limit new sensitive receptor land uses in proximity to significant sources of air pollution
- Policy CN-8.5: Minimize exposure of sensitive receptor land uses and sites to health risks related to air pollution.

ENERGY REGULATORY SETTING

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation (USDOT), the

[35] San Bernardino, City of. 2005. *City of San Bernardino General Plan*. November.

United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs state response to energy emergencies. The applicable federal, State, regional, and local regulatory framework is discussed below.

Federal Regulations

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy (CAFE). On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

State Regulations

Assembly Bill 1575, Warren-Alquist Act

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public

Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting

In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2021 Integrated Energy Policy Report*[36] and the *2022 Integrated Energy Policy Report Update.*[37] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standard

SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350

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36 CEC. 2021c. *2021 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 21-IEPR-01.

37 CEC. 2022c. *2022 Integrated Energy Policy Report Update*. California Energy Commission. Docket Number: 22-IEPR-01.

established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[38]

Title 24, California Building Code and CalGreen Code

Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every three years, the 2022 CBC adopted in December 2022 and became effective as of January 1, 2023. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24. In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that will be effective January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce greenhouse gas (GHG) emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan.

On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

[38] California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed December 2022).

Regional Regulations

There are no regional regulations that apply to the proposed project.

Local Regulations

City of Hesperia General Plan Update

The City of Hesperia addresses energy in the Conservation Element of the Hesperia General Plan Update. Conservation Element contains policies that work to provide programs and incentives to encourage residents, businesses, and developers to reduce consumption and efficiently use energy resources. The following policies are applicable to the proposed project:

- Policy CN-6.2: Encourage the use of green building standards and Leadership in Energy and Environmental Design (LEED) or similar programs in both private and public projects.
- Policy CN-6.5: Coordinate with the local energy provider in developing policies and procedures to reduce energy consumption in existing and future developments.

GLOBAL CLIMATE CHANGE REGULATORY SETTING

This section describes regulations related to Global Climate Change at the federal, State, and local level.

Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the federal CAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the Clean Air Act, finding that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

In October 2012, the USEPA and the NHTSA, on behalf of the USDOT, issued final rules to further reduce GHG emissions and improve Corporate Average Fuel Economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond (77 *Federal Register* 62624). The NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 mpg, limiting vehicle emissions to 163 grams of CO_2 per mile for the fleet of cars and light-duty trucks by model year 2025 (77 *Federal Register* 62630).

On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

State Regulations

The CARB is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 1493 (2002)

In a response to the transportation sector's significant contribution to California's CO_2 emissions, AB 1493 was enacted on July 22, 2002. AB 1493 requires the CARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of CCAA Preemption was not granted by the USEPA until June 30, 2009. The CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025. The Trump administration revoked California's waiver in 2019; however, the Biden administration restored California's waiver in 2021.

Executive Order S-3-05 (2005)

Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05 on June 1, 2005, which proclaimed that California is vulnerable to the impacts of climate change. To combat those concerns, the executive order established California's GHG emissions reduction targets, which established the following goals:

- GHG emissions should be reduced to 2000 levels by 2010;
- GHG emissions should be reduced to 1990 levels by 2020; and
- GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

The Secretary of the California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various State agencies in order to collectively and efficiently reduce GHGs. A biannual progress report must be submitted to the Governor and State Legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, the coastline, and forestry, and report possible mitigation and adaptation plans to address these impacts.

The Secretary of CalEPA leads this CAT made up of representatives from State agencies as well as numerous other boards and departments. The CAT members work to coordinate statewide efforts to implement global warming emission reduction programs and the State's Climate Adaptation

Strategy. The CAT is also responsible for reporting on the progress made toward meeting the statewide GHG targets that were established in the executive order and further defined under AB 32, the "Global Warming Solutions Act of 2006." The first CAT Report to the Governor and the Legislature was released in March 2006, which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the executive order. The most recent report was released in December 2020.

Assembly Bill 32 (2006), California Global Warming Solutions Act

California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The Scoping Plan identifies 18 emission reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT CO_2e by 2020.

On August 24, 2011, the CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. The CARB also approved a more robust CEQA equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

CARB has not yet determined what amount of GHG reductions it recommends from local government operations and local land use decisions; however, the Scoping Plan states that land use

planning and urban growth decisions will play an important role in the State's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions (meanwhile, CARB is also developing an additional protocol for community emissions). CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the Scoping Plan expects an approximately 5.0 MMT CO_2e reduction due to implementation of SB 375.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed the CARB and the CAT to identify a list of "discrete early action GHG reduction measures" that could be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed EO S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel Standard (LCFS). This executive order sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs the CARB to consider the LCFS as a discrete early action measure. In 2011, U.S. District Court Judge Lawrence O'Neil issued an injunction preventing implementation of the LCFS, ruling that it is unconstitutional. In 2012, the Ninth Circuit Court of Appeal stayed the District Court's injunction, allowing implementation of the LCFS. The Ninth Circuit decided to uphold the LCFS.

In June 2007, the CARB approved a list of 37 early action measures, including three discrete early action measures (LCFS, Restrictions on GWP Refrigerants, and Landfill CH_4 Capture).[39] Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code Section 38560.5. The CARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of PFCs from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and SF_6 reductions from the non-electricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 MMT.[40]

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

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39 CARB. 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October.

40 CARB. 2007. "ARB approves tripling of early action measures required under AB 32" News Release 07-46. October 25.

CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[41] to reflect the 2030 target set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan[42] was approved in December 2022 and assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Senate Bill 97 (2007)

SB 97, signed by the Governor in August 2007 (Chapter 185, Statutes of 2007; PRC Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Resources Agency guidelines for mitigating GHG emissions or the effects of GHG emissions, as required by CEQA.

The California Natural Resources Agency adopted the amendments to the *State CEQA Guidelines* in November 2018, which went into effect in December 2018. The amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. The amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs when they perform individual project analyses.

Senate Bill 375 (2008)

SB 375, the Sustainable Communities and Climate Protection Act, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State on September 30, 2008. On September 23, 2010, the CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the MPOs; the targets require a 6 to 15 percent reduction by 2020 and between 13 to 19 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs such as the Fresno Council of Governments will work with local jurisdictions in the development of Sustainable Communities Strategy (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. Pursuant to SB 375, the Los Angeles/ Southern California reduction targets for per capita vehicular emissions were 8 percent by 2020 and are 19 percent by 2035 as shown in Table E.

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41 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

42 CARB. 2022. *2022 Scoping Plan*. November 16. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed December 2022).

Table E: Senate Bill 375 Regional Greenhouse Gas Emissions Reduction Targets

Metropolitan Planning Organization	By 2020 (percent)	By 2035 (percent)
San Francisco Bay Area	10	19
San Diego	15	19
Sacramento	7	19
Central Valley/San Joaquin	6–13	13–16
Los Angeles/Southern California	8	19

Source: California Air Resources Board (2018).

Executive Order B-30-15 (2015)

Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act

SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this legislation requires state energy agencies to plan for, and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197

In summer 2016 the Legislature passed, and the Governor signed, SB 32, and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an IPCC analysis of

the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's Renewables Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18

EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Title 24, Part 11, Building Standards Code and CALGreen Code

California Building Standards Code, or Title 24 of the California Code of Regulations (CCR) contains the regulations that govern the construction of buildings in California. Within the Building Standards Code, two parts pertain to the incorporation of both energy efficient and green building elements into land use development. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. The California Building Standards Commission established the California Green Building Standards Code (CALGreen Code), which sets performance standards for residential and non-residential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is updated every 3 years and was most recently updated in 2022 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2023. The new set of standards were adopted in December 2022 and will apply to projects seeking building permits on or after January 1, 2023.

Cap and Trade

The development of a cap-and-trade program was included as a key reduction measure of the CARB AB 32 Climate Change Scoping Plan. The cap-and-trade program will help put California on the path

to meet its goal of reducing GHG emissions to 1990 levels by 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. The cap-and-trade emissions trading program developed by the CARB took effect on January 1, 2012, with enforceable compliance obligations beginning January 1, 2013. The cap-and-trade program aims to regulate GHG emissions from the largest producers in the State by setting a statewide firm limit, or cap, on allowable annual GHG emissions. The cap was set in 2013 at approximately 2 percent below the emissions forecast for 2020. In 2014, the cap declined approximately 2 percent. Beginning in 2015 and continuing through 2020, the cap has been declining approximately 3 percent annually. The CARB administered the first auction on November 14, 2012, with many of the qualified bidders representing corporations or organizations that produce large amounts of GHG emissions, including energy companies, agriculture and food industries, steel mills, cement companies, and universities. On January 1, 2015, compliance obligation began for distributors of transportation fuels, natural gas, and other fuels. The cap-and-trade program was initially slated to sunset in 2020 but the passage of SB 398 in 2017 extended the program through 2030.

Executive Order N-79-20

EO N-79-20, which was signed by the Governor on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. The resulting 2012 Mandatory Commercial Recycling Regulation requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939, the Integrated Waste Management Act. In April 2016, AB 1826 further modified the California Integrated Waste Management Act, requiring businesses that generate a specified amount of organic waste per week to arrange for recycling services for that organic waste in a specified manner. If CalRecycle determines that statewide disposal of organic waste has not been reduced by 50 percent below 2014 levels by 2020, businesses generating more than two cubic yards of organic waste per week would be subject to these waste collection requirements. CalRecycle plans to make this assessment in the fall of 2020. Diverting organic waste from landfills reduces emissions of CH_4. This is equivalent

to reducing anaerobic decomposition of organic waste that would have otherwise occurred in landfills where organic waste is often buried with other inorganic waste.

Low Carbon Fuel Standard

In January 2007, EO S-01-07 established an LCFS. This executive order calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that an LCFS for transportation fuels be established for California. The LCFS applies to all refiners, blenders, producers, or importers ("Providers") of transportation fuels in California, including fuels used by off-road construction equipment. In June 2007, CARB adopted the LCFS under AB 32 pursuant to Health and Safety Code Section 38560.5, and, in April 2009, CARB approved the new rules and carbon intensity reference values with new regulatory requirements taking effect in January 2011. The standards require providers of transportation fuels to report on the mix of fuels they provide and demonstrate they meet the LCFS intensity standards annually. This is accomplished by ensuring that the number of "credits" earned by providing fuels with a lower carbon intensity than the established baseline (or obtained from another party) is equal to or greater than the "deficits" earned from selling higher intensity fuels. In response to certain court rulings, CARB re-adopted the LCFS regulation in September 2015, and the LCFS went into effect on January 1, 2016. In 2018, CARB approved amendments to the regulation to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote ZEV adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory standards for vehicle model years 2017 through 2025. The new regulations strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's ZEVs regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 40 percent fewer GHGs and 75 percent fewer smog-forming emissions than 2012 model year vehicles.

Executive Order B-48-18

In January 2018, Governor Brown signed EO B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen

Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential land uses, through the LCFS Program, and recommend how to ensure affordability and accessibility for all drivers.

Regional Regulations

Mojave Desert Air Quality Management District

The MDAQMD has adopted GHG emissions thresholds in its CEQA Guidelines but has not adopted a comprehensive strategy for reducing GHG emissions. The MDAQMD threshold is 100,000 MT/year CO_2e and 548,000 pounds per day.

Southern California Association of Governments

On September 3, 2020, SCAG adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).[43] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[44] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; SCAG is required to consider local land use controls when drafting the SCS.

Local Regulations

County of San Bernardino Regional Greenhouse Gas Reduction Plan (GHGRP)

As a response to the 2006 AB 32 law, a project partnership led by the San Bernardino Associated Governments, the predecessor agency to the San Bernardino County Transportation Authority (SBCTA), has compiled an inventory of GHG emissions and developed reduction measures that was adopted by the 21 Partnership Cities of San Bernardino County. The regional GHG reduction plan[45]

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43 SCAG. 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed December 2022).

44 SCAG. 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed December 2022).

45 San Bernardino Council of Governments (SBCOG). 2021. San Bernardino County Regional Greenhouse Gas Reduction Plan. Website: https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf (accessed January 2023).

was adopted in 2021 and will serve as the basis for cities in San Bernardino County to develop more detailed community level climate action plans. The City of Hesperia was a participant in the San Bernardino County Regional Greenhouse Gas Reduction Plan, which identifies the County's vision and goals on reducing GHG emissions in the different cities, local government facilities, and communities. In response to these initiatives, an informal project partnership, led by the San Bernardino Council of Governments (SBCOG), compiled a GHG emissions inventory and an evaluation of reduction measures that could be adopted by the 25 Partnership Cities of San Bernardino County. The Partnership has committed to undertake the following actions that will reduce GHG emissions associated with its regional (or countywide) activities:

- Prepare a baseline (2016) GHG emissions inventory for each of the 25 Partnership Jurisdictions in the County.
- Prepare a future year (2020, 2030, and 2045) GHG emissions forecasts for each of the jurisdictions.
- Develop general GHG reduction measures and jurisdiction-specific measures appropriate for each jurisdiction.
- Develop consistent baseline in information for jurisdictions to use for their development of community climate action plans (CAPs) meeting jurisdiction-identified reduction goals.

Hesperia Climate Action Plan

The City of Hesperia adopted the City of Hesperia Climate Action Plan (CAP)[46] in June of 2010. The Hesperia CAP outlines a course of action for the City government and the community of Hesperia to reduce per capita GHG emissions 29 percent below 2010 levels by 2020 and to adapt to the effects of climate change. The Hesperia CAP includes actions such as reducing emissions from new development through CEQA, increasing bicycle use through a safe and well-connected system of bicycle paths and end of trip facilities, reducing energy use from the transport and treatment of water, and improving the City's recycling and source reduction programs to make continued progress in minimizing waste. The CAP also lists implementation strategies that add more details and specific actions to the General Plan policies and clarify how the reductions would occur.

[46] Hesperia, City Of. June. City of Hesperia Climate Action Plan. 2010. Website: https://www.cityofhesperia.us/DocumentCenter/View/1587/Climate-Action-Plan-7210?bidId= (accessed December 2022).

SETTING

This section provides the current MDAQMD attainment status, climate and air quality, ambient air quality monitoring results, and GHG emissions inventory.

ATTAINMENT STATUS

The CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for all State standards. An *attainment* designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A *nonattainment* designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An *unclassified* designation signifies that data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA designates areas for O_3, CO, and NO_2 as either does not meet the primary standards, or cannot be classified, or better than national standards. For SO_2, areas are designated as does not meet the primary standards, does not meet the secondary standards, cannot be classified, or better than national standards.

Table F provides a summary of the attainment status for the MDAB with respect to NAAQS and CAAQS.

Table F: Attainment Status of Criteria Pollutants in the Mojave Desert Air Basin

Pollutant	State	Federal
O_3 1 hour	Proposed Attainment in 2014	Revoked June 2005
O_3 8 hour	Nonattainment: Severe	Nonattainment: Severe
PM_{10}	Nonattainment	Nonattainment: Moderate
$PM_{2.5}$	Nonattainment	Unclassified/attainment
CO	Attainment/unclassified	Attainment/unclassified
NO_2	Attainment/unclassified	Attainment/unclassified
SO_2	Attainment/unclassified	Attainment/unclassified
Lead	Attainment/unclassified	Attainment/unclassified

Source: Mojave Desert Air Quality Management District (2020) (Website: https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000; accessed March 2023).

CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SO_2 = sulfur dioxide

EXISTING CLIMATE AND AIR QUALITY

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc.

The MDAB is an assemblage of mountain ranges interspersed with long, broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 ft above the valley floor. Prevailing winds in the Basin are out of the west and southwest. These prevailing winds are due to the proximity of the Basin to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the Basin. The Basin is separated from the Southern California coastal and central California valley regions by mountains (highest elevation is approximately 10,000 ft), whose passes form the main channels for these air masses. The Mojave Desert is bordered on the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 ft). A lesser pass lies between the San Bernardino Mountains and the Little San Bernardino Mountains in the Morongo Valley. The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley), whose primary channel is the San Gorgonio Pass (2,300 ft) between the San Bernardino and San Jacinto Mountains.

During the summer, the Basin is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The Basin is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time, they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The Basin averages between 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The Basin is classified as a dry-hot desert climate (BWh), with portions classified as dry-very hot desert climate (BWhh), to indicate that at least 3 months have maximum average temperatures over 100.4 degrees Fahrenheit (^{o} F).

Snow is common above 5,000 ft in elevation, resulting in moderate snowpack and limited spring runoff. Below 5,000 ft, any precipitation normally occurs as rainfall. Pacific storm fronts normally move into the area from the west, driven by prevailing winds from the west and southwest. During late summer, moist high-pressure systems from the Pacific Ocean collide with rising heated air from desert areas, resulting in brief, high-intensity thunderstorms that can cause high winds and localized flash flooding. During the fall and winter months, strong, dry Santa Ana winds from the northeast can cause rapid temperature variations of significant magnitude.

The climatological station closest to the site with a temperature history is the Victorville station.[47] The monthly average maximum temperature recorded at this station ranged from 58.8°F in January to 98.1°F in July, with an annual average maximum of 77.5°F. The monthly average minimum temperature recorded at this station ranged from 29.2°F in December to 60.8°F in July, with an annual average minimum of 43.9°F. These levels are representative of the project area.

The climatological station closest to the site with a precipitation history is the Hesperia station. Average monthly rainfall at this station varied from 0.02 inch in June to 1.26 inches in January, with

[47] Western Regional Climate Center. Recent Climate in the West. Website: http://www.wrcc.dri.edu, (accessed December 2022).

an annual total of 6.72 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

AIR QUALITY MONITORING RESULTS

Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The MDAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring stations closest to the project site located at 17288 Olive Street in Hesperia and 14306 Park Avenue in Victorville, California.

Pollutant monitoring results for years 2019 to 2021 at the Hesperia and Victorville ambient air quality monitoring stations, shown in Table G, indicate that air quality in the area has generally been moderate. As indicated in the monitoring results, the federal PM_{10} standard had one exceedance for 2019, 2020, and 2021. The State PM_{10} standard was exceeded an unknown number of times during the three-year period. The $PM_{2.5}$ federal standard had no exceedances in 2019, 4 exceedances in 2020, and an unknown number of exceedances in 2021. The 1-hour ozone State standard was exceeded 9 times in 2019 and in 2020, and an unknown number of times in 2021. The 8-hour ozone State standard was exceeded 52 times in 2019, 48 times in 2020, and an unknown number of times in 2021. The 8-hour ozone federal standard was 47 times in 2019, 48 times in 2020, and 55 times in 2021. In addition, the CO, SO_2, and NO_2 standards were not exceeded in this area during the 3-year period.

GREENHOUSE GAS EMISSIONS INVENTORY

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emission inventories.

Global Emissions

Worldwide emissions of GHGs in 2018 totaled 25.6 billion metric tons of CO_2e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).[48]

[48] United Nations Framework Convention on Climate Change (UNFCCC). 2021. GHG Data from UNFCCC. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed December 2022).

Table G: Ambient Air Quality at Nearby Monitoring Stations

Pollutant	Standard	2019	2020	2021
Carbon Monoxide (CO)[1]				
Maximum 1-hour concentration (ppm)		1.5	1.6	1.5
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		1.1	1.4	1.0
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O_3)[2]				
Maximum 1-hour concentration (ppm)		0.108	0.118	0.114
Number of days exceeded:	State: > 0.09 ppm	9	9	ND
Maximum 8-hour concentration (ppm)		0.088	0.095	0.101
Number of days exceeded:	State: > 0.07 ppm	52	48	ND
	Federal: > 0.07 ppm	47	48	55
Coarse Particulates (PM_{10})[2]				
Maximum 24-hour concentration (µg/m^3)		157	224	426
Number of days exceeded:	State: > 50 µg/m^3	ND	ND	ND
	Federal: > 150 µg/m^3	1	1	1
Annual arithmetic average concentration (µg/m^3)		ND	ND	ND
Exceeded for the year:	State: > 20 µg/m^3	ND	ND	ND
	Federal: > 50 µg/m^3	ND	ND	ND
Fine Particulates ($PM_{2.5}$)[1]				
Maximum 24-hour concentration (µg/m^3)		20.0	48.7	87.1
Number of days exceeded:	Federal: > 35 µg/m^3	0	4	ND
Annual arithmetic average concentration (µg/m^3)		7.0	10.4	10.3
Exceeded for the year:	State: > 12 µg/m^3	No	No	No
	Federal: > 15 µg/m^3	No	No	No
Nitrogen Dioxide (NO_2)[1]				
Maximum 1-hour concentration (ppm)		0.056	0.059	0.057
Number of days exceeded:	State: > 0.250 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.011	0.012	0.0126
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)[1]				
Maximum 1-hour concentration (ppm)		0.0043	0.0036	0.0034
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Maximum 24-hour concentration (ppm)		0.0034	0.0022	0.0018
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.00174	0.00101	0.0009
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Sources: CARB (2021) and USEPA (2022).
[1] Data taken from the 14306 Park Avenue, Victorville Monitoring Station.
[2] Data taken from the 17288 Olive Street, Hesperia Monitoring Station.
µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
ND = No data. There were insufficient (or no) data to determine the value.
ppm = parts per million
USEPA = United States Environmental Protection Agency

United States Emissions

In 2020, the year for which the most recent data are available, the United States emitted about 5,222 million metric tons of CO_2e (MMT CO_2e). Overall, emissions in 2020 decreased by 11 percent since 2019 and were 21 percent lower than 2005 levels. The primary driver for the decrease was an 11 percent decrease in CO_2 emissions from fossil fuel combustion. This decrease was primarily due to a 13 percent decrease in transportation emissions driven by decreased demand due to the ongoing COVID-19 pandemic. Electric power sector emissions also decreased 10 percent, reflecting both a slight decrease in demand from the COVID-19 pandemic and a continued shift from coal to less carbon intensive natural gas and renewables. Of the five major sectors – residential and commercial, agricultural, industry, transportation, and electricity generation – transportation accounted for the highest amount of GHG emissions in 2020 (approximately 27 percent), with electricity generation second at 27 percent and emissions from industry third at 24 percent.[49]

State of California Emissions

The State emitted approximately 369.2 MMT CO_2e emissions in 2020, 35.3 MMT CO_2e lower than 2019 levels and 61.8 MMT CO_2e below the 2020 GHG limit of 431 MMT CO_2e.[50] The California Air Resources Board (CARB) estimates that transportation was the source of approximately 37 percent of the State's GHG emissions in 2020, which is a smaller share than recent years, as the transportation sector saw a significant decrease of 26.6 MMT CO_2e in 2020, likely due in large part to the impact of the COVID-19 pandemic. The next largest sources included industrial sources at approximately 20 percent and electricity generation at 16 percent. The remaining sources of GHG emissions were commercial and residential activities at 10 percent, agriculture at 9 percent, high GWP at 6 percent, and waste at 2 percent.[51]

City of Hesperia Emissions

The City of Hesperia's goal is to reduce emissions to a level that is 40 percent below that of 2020 GHG emissions level by 2030. Table H summarizes the 2016 inventory, 2030 business as usual (BAU) forecast, and GHG reduction results by sector. Table H also shows the percent reduction in each sector's emissions in 2030 and demonstrates that Hesperia exceeds its emissions reduction goal, by reducing emissions by 50.9 percent. Emissions sectors with the greatest percent reduction include the waste, building energy, and On-Road Transportation sectors.

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49 USEPA. 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks (accessed December 2022).

50 CARB. 2022a. *California Greenhouse Gas Emissions for 2000 to 2020, Trends of Emissions and Other Indicators Report*. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf (accessed December 2022).

51 Ibid.

Table H: Emission Reductions by Sector for Hesperia

Sector	2016 Emissions (MT CO_2e)	2030 BAU (MT CO_2e)	2030 Reductions (MT CO_2e)	2030 Emissions w/Reduction Plan (MT CO_2e)	Reduction Percentage
Building Energy	167,316	243,320	141,764	101,557	58.3
On-Road Transportation	346,306	398,267	121,727	276,540	30.6
Off-Road Transportation	10,296	17,152	556	16,596	3.2
Waste	30,825	42,579	39,507	3,072	92.8
Agriculture	3,642	2,051	0	2,051	0.0
Wastewater Treatment	2,935	4,054	0	4,054	0.0
Water Conveyance	2,048	2,714	492	2,222	18.1
GHG Performance Standard[1]	-	-	57,079	-	-
Total Emissions	**563,369**	**710,136**	**361,125**	**349,011**	**50.9**
Reduction Goal	-	-	-	363,195	-
Goal Met?	**-**	**-**	**-**	**Yes**	**-**
Reductions Beyond Goal	-	-	-	14,184	-

Source: San Bernardino County Greenhouse Gas Reduction Plan (GHGRP).
Note: Values may not sum due to rounding
[1] The GHG Performance Standard for New Development is not a sector of the inventory, but it contributes toward the City's reduction goal by promoting reductions in multiple sectors.
BAU = business as usual
GHG = greenhouse gas
MT CO_2e = metric tons of carbon dioxide equivalent

METHODOLOGY

The methodology used to estimate air quality, health risk, GHG, and energy impacts is described below.

CONSTRUCTION EMISSIONS

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel and gasoline powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model version 2022.1 (CalEEMod) computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. This analysis assumes that construction would begin in the Fall of 2023 and be completed in 2024, which was included in CalEEMod. The proposed project would not require any soil import or export, which were also included in CalEEMod. This analysis also assumes the use of Tier 2 construction equipment and that the proposed project would comply with MDAQMD Rule 403.2 measures. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

OPERATIONAL EMISSIONS

The air quality analysis includes estimating emissions associated with long-term operation of the proposed project. Consistent with the MDAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As stated in the project description, the proposed project would include 75 percent warehouse uses, 5 percent cold storage uses, and 20 percent manufacturing uses, which was included in this analysis. The proposed project analysis was conducted using land use codes *Refrigerated Warehouse-No Rail, Unrefrigerated Warehouse-No Rail, Manufacturing, City Park,* and *Parking Lot*. Trip generation rates used in CalEEMod for the project were based on the project's Traffic Impact Analysis[52], which identifies that the proposed project would generate a total of approximately 1,357 average daily trips, including 976 passenger vehicles, 68 2-axle truck trips, 77 3-axle truck trips, and 236 4+-axle truck trips. This analysis assumes that the four+-axle truck trips would travel approximately 40 miles. To be conservative, separate CalEEMod analyses were prepared for the operational analysis. One CalEEMod run evaluated operational and vehicle and light duty truck trip emissions and another CalEEMod run evaluated four +-axle truck trip emissions. In addition, the proposed project would include an 800-kilowatt (1,073-horsepower) emergency backup generator, which this analysis assumes would run approximately 50 hours annually.

[52] EPD Solutions, Inc. 2022.op.cit.

CONSTRUCTION HEALTH RISK ASSESSMENT

A construction health risk assessment (HRA), which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

OPERATIONAL HEALTH RISK ASSESSMENT

To determine the potential health risk to people living and working near the proposed project associated with the exhaust of diesel-powered trucks and equipment, an operational HRA was conducted for the proposed project. This HRA has been conducted using three models:
(1) EMFAC2021 for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the USEPA AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The first step of an HRA is to characterize the project-related emissions of TACs. The proposed project would generate approximately 1,357 average daily trips. The trucks would access the site by Phelan Road and "A" Street (future roadway). The proposed project would provide 60 dock doors; as the project would contain multiple loading docks, offsite queuing of trucks is not anticipated. While the TAC emissions from gasoline-powered vehicles have a small health effect compared to DPM, this HRA includes both gasoline- and diesel-powered vehicle emissions. For the diesel exhaust emissions, it is sufficient to only consider the DPM (PM_{10} and $PM_{2.5}$) portions of the exhaust; all the TACs for the gasoline exhaust emissions are contained in the ROG emissions. Using speciation data from CARB, the emission rates of the TAC components are derived from the total ROG emissions. Calculations are provided in Appendix B.

Project trucks would operate in two modes: stationary idling and moving on and off the site. The emissions from trucks while idling result in a much higher concentration of TACs at nearby sensitive receptors compared to the emissions from moving trucks. This is due to the dispersion of emissions that occurs with distance and with travel of the vehicle. For this HRA, trucks were assumed to idle for 15 minutes and the truck travel emissions were modeled as a series of volume sources along the onsite driveway, along the proposed "A" Street going north and south. LSA assumed vehicles traveling on site would maneuver slowly, averaging approximately 5–15 miles per hour (mph), and that vehicles traveling on roadways would average 5–55 mph.

The idling emissions of trucks operating on the project site were modeled as point sources within the area sources representing the planned loading docks. EMFAC2021 was used to determine the emissions factors of idling and operating diesel trucks to determine the total emissions of DPM.

While it is expected that the truck emissions rate will continue to reduce over time, an HRA only allows for a single emission rate to represent the entire 30-year exposure period. The use of emissions factors for the year 2023 were used as a conservative estimate of emissions, as the project is not expected to be fully operational until 2024, and emission rates would be expected to decline over the 30-year exposure period.

ENERGY USE

The analysis of electricity/natural gas usage is based on the CalEEMod modeling, which quantifies energy use for project operations. Fuel consumption (diesel fuel and gasoline) from vehicle trips during operation was estimated for the opening year (2024) of the proposed project based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB's EMFAC2021 model. Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB EMFAC2021 model.

The analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, natural gas, project construction equipment fuel, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in San Bernardino County. The electricity/natural gas use of the proposed project is analyzed as a whole on an annual basis.

GREENHOUSE GAS ANALYSIS

Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that for determining a project's contribution to GHG emissions, lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the project.

THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or state ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse energy impact if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse greenhouse gas emission impact if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reduction the emissions of greenhouse gases.

Certain air districts (e.g., MDAQMD) have created guidelines and requirements to conduct air quality analysis. The MDAQMD's current guidelines, the CEQA Air Quality Handbook with associated updates, were followed in this assessment of air quality and GHG impacts for the proposed project.

CRITERIA POLLUTANT THRESHOLDS

MDAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the MDAQMD's *CEQA and Federal Conformity Guidelines*. The criteria include emissions thresholds, compliance with State and national air quality standards, and consistency with the current air quality plans. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Table I lists the CEQA significance thresholds for construction and operational emissions established for the Basin. Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under MDAQMD guidelines. These thresholds, which MDAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Table I: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Tons Per Year						
Construction	25	25	100	25	15	12
Operations	25	25	100	25	15	12
Pounds Per Day						
Construction	137	137	548	137	82	65
Operations	137	137	548	137	82	65

Source: MDAQMD, 2020. (Website: https://www.mdaqmd.ca.gov/home/showdocument?id=192; accessed December 2022).
CO = carbon monoxide
lbs/day = pounds per day
MDAQMD = Mojave Desert Air Quality Management District
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_X = sulfur oxides
VOC = volatile organic compounds

HEALTH RISK THRESHOLDS

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximally exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for children in residential locations and over a period of 25 years for workers. The MICR calculations include multipathway consideration, when applicable.

  The cumulative increase in MICR that is the sum of the calculated MICR values for all TACs would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1×10^{-5}) at any receptor location.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multipathway consideration, when applicable.

  The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level.

The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

The MDAQMD *CEQA and Federal Conformity Guidelines* state that emissions of TACs are considered significant if a project exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.0.

LOCAL MICROSCALE CONCENTRATION STANDARDS

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 parts per million (ppm)
- California State 8-hour CO standard of 9 ppm

GLOBAL CLIMATE CHANGE

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

The City applies Appendix G of the *State CEQA Guidelines* as the significance threshold for GHG emissions. A project would normally have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The analysis of the proposed project's GHG emissions impacts follows the guidance and methodologies recommended in MDAQMD's *CEQA and Federal Conformity Guidelines*. CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on climate change. The MDAQMD has established thresholds of significance for GHG emissions, applicable to both construction and operations regardless of whether they are stationary or mobile sources. The MDAQMD's GHG emissions thresholds are 548,000 pounds per day (lbs/day) CO_2e or 100,000 MT/year CO_2e. However, to be conservative, the City recommends evaluating the project's GHG emissions based on the South Coast Air Quality Management District (SCAQMD) GHG thresholds.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2. Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD, under Option 1, is proposing a "bright-line" screening-level threshold of 3,000 metric tons (MT) of CO_2e (or MT CO_2e) per year (or MT CO_2e/year) for all land use types or, under Option 2, the following landuse-specific thresholds: 1,400 MT CO_2e commercial projects; 3,500 MT CO_2e for residential projects; or 3,000 MT CO_2e for mixed-use projects. This bright-line threshold is based on a review of the OPR database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.
- **Tier 4. Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per-capita efficiency targets. The SCAQMD is not recommending use of a percentage emissions reduction target. Instead, the SCAQMD proposes proposed a 2020 efficiency target of 4.8 MT CO_2e per year per service population for project-level analyses and 6.6 MT CO_2e per year per service population for plan-level projects (e.g., program-level projects such as General Plans). Because the project would be exempt under CEQA, Tier 1 would apply to the project and no further analysis is required under CEQA.

For the purpose of this analysis, the proposed project will be compared to the threshold of 3,000 MT CO_2e/year for all land use types. The project is also evaluated for compliance with the County's Regional Greenhouse Gas Reduction Plan (GHGRP), the Scoping Plan, and SCAG's RTP/SCS.

IMPACTS ANALYSIS

This section identifies the air quality, energy, and GHG emissions impacts associated with implementation of the proposed project.

AIR QUALITY IMPACTS

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed land uses.

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans. The project site has a General Plan Land Use designation of Main Street and Freeway Corridor Specific Plan (MSFC SP) per the City's 2010 General Plan. Within the MSFC SP, the two northerly parcels of the site (APNs 3064-401-03 and -04) are zoned as Commercial/Industrial Park (CIBP). The MSFC SP states that the purpose of the CIBP zone is to provide service for commercial, light industrial, light manufacturing, and industrial support uses, mainly conducted in enclosed buildings. Within the MSFC SP, the southerly parcel of the site (APN 3064-401-05) is zoned as Neighborhood Commercial (NC). The MSFC SP states that the NC is intended for immediate day-to-day convenience shopping and services for the residents of nearby neighborhoods. NC does not permit industrial and warehousing uses; therefore, the proposed project would require a Specific Plan amendment.

As identified above, all areas designated as nonattainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The most recent air quality plans are the PM_{10} Attainment Demonstration and Attainment Plan and the O_3 Attainment Plan. The attainment plans are based on regional growth projections developed by SCAG. Under CEQA, a project has the potential to be regionally significant if it would house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 sf of floor area. The proposed project would include 655,468 sf of industrial uses; therefore, the proposed project would be considered potentially regionally significant.

With respect to determining the proposed project's consistency with the air quality plan growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's RTP/SCS regarding population, housing, and growth trends. According to SCAG's 2020—2045 RTP/SCS, the City's population, households, and employment are forecast to increase by approximately 74,400 residents, 26,400 households, and 23,600 jobs, respectively, between 2016

and 2045.[53] SCAG estimates that the average number of employees generated by industrial uses is one per 1,195 square feet. The proposed project would construct a 655,468 sq ft building that would accommodate for approximately 549 new employees. The additional 549 employees would fall within the 23,600 projected jobs projected for the City. Therefore, it is assumed that it the project's labor demand would not substantially increase population, households, or employment in the City. As such, the project would be consistent with SCAG's goals for new job growth in the region.

Additionally, as discussed below, the regional emissions generated by construction and operation phases of the proposed project would be less than the MDAQMD emissions thresholds, and MDAQMD would not consider the project a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the air basin. Therefore, the proposed project would not affect the regional emissions inventory or conflict with strategies in the applicable air quality plans.

Criteria Pollutant Analysis

The Basin is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The MDAQMD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the MDAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Construction Emissions

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by demolition, grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, VOCs, directly emitted er ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Project construction activities would include grading, site preparation, building, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions.

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53 Southern California Association of Governments (SCAG). 2020. *Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy.* Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed December 2022).

Construction emissions were estimated for the project using CalEEMod. Table J lists the tentative project construction schedule. Table K lists the potential construction equipment to be used during project construction under each phase of construction. Other precise details of construction activities are unknown at this time; therefore, default settings (e.g., construction equipment) from CalEEMod were assumed. Table L identifies the maximum daily emissions associated with construction activities. CalEEMod output sheets are included in Appendix A.

Table J: Tentative Project Construction Schedule

Phase Number	Phase Name	Phase Start Date	Phase End Date	Number of Days/Week	Number of Days
1	Site Preparation	10/2/2023	10/20/2023	5	15
2	Grading	10/23/2023	11/17/2023	5	20
3	Building Construction	12/18/2023	11/1/2024	5	230
4	Paving	11/4/2024	11/22/2024	5	15
5	Architectural Coating	6/3/2024	11/30/2024	5	130

Source: Compiled by LSA, assuming construction starts in the fourth quarter of 2023 (December 2022).

Table K: Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	367	0.40
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	2	8	36	0.38
	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.40
	Scrapers	2	8	423	0.48
	Tractors/Loaders/Backhoes	2	8	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	82	0.20
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	46	0.45
Paving	Paving Equipment	2	8	81	0.36
	Pavers	2	8	89	0.42
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48

Source: Compiled by LSA, using CalEEMod defaults (December 2022).
CalEEMod = California Emissions Estimator Model

Table L: Project Construction Emissions

Project Construction	Pollutant Emissions					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Pounds Per Day						
Site Preparation	1.2	40.0	29.5	<0.1	8.1	4.1
Grading	1.4	49.0	36.7	0.1	4.1	1.2
Building Construction	2.3	24.4	40.7	<0.1	5.3	1.8
Paving	1.4	13.4	11.5	<0.1	0.8	0.6
Architectural Coating	24.2	1.4	5.9	<0.1	0.8	0.2
Maximum (lbs/day)	**26.5**	**49.0**	**46.7**	**0.1**	**8.1**	**4.2**
MDAQMD Thresholds	**137.0**	**137.0**	**548.0**	**137.0**	**82.0**	**65.0**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**
Tons Per Year						
2023	<0.1	0.9	0.8	<0.1	0.1	0.1
2024	1.8	2.9	4.2	<0.1	0.6	0.2
Maximum (tons/year)	**1.8**	**2.9**	**4.2**	**<0.1**	**0.6**	**0.2**
MDAQMD Thresholds	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (December 2022).
Note: Maximum emissions of VOC and CO occurred during the overlapping building construction and architectural coating phases.
CO = carbon monoxide
lbs/day = pounds per day
MDAQMD = Mojave Desert Air Quality Management District
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_X = sulfur oxides
VOC = volatile organic compounds

As shown in Table L, construction emissions associated with the project would not exceed the daily or annual MDAQMD thresholds for VOCs, NO_x, CO, sulfur oxides (SO_x), $PM_{2.5}$, or PM_{10} emissions. Therefore, construction of the proposed project would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State AAQS.

Operational Air Quality Impacts

Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), area sources (e.g., architectural coatings and the use of landscape maintenance equipment), and stationary sources (e.g., use of the emergency backup generator) related to the proposed project.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emissions processes. Gasoline-powered engines have small rates of PM emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission

factor of the fuel source. Major sources of energy demand for the proposed project could include building mechanical systems, such as heating and air conditioning.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings, consumer products, and the use of landscape maintenance equipment. Stationary source emissions would be associated with use of a backup diesel generator.

Long-term operation emissions associated with the proposed project were calculated using CalEEMod. Model results are shown in Table M below. CalEEMod output sheets are included in Appendix A.

Table M: Project Operational Emissions

Emission Type	Pollutant Emissions					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Pounds Per Day						
Area Sources	19.6	0.2	28.5	<0.1	<0.1	0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Mobile Sources – Vehicles and Light Duty Trucks	6.9	12.8	109.0	0.3	8.2	1.6
Mobile Sources – Heavy Heavy Duty Trucks	0.5	34.8	4.7	0.3	5.1	1.7
Stationary Sources	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Project Emissions	**27.0**	**47.8**	**142.2**	**0.6**	**13.3**	**3.4**
MDAQMD Thresholds	**137.0**	**137.0**	**548.0**	**137.0**	**82.0**	**65.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Tons Per Year						
Area Sources	3.1	<0.1	2.6	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Mobile Sources – Vehicles and Light Duty Trucks	1.2	2.4	16.1	0.1	1.5	0.3
Mobile Sources – Heavy Heavy Duty Trucks	0.1	6.4	0.9	0.1	0.9	0.3
Stationary Emissions	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Total Emissions	**4.4**	**9.0**	**19.7**	**0.2**	**2.4**	**0.6**
MDAQMD Thresholds	**25**	**25**	**100**	**25**	**15**	**12**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (December 2022).
CO = carbon monoxide
lbs/day = pounds per day
MDAQMD = Mojave Desert Air Quality Management District
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_X = sulfur oxides
VOC = volatile organic compounds

The results shown in Table M indicate the project would not exceed the significance criteria for daily or annual VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions; thus, the proposed project would not have a significant effect on regional air quality. Therefore, operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard.

Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Victorville station, the closest station to the project site, showed a highest recorded 1-hour concentration of 1.6 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.4 ppm (the State standard is 9 ppm) during the past 3 years (Table G). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in the project's Traffic Impact Analysis[54], the proposed project would generate 131 AM peak hour trips and 149 PM peak-hour trips. It was determined that the proposed project could contribute to unsatisfactory level of service (LOS) at intersections within the project study area. However, with implementation of fair share improvements, it was determined that operation of the affected intersections would be reduced to better than baseline conditions. Therefore, it is assumed that the addition of the proposed project traffic would not create any significant adverse impacts to nearby intersections.

Therefore, given the extremely low level of CO concentrations in the project area, and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards.

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include residential uses including existing rural single-family residential uses approximately 1,100 ft southwest, opposite Phelan Road and an existing West Main Villas multifamily residential community located approximately 1,600 ft away.

[54] EPD Solutions, Inc. 2022. op. cit.

The following section describes the potential impacts on sensitive receptors from construction and operation of the proposed project. The HRA analysis and results are presented below; data outputs are included in Appendix B.

Construction Health Risk Assessment

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. Table N, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment, as proposed by the project, at the MEI, which is the nearest sensitive receptor. Model snap shots of the sources are shown in Appendix B.

Table N: Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Worker Receptor Risk	0.08	0.005	0.000
Sensitive Receptor Risk	4.60	0.005	0.000
MDAQMD Significance Threshold	**10.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (January 2023).
MDAQMD = Mojave Desert Air Quality Management District

As shown in Table N, the maximum cancer risk for the sensitive receptor MEI would be 4.60 in one million, which would not exceed the MDAQMD cancer risk threshold of 10 in one million. The worker receptor risk would be lower at 0.08 in one million, but which would also not exceed the threshold. The total chronic hazard index would be 0.005 for both the worker receptor MEI and sensitive receptor MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not exceed MDAQMD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Operational Health Risk Assessment

To determine the potential health risk to people living and working near the proposed project associated with the exhaust of diesel-powered trucks and equipment, an operational HRA was conducted for the proposed project. The carcinogenic and chronic health risks from the proposed project are shown in Table O. The residential risk incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 30 years (considered a conservative period of time for an individual to live in any one residence). The HRA model snapshots and outputs are included in Appendix B.

Table O: Health Risks from Project Operation to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Worker Receptor Risk	0.25	0.001	<0.001
Sensitive Receptor Risk	1.84	0.001	<0.001
MDAQMD Significance Threshold	**10.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (January 2023).
MDAQMD = Mojave Desert Air Quality Management District

As shown in Table O, the maximum cancer risk for the sensitive receptor MEI would be 1.84 in one million, less than the threshold of 10 in one million. The worker receptor risk would be lower at 0.25 in one million. The total chronic hazard index would be 0.001 for the sensitive receptor MEI and 0.002 for the worker receptor MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. As these results show, all health risk levels to nearby residents from operation-related emissions of TACs would be well below the MDAQMD's HRA thresholds. No significant health risk would occur from project operation emissions.

Odors

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) affecting a substantial number of people

ENERGY IMPACTS

The following describes the potential impacts regarding energy resources that could result from implementation of the proposed project.

Energy Consumption

The proposed project would increase the demand for energy through day-to-day operations and fuel consumption associated with project construction. This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

Construction Energy Use

Construction of the proposed project is anticipated to begin in the Fall of 2023 and be completed in 2024. The project would require energy for activities such as the manufacture and transportation of building materials, grading activities, and building construction. Construction of the proposed project would require electricity to power construction-related equipment. Construction of the proposed project would not involve the consumption of natural gas. The construction-related

equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from the project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the project site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from EMFAC2021. Fuel consumption estimates are presented in Table P. CalEEMod output sheets are included in Appendix A, and detailed energy calculations are included in Appendix C.

Table P: Proposed Project Energy Consumption Estimates during Construction

Energy Type	Total Energy Consumption	Percentage Increase Countywide
Diesel Fuel (total gallons)	66,462.3	<0.01
Gasoline (total gallons)	100,308.7	<0.01

Source: Compiled by LSA (December 2022).

As indicated in Table P, the project would consume approximately 66,462.3 gallons of diesel fuel and approximately 100,308.7 gallons of gasoline during construction. Based on fuel consumption obtained from EMFAC2021, approximately 915.5 million gallons of gasoline and approximately 321.6 million gallons of diesel will be consumed from vehicle trips in San Bernardino County in 2022. Therefore, construction of the proposed project would increase the annual construction generated fuel use in San Bernardino County by approximately less than 0.01 percent for diesel fuel usage and by approximately less than 0.01 percent for gasoline fuel usage. As such, project construction would have a negligible effect on local and regional energy supplies.

Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to San Bernardino County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

Operational Energy Usage

Operational energy use is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with a project. Electricity consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod. The proposed project would not include natural gas; therefore, no natural gas demand is anticipated during operation. The proposed project would also result in diesel usage associated with the emergency backup generator; however, the emergency backup generator is only expected to run a maximum of 50 hours annually. Therefore, use of the emergency backup generator is not expected to substantially increase diesel fuel usage and is not evaluated further.

The proposed project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle and truck trips. Fuel use associated with vehicle and truck trips generated by the proposed project was calculated based on the project's Traffic Impact Analysis [55], which identifies that the proposed project would generate approximately 1,357 average daily trips. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage in San Bernardino County. In addition, the proposed project is

Electricity and fuel usage estimates associated with the proposed project are shown in Table Q.

Table Q: Proposed Project Energy Consumption Estimates during Operation

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Electricity Consumption (kWh/year)	4,417,821	0.03
Automotive Fuel Consumption		
Gasoline (gallons/year)	371,755.7	0.04
Diesel Fuel (gallons/year)	676,198.1	0.21

Source: Compiled by LSA (December 2022).
kWh = kilowatt-hours

As shown in Table Q, the estimated potential increase in electricity demand associated with the operation of the proposed project is 4,417,821 kWh per year. Total electricity consumption in San Bernardino County in 2021 was 16,180.8 GWh (16,180,811,158 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in San Bernardino County by approximately 0.03 percent.

Electrical demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features,

[55] EPD Solutions, Inc. 2022. op. cit.

including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage.

As shown in Table Q, fuel use associated with the vehicle trips generated by the proposed project is estimated at 371,755.7 gallons of gasoline and 676,198.1 gallons of diesel fuel per year. This analysis conservatively assumes that all vehicle trips generated as a result of project operation would be new to San Bernardino County. Based on fuel consumption obtained from EMFAC2021, approximately 915.5 million gallons of gasoline and approximately 321.6 million gallons of diesel will be consumed from vehicle trips in San Bernardino County in 2022. Therefore, vehicle and truck trips associated with the proposed project would increase the annual fuel use in San Bernardino County by approximately 0.04 percent for gasoline fuel usage and approximately 0.21 percent for diesel fuel usage. Fuel consumption associated with vehicle trips generated by project operations would be consistent with current State and federal fuel economy standards and would not be considered inefficient, wasteful, or unnecessary.

Conflict with Renewable Energy or Energy Efficiency Plans

In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels for the Integrated Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC's *2021 Integrated Energy Policy Report* and *2022 Integrated Energy Policy Report Update* provide the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the overall use in San Bernardino County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's *2021 Integrated Energy Policy Report*. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy.

GREENHOUSE GAS IMPACTS

The section below describes the potential GHG impacts associated with implementation of the proposed project.

Generation of Greenhouse Gas Emissions

The following section details the proposed project's construction- and operational-related GHG emissions and contribution to global climate change.

Short-Term Greenhouse Gas Emissions

Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Neither the MDAQMD nor SCAQMD has an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. As described above, for the purpose of this analysis, the proposed project will be compared to the GHG threshold of 3,000 MT/year CO_2e. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined by the SCAQMD as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier.

Using CalEEMod, it is estimated that the project would generate approximately 1,184 MT CO_2e during construction of the project. When amortized over the 30-year life of the project, annual emissions would be 39.5 MT CO_2e.

Long-Term Greenhouse Gas Emissions

Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), stationary sources (e.g., use of the emergency backup generator), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers because of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment. Stationary source emissions would be associated with use of the emergency backup generator .

Following guidance from the MDAQMD, GHG emissions were estimated for the operational year of 2024 using CalEEMod. Table R shows the calculated GHG emissions for the proposed project.

As discussed above, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 MT/year CO_2e. Based on the analysis results, the proposed project would result in annual emissions of 11,689.6 MT/year CO_2e, which would exceed the threshold of 3,000 MT/year CO_2e. Therefore, the following discussion compares the proposed project to the efficiency-based threshold.

Table R: Unmitigated Long-Term Operational Greenhouse Gas Emissions

Source	Greenhouse Gas Emissions, CO_2e
	Metric Tons per Year
Project Operational Emissions	
Area Sources	9.6
Energy Sources	1,070.0
Mobile Sources – Vehicles and Light Duty Trucks	4,317.0
Mobile Sources – Heavy Heavy Duty Trucks	5,598.0
Stationary Sources	20.5
Waste Sources	204.0
Water Sources	421.0
Total Project Emissions	**11,640.1**
Amortized Construction Emissions	39.5
Total Annual Emissions	**11,679.6**
Threshold	**3,000**
Significant?	**Yes**

Source: Compiled by LSA (April 2023).
CO_2e = carbon dioxide equivalent
MDAQMD = Mojave Desert Air Quality Management District

As discussed above, the proposed project would construct a 655,468 sq ft building that would accommodate for approximately 549 new employees. The proposed project would not accommodate new residents; therefore, the total service population would be 549 people (residents plus employees). As such, the proposed project would result in a per service population of 21.3 MT CO_2e per year per service population, which exceeds the SCAQMD's threshold of 4.8 MT CO_2e per year per service population.

Therefore, operation of the proposed project would have the potential to generate significant GHG emissions that would have a significant effect on the environment. As such, Mitigation Measure GHG-1 would be required to reduce GHG emissions.

Mitigation Measure GHG-1 Prior to issuance of a building permit, the City of Hesperia shall identify project design details and specifications to document implementation and compliance with the following emission reduction measures. Implementation of the following measures will be required prior to building permits and is considered to be applicable, feasible, and effective in reducing greenhouse gas emissions generated by the project:

- Use the cleanest technologies available and provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating on site.
- All loading/unloading docks and trailer spaces shall be equipped with electrical hookups for trucks with transport refrigeration

units (TRU) or auxiliary power units. This requirement will substantially decrease the amount of time that a TRU powered by a fossil-fueled internal combustion engine can operate at the project site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration, and cryogenic transport refrigeration shall be encouraged for operational fleets.[56]

- All TRUs entering the project site be shall plug-in capable.
- Operational fleets shall exclusively use zero-emission light and medium-duty delivery trucks and vans when feasible.
- All heavy-duty trucks entering or on the project site shall be model year 2014 or later, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030 if feasible.
- The Project Applicant shall be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,[57] Periodic Smoke Inspection Program (PSIP),[58] and the Statewide Truck and Bus Regulation.[59]
- Trucks and support equipment shall be prohibited from idling longer than five minutes while on site.
- On-site TRU diesel engine runtime shall be limited to no longer than 15 minutes.
- Include rooftop solar panels that supply 100 percent of electricity from renewable energy resources.

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56 CARB's technology assessment for transport refrigerators provides information on the current and projected development of TRUs, including current and anticipated costs. The assessment is available at: https://www.arb.ca.gov/msprog/tech/techreport/tru_07292015.pdf.

57 In December 2008, CARB adopted a regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation is available at: https://ww2.arb.ca.gov/our-work/programs/ttghg/about.

58 The PSIP program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance. CARB's PSIP program is available at: https://www.arb.ca.gov/enf/hdvip/hdvip.htm.

59 The regulation requires that newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model-year engines or equivalent. CARB's Statewide Truck and Bus Regulation is available at: https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.

- Implement a transportation demand program. Program measures may include free transit passes for employees, electric rideshare vehicles for employees, and construction of additional transit infrastructure at the project site.
- Implement a zero-waste program or other feasible waste-reduction measures such as composting waste food scraps from employee activities and food waste processing.
- Install water-efficient fixtures (toilets, faucets, showers), water efficient landscape irrigation systems (drip irrigation with control panel and soil moisture sensors), and water efficient landscaping.

Mitigation Measure GHG-1 requires that the project incorporate sustainable transportation technologies and practices appropriate for the proposed use. As the project includes a considerable number of heavy-duty truck trips over long distances, Mitigation Measure GHG-1 requires multiple measures to reduce emissions associated with heavy-duty trucks and associated transport refrigeration units (TRUs). These include installing electrical hookup equipment for TRUs at all loading docks, requiring the use of newer (model year 2014 or newer) heavy duty trucks to accelerate transition to more efficient vehicles, and practices limiting truck idling and TRU run-time. Table S identifies the results of the analysis with implementation of Mitigation Measure GHG-1.

Table S: Mitigated Long-Term Operational Greenhouse Gas Emissions

Source	Greenhouse Gas Emissions, CO_2e
	Metric Tons per Year
Project Operational Emissions	
Area Sources	9.6
Energy Sources	43.4
Mobile Sources – Vehicles and Light Duty Trucks	4,317.0
Mobile Sources – Heavy Heavy Duty Trucks	5,598.0
Stationary Sources	20.5
Waste Sources	204.0
Water Sources	382.0
Total Project Emissions	**10,574.5**
Amortized Construction Emissions	39.5
Total Annual Emissions	**10,614.0**
Threshold	**3,000**
Significant?	**Yes**

Source: Compiled by LSA (April 2023).
CO_2e = carbon dioxide equivalent
MDAQMD = Mojave Desert Air Quality Management District

As shown in Table S, with implementation of Mitigation Measure GHG-1, the proposed project would result in approximately 10,614.0 MT/year CO_2e. Implementation of Mitigation Measure GHG-1 would reduce emissions to the extent feasible; however, emissions would continue to exceed the

SCAQMD threshold. Therefore, with implementation of Mitigation Measure GHG-1, operation of the proposed project would have the potential to generate significant GHG emissions that would have a significant effect on the environment.

Consistency with Greenhouse Gas Emissions Reduction Plans

An evaluation of the proposed project's consistency with the County's Greenhouse Gas Reduction Plan, the Scoping Plan, and the 2020–2045 RTP/SCS is provided below.

San Bernardino County Regional Greenhouse Gas Reduction Plan

As discussed above, the City of San Bernardino was a participant in the San Bernardino County Regional Greenhouse Gas Reduction Plan, which identifies the County's vision and goals on reducing GHG emissions in the different cities, local government facilities, and communities. Table T, below, presents the proposed project's compliance with each reduction measure evaluated for the City of Hesperia, as identified in the San Bernardino County Regional Greenhouse Gas Reduction Plan.

Table T: Project Consistency with City of Hesperia Greenhouse Gas Reduction Measures

Measure	Description	Project Consistency
Building Energy		
Energy-1. Building Energy Efficiency	• **Implementation Policy CN-7.4.** Educate the public about energy conservation techniques. • **Implementation Policy CN-7.5.** Coordinate with the local energy provider in developing policies and procedures to reduce energy consumption in existing and future developments. • **Implementation Policy CN-7.3.** Provide incentives like technical assistance and low interest loans for projects that are energy efficient and contain energy conservation measures. • **Implementation Policy CN-7.6.** Encourage residents and businesses to utilize the incentives provided by the local energy providers to retrofit their buildings and businesses for energy efficiency and conservation. • **Implementation Policy LU-6.2.** Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code, and encourage energy-efficient design elements, consistent with Policy LU-6.1. • **Implementation Policy CN-7.2.** Encourage the use of green building standards and LEED or similar programs in both private and public projects • **Implementation Policy CN-8.7.** Promote energy conservation through site layout, building design, natural light, and efficient mechanical and electrical products in development.	***Not Applicable.*** This measure is not applicable as the City would be responsible for implementing this measure. However, the proposed project would comply with the CALGreen Code, regarding building energy efficiency and other green building standards.
Energy-2. Lighting Efficiency	• **Implementation Policy LU-6.1.** Promote the use of green building standards and LEED, or other equivalent programs, in both private and public projects. • **Implementation Policy CN-7.4.** Educate the public about energy conservation techniques. • **Implementation Policy CN-8.9.** Promote sustainable principles in development that conserves such natural resources as air quality and energy resources.	***Consistent.*** The proposed project would comply with the CALGreen Code, regarding energy conservation and green building standards.
Energy-10. Urban Tree Planting for Shading and Energy Savings	• **Implementation Policy CN-7.5.** Coordinate with the local energy provider in developing policies and procedures to reduce energy consumption in existing and future developments. • **Implementation Policy LU-3.4.** Encourage the beautification of pedestrian areas, particularly through the use of landscaping. • **Implementation Policy LU-3.8.** Incorporate landscape plantings into commercial developments	***Consistent.*** The proposed project would include landscaping along the perimeter of the project site consistent with the City's landscaping requirements.

Table T: Project Consistency with City of Hesperia Greenhouse Gas Reduction Measures

Measure	Description	Project Consistency
	to define and emphasize entrances, inclusive of those areas along the front of a building facing a parking lot. ● **Implementation Policy LU-4.7.** Incorporate landscape plantings into industrial projects to define and emphasize entrances, inclusive of those areas along the front of a building facing a parking lot. ● **Implementation Policy LU-6.5.** Encourage development that incorporates green building practices to conserve natural resources as part of sustainable development practices.	
On-Road		
On Road	● **Implementation Policy CI-5.3.** Continue to participate with the Victor Valley Transit Authority to ensure there are adequate routes to provide efficient, adequate, safe service for the community. ● **Implementation Policy CI-5.4.** Continue to work with and support the Victor Valley Transit Authority in providing transit facilities for elderly and handicapped residents. ● **Implementation Policy LU-6.7.** Encourage the development of public facilities in a manner which assures adequate levels of service, while remaining compatible with existing and future land uses. ● **Implementation Policy CI-1.11.** Encourage alternative modes of transportation including bus, bicycle, pedestrian, and equestrian through street design. ● **Implementation Policy CI-1.13.** Where feasible, create opportunities for recreation through the establishment of interconnected trail systems throughout the community. ● **Implementation Policy CI-1.12.** Provide for a safe and efficient pedestrian network. ● **Implementation Policy CI-1.14.** Coordinate with San Bernardino County Flood Control District and Southern California Edison Company to promote utilization of easements for the trail system. ● **Implementation Policy CI-2.8.** Reduce trip generation through development and implementation of Transportation Demand Management Programs. ● **Implementation Policy CI-5.1.** Provide a wide range of travel alternatives to the use of single occupancy vehicles.	***Not Applicable.*** The proposed project would construct a warehouse building and would not include transit fleet vehicles.

Table T: Project Consistency with City of Hesperia Greenhouse Gas Reduction Measures

Measure	Description	Project Consistency
	• **Implementation Policy CI-5.2.** Work with Caltrans and SBCOG to provide additional park and ride lots at key locations. • **Implementation Policy OS-6.1.** Provide an interconnecting plan in conjunction with surrounding agencies to provide regional trails. • **Implementation Policy LU-2.4.** Utilize mixed-use development to create unique and varied housing • **Implementation Policy LU-6.4.** Encourage sustainable development that incorporates green building best practices and involves the reuse of previously developed property and/or vacant sites within a built-up area.	
Off-Road		
Off-Road-2. Idling Ordinance	• **Implementation Policy CN-7.4**. Educate the public about energy conservation techniques.	***Not Applicable:*** This measure is not applicable as the City would be responsible for implementing this measure.
Off-Road-3. Electric Landscaping Equipment	• **Implementation Policy CN-7.4**. Educate the public about energy conservation techniques.	***Not Applicable:*** This measure is not applicable as the City would be responsible for implementing this measure.
Solid Waste Management		
Waste-2. Waste Diversion and Reduction	• **Implementation Policy CN-8.8**. Continue the existing recycling program and utilization of the material recovery facility program while exploring additional methods of reducing waste. • **Implementation Policy LU-6.3.** Support sustainable building practices that encourage the use of recycled or other building materials that promote environmental quality, economic vitality, and social benefits. Support construction, and operational practices that limit impacts to the environment.	***Consistent.*** The proposed project would be consistent with City and County Solid Waste and State requirements for waste reduction.
Wastewater Treatment		
Wastewater Treatment	• **Implementation Policy CN-8.4**. Promote the utilization of alternative energy resources such as wind and solar in new development. • **Implementation Policy CN 8.9.** Promote sustainable principles in development that conserves such natural resources as air quality and energy resources.	***Consistent:*** The proposed project would comply with the CALGreen Code regarding water and energy conservation.

Table T: Project Consistency with City of Hesperia Greenhouse Gas Reduction Measures

Measure	Description	Project Consistency
Water Conveyance		
Water-1. Require Tier 1 Voluntary CALGreen Standards for new construction	• **Implementation Policy CN-1.6.** Encourage the use of low-water consumption fixtures in homes and businesses. • **Implementation Policy CN-1.7.** Require new development to use new technology, features, equipment, and other methods to reduce water consumption.	***Consistent:*** The proposed project would comply with the CALGreen Code regarding water conservation.
Water-2. Renovate Existing Buildings to Achieve Higher Levels of Water Efficiency	• **Implementation Policy CN-1.2.** Educate residents on water conservation methods with best practices and tips. • **Implementation Policy CN-1.6.** Encourage the use of low-water consumption fixtures in homes and businesses.	***Not Applicable:*** This measure is not applicable as the proposed project would include a speculative warehouse building and would not retrofit an existing building.
Water-3. Water-Efficient Landscaping Practices	• **Implementation Policy CN-1.1.** Promote the use of desert vegetation with low water usage and drought tolerant materials in landscaped areas • **Implementation Policy CN-1.2**. Educate residents on water conservation methods with best practices and tips. • **Implementation Policy CN-1.6.** Encourage the use of low-water consumption fixtures in homes and businesses. • **Implementation Policy CN-1.7.** Require new development to use new technology, features, equipment, and other methods to reduce water consumption.	***Consistent:*** The proposed project would include drought-tolerant landscaping and irrigation.

Source: Compiled by LSA (December 2022).
CALGreen Code = California Green Building Standards Code
LEED = Leadership in Energy and Environmental Design

Scoping Plan

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[60] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

[60] CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

The 2022 Scoping Plan[61] assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

As identified above, the Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by AB 32, EO B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed above, the proposed project would comply with the CALGreen Code, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would comply with the CALGreen Code, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emissions targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2020–2045 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological

[61] CARB. 2022. op. cit.

advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit oriented communities. The 2020–2045 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels). The 2020–2045 RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the 2020–2045 RTP/SCS but provides incentives for consistency for governments and developers.

The project proposes to build an industrial building that would support warehouse, manufacturing, and office uses. The proposed building area would be 639,468 sf of warehouse space, 11,000 sf of ground floor office space, and 5,000 sf of mezzanine office space for a total 655,468 sf industrial building. The proposed project would generate approximately 1,357 average daily trips; however, the project would be consistent with SCAG's goals for new job growth in the region.

Implementing SCAG's RTP/SCS would greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. The proposed project would not conflict with the stated goals of the RTP/SCS; therefore, the proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020 and 19 percent below 2005 per capita emissions levels by 2035, and it can be assumed that regional mobile emissions would decrease in line with the goals of the RTP/SCS. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206, and, as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level.

Based on the nature of the proposed project, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS.

CONCLUSIONS

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed MDAQMD thresholds of significance. Compliance with MDAQMD Rule 403.2: Fugitive Dust would further reduce construction dust impacts. In addition, the proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also not result in other emissions (such as those leading to odors) affecting a substantial number of people. GHG emissions released during construction and operation of the project are estimated to exceed significance thresholds and would be significant and unavoidable. The project would also be consistent with the State's GHG emissions reductions objectives embodied in the Scoping Plan and the 2020–2045 RTP/SCS and would be consistent with the applicable measures in the San Bernardino County Regional Greenhouse Gas Reduction Plan (GHGRP).

APPENDIX A

CALEEMOD OUTPUT

KISS Logistics Warehouse Project - Vehicles Only Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

3.2. Site Preparation (2023) - Mitigated

3.3. Grading (2023) - Unmitigated

3.4. Grading (2023) - Mitigated

3.5. Building Construction (2023) - Unmitigated

3.6. Building Construction (2023) - Mitigated

3.7. Building Construction (2024) - Unmitigated

3.8. Building Construction (2024) - Mitigated

3.9. Paving (2024) - Unmitigated

3.10. Paving (2024) - Mitigated

3.11. Architectural Coating (2024) - Unmitigated

3.12. Architectural Coating (2024) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.2. Unmitigated

4.3.1. Mitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.4.1. Mitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.5.1. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	KISS Logistics Warehouse Project - Vehicles Only
Construction Start Date	10/2/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	1.40
Location	34.42913303933578, -117.40207368660049
County	San Bernardino-Mojave Desert
City	Hesperia
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5106
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.7

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Unrefrigerated Warehouse-No Rail	491	1000sqft	12.6	491,601	209,075	—	—	—
Manufacturing	131	1000sqft	6.70	131,094	0.00	—	—	—
Refrigerated Warehouse-No Rail	32.0	1000sqft	5.60	32,773	0.00	—	—	—
Parking Lot	374	Space	4.70	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-6	Use Diesel Particulate Filters
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-11*	Provide Employer-Sponsored Vanpool
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-30*	Use Cleaner-Fuel Vehicles
Transportation	T-53*	Electrify Loading Docks
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.5	25.3	46.7	0.05	0.80	5.24	6.04	0.75	1.27	2.02	10,941	0.31	0.64	11,169
Mit.	26.5	25.3	46.7	0.05	0.16	5.24	5.40	0.15	1.27	1.42	10,941	0.31	0.64	11,169
% Reduced	—	—	—	—	80%	—	11%	80%	—	30%	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.3	49.0	36.9	0.06	1.36	19.9	21.0	1.23	10.2	11.2	10,378	0.32	0.65	10,579
Mit.	26.3	49.0	36.9	0.06	0.20	7.89	8.06	0.18	3.99	4.15	10,378	0.32	0.65	10,579
% Reduced	—	—	—	—	85%	60%	62%	85%	61%	63%	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.96	15.7	22.9	0.03	0.49	2.97	3.46	0.46	0.72	1.18	6,147	0.19	0.38	6,272
Mit.	9.96	15.7	22.9	0.03	0.10	2.97	3.06	0.09	0.72	0.81	6,147	0.19	0.38	6,272
% Reduced	—	—	—	—	80%	—	11%	80%	—	31%	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.82	2.86	4.18	0.01	0.09	0.54	0.63	0.08	0.13	0.21	1,018	0.03	0.06	1,038
Mit.	1.82	2.86	4.18	0.01	0.02	0.54	0.56	0.02	0.13	0.15	1,018	0.03	0.06	1,038
% Reduced	—	—	—	—	80%	—	11%	80%	—	31%	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	26.5	25.3	46.7	0.05	0.80	5.24	6.04	0.75	1.27	2.02	10,941	0.31	0.64	11,169
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.22	49.0	36.7	0.06	1.36	19.9	21.0	1.23	10.2	11.2	9,647	0.28	0.64	9,846
2024	26.3	25.8	36.9	0.05	0.80	5.24	6.04	0.75	1.27	2.02	10,378	0.32	0.65	10,579
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.19	5.01	4.23	0.01	0.14	1.46	1.60	0.13	0.65	0.78	872	0.03	0.02	880
2024	9.96	15.7	22.9	0.03	0.49	2.97	3.46	0.46	0.72	1.18	6,147	0.19	0.38	6,272
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.91	0.77	< 0.005	0.03	0.27	0.29	0.02	0.12	0.14	144	0.01	< 0.005	146
2024	1.82	2.86	4.18	0.01	0.09	0.54	0.63	0.08	0.13	0.21	1,018	0.03	0.06	1,038

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	26.5	25.3	46.7	0.05	0.16	5.24	5.40	0.15	1.27	1.42	10,941	0.31	0.64	11,169
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.22	49.0	36.7	0.06	0.20	7.89	8.06	0.18	3.99	4.15	9,647	0.28	0.64	9,846
2024	26.3	25.8	36.9	0.05	0.16	5.24	5.40	0.15	1.27	1.42	10,378	0.32	0.65	10,579

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.19	5.01	4.23	0.01	0.02	0.66	0.68	0.02	0.28	0.30	872	0.03	0.02	880
2024	9.96	15.7	22.9	0.03	0.10	2.97	3.06	0.09	0.72	0.81	6,147	0.19	0.38	6,272
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.91	0.77	< 0.005	< 0.005	0.12	0.12	< 0.005	0.05	0.05	144	0.01	< 0.005	146
2024	1.82	2.86	4.18	0.01	0.02	0.54	0.56	0.02	0.13	0.15	1,018	0.03	0.06	1,038

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.4	12.1	138	0.27	0.21	8.06	8.27	0.21	1.43	1.64	35,848	66.2	1.95	52,201
Mit.	26.4	12.1	138	0.27	0.21	8.06	8.27	0.21	1.43	1.64	29,516	63.1	1.84	45,760
% Reduced	—	—	—	—	—	—	—	—	—	—	18%	5%	6%	12%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.3	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	33,516	66.2	1.99	49,773
Mit.	21.3	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	27,184	63.1	1.88	43,332
% Reduced	—	—	—	—	—	—	—	—	—	—	19%	5%	6%	13%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.9	14.4	103	0.25	0.22	8.06	8.29	0.22	1.43	1.65	34,202	66.2	2.01	50,511
Mit.	23.9	14.4	103	0.25	0.22	8.06	8.29	0.22	1.43	1.65	27,870	63.1	1.90	44,070
% Reduced	—	—	—	—	—	—	—	—	—	—	19%	5%	5%	13%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	4.36	2.63	18.8	0.05	0.04	1.47	1.51	0.04	0.26	0.30	5,663	11.0	0.33	8,363
Mit.	4.36	2.63	18.8	0.05	0.04	1.47	1.51	0.04	0.26	0.30	4,614	10.5	0.31	7,296
% Reduced	—	—	—	—	—	—	—	—	—	—	19%	5%	5%	13%
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.88	11.8	109	0.27	0.17	8.06	8.23	0.16	1.43	1.59	27,352	0.72	1.18	27,832
Area	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	26.4	12.1	138	0.27	0.21	8.06	8.27	0.21	1.43	1.64	35,848	66.2	1.95	52,201
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.37	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	25,137	0.73	1.22	25,522
Area	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463

Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	21.3	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	33,516	66.2	1.99	49,773
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.43	13.2	88.3	0.25	0.17	8.06	8.23	0.16	1.43	1.59	25,642	0.73	1.24	26,078
Area	17.2	0.12	14.1	< 0.005	0.02	—	0.02	0.03	—	0.03	57.8	< 0.005	< 0.005	58.0
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.24	1.08	0.62	< 0.005	0.04	—	0.04	0.04	—	0.04	123	< 0.005	< 0.005	124
Total	23.9	14.4	103	0.25	0.22	8.06	8.29	0.22	1.43	1.65	34,202	66.2	2.01	50,511
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.17	2.42	16.1	0.05	0.03	1.47	1.50	0.03	0.26	0.29	4,245	0.12	0.21	4,317
Area	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	1,066	0.07	0.01	1,070
Water	—	—	—	—	—	—	—	—	—	—	263	4.93	0.12	421
Waste	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319
Stationary	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	4.36	2.63	18.8	0.05	0.04	1.47	1.51	0.04	0.26	0.30	5,663	11.0	0.33	8,363

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.88	11.8	109	0.27	0.17	8.06	8.23	0.16	1.43	1.59	27,352	0.72	1.18	27,832
Area	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	261	0.02	< 0.005	262
Water	—	—	—	—	—	—	—	—	—	—	1,433	27.1	0.65	2,306
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	26.4	12.1	138	0.27	0.21	8.06	8.27	0.21	1.43	1.64	29,516	63.1	1.84	45,760
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.37	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	25,137	0.73	1.22	25,522
Area	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	261	0.02	< 0.005	262
Water	—	—	—	—	—	—	—	—	—	—	1,433	27.1	0.65	2,306
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	21.3	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	27,184	63.1	1.88	43,332
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.43	13.2	88.3	0.25	0.17	8.06	8.23	0.16	1.43	1.59	25,642	0.73	1.24	26,078
Area	17.2	0.12	14.1	< 0.005	0.02	—	0.02	0.03	—	0.03	57.8	< 0.005	< 0.005	58.0
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	261	0.02	< 0.005	262
Water	—	—	—	—	—	—	—	—	—	—	1,433	27.1	0.65	2,306

Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.24	1.08	0.62	< 0.005	0.04	—	0.04	0.04	—	0.04	123	< 0.005	< 0.005	124
Total	23.9	14.4	103	0.25	0.22	8.06	8.29	0.22	1.43	1.65	27,870	63.1	1.90	44,070
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.17	2.42	16.1	0.05	0.03	1.47	1.50	0.03	0.26	0.29	4,245	0.12	0.21	4,317
Area	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	43.3	< 0.005	< 0.005	43.4
Water	—	—	—	—	—	—	—	—	—	—	237	4.49	0.11	382
Waste	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319
Stationary	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	4.36	2.63	18.8	0.05	0.04	1.47	1.51	0.04	0.26	0.30	4,614	10.5	0.31	7,296

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,295	0.21	0.04	5,314

Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.81	0.81	—	0.42	0.42	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.12	1.15	0.00	0.00	0.23	0.23	0.00	0.05	0.05	235	0.01	0.01	238
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.96	< 0.005	< 0.005	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.65	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	0.17	—	0.17	0.15	—	0.15	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.01	—	0.01	0.01	—	0.01	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.30	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.12	1.15	0.00	0.00	0.23	0.23	0.00	0.05	0.05	235	0.01	0.01	238
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	9.96	< 0.005	< 0.005	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.65	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	1.36	—	1.36	1.23	—	1.23	6,598	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.68	1.94	< 0.005	0.07	—	0.07	0.07	—	0.07	362	0.01	< 0.005	363
Dust From Material Movement	—	—	—	—	—	0.50	0.50	—	0.20	0.20	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.49	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	59.9	< 0.005	< 0.005	60.1
Dust From Material Movement	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.13	1.32	0.00	0.00	0.26	0.26	0.00	0.06	0.06	269	0.01	0.01	272
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	15.2	< 0.005	< 0.005	15.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.51	< 0.005	< 0.005	2.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	0.20	—	0.20	0.18	—	0.18	6,598	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.68	1.94	< 0.005	0.01	—	0.01	0.01	—	0.01	362	0.01	< 0.005	363
Dust From Material Movement	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.49	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	59.9	< 0.005	< 0.005	60.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.13	1.32	0.00	0.00	0.26	0.26	0.00	0.06	0.06	269	0.01	0.01	272
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	15.2	< 0.005	< 0.005	15.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.51	< 0.005	< 0.005	2.55

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.52	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	65.7	< 0.005	< 0.005	65.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	10.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.47	1.83	18.1	0.00	0.00	3.60	3.60	0.00	0.84	0.84	3,704	0.18	0.14	3,749
Vendor	0.13	4.02	1.85	0.03	0.05	0.92	0.97	0.05	0.25	0.30	3,546	0.01	0.49	3,691
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.56	0.00	0.00	0.10	0.10	0.00	0.02	0.02	104	0.01	< 0.005	106
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	97.1	< 0.005	0.01	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.3	< 0.005	< 0.005	17.5
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.1	< 0.005	< 0.005	16.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.52	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	65.7	< 0.005	< 0.005	65.9

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	10.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.83	18.1	0.00	0.00	3.60	3.60	0.00	0.84	0.84	3,704	0.18	0.14	3,749
Vendor	0.13	4.02	1.85	0.03	0.05	0.92	0.97	0.05	0.25	0.30	3,546	0.01	0.49	3,691
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.56	0.00	0.00	0.10	0.10	0.00	0.02	0.02	104	0.01	< 0.005	106
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	97.1	< 0.005	0.01	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.3	< 0.005	< 0.005	17.5
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.1	< 0.005	< 0.005	16.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11.3	8.56	0.01	0.41	—	0.41	0.38	—	0.38	1,436	0.06	0.01	1,441
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.06	1.56	< 0.005	0.08	—	0.08	0.07	—	0.07	238	0.01	< 0.005	239
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.46	24.8	0.00	0.00	3.60	3.60	0.00	0.84	0.84	4,102	0.17	0.14	4,163
Vendor	0.13	3.63	1.63	0.03	0.05	0.92	0.97	0.05	0.25	0.30	3,487	0.01	0.46	3,634
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.41	1.70	16.7	0.00	0.00	3.60	3.60	0.00	0.84	0.84	3,630	0.18	0.14	3,675

Vendor	0.12	3.85	1.66	0.03	0.05	0.92	0.97	0.05	0.25	0.30	3,491	0.01	0.46	3,629
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	1.02	11.2	0.00	0.00	2.15	2.15	0.00	0.50	0.50	2,238	0.11	0.08	2,269
Vendor	0.08	2.31	0.98	0.02	0.03	0.55	0.58	0.03	0.15	0.18	2,089	< 0.005	0.27	2,174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.05	0.00	0.00	0.39	0.39	0.00	0.09	0.09	371	0.02	0.01	376
Vendor	0.01	0.42	0.18	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	346	< 0.005	0.05	360
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	11.3	8.56	0.01	0.06	—	0.06	0.06	—	0.06	1,436	0.06	0.01	1,441
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.06	1.56	< 0.005	0.01	—	0.01	0.01	—	0.01	238	0.01	< 0.005	239
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.46	24.8	0.00	0.00	3.60	3.60	0.00	0.84	0.84	4,102	0.17	0.14	4,163
Vendor	0.13	3.63	1.63	0.03	0.05	0.92	0.97	0.05	0.25	0.30	3,487	0.01	0.46	3,634
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.41	1.70	16.7	0.00	0.00	3.60	3.60	0.00	0.84	0.84	3,630	0.18	0.14	3,675
Vendor	0.12	3.85	1.66	0.03	0.05	0.92	0.97	0.05	0.25	0.30	3,491	0.01	0.46	3,629
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	1.02	11.2	0.00	0.00	2.15	2.15	0.00	0.50	0.50	2,238	0.11	0.08	2,269
Vendor	0.08	2.31	0.98	0.02	0.03	0.55	0.58	0.03	0.15	0.18	2,089	< 0.005	0.27	2,174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.05	0.00	0.00	0.39	0.39	0.00	0.09	0.09	371	0.02	0.01	376
Vendor	0.01	0.42	0.18	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	346	< 0.005	0.05	360
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,512	0.06	0.01	1,517
Paving	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.55	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	62.1	< 0.005	< 0.005	62.3
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.3	< 0.005	< 0.005	10.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.20	0.20	0.00	0.05	0.05	198	0.01	0.01	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.37	< 0.005	< 0.005	8.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.39	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.09	—	0.09	0.08	—	0.08	1,512	0.06	0.01	1,517
Paving	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.55	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	62.1	< 0.005	< 0.005	62.3
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.3	< 0.005	< 0.005	10.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.20	0.20	0.00	0.05	0.05	198	0.01	0.01	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.37	< 0.005	< 0.005	8.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.39	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.39	0.34	< 0.005	0.02	—	0.02	0.02	—	0.02	47.6	< 0.005	< 0.005	47.7
Architectural Coatings	8.48	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.87	< 0.005	< 0.005	7.90
Architectural Coatings	1.55	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	4.97	0.00	0.00	0.72	0.72	0.00	0.17	0.17	820	0.03	0.03	833
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.34	3.34	0.00	0.00	0.72	0.72	0.00	0.17	0.17	726	0.04	0.03	735
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.33	0.00	0.00	0.26	0.26	0.00	0.06	0.06	266	0.01	0.01	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	44.1	< 0.005	< 0.005	44.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.01	—	0.01	0.01	—	0.01	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.01	—	0.01	0.01	—	0.01	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.39	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.6	< 0.005	< 0.005	47.7
Architectural Coatings	8.48	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.87	< 0.005	< 0.005	7.90

Architectural Coatings	1.55	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	4.97	0.00	0.00	0.72	0.72	0.00	0.17	0.17	820	0.03	0.03	833
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.34	3.34	0.00	0.00	0.72	0.72	0.00	0.17	0.17	726	0.04	0.03	735
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.33	0.00	0.00	0.26	0.26	0.00	0.06	0.06	266	0.01	0.01	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	44.1	< 0.005	< 0.005	44.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.50	6.02	55.6	0.14	0.09	4.10	4.19	0.08	0.73	0.81	13,914	0.37	0.60	14,158
Manufacturing	3.17	5.48	50.4	0.12	0.08	3.72	3.80	0.07	0.66	0.73	12,643	0.33	0.55	12,865
Refrigerated Warehouse-No Rail	0.20	0.34	3.26	0.01	< 0.005	0.24	0.24	< 0.005	0.04	0.05	796	0.02	0.03	809
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.88	11.8	109	0.27	0.17	8.06	8.23	0.16	1.43	1.59	27,352	0.72	1.18	27,832
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.24	6.52	41.2	0.13	0.09	4.10	4.19	0.08	0.73	0.81	12,786	0.37	0.62	12,982
Manufacturing	2.94	5.94	37.4	0.11	0.08	3.72	3.80	0.07	0.66	0.73	11,622	0.33	0.57	11,801
Refrigerated Warehouse-No Rail	0.19	0.37	2.41	0.01	< 0.005	0.24	0.24	< 0.005	0.04	0.05	729	0.02	0.03	740

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.37	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	25,137	0.73	1.22	25,522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.60	1.23	8.21	0.02	0.02	0.75	0.76	0.01	0.13	0.15	2,159	0.06	0.10	2,196
Manufacturing	0.54	1.12	7.43	0.02	0.01	0.68	0.69	0.01	0.12	0.13	1,963	0.06	0.10	1,996
Refrigerated Warehouse-No Rail	0.03	0.07	0.48	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	123	< 0.005	0.01	125
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.17	2.42	16.1	0.05	0.03	1.47	1.50	0.03	0.26	0.29	4,245	0.12	0.21	4,317

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.50	6.02	55.6	0.14	0.09	4.10	4.19	0.08	0.73	0.81	13,914	0.37	0.60	14,158
Manufacturing	3.17	5.48	50.4	0.12	0.08	3.72	3.80	0.07	0.66	0.73	12,643	0.33	0.55	12,865

Refrigerated Warehouse-No	0.20	0.34	3.26	0.01	< 0.005	0.24	0.24	< 0.005	0.04	0.05	796	0.02	0.03	809
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.88	11.8	109	0.27	0.17	8.06	8.23	0.16	1.43	1.59	27,352	0.72	1.18	27,832
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.24	6.52	41.2	0.13	0.09	4.10	4.19	0.08	0.73	0.81	12,786	0.37	0.62	12,982
Manufacturing	2.94	5.94	37.4	0.11	0.08	3.72	3.80	0.07	0.66	0.73	11,622	0.33	0.57	11,801
Refrigerated Warehouse-No Rail	0.19	0.37	2.41	0.01	< 0.005	0.24	0.24	< 0.005	0.04	0.05	729	0.02	0.03	740
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.37	12.8	81.0	0.25	0.17	8.06	8.23	0.16	1.43	1.59	25,137	0.73	1.22	25,522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.60	1.23	8.21	0.02	0.02	0.75	0.76	0.01	0.13	0.15	2,159	0.06	0.10	2,196
Manufacturing	0.54	1.12	7.43	0.02	0.01	0.68	0.69	0.01	0.12	0.13	1,963	0.06	0.10	1,996
Refrigerated Warehouse-No Rail	0.03	0.07	0.48	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	123	< 0.005	0.01	125

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.17	2.42	16.1	0.05	0.03	1.47	1.50	0.03	0.26	0.29	4,245	0.12	0.21	4,317

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,309	0.21	0.02	3,322
Manufacturing	—	—	—	—	—	—	—	—	—	—	1,822	0.11	0.01	1,829
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,046	0.06	0.01	1,050
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	6,439	0.40	0.05	6,463
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,309	0.21	0.02	3,322

Manufacturing	—	—	—	—	—	—	—	—	—	—	1,822	0.11	0.01	1,829
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,046	0.06	0.01	1,050
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	6,439	0.40	0.05	6,463
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	548	0.03	< 0.005	550
Manufacturing	—	—	—	—	—	—	—	—	—	—	302	0.02	< 0.005	303
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	173	0.01	< 0.005	174
Parking Lot	—	—	—	—	—	—	—	—	—	—	43.3	< 0.005	< 0.005	43.4
Total	—	—	—	—	—	—	—	—	—	—	1,066	0.07	0.01	1,070

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Manufacturing	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Manufacturing	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005

Manufacturi	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	43.3	< 0.005	< 0.005	43.4
Total	—	—	—	—	—	—	—	—	—	—	43.3	< 0.005	< 0.005	43.4

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.67	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Total	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectura Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectura l Coatings	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.42	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Total	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectura l Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.67	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Total	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectura Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectura l Coatings	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.42	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Total	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerat ed Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,199	22.4	0.54	1,918
Manufacturi ng	—	—	—	—	—	—	—	—	—	—	312	5.97	0.14	504
Refrigerate d Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.3	1.46	0.04	123

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,199	22.4	0.54	1,918
Manufacturing	—	—	—	—	—	—	—	—	—	—	312	5.97	0.14	504
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.3	1.46	0.04	123
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	199	3.70	0.09	318
Manufacturing	—	—	—	—	—	—	—	—	—	—	51.7	0.99	0.02	83.5
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	12.6	0.24	0.01	20.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	263	4.93	0.12	421

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,079	20.4	0.49	1,734
Manufacturing	—	—	—	—	—	—	—	—	—	—	284	5.44	0.13	459
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	69.5	1.33	0.03	112
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,433	27.1	0.65	2,306
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,079	20.4	0.49	1,734
Manufacturing	—	—	—	—	—	—	—	—	—	—	284	5.44	0.13	459
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	69.5	1.33	0.03	112

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,433	27.1	0.65	2,306
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	179	3.37	0.08	287
Manufacturing	—	—	—	—	—	—	—	—	—	—	47.1	0.90	0.02	76.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	11.5	0.22	0.01	18.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	237	4.49	0.11	382

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306

Refrigerate Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	41.2	4.12	0.00	144
Manufacturing	—	—	—	—	—	—	—	—	—	—	14.5	1.45	0.00	50.7
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.68	0.27	0.00	9.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00

Total	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	41.2	4.12	0.00	144
Manufacturing	—	—	—	—	—	—	—	—	—	—	14.5	1.45	0.00	50.7
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.68	0.27	0.00	9.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,169
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	5.65

Refrigerate Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,169
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	5.65
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/2/2023	10/20/2023	5.00	15.0	—
Grading	Grading	10/23/2023	11/17/2023	5.00	20.0	—
Building Construction	Building Construction	12/18/2023	11/1/2024	5.00	230	—
Paving	Paving	11/4/2024	11/22/2024	5.00	15.0	—
Architectural Coating	Architectural Coating	6/3/2024	11/30/2024	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38

Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	275	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	107	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	55.1	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	275	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	107	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	55.1	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	983,202	327,734	12,284

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	22.5	0.00	—
Grading	0.00	0.00	60.0	0.00	—

Paving	0.00	0.00	0.00	0.00	4.70

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Manufacturing	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%
Parking Lot	4.70	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	570	570	570	207,889	14,854	14,854	14,854	5,421,659
Manufacturing	516	516	516	188,391	13,461	13,461	13,461	4,913,152
Refrigerated Warehouse-No Rail	33.3	33.3	33.3	12,147	868	868	868	316,793
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	570	570	570	207,889	14,854	14,854	14,854	5,421,659
Manufacturing	516	516	516	188,391	13,461	13,461	13,461	4,913,152
Refrigerated Warehouse-No Rail	33.3	33.3	33.3	12,147	868	868	868	316,793
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	983,202	327,734	12,284

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,270,559	532	0.0330	0.0040	0.00
Manufacturing	1,250,338	532	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	717,579	532	0.0330	0.0040	0.00
Parking Lot	179,345	532	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	< 0.005	532	0.0330	0.0040	0.00
Manufacturing	0.22	532	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	< 0.005	532	0.0330	0.0040	0.00
Parking Lot	179,345	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

Unrefrigerated Warehouse-No Rail	113,543,750	4,628,615
Manufacturing	30,293,750	0.00
Refrigerated Warehouse-No Rail	7,400,000	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	103,438,356	2,046,340
Manufacturing	27,597,606	0.00
Refrigerated Warehouse-No Rail	6,741,400	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	461.54	0.00
Manufacturing	162.44	0.00
Refrigerated Warehouse-No Rail	30.08	0.00
Parking Lot	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	461.54	0.00
Manufacturing	162.44	0.00
Refrigerated Warehouse-No Rail	30.08	0.00

Parking Lot	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	0.00	50.0	1,073	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Total project site is 29.6 acres and will consist of a 655,468 sq ft industrial building with 5% cold storage and 20% manufacturing. Approximately 209,075 sq ft will be dedicated to landscape
Construction: Construction Phases	Construction is anticipated to begin in Fall of 2023 and be completed in 2024. Overlap of building construction with architectural coating phase.
Construction: Off-Road Equipment	Default construction equipment with Tier 2 Engine.
Operations: Vehicle Data	Passenger cars and medium trucks trip generation only. Total of 570 ADT are for the Unrefrigerated Warehouse, 34 ADT are for cold storage, and 517 ADT are for manufacturing
Operations: Fleet Mix	Based on fleet mix distribution from the Traffic Impact Analysis. Passenger cars and medium trucks only.
Operations: Energy Use	The proposed project would not utilize natural gas
Operations: Emergency Generators and Fire Pumps	Project would include a 1,073 HP emergency generator to be used 50 hours per year

KISS Logistics Warehouse Project - Heavy Heavy Trucks Only Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

3.2. Site Preparation (2023) - Mitigated

3.3. Grading (2023) - Unmitigated

3.4. Grading (2023) - Mitigated

3.5. Building Construction (2023) - Unmitigated

3.6. Building Construction (2023) - Mitigated

3.7. Building Construction (2024) - Unmitigated

3.8. Building Construction (2024) - Mitigated

3.9. Paving (2024) - Unmitigated

3.10. Paving (2024) - Mitigated

3.11. Architectural Coating (2024) - Unmitigated

3.12. Architectural Coating (2024) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.2. Unmitigated

4.3.1. Mitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.4.1. Mitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.5.1. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	KISS Logistics Warehouse Project - Heavy Heavy Trucks Only
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	1.40
Location	34.42913303933578, -117.40207368660049
County	San Bernardino-Mojave Desert
City	Hesperia
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5106
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	491	1000sqft	12.6	491,601	209,075	—	—	—
Manufacturing	131	1000sqft	6.70	131,094	0.00	—	—	—

Refrigerated Warehouse-No Rail	32.0	1000sqft	5.60	32,773	0.00	—	—	—
Parking Lot	374	Space	4.70	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-6	Use Diesel Particulate Filters
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.5	25.3	46.7	0.05	0.80	5.24	6.04	0.75	1.27	2.02	10,941	0.31	0.64	11,169
Mit.	26.5	25.3	46.7	0.05	0.16	5.24	5.40	0.15	1.27	1.42	10,941	0.31	0.64	11,169
% Reduced	—	—	—	—	80%	—	11%	80%	—	30%	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.3	49.0	36.9	0.06	1.36	19.9	21.0	1.23	10.2	11.2	10,378	0.32	0.65	10,579
Mit.	26.3	49.0	36.9	0.06	0.20	7.89	8.06	0.18	3.99	4.15	10,378	0.32	0.65	10,579
% Reduced	—	—	—	—	85%	60%	62%	85%	61%	63%	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.96	15.7	22.9	0.03	0.49	2.97	3.46	0.46	0.72	1.18	6,147	0.19	0.38	6,272
Mit.	9.96	15.7	22.9	0.03	0.10	2.97	3.06	0.09	0.72	0.81	6,147	0.19	0.38	6,272
% Reduced	—	—	—	—	80%	—	11%	80%	—	31%	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.82	2.86	4.18	0.01	0.09	0.54	0.63	0.08	0.13	0.21	1,018	0.03	0.06	1,038
Mit.	1.82	2.86	4.18	0.01	0.02	0.54	0.56	0.02	0.13	0.15	1,018	0.03	0.06	1,038
% Reduced	—	—	—	—	80%	—	11%	80%	—	31%	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	26.5	25.3	46.7	0.05	0.80	5.24	6.04	0.75	1.27	2.02	10,941	0.31	0.64	11,169
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.22	49.0	36.7	0.06	1.36	19.9	21.0	1.23	10.2	11.2	9,647	0.28	0.64	9,846
2024	26.3	25.8	36.9	0.05	0.80	5.24	6.04	0.75	1.27	2.02	10,378	0.32	0.65	10,579
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2023	0.19	5.01	4.23	0.01	0.14	1.46	1.60	0.13	0.65	0.78	872	0.03	0.02	880
2024	9.96	15.7	22.9	0.03	0.49	2.97	3.46	0.46	0.72	1.18	6,147	0.19	0.38	6,272
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.91	0.77	< 0.005	0.03	0.27	0.29	0.02	0.12	0.14	144	0.01	< 0.005	146
2024	1.82	2.86	4.18	0.01	0.09	0.54	0.63	0.08	0.13	0.21	1,018	0.03	0.06	1,038

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	26.5	25.3	46.7	0.05	0.16	5.24	5.40	0.15	1.27	1.42	10,941	0.31	0.64	11,169
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.22	49.0	36.7	0.06	0.20	7.89	8.06	0.18	3.99	4.15	9,647	0.28	0.64	9,846
2024	26.3	25.8	36.9	0.05	0.16	5.24	5.40	0.15	1.27	1.42	10,378	0.32	0.65	10,579
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.19	5.01	4.23	0.01	0.02	0.66	0.68	0.02	0.28	0.30	872	0.03	0.02	880
2024	9.96	15.7	22.9	0.03	0.10	2.97	3.06	0.09	0.72	0.81	6,147	0.19	0.38	6,272
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.91	0.77	< 0.005	< 0.005	0.12	0.12	< 0.005	0.05	0.05	144	0.01	< 0.005	146
2024	1.82	2.86	4.18	0.01	0.02	0.54	0.56	0.02	0.13	0.15	1,018	0.03	0.06	1,038

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.1	33.3	33.1	0.31	0.75	4.39	5.14	0.73	1.03	1.76	40,755	65.5	5.85	58,214
Mit.	20.1	33.3	33.1	0.31	0.75	4.39	5.14	0.73	1.03	1.76	40,755	65.5	5.85	58,214
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.4	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	40,654	65.5	5.85	58,045
Mit.	15.4	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	40,654	65.5	5.85	58,045
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.9	36.3	19.3	0.31	0.77	4.39	5.16	0.74	1.03	1.77	40,826	65.5	5.85	58,246
Mit.	17.9	36.3	19.3	0.31	0.77	4.39	5.16	0.74	1.03	1.77	40,826	65.5	5.85	58,246
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	6.62	3.53	0.06	0.14	0.80	0.94	0.14	0.19	0.32	6,759	10.8	0.97	9,643
Mit.	3.27	6.62	3.53	0.06	0.14	0.80	0.94	0.14	0.19	0.32	6,759	10.8	0.97	9,643
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	—	—	82.0	—	—	65.0	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.52	33.1	4.62	0.31	0.72	4.39	5.10	0.68	1.03	1.71	32,259	0.05	5.08	33,845
Area	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	20.1	33.3	33.1	0.31	0.75	4.39	5.14	0.73	1.03	1.76	40,755	65.5	5.85	58,214
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	32,275	0.04	5.09	33,794
Area	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	15.4	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	40,654	65.5	5.85	58,045
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.50	35.1	4.65	0.31	0.72	4.39	5.10	0.68	1.03	1.71	32,266	0.05	5.08	33,812
Area	17.2	0.12	14.1	< 0.005	0.02	—	0.02	0.03	—	0.03	57.8	< 0.005	< 0.005	58.0
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546

Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.24	1.08	0.62	< 0.005	0.04	—	0.04	0.04	—	0.04	123	< 0.005	< 0.005	124
Total	17.9	36.3	19.3	0.31	0.77	4.39	5.16	0.74	1.03	1.77	40,826	65.5	5.85	58,246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	6.41	0.85	0.06	0.13	0.80	0.93	0.12	0.19	0.31	5,342	0.01	0.84	5,598
Area	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	1,066	0.07	0.01	1,070
Water	—	—	—	—	—	—	—	—	—	—	263	4.93	0.12	421
Waste	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319
Stationary	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	3.27	6.62	3.53	0.06	0.14	0.80	0.94	0.14	0.19	0.32	6,759	10.8	0.97	9,643

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.52	33.1	4.62	0.31	0.72	4.39	5.10	0.68	1.03	1.71	32,259	0.05	5.08	33,845
Area	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	20.1	33.3	33.1	0.31	0.75	4.39	5.14	0.73	1.03	1.76	40,755	65.5	5.85	58,214

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	32,275	0.04	5.09	33,794
Area	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	15.4	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	40,654	65.5	5.85	58,045
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.50	35.1	4.65	0.31	0.72	4.39	5.10	0.68	1.03	1.71	32,266	0.05	5.08	33,812
Area	17.2	0.12	14.1	< 0.005	0.02	—	0.02	0.03	—	0.03	57.8	< 0.005	< 0.005	58.0
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	6,439	0.40	0.05	6,463
Water	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Waste	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Stationary	0.24	1.08	0.62	< 0.005	0.04	—	0.04	0.04	—	0.04	123	< 0.005	< 0.005	124
Total	17.9	36.3	19.3	0.31	0.77	4.39	5.16	0.74	1.03	1.77	40,826	65.5	5.85	58,246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	6.41	0.85	0.06	0.13	0.80	0.93	0.12	0.19	0.31	5,342	0.01	0.84	5,598
Area	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	1,066	0.07	0.01	1,070
Water	—	—	—	—	—	—	—	—	—	—	263	4.93	0.12	421
Waste	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319
Stationary	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5

Total	3.27	6.62	3.53	0.06	0.14	0.80	0.94	0.14	0.19	0.32	6,759	10.8	0.97	9,643

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.81	0.81	—	0.42	0.42	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2

Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.12	1.15	0.00	0.00	0.01	0.01	0.00	0.00	0.00	235	0.01	0.01	238
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	9.96	< 0.005	< 0.005	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.65	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	0.17	—	0.17	0.15	—	0.15	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.01	—	0.01	0.01	—	0.01	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.12	1.15	0.00	0.00	0.01	0.01	0.00	0.00	0.00	235	0.01	0.01	238
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	9.96	< 0.005	< 0.005	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.65	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	1.36	—	1.36	1.23	—	1.23	6,598	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.68	1.94	< 0.005	0.07	—	0.07	0.07	—	0.07	362	0.01	< 0.005	363
Dust From Material Movement	—	—	—	—	—	0.50	0.50	—	0.20	0.20	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.49	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	59.9	< 0.005	< 0.005	60.1
Dust From Material Movement	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.13	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	269	0.01	0.01	272
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	15.2	< 0.005	< 0.005	15.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	2.51	< 0.005	< 0.005	2.55

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	0.20	—	0.20	0.18	—	0.18	6,598	0.27	0.05	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.68	1.94	< 0.005	0.01	—	0.01	0.01	—	0.01	362	0.01	< 0.005	363
Dust From Material Movement	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.49	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	59.9	< 0.005	< 0.005	60.1

Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.13	1.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	269	0.01	0.01	272
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	15.2	< 0.005	< 0.005	15.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	2.51	< 0.005	< 0.005	2.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.52	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	65.7	< 0.005	< 0.005	65.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	10.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.83	18.1	0.00	0.00	0.22	0.22	0.00	0.00	0.00	3,704	0.18	0.14	3,749
Vendor	0.13	4.02	1.85	0.03	0.05	0.19	0.24	0.05	0.07	0.12	3,546	0.01	0.49	3,691
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.56	0.00	0.00	0.01	0.01	0.00	0.00	0.00	104	0.01	< 0.005	106
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	97.1	< 0.005	0.01	101

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	17.3	< 0.005	< 0.005	17.5
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.1	< 0.005	< 0.005	16.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.52	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	65.7	< 0.005	< 0.005	65.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	10.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.47	1.83	18.1	0.00	0.00	0.22	0.22	0.00	0.00	0.00	3,704	0.18	0.14	3,749
Vendor	0.13	4.02	1.85	0.03	0.05	0.19	0.24	0.05	0.07	0.12	3,546	0.01	0.49	3,691
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.56	0.00	0.00	0.01	0.01	0.00	0.00	0.00	104	0.01	< 0.005	106
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	97.1	< 0.005	0.01	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	17.3	< 0.005	< 0.005	17.5
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.1	< 0.005	< 0.005	16.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11.3	8.56	0.01	0.41	—	0.41	0.38	—	0.38	1,436	0.06	0.01	1,441
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.06	1.56	< 0.005	0.08	—	0.08	0.07	—	0.07	238	0.01	< 0.005	239
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.46	24.8	0.00	0.00	0.22	0.22	0.00	0.00	0.00	4,102	0.17	0.14	4,163
Vendor	0.13	3.63	1.63	0.03	0.05	0.19	0.24	0.05	0.07	0.12	3,487	0.01	0.46	3,634
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.41	1.70	16.7	0.00	0.00	0.22	0.22	0.00	0.00	0.00	3,630	0.18	0.14	3,675
Vendor	0.12	3.85	1.66	0.03	0.05	0.19	0.24	0.05	0.07	0.12	3,491	0.01	0.46	3,629
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	1.02	11.2	0.00	0.00	0.13	0.13	0.00	0.00	0.00	2,238	0.11	0.08	2,269
Vendor	0.08	2.31	0.98	0.02	0.03	0.12	0.14	0.03	0.04	0.07	2,089	< 0.005	0.27	2,174

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	371	0.02	0.01	376
Vendor	0.01	0.42	0.18	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	346	< 0.005	0.05	360
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.10	—	0.10	0.10	—	0.10	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	11.3	8.56	0.01	0.06	—	0.06	0.06	—	0.06	1,436	0.06	0.01	1,441
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	2.06	1.56	< 0.005	0.01	—	0.01	0.01	—	0.01	238	0.01	< 0.005	239

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.58	1.46	24.8	0.00	0.00	0.22	0.22	0.00	0.00	0.00	4,102	0.17	0.14	4,163
Vendor	0.13	3.63	1.63	0.03	0.05	0.19	0.24	0.05	0.07	0.12	3,487	0.01	0.46	3,634
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.41	1.70	16.7	0.00	0.00	0.22	0.22	0.00	0.00	0.00	3,630	0.18	0.14	3,675
Vendor	0.12	3.85	1.66	0.03	0.05	0.19	0.24	0.05	0.07	0.12	3,491	0.01	0.46	3,629
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	1.02	11.2	0.00	0.00	0.13	0.13	0.00	0.00	0.00	2,238	0.11	0.08	2,269
Vendor	0.08	2.31	0.98	0.02	0.03	0.12	0.14	0.03	0.04	0.07	2,089	< 0.005	0.27	2,174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.19	2.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	371	0.02	0.01	376
Vendor	0.01	0.42	0.18	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	346	< 0.005	0.05	360
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,512	0.06	0.01	1,517
Paving	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.55	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	62.1	< 0.005	< 0.005	62.3
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.3	< 0.005	< 0.005	10.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.01	0.01	0.00	0.00	0.00	198	0.01	0.01	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	8.37	< 0.005	< 0.005	8.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.39	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.09	—	0.09	0.08	—	0.08	1,512	0.06	0.01	1,517
Paving	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.55	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	62.1	< 0.005	< 0.005	62.3
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.3	< 0.005	< 0.005	10.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.01	0.01	0.00	0.00	0.00	198	0.01	0.01	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	8.37	< 0.005	< 0.005	8.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.39	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.39	0.34	< 0.005	0.02	—	0.02	0.02	—	0.02	47.6	< 0.005	< 0.005	47.7
Architectural Coatings	8.48	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.87	< 0.005	< 0.005	7.90
Architectural Coatings	1.55	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	4.97	0.00	0.00	0.04	0.04	0.00	0.00	0.00	820	0.03	0.03	833
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.34	3.34	0.00	0.00	0.04	0.04	0.00	0.00	0.00	726	0.04	0.03	735
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.33	0.00	0.00	0.02	0.02	0.00	0.00	0.00	266	0.01	0.01	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	44.1	< 0.005	< 0.005	44.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.01	—	0.01	0.01	—	0.01	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.01	—	0.01	0.01	—	0.01	134	0.01	< 0.005	134
Architectural Coatings	23.8	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.39	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.6	< 0.005	< 0.005	47.7
Architectural Coatings	8.48	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.87	< 0.005	< 0.005	7.90
Architectural Coatings	1.55	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.32	0.29	4.97	0.00	0.00	0.04	0.04	0.00	0.00	0.00	820	0.03	0.03	833
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.34	3.34	0.00	0.00	0.04	0.04	0.00	0.00	0.00	726	0.04	0.03	735
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.33	0.00	0.00	0.02	0.02	0.00	0.00	0.00	266	0.01	0.01	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	44.1	< 0.005	< 0.005	44.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerat Warehouse-No Rail	0.26	16.6	2.31	0.15	0.36	2.20	2.55	0.34	0.51	0.86	16,144	0.02	2.54	16,938
Manufacturing	0.23	14.9	2.08	0.14	0.32	1.98	2.30	0.31	0.46	0.77	14,537	0.02	2.29	15,252
Refrigerated Warehouse-No Rail	0.03	1.62	0.23	0.01	0.03	0.21	0.25	0.03	0.05	0.08	1,578	< 0.005	0.25	1,656
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.52	33.1	4.62	0.31	0.72	4.39	5.10	0.68	1.03	1.71	32,259	0.05	5.08	33,845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.24	17.4	2.36	0.15	0.36	2.20	2.55	0.34	0.51	0.86	16,152	0.02	2.55	16,912
Manufacturing	0.22	15.7	2.13	0.14	0.32	1.98	2.30	0.31	0.46	0.77	14,544	0.02	2.29	15,229
Refrigerated Warehouse-No Rail	0.02	1.70	0.23	0.01	0.04	0.21	0.25	0.03	0.05	0.08	1,579	< 0.005	0.25	1,653
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.48	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	32,275	0.04	5.09	33,794
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	3.21	0.43	0.03	0.07	0.40	0.47	0.06	0.09	0.16	2,673	< 0.005	0.42	2,802

Manufacturing	0.04	2.89	0.38	0.03	0.06	0.36	0.42	0.06	0.08	0.14	2,407	< 0.005	0.38	2,523
Refrigerated Warehouse-No Rail	< 0.005	0.31	0.04	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	261	< 0.005	0.04	274
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09	6.41	0.85	0.06	0.13	0.80	0.93	0.12	0.19	0.31	5,342	0.01	0.84	5,598

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.26	16.6	2.31	0.15	0.36	2.20	2.55	0.34	0.51	0.86	16,144	0.02	2.54	16,938
Manufacturing	0.23	14.9	2.08	0.14	0.32	1.98	2.30	0.31	0.46	0.77	14,537	0.02	2.29	15,252
Refrigerated Warehouse-No Rail	0.03	1.62	0.23	0.01	0.03	0.21	0.25	0.03	0.05	0.08	1,578	< 0.005	0.25	1,656
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.52	33.1	4.62	0.31	0.72	4.39	5.10	0.68	1.03	1.71	32,259	0.05	5.08	33,845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	0.24	17.4	2.36	0.15	0.36	2.20	2.55	0.34	0.51	0.86	16,152	0.02	2.55	16,912
Manufacturing	0.22	15.7	2.13	0.14	0.32	1.98	2.30	0.31	0.46	0.77	14,544	0.02	2.29	15,229
Refrigerated Warehouse-No Rail	0.02	1.70	0.23	0.01	0.04	0.21	0.25	0.03	0.05	0.08	1,579	< 0.005	0.25	1,653
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.48	34.8	4.72	0.31	0.72	4.39	5.11	0.68	1.03	1.71	32,275	0.04	5.09	33,794
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	3.21	0.43	0.03	0.07	0.40	0.47	0.06	0.09	0.16	2,673	< 0.005	0.42	2,802
Manufacturing	0.04	2.89	0.38	0.03	0.06	0.36	0.42	0.06	0.08	0.14	2,407	< 0.005	0.38	2,523
Refrigerated Warehouse-No Rail	< 0.005	0.31	0.04	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	261	< 0.005	0.04	274
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09	6.41	0.85	0.06	0.13	0.80	0.93	0.12	0.19	0.31	5,342	0.01	0.84	5,598

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,309	0.21	0.02	3,322
Manufacturing	—	—	—	—	—	—	—	—	—	—	1,822	0.11	0.01	1,829
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,046	0.06	0.01	1,050
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	6,439	0.40	0.05	6,463
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,309	0.21	0.02	3,322
Manufacturing	—	—	—	—	—	—	—	—	—	—	1,822	0.11	0.01	1,829
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,046	0.06	0.01	1,050
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	6,439	0.40	0.05	6,463
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	548	0.03	< 0.005	550
Manufacturing	—	—	—	—	—	—	—	—	—	—	302	0.02	< 0.005	303
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	173	0.01	< 0.005	174
Parking Lot	—	—	—	—	—	—	—	—	—	—	43.3	< 0.005	< 0.005	43.4
Total	—	—	—	—	—	—	—	—	—	—	1,066	0.07	0.01	1,070

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,309	0.21	0.02	3,322
Manufacturing	—	—	—	—	—	—	—	—	—	—	1,822	0.11	0.01	1,829
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,046	0.06	0.01	1,050
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	6,439	0.40	0.05	6,463

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,309	0.21	0.02	3,322
Manufacturing	—	—	—	—	—	—	—	—	—	—	1,822	0.11	0.01	1,829
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,046	0.06	0.01	1,050
Parking Lot	—	—	—	—	—	—	—	—	—	—	261	0.02	< 0.005	262
Total	—	—	—	—	—	—	—	—	—	—	6,439	0.40	0.05	6,463
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	548	0.03	< 0.005	550
Manufacturing	—	—	—	—	—	—	—	—	—	—	302	0.02	< 0.005	303
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	173	0.01	< 0.005	174
Parking Lot	—	—	—	—	—	—	—	—	—	—	43.3	< 0.005	< 0.005	43.4
Total	—	—	—	—	—	—	—	—	—	—	1,066	0.07	0.01	1,070

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerat Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Manufacturing	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.67	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Total	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.42	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Total	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.67	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Total	19.6	0.24	28.5	< 0.005	0.04	—	0.04	0.05	—	0.05	117	< 0.005	< 0.005	118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.42	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61
Total	3.14	0.02	2.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57	< 0.005	< 0.005	9.61

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,199	22.4	0.54	1,918
Manufacturing	—	—	—	—	—	—	—	—	—	—	312	5.97	0.14	504
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.3	1.46	0.04	123
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,199	22.4	0.54	1,918
Manufacturing	—	—	—	—	—	—	—	—	—	—	312	5.97	0.14	504

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	76.3	1.46	0.04	123
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	199	3.70	0.09	318
Manufacturing	—	—	—	—	—	—	—	—	—	—	51.7	0.99	0.02	83.5
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	12.6	0.24	0.01	20.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	263	4.93	0.12	421

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,199	22.4	0.54	1,918

Manufacturing	—	—	—	—	—	—	—	—	—	—	312	5.97	0.14	504
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.3	1.46	0.04	123
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	1,199	22.4	0.54	1,918
Manufacturing	—	—	—	—	—	—	—	—	—	—	312	5.97	0.14	504
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.3	1.46	0.04	123
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1,588	29.8	0.72	2,546
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	199	3.70	0.09	318
Manufacturing	—	—	—	—	—	—	—	—	—	—	51.7	0.99	0.02	83.5

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	12.6	0.24	0.01	20.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	263	4.93	0.12	421

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	41.2	4.12	0.00	144
Manufacturing	—	—	—	—	—	—	—	—	—	—	14.5	1.45	0.00	50.7
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.68	0.27	0.00	9.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	249	24.9	0.00	870
Manufacturing	—	—	—	—	—	—	—	—	—	—	87.5	8.75	0.00	306
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	16.2	1.62	0.00	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	352	35.2	0.00	1,233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	41.2	4.12	0.00	144
Manufacturing	—	—	—	—	—	—	—	—	—	—	14.5	1.45	0.00	50.7
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2.68	0.27	0.00	9.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	58.4	5.83	0.00	204

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,169
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	5.65
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	13,101
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	34.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	873
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	14,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,169
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	5.65
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,319

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5
Total	0.04	0.20	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	20.4	< 0.005	< 0.005	20.5

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/2/2023	10/20/2023	5.00	15.0	—
Grading	Grading	10/23/2023	11/17/2023	5.00	20.0	—
Building Construction	Building Construction	12/18/2023	11/1/2024	5.00	230	—
Paving	Paving	11/4/2024	11/22/2024	5.00	15.0	—
Architectural Coating	Architectural Coating	6/3/2024	11/30/2024	5.00	130	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48

Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37

Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	275	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	107	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2

Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	55.1	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	275	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	107	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	55.1	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	983,202	327,734	12,284

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	22.5	0.00	—
Grading	0.00	0.00	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	4.70

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Manufacturing	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%
Parking Lot	4.70	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	118	118	118	43,012	4,714	4,714	4,714	1,720,464
Manufacturing	106	106	106	38,730	4,244	4,244	4,244	1,549,206
Refrigerated Warehouse-No Rail	11.5	11.5	11.5	4,205	461	461	461	168,192
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	118	118	118	43,012	4,714	4,714	4,714	1,720,464
Manufacturing	106	106	106	38,730	4,244	4,244	4,244	1,549,206
Refrigerated Warehouse-No Rail	11.5	11.5	11.5	4,205	461	461	461	168,192
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	983,202	327,734	12,284

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,270,559	532	0.0330	0.0040	0.00
Manufacturing	1,250,338	532	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	717,579	532	0.0330	0.0040	0.00
Parking Lot	179,345	532	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,270,559	532	0.0330	0.0040	0.00
Manufacturing	1,250,338	532	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	717,579	532	0.0330	0.0040	0.00
Parking Lot	179,345	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

Unrefrigerated Warehouse-No Rail	113,543,750	4,628,615
Manufacturing	30,293,750	0.00
Refrigerated Warehouse-No Rail	7,400,000	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	113,543,750	4,628,615
Manufacturing	30,293,750	0.00
Refrigerated Warehouse-No Rail	7,400,000	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	462	0.00
Manufacturing	162	0.00
Refrigerated Warehouse-No Rail	30.1	0.00
Parking Lot	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	462	0.00
Manufacturing	162	0.00
Refrigerated Warehouse-No Rail	30.1	0.00

Parking Lot	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	0.00	50.0	1,073	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	33.6	annual days of extreme heat
Extreme Precipitation	4.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	22.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	2	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	2	1	1	3
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	91.1
AQ-PM	32.2
AQ-DPM	57.9
Drinking Water	29.7
Lead Risk Housing	13.8
Pesticides	0.00
Toxic Releases	25.0
Traffic	83.1
Effect Indicators	—
CleanUp Sites	73.4
Groundwater	0.00
Haz Waste Facilities/Generators	65.9

Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	84.6
Cardio-vascular	99.5
Low Birth Weights	5.81
Socioeconomic Factor Indicators	—
Education	67.1
Housing	11.2
Linguistic	19.9
Poverty	67.2
Unemployment	82.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	66.22610035
Employed	25.70255357
Median HI	56.85871936
Education	—
Bachelor's or higher	31.64378288
High school enrollment	2.258437059
Preschool enrollment	41.10098807
Transportation	—
Auto Access	89.83703323
Active commuting	14.92364943

Social	—
2-parent households	97.98537149
Voting	43.48774541
Neighborhood	—
Alcohol availability	89.68304889
Park access	26.5622995
Retail density	22.41755422
Supermarket access	25.03528808
Tree canopy	7.25009624
Housing	—
Homeownership	84.70422174
Housing habitability	80.57230848
Low-inc homeowner severe housing cost burden	56.2941101
Low-inc renter severe housing cost burden	70.48633389
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	59.70742974
Arthritis	0.6
Asthma ER Admissions	14.5
High Blood Pressure	1.1
Cancer (excluding skin)	0.9
Asthma	37.3
Coronary Heart Disease	1.0
Chronic Obstructive Pulmonary Disease	1.6
Diagnosed Diabetes	6.3
Life Expectancy at Birth	28.4
Cognitively Disabled	58.3

Physically Disabled	16.0
Heart Attack ER Admissions	1.2
Mental Health Not Good	58.7
Chronic Kidney Disease	1.3
Obesity	41.7
Pedestrian Injuries	90.6
Physical Health Not Good	24.5
Stroke	2.9
Health Risk Behaviors	—
Binge Drinking	95.3
Current Smoker	59.6
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	33.8
Elderly	53.1
English Speaking	52.3
Foreign-born	39.5
Outdoor Workers	27.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.5
Traffic Density	80.1
Traffic Access	23.0
Other Indices	—
Hardship	53.1
Other Decision Support	—

2016 Voting	53.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	42.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total project site is 29.6 acres and will consist of a 655,468 sq ft industrial building with 5% cold storage and 20% manufacturing. Approximately 209,075 sq ft will be dedicated to landscape
Construction: Construction Phases	Construction is anticipated to begin in Fall of 2023 and be completed in 2024. Overlap of building construction with architectural coating phase.
Construction: Off-Road Equipment	Default construction equipment with Tier 2 Engine.
Operations: Vehicle Data	Heavy heavy truck trips only with a 40 mile trip length. Total of 118 ADT for the Unrefrigerated Warehouse, 12 ADT for cold storage, and 106 ADT for manufacturing.

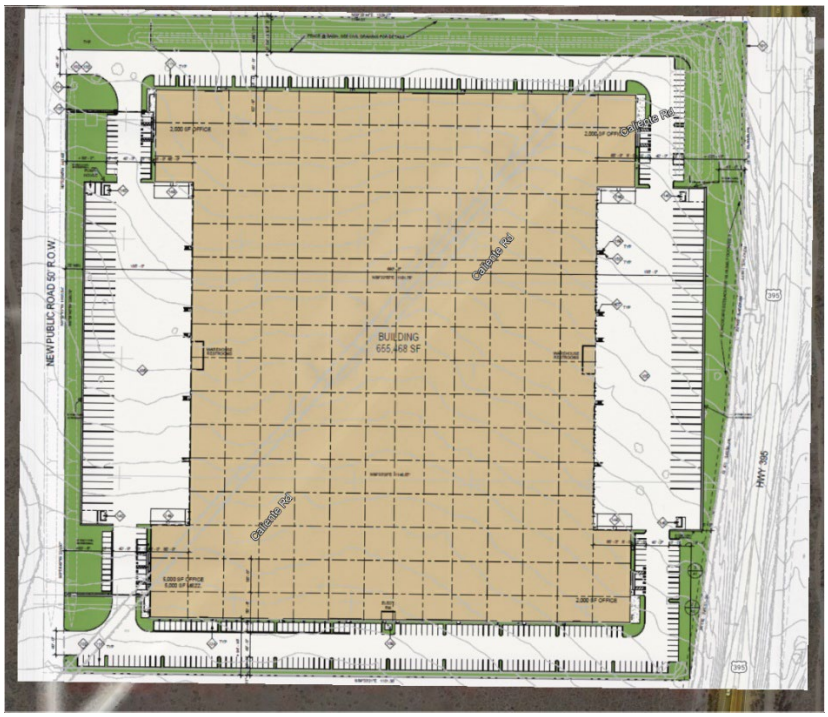
Operations: Fleet Mix	Based on fleet mix distribution from the Traffic Impact Analysis. Heavy Heavy truck only.
Operations: Emergency Generators and Fire Pumps	Proposed project would include a 1,073 HP emergency generator to be used for 50 hours per year
Operations: Energy Use	The proposed project would not utilize natural gas

APPENDIX B

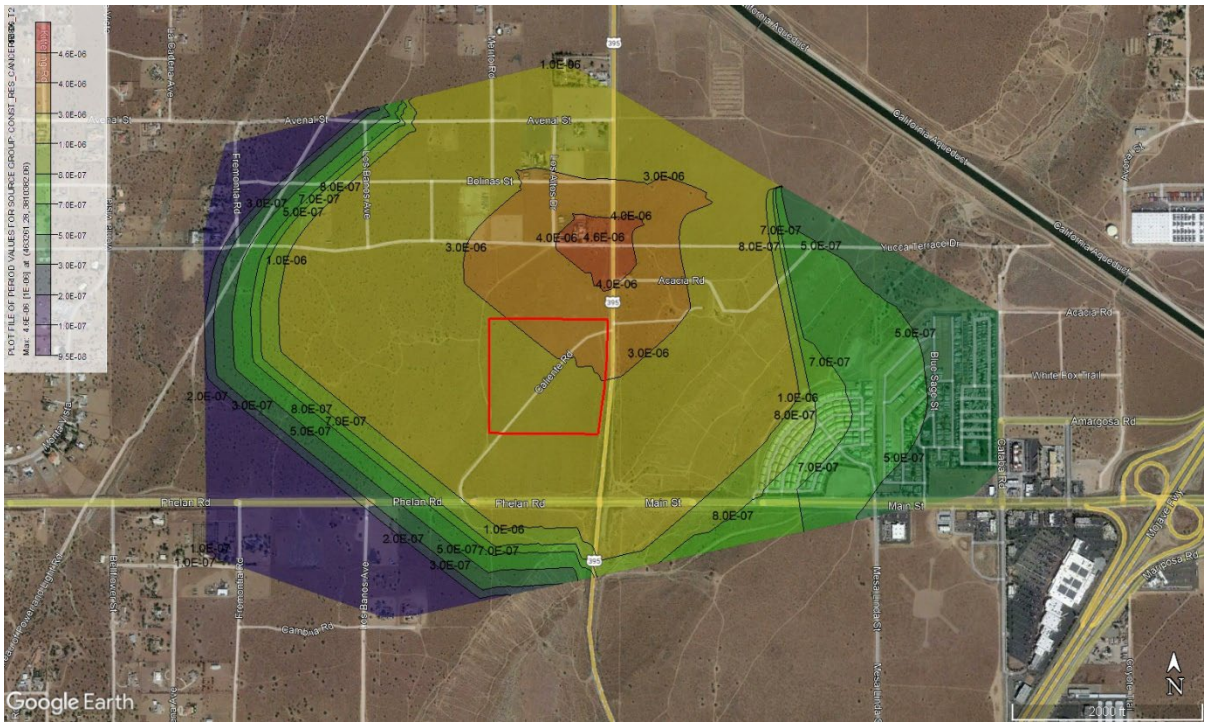
HRA MODEL OUTPUT

Project Location

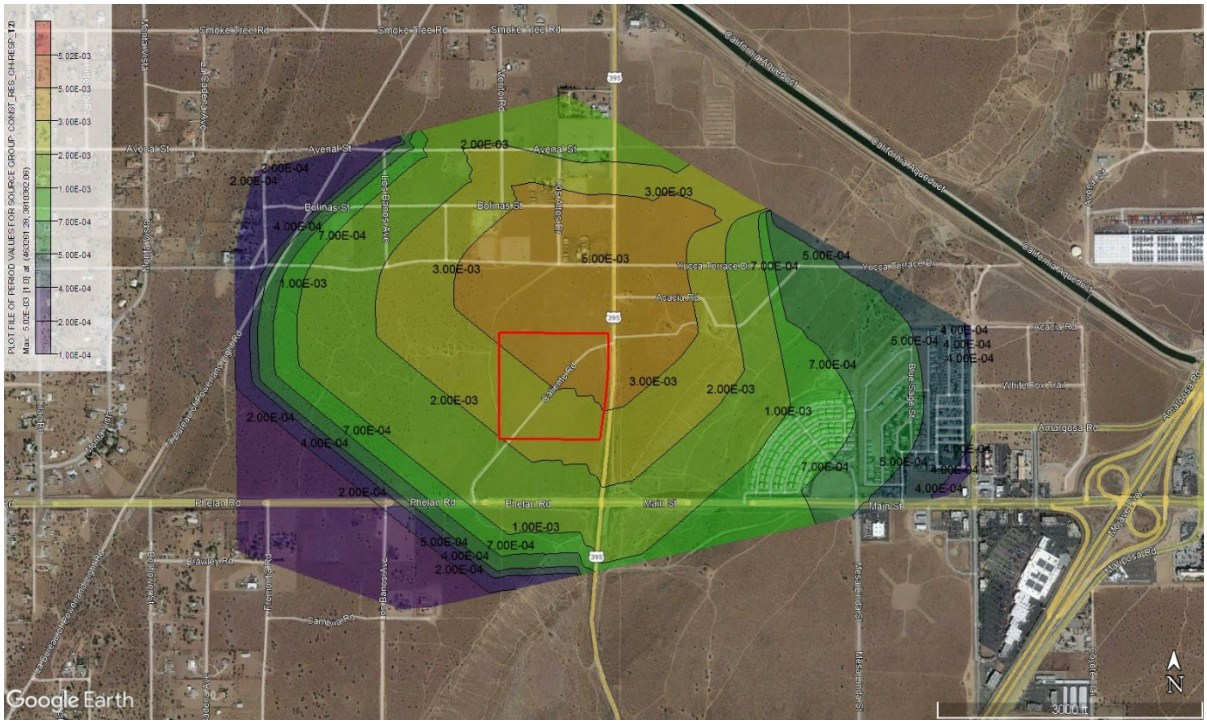
Project Site Plan



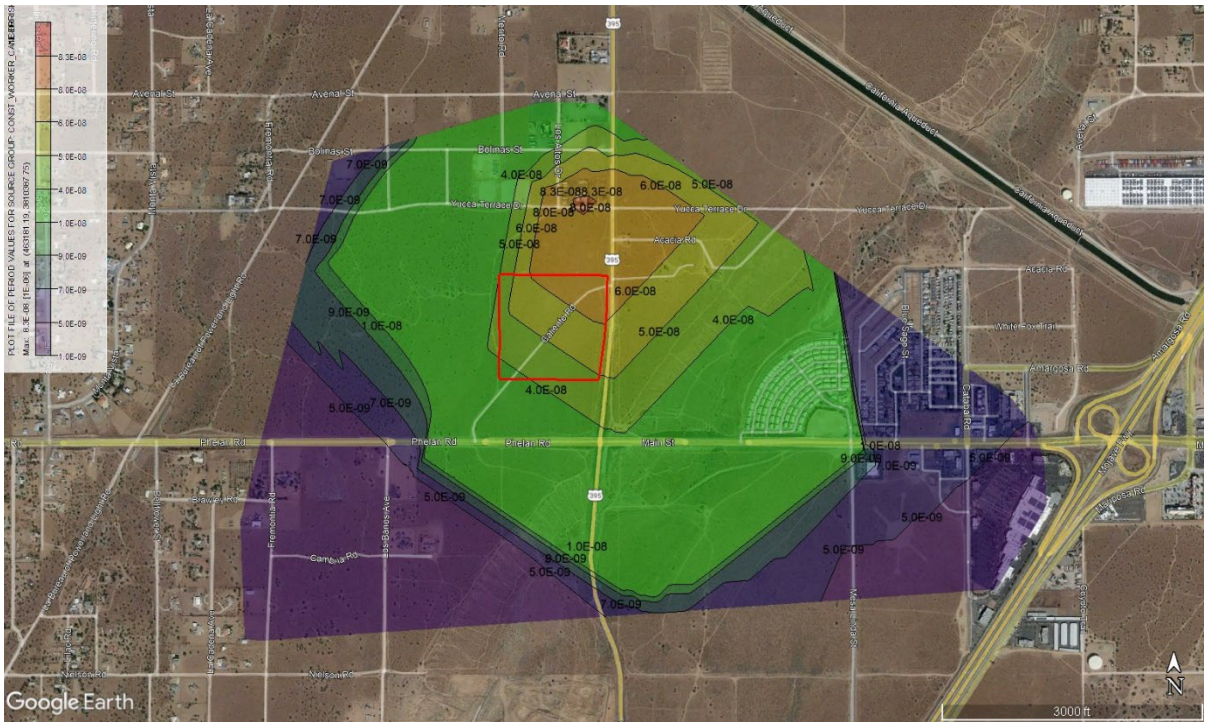
Construction Cancer Risk – Sensitive Receptor



Construction Chronic Hazard Index – Sensitive Receptor



Construction Cancer Risk – Worker Receptor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3000 ft
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Bolinas St
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Main St
Cambria Rd
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Mojave Rd
Los Banos Ave
Mesquite St
Big Oak St
Calabar Rd
Sandoval Rd
Sandoval Aqueduct
Mojave Aqueduct
Tremonia Rd
Brawley Rd
Mojave Rd
Kern Rd
Vista Rd
Mentor Rd
Lancaster Rd
Sierra Ave
Cedar St
Oak St
Pine St
Elm St
Maple St
Willow St
Ivy St
Ivy Way
Ivy Ln
Ivy Cir
Ivy Ct
Ivy Pl
Ivy Terr
Ivy Trl
Ivy Vw
Ivy Wy
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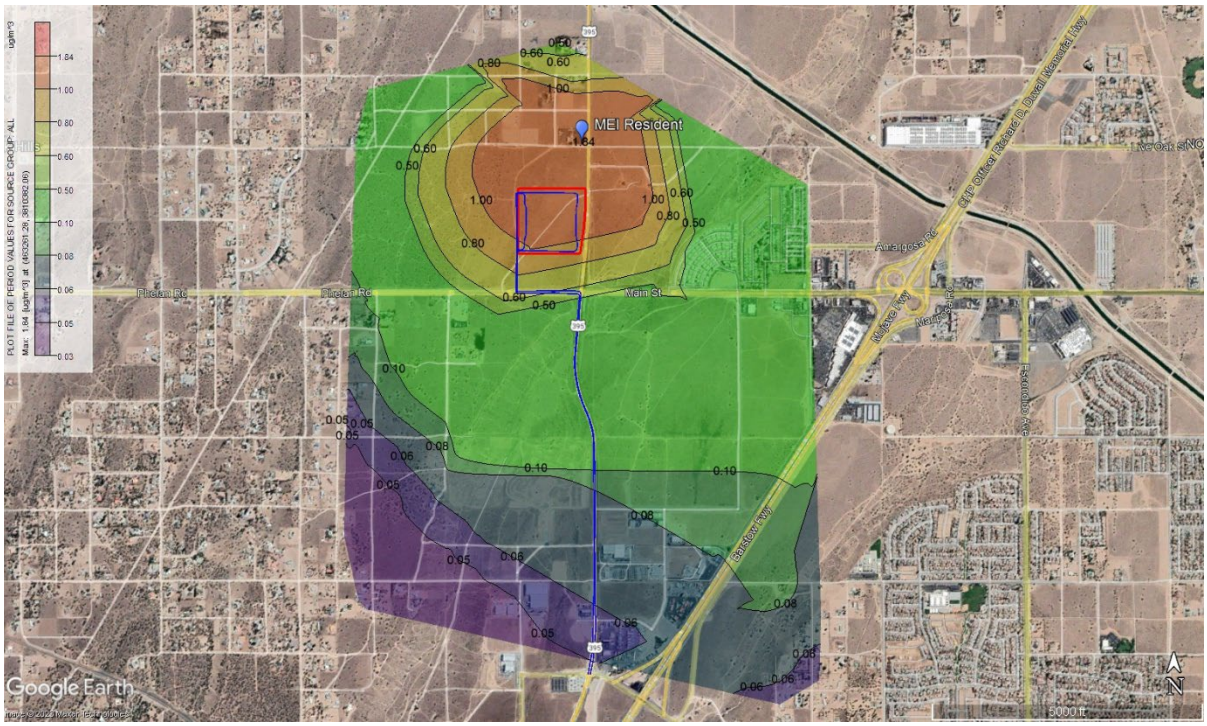
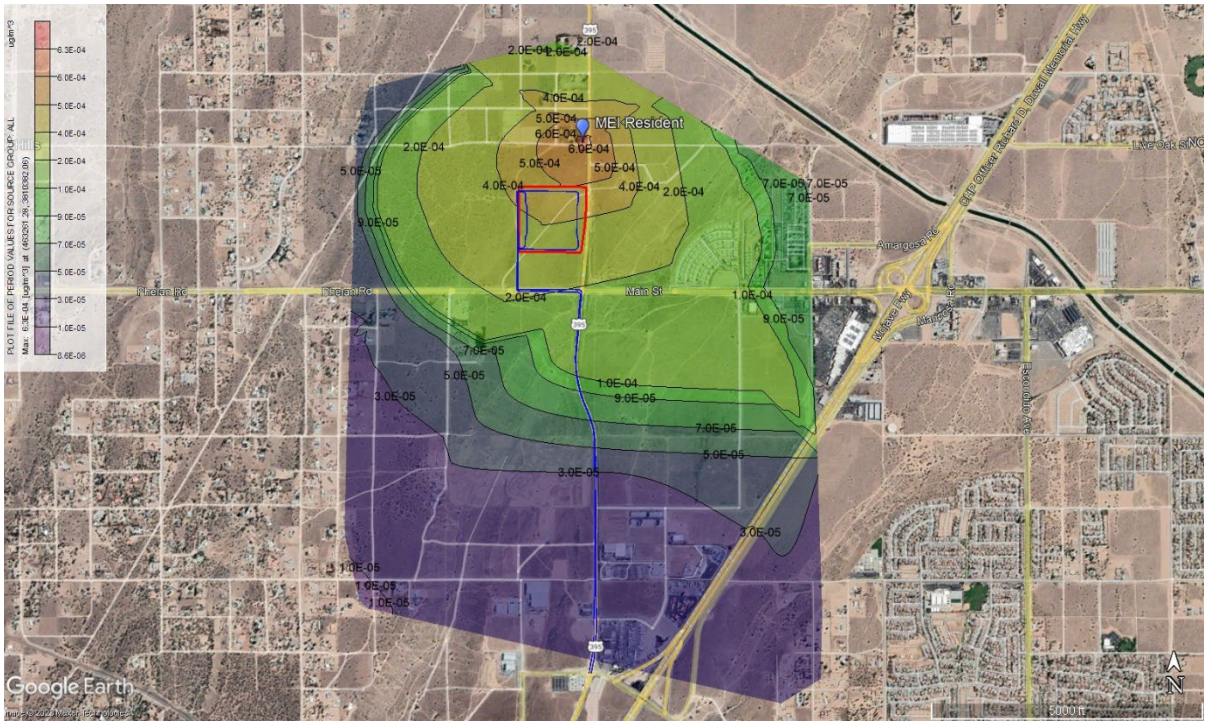
Ivy Ave
Ivy St
Ivy Rd
Ivy Dr

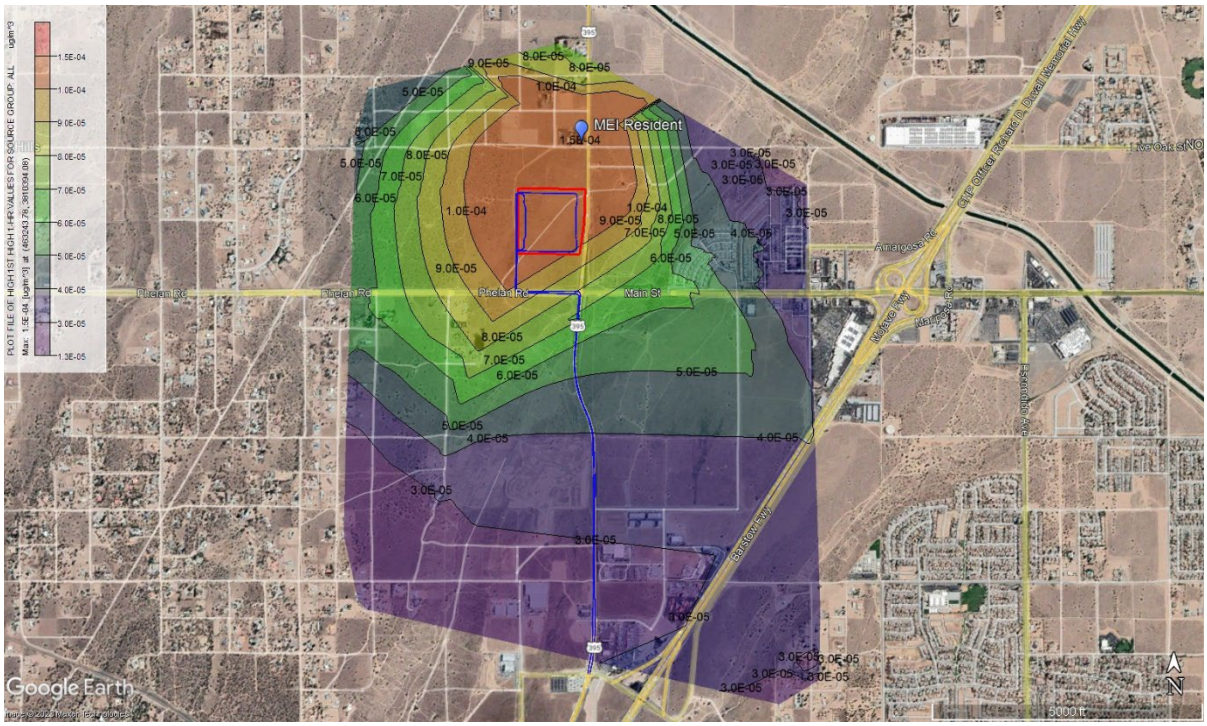
Operational Cancer Risk – Sensitive Receptor



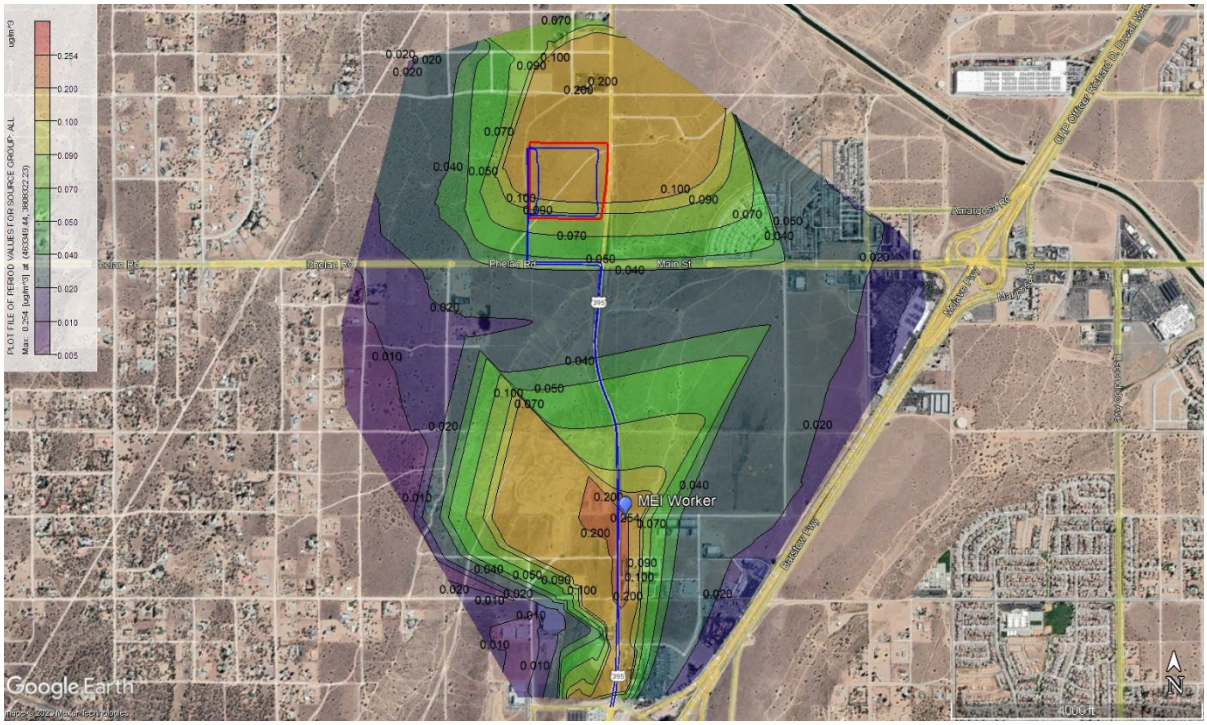
Operational Chronic Hazard Index – Sensitive Receptor



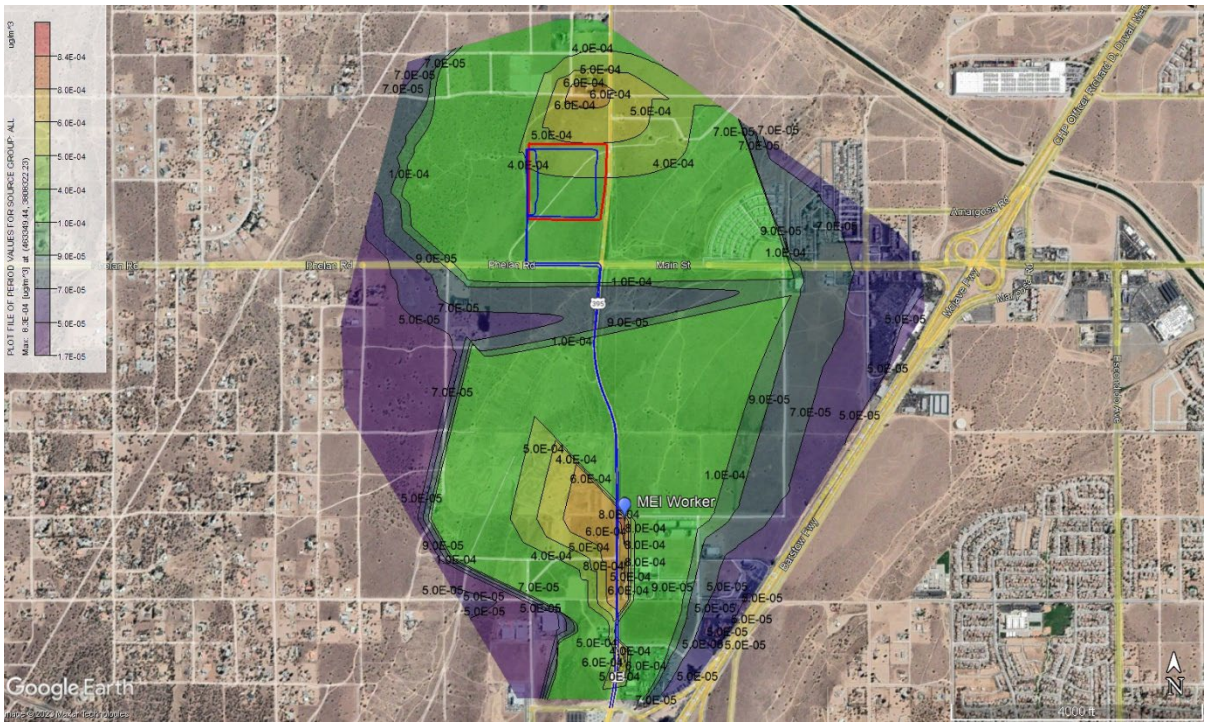
Operational Acute Hazard Index – Sensitive Receptor



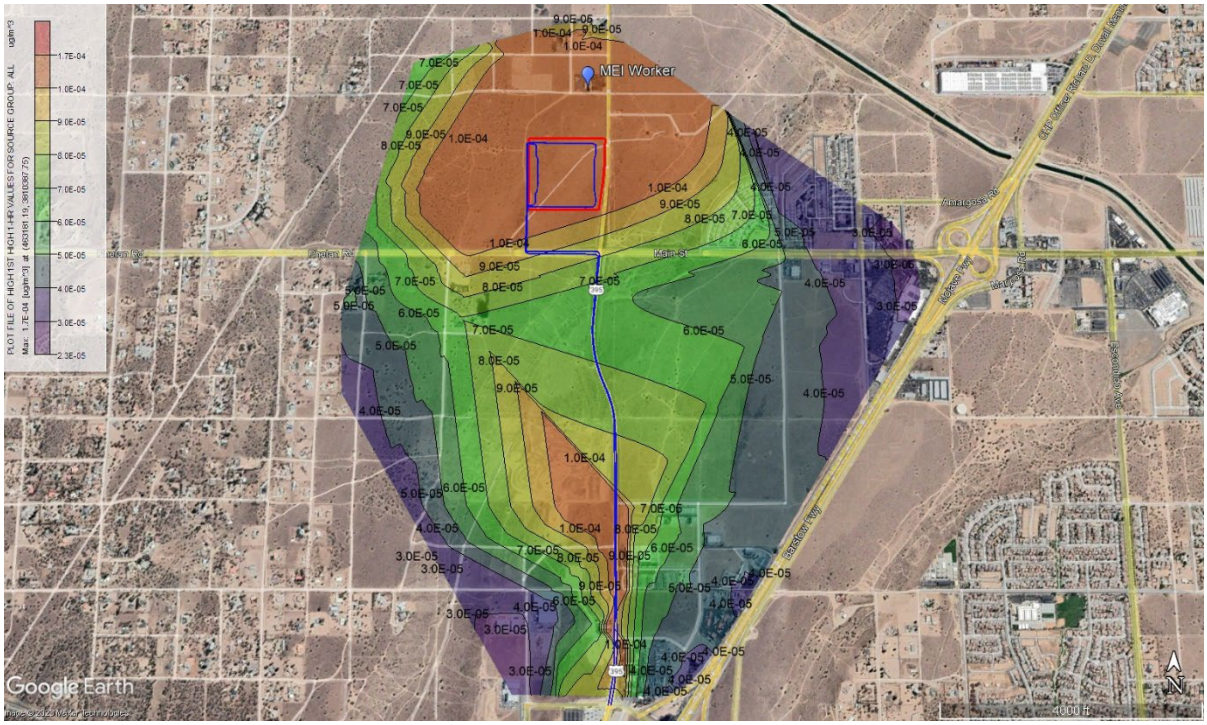
Operational Cancer Risk – Worker Receptor



Operational Chronic Hazard Index – Worker Receptor



Operational Acute Hazard Index – Worker Receptor



Construction	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.08	4.60
Chronic HI	4.98E-03	5.02E-03
Acute HI	0.0	0.0
PM 2.5	0.025	0.025

Construction (T2)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.08	4.60
Chronic HI	4.98E-03	5.02E-03
Acute HI	0.0	0.0
PM 2.5	0.025	0.025

Construction (T2L3)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.02	0.88
Chronic HI	9.98E-04	1.01E-03
Acute HI	0.0	0.0
PM 2.5	0.004	0.004

Construction (T4)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.01	0.51
Chronic HI	5.79E-04	5.84E-04
Acute HI	0.0	0.0
PM 2.5	0.002	0.002

Operational	Worker Receptor	Sensitive Receptor
30Yr Cancer Risk (in a Million)	---	1.84
70Yr Cancer Risk (in a Million)	---	2.15
25Yr Cancer Risk (in a Million)	0.25	---
Chronic HI	8.31E-04	6.28E-04
Acute HI	1.66E-04	1.50E-04
PM 2.5	0.0041	0.0031

PM 10				
Tons/Yr	UM	T2	T2L3	T4
Year 1	0.02565	0.02565	0.004053	2.44E-03
Year 2	0.0891	0.0891	1.79E-02	1.04E-02
Year 3	0	0	0	0

PM 2.5				
Tons/Yr	UM	T2	T2L3	T4
Year 1	0.023385	0.023385	0.003713	2.44E-03
Year 2	0.08345	0.08345	1.70E-02	1.04E-02
Year 3	0	0	0	0

PM 10				
Lbs /Yr	UM	T2	T2L3	T4
Year 1	51.3	51.3	8.106	4.889
Year 2	178.2	178.2	35.71	20.72
Year 3	0	0	0	0

PM 2.5				
Lbs /Yr	UM	T2	T2L3	T4
Year 1	46.77	46.77	7.426	4.889
Year 2	166.9	166.9	34.01	20.72
Year 3	0	0	0	0

PM 10				
% Chng	UM	M	T2L3	T4
Year 1	100%	100%	16%	10%
Year 2	100%	100%	20%	12%
Year 3	0%	0%	0%	0%

PM 2.5				
g/sec	UM	T2	T2L3	T4
Year 1	0.000673	0.000673	0.000107	7.03E-05
Year 2	0.002401	0.002401	0.000489	0.000298
Year 3	0	0	0	0

			UnMitigated				T2				T2L3				T4			
						4.60E-06				4.60E-06				8.75E-07				5.12E-07
			Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total
1	464159.2	3809562	1.10E-07	3.53E-07	0.00E+00	4.63E-07	1.10E-07	3.53E-07	0.00E+00	4.63E-07	1.74E-08	7.07E-08	0.00E+00	8.80E-08	1.05E-08	4.10E-08	0.00E+00	5.15E-08
2	464179.2	3809562	1.07E-07	3.45E-07	0.00E+00	4.52E-07	1.07E-07	3.45E-07	0.00E+00	4.52E-07	1.70E-08	6.91E-08	0.00E+00	8.61E-08	1.02E-08	4.01E-08	0.00E+00	5.03E-08
3	464199.2	3809562	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.76E-08	0.00E+00	8.42E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
4	464219.2	3809562	1.03E-07	3.30E-07	0.00E+00	4.33E-07	1.03E-07	3.30E-07	0.00E+00	4.33E-07	1.62E-08	6.61E-08	0.00E+00	8.23E-08	9.80E-09	3.83E-08	0.00E+00	4.81E-08
5	464239.2	3809562	1.01E-07	3.23E-07	0.00E+00	4.23E-07	1.01E-07	3.23E-07	0.00E+00	4.23E-07	1.59E-08	6.46E-08	0.00E+00	8.05E-08	9.58E-09	3.75E-08	0.00E+00	4.71E-08
6	464259.2	3809562	9.84E-08	3.16E-07	0.00E+00	4.14E-07	9.84E-08	3.16E-07	0.00E+00	4.14E-07	1.56E-08	6.33E-08	0.00E+00	7.88E-08	9.38E-09	3.67E-08	0.00E+00	4.61E-08
7	464279.2	3809562	9.63E-08	3.09E-07	0.00E+00	4.05E-07	9.63E-08	3.09E-07	0.00E+00	4.05E-07	1.52E-08	6.19E-08	0.00E+00	7.71E-08	9.18E-09	3.59E-08	0.00E+00	4.51E-08
8	464299.2	3809562	9.43E-08	3.02E-07	0.00E+00	3.97E-07	9.43E-08	3.02E-07	0.00E+00	3.97E-07	1.49E-08	6.06E-08	0.00E+00	7.55E-08	8.98E-09	3.52E-08	0.00E+00	4.41E-08
9	464319.2	3809562	9.24E-08	2.96E-07	0.00E+00	3.89E-07	9.24E-08	2.96E-07	0.00E+00	3.89E-07	1.46E-08	5.94E-08	0.00E+00	7.40E-08	8.80E-09	3.45E-08	0.00E+00	4.33E-08
10	464339.2	3809562	9.06E-08	2.91E-07	0.00E+00	3.81E-07	9.06E-08	2.91E-07	0.00E+00	3.81E-07	1.43E-08	5.82E-08	0.00E+00	7.25E-08	8.63E-09	3.38E-08	0.00E+00	4.24E-08
11	464359.2	3809562	8.87E-08	2.85E-07	0.00E+00	3.73E-07	8.87E-08	2.85E-07	0.00E+00	3.73E-07	1.40E-08	5.70E-08	0.00E+00	7.11E-08	8.46E-09	3.31E-08	0.00E+00	4.16E-08
12	464379.2	3809562	8.69E-08	2.79E-07	0.00E+00	3.66E-07	8.69E-08	2.79E-07	0.00E+00	3.66E-07	1.37E-08	5.59E-08	0.00E+00	6.96E-08	8.28E-09	3.24E-08	0.00E+00	4.07E-08
13	464399.2	3809562	8.52E-08	2.73E-07	0.00E+00	3.59E-07	8.52E-08	2.73E-07	0.00E+00	3.59E-07	1.35E-08	5.48E-08	0.00E+00	6.83E-08	8.12E-09	3.18E-08	0.00E+00	3.99E-08
14	464419.2	3809562	8.36E-08	2.68E-07	0.00E+00	3.52E-07	8.36E-08	2.68E-07	0.00E+00	3.52E-07	1.32E-08	5.37E-08	0.00E+00	6.70E-08	7.97E-09	3.12E-08	0.00E+00	3.92E-08
15	464439.2	3809562	8.20E-08	2.63E-07	0.00E+00	3.45E-07	8.20E-08	2.63E-07	0.00E+00	3.45E-07	1.30E-08	5.27E-08	0.00E+00	6.57E-08	7.82E-09	3.06E-08	0.00E+00	3.84E-08
16	463759.2	3809582	1.92E-07	6.16E-07	0.00E+00	8.08E-07	1.92E-07	6.16E-07	0.00E+00	8.08E-07	3.03E-08	1.23E-07	0.00E+00	1.54E-07	1.83E-08	7.16E-08	0.00E+00	8.99E-08
17	463779.2	3809582	1.87E-07	6.00E-07	0.00E+00	7.87E-07	1.87E-07	6.00E-07	0.00E+00	7.87E-07	2.96E-08	1.20E-07	0.00E+00	1.50E-07	1.78E-08	6.98E-08	0.00E+00	8.76E-08
18	463799.2	3809582	1.82E-07	5.84E-07	0.00E+00	7.66E-07	1.82E-07	5.84E-07	0.00E+00	7.66E-07	2.88E-08	1.17E-07	0.00E+00	1.46E-07	1.73E-08	6.79E-08	0.00E+00	8.52E-08
19	463819.2	3809582	1.77E-07	5.69E-07	0.00E+00	7.46E-07	1.77E-07	5.69E-07	0.00E+00	7.46E-07	2.80E-08	1.14E-07	0.00E+00	1.42E-07	1.69E-08	6.61E-08	0.00E+00	8.30E-08
20	463839.2	3809582	1.73E-07	5.54E-07	0.00E+00	7.27E-07	1.73E-07	5.54E-07	0.00E+00	7.27E-07	2.73E-08	1.11E-07	0.00E+00	1.38E-07	1.65E-08	6.45E-08	0.00E+00	8.09E-08
21	463859.2	3809582	1.69E-07	5.42E-07	0.00E+00	7.11E-07	1.69E-07	5.42E-07	0.00E+00	7.11E-07	2.67E-08	1.09E-07	0.00E+00	1.35E-07	1.61E-08	6.31E-08	0.00E+00	7.92E-08
22	463879.2	3809582	1.65E-07	5.28E-07	0.00E+00	6.93E-07	1.65E-07	5.28E-07	0.00E+00	6.93E-07	2.60E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.14E-08	0.00E+00	7.71E-08
23	463899.2	3809582	1.60E-07	5.13E-07	0.00E+00	6.73E-07	1.60E-07	5.13E-07	0.00E+00	6.73E-07	2.53E-08	1.03E-07	0.00E+00	1.28E-07	1.52E-08	5.97E-08	0.00E+00	7.49E-08
24	463919.2	3809582	1.55E-07	4.98E-07	0.00E+00	6.53E-07	1.55E-07	4.98E-07	0.00E+00	6.53E-07	2.45E-08	9.97E-08	0.00E+00	1.24E-07	1.48E-08	5.78E-08	0.00E+00	7.26E-08
25	463939.2	3809582	1.50E-07	4.83E-07	0.00E+00	6.33E-07	1.50E-07	4.83E-07	0.00E+00	6.33E-07	2.38E-08	9.67E-08	0.00E+00	1.20E-07	1.43E-08	5.61E-08	0.00E+00	7.05E-08
26	464159.2	3809582	1.13E-07	3.62E-07	0.00E+00	4.75E-07	1.13E-07	3.62E-07	0.00E+00	4.75E-07	1.78E-08	7.26E-08	0.00E+00	9.04E-08	1.08E-08	4.21E-08	0.00E+00	5.29E-08
27	464179.2	3809582	1.10E-07	3.54E-07	0.00E+00	4.64E-07	1.10E-07	3.54E-07	0.00E+00	4.64E-07	1.74E-08	7.09E-08	0.00E+00	8.83E-08	1.05E-08	4.11E-08	0.00E+00	5.17E-08
28	464199.2	3809582	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.70E-08	6.93E-08	0.00E+00	8.64E-08	1.03E-08	4.02E-08	0.00E+00	5.05E-08
29	464219.2	3809582	1.05E-07	3.38E-07	0.00E+00	4.44E-07	1.05E-07	3.38E-07	0.00E+00	4.44E-07	1.67E-08	6.78E-08	0.00E+00	8.44E-08	1.00E-08	3.93E-08	0.00E+00	4.94E-08
30	464239.2	3809582	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.63E-08	6.63E-08	0.00E+00	8.26E-08	9.83E-09	3.85E-08	0.00E+00	4.83E-08
31	464259.2	3809582	1.01E-07	3.23E-07	0.00E+00	4.24E-07	1.01E-07	3.23E-07	0.00E+00	4.24E-07	1.59E-08	6.48E-08	0.00E+00	8.07E-08	9.61E-09	3.76E-08	0.00E+00	4.72E-08
32	464279.2	3809582	9.86E-08	3.16E-07	0.00E+00	4.15E-07	9.86E-08	3.16E-07	0.00E+00	4.15E-07	1.56E-08	6.34E-08	0.00E+00	7.90E-08	9.40E-09	3.68E-08	0.00E+00	4.62E-08
33	464299.2	3809582	9.66E-08	3.10E-07	0.00E+00	4.06E-07	9.66E-08	3.10E-07	0.00E+00	4.06E-07	1.53E-08	6.21E-08	0.00E+00	7.73E-08	9.20E-09	3.60E-08	0.00E+00	4.52E-08
34	464319.2	3809582	9.46E-08	3.03E-07	0.00E+00	3.98E-07	9.46E-08	3.03E-07	0.00E+00	3.98E-07	1.49E-08	6.08E-08	0.00E+00	7.58E-08	9.01E-09	3.53E-08	0.00E+00	4.43E-08
35	464339.2	3809582	9.26E-08	2.97E-07	0.00E+00	3.90E-07	9.26E-08	2.97E-07	0.00E+00	3.90E-07	1.46E-08	5.95E-08	0.00E+00	7.42E-08	8.82E-09	3.45E-08	0.00E+00	4.34E-08
36	464359.2	3809582	9.07E-08	2.91E-07	0.00E+00	3.82E-07	9.07E-08	2.91E-07	0.00E+00	3.82E-07	1.43E-08	5.83E-08	0.00E+00	7.26E-08	8.64E-09	3.38E-08	0.00E+00	4.25E-08
37	464379.2	3809582	8.88E-08	2.85E-07	0.00E+00	3.74E-07	8.88E-08	2.85E-07	0.00E+00	3.74E-07	1.40E-08	5.71E-08	0.00E+00	7.11E-08	8.46E-09	3.31E-08	0.00E+00	4.16E-08
38	464399.2	3809582	8.71E-08	2.79E-07	0.00E+00	3.66E-07	8.71E-08	2.79E-07	0.00E+00	3.66E-07	1.38E-08	5.60E-08	0.00E+00	6.97E-08	8.30E-09	3.25E-08	0.00E+00	4.08E-08
39	464419.2	3809582	8.53E-08	2.74E-07	0.00E+00	3.59E-07	8.53E-08	2.74E-07	0.00E+00	3.59E-07	1.35E-08	5.49E-08	0.00E+00	6.83E-08	8.13E-09	3.18E-08	0.00E+00	4.00E-08
40	464439.2	3809582	8.36E-08	2.68E-07	0.00E+00	3.52E-07	8.36E-08	2.68E-07	0.00E+00	3.52E-07	1.32E-08	5.37E-08	0.00E+00	6.70E-08	7.97E-09	3.12E-08	0.00E+00	3.91E-08
41	464459.2	3809582	8.19E-08	2.63E-07	0.00E+00	3.45E-07	8.19E-08	2.63E-07	0.00E+00	3.45E-07	1.29E-08	5.27E-08	0.00E+00	6.56E-08	7.81E-09	3.06E-08	0.00E+00	3.84E-08
42	463759.2	3809602	1.97E-07	6.33E-07	0.00E+00	8.31E-07	1.97E-07	6.33E-07	0.00E+00	8.31E-07	3.12E-08	1.27E-07	0.00E+00	1.58E-07	1.88E-08	7.36E-08	0.00E+00	9.25E-08
43	463779.2	3809602	1.92E-07	6.16E-07	0.00E+00	8.09E-07	1.92E-07	6.16E-07	0.00E+00	8.09E-07	3.04E-08	1.24E-07	0.00E+00	1.54E-07	1.83E-08	7.17E-08	0.00E+00	9.00E-08
44	463799.2	3809602	1.87E-07	6.01E-07	0.00E+00	7.88E-07	1.87E-07	6.01E-07	0.00E+00	7.88E-07	2.96E-08	1.20E-07	0.00E+00	1.50E-07	1.78E-08	6.98E-08	0.00E+00	8.77E-08
45	463819.2	3809602	1.82E-07	5.85E-07	0.00E+00	7.67E-07	1.82E-07	5.85E-07	0.00E+00	7.67E-07	2.88E-08	1.17E-07	0.00E+00	1.46E-07	1.74E-08	6.80E-08	0.00E+00	8.53E-08
46	463839.2	3809602	1.77E-07	5.69E-07	0.00E+00	7.46E-07	1.77E-07	5.69E-07	0.00E+00	7.46E-07	2.80E-08	1.14E-07	0.00E+00	1.42E-07	1.69E-08	6.61E-08	0.00E+00	8.30E-08
47	463859.2	3809602	1.74E-07	5.57E-07	0.00E+00	7.30E-07	1.74E-07	5.57E-07	0.00E+00	7.30E-07	2.74E-08	1.12E-07	0.00E+00	1.39E-07	1.65E-08	6.47E-08	0.00E+00	8.13E-08
48	463879.2	3809602	1.69E-07	5.43E-07	0.00E+00	7.12E-07	1.69E-07	5.43E-07	0.00E+00	7.12E-07	2.67E-08	1.09E-07	0.00E+00	1.36E-07	1.61E-08	6.31E-08	0.00E+00	7.93E-08
49	463899.2	3809602	1.65E-07	5.28E-07	0.00E+00	6.93E-07	1.65E-07	5.28E-07	0.00E+00	6.93E-07	2.60E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.14E-08	0.00E+00	7.71E-08
50	463919.2	3809602	1.60E-07	5.13E-07	0.00E+00	6.73E-07	1.60E-07	5.13E-07	0.00E+00	6.73E-07	2.53E-08	1.03E-07	0.00E+00	1.28E-07	1.52E-08	5.97E-08	0.00E+00	7.49E-08
51	463939.2	3809602	1.55E-07	4.98E-07	0.00E+00	6.53E-07	1.55E-07	4.98E-07	0.00E+00	6.53E-07	2.45E-08	9.98E-08	0.00E+00	1.24E-07	1.48E-08	5.79E-08	0.00E+00	7.27E-08
52	463959.2	3809602	1.51E-07	4.83E-07	0.00E+00	6.34E-07	1.51E-07	4.83E-07	0.00E+00	6.34E-07	2.38E-08	9.69E-08	0.00E+00	1.21E-07	1.44E-08	5.62E-08	0.00E+00	7.06E-08
53	464159.2	3809602	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.83E-08	7.45E-08	0.00E+00	9.28E-08	1.10E-08	4.32E-08	0.00E+00	5.43E-08
54	464179.2	3809602	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.79E-08	7.27E-08	0.00E+00	9.06E-08	1.08E-08	4.22E-08	0.00E+00	5.30E-08
55	464199.2	3809602	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.75E-08	7.11E-08	0.00E+00	8.85E-08	1.05E-08	4.12E-08	0.00E+00	5.18E-08
56	464219.2	3809602	1.08E-07	3.47E-07	0.00E+00	4.55E-07	1.08E-07	3.47E-07	0.00E+00	4.55E-07	1.71E-08	6.95E-08	0.00E+00	8.66E-08	1.03E-08	4.03E-08	0.00E+00	5.06E-08
57	464239.2	3809602	1.06E-07	3.39E-07	0.00E+00	4.45E-07	1.06E-07	3.39E-07	0.00E+00	4.45E-07	1.67E-08	6.79E-08	0.00E+00	8.46E-08	1.01E-08	3.94E-08	0.00E+00	4.95E-08
58	464259.2	3809602	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.63E-08	6.64E-08	0.00E+00	8.27E-08	9.84E-09	3.85E-08	0.00E+00	4.83E-08
59	464279.2	3809602	1.01E-07	3.24E-07	0.00E+00	4.25E-07	1.01E-07	3.24E-07	0.00E+00	4.25E-07	1.60E-08	6.49E-08	0.00E+00	8.09E-08	9.62E-09	3.77E-08	0.00E+00	4.73E-08
60	464299.2	3809602	9.88E-08	3.17E-07	0.00E+00	4.16E-07	9.88E-08	3.17E-07	0.00E+00	4.16E-07	1.56E-08	6.35E-08	0.00E+00	7.91E-08	9.42E-09	3.69E-08	0.00E+00	4.63E-08
61	464319.2	3809602	9.67E-08	3.10E-07	0.00E+00	4.07E-07	9.67E-08	3.10E-07	0.00E+00	4.07E-07	1.53E-08	6.22E-08	0.00E+00	7.75E-08	9.22E-09	3.61E-08	0.00E+00	4.53E-08
62	464339.2	3809602	9.46E-08	3.03E-07	0.00E+00	3.98E-07	9.46E-08	3.03E-07	0.00E+00	3.98E-07	1.49E-08	6.08E-08	0.00E+00	7.58E-08	9.02E-09	3.53E-08	0.00E+00	4.43E-08
63	464359.2	3809602	9.26E-08	2.97E-07	0.00E+00	3.90E-07	9.26E-08	2.97E-07	0.00E+00	3.90E-07	1.46E-08	5.95E-08	0.00E+00	7.41E-08	8.82E-09	3.45E-08	0.00E+00	4.34E-08
64	464379.2	3809602	9.07E-08	2.91E-07	0.00E+00	3.81E-07	9.07E-08	2.91E-07	0.00E+00	3.81E-07	1.43E-08	5.83E-08	0.00E+00	7.26E-08	8.64E-09	3.38E-08	0.00E+00	4.25E-08
65	464399.2	3809602	8.88E-08	2.85E-07	0.00E+00	3.74E-07	8.88E-08	2.85E-07	0.00E+00	3.74E-07	1.40E-08	5.71E-08	0.00E+00	7.11E-08	8.47E-09	3.31E-08	0.00E+00	4.16E-08
66	464419.2	3809602	8.70E-08	2.79E-07	0.00E+00	3.66E-07	8.70E-08	2.79E-07	0.00E+00	3.66E-07	1.37E-08	5.59E-08	0.00E+00	6.97E-08	8.29E-09	3.25E-08	0.00E+00	4.07E-08
67	464439.2	3809602	8.52E-08	2.73E-07	0.00E+00	3.58E-07	8.52E-08	2.73E-07	0.00E+00	3.58E-07	1.35E-08	5.47E-08	0.00E+00	6.82E-08	8.12E-09	3.18E-08	0.00E+00	3.99E-08
68	464459.2	3809602	8.35E-08	2.68E-07	0.00E+00	3.51E-07	8.35E-08	2.68E-07	0.00E+00	3.51E-07	1.32E-08	5.37E-08	0.00E+00	6.69E-08	7.96E-09	3.11E-08	0.00E+00	3.91E-08
69	464479.2	3809602	8.19E-08	2.63E-07	0.00E+00	3.44E-07	8.19E-08	2.63E-07	0.00E+00	3.44E-07	1.29E-08	5.26E-08	0.00E+00	6.56E-08	7.80E-09	3.05E-08	0.00E+00	3.83E-08
70	463759.2	3809622	2.02E-07	6.48E-07	0.00E+00	8.51E-07	2.02E-07	6.48E-07	0.00E+00	8.51E-07	3.19E-08	1.30E-07	0.00E+00	1.62E-07	1.93E-08	7.54E-08	0.00E+00	9.47E-08
71	463779.2	3809622	1.97E-07	6.31E-07	0.00E+00	8.28E-07	1.97E-07	6.31E-07	0.00E+00	8.28E-07	3.11E-08	1.26E-07	0.00E+00	1.58E-07	1.87E-08	7.34E-08	0.00E+00	9.21E-08
72	463799.2	3809622	1.92E-07	6.17E-07	0.00E+00	8.09E-07	1.92E-07	6.17E-07	0.00E+00	8.09E-07	3.04E-08	1.24E-07	0.00E+00	1.54E-07	1.83E-08	7.17E-08	0.00E+00	9.01E-08
73	463819.2	3809622	1.88E-07	6.02E-07	0.00E+00	7.89E-07	1.88E-07	6.02E-07	0.00E+00	7.89E-07	2.96E-08	1.21E-07	0.00E+00	1.50E-07	1.79E-08	7.00E-08	0.00E+00	8.78E-08
74	463839.2	3809622	1.82E-07	5.85E-07	0.00E+00	7.67E-07	1.82E-07	5.85E-07	0.00E+00	7.67E-07	2.88E-08	1.17E-07	0.00E+00	1.46E-07	1.74E-08	6.80E-08	0.00E+00	8.54E-08
75	463859.2	3809622	1.78E-07	5.72E-07	0.00E+00	7.50E-07	1.78E-07	5.72E-07	0.00E+00	7.50E-07	2.82E-08	1.15E-07	0.00E+00	1.43E-07	1.70E-08	6.65E-08	0.00E+00	8.34E-08
76	463879.2	3809622	1.74E-07	5.58E-07	0.00E+00	7.31E-07	1.74E-07	5.58E-07	0.00E+00	7.31E-07	2.75E-08	1.12E-07	0.00E+00	1.39E-07	1.66E-08	6.48E-08	0.00E+00	8.14E-08
77	463899.2	3809622	1.69E-07	5.43E-07	0.00E+00	7.13E-07	1.69E-07	5.43E-07	0.00E+00	7.13E-07	2.68E-08	1.09E-07	0.00E+00	1.36E-07	1.61E-08	6.32E-08	0.00E+00	7.93E-08
78	463919.2	3809622	1.65E-07	5.29E-07	0.00E+00	6.93E-07	1.65E-07	5.29E-07	0.00E+00	6.93E-07	2.60E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.15E-08	0.00E+00	7.72E-08
79	463939.2	3809622	1.60E-07	5.14E-07	0.00E+00	6.74E-07	1.60E-07	5.14E-07	0.00E+00	6.74E-07	2.53E-08	1.03E-07	0.00E+00	1.28E-07	1.53E-08	5.97E-08	0.00E+00	7.50E-08
80	463959.2	3809622	1.55E-07	4.99E-07	0.00E+00	6.54E-07	1.55E-07	4.99E-07	0.00E+00	6.54E-07	2.46E-08	9.99E-08	0.00E+00	1.25E-07	1.48E-08	5.80E-08	0.00E+00	7.28E-08
81	464139.2	3809622	1.22E-07	3.91E-07	0.00E+00	5.13E-07	1.22E-07	3.91E-07	0.00E+00	5.13E-07	1.93E-08	7.84E-08	0.00E+00	9.76E-08	1.16E-08	4.55E-08	0.00E+00	5.71E-08
82	464159.2	3809622	1.19E-07	3.82E-07	0.00E+00	5.01E-07	1.19E-07	3.82E-07	0.00E+00	5.01E-07	1.88E-08	7.65E-08	0.00E+00	9.53E-08	1.13E-08	4.44E-08	0.00E+00	5.57E-08
83	464179.2	3809622	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.83E-08	7.46E-08	0.00E+00	9.30E-08	1.11E-08	4.33E-08	0.00E+00	5.44E-08
84	464199.2	3809622	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.79E-08	7.28E-08	0.00E+00	9.07E-08	1.08E-08	4.22E-08	0.00E+00	5.30E-08
85	464219.2	3809622	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.75E-08	7.11E-08	0.00E+00	8.86E-08	1.05E-08	4.13E-08	0.00E+00	5.18E-08
86	464239.2	3809622	1.08E-07	3.47E-07	0.00E+00	4.55E-07	1.08E-07	3.47E-07	0.00E+00	4.55E-07	1.71E-08	6.95E-08	0.00E+00	8.66E-08	1.03E-08	4.03E-08	0.00E+00	5.06E-08
87	464259.2	3809622	1.06E-07	3.39E-07	0.00E+00	4.45E-07	1.06E-07	3.39E-07	0.00E+00	4.45E-07	1.67E-08	6.80E-08	0.00E+00	8.47E-08	1.01E-08	3.94E-08	0.00E+00	4.95E-08
88	464279.2	3809622	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.63E-08	6.64E-08	0.00E+00	8.27E-08	9.84E-09	3.85E-08	0.00E+00	4.83E-08
89	464299.2	3809622	1.01E-07	3.24E-07	0.00E+00	4.25E-07	1.01E-07	3.24E-07	0.00E+00	4.25E-07	1.59E-08	6.49E-08	0.00E+00	8.08E-08	9.61E-09	3.76E-08	0.00E+00	4.72E-08
90	464319.2	3809622	9.87E-08	3.17E-07	0.00E+00	4.15E-07	9.87E-08	3.17E-07	0.00E+00	4.15E-07	1.56E-08	6.35E-08	0.00E+00	7.91E-08	9.41E-09	3.68E-08	0.00E+00	4.62E-08
91	464339.2	3809622	9.66E-08	3.10E-07	0.00E+00	4.06E-07	9.66E-08	3.10E-07	0.00E+00	4.06E-07	1.53E-08	6.21E-08	0.00E+00	7.74E-08	9.21E-09	3.60E-08	0.00E+00	4.52E-08
92	464359.2	3809622	9.45E-08	3.03E-07	0.00E+00	3.98E-07	9.45E-08	3.03E-07	0.00E+00	3.98E-07	1.49E-08	6.07E-08	0.00E+00	7.57E-08	9.00E-09	3.52E-08	0.00E+00	4.42E-08
93	464379.2	3809622	9.23E-08	2.96E-07	0.00E+00	3.89E-07	9.23E-08	2.96E-07	0.00E+00	3.89E-07	1.46E-08	5.94E-08	0.00E+00	7.40E-08	8.80E-09	3.44E-08	0.00E+00	4.32E-08
94	464399.2	3809622	9.04E-08	2.90E-07	0.00E+00	3.81E-07	9.04E-08	2.90E-07	0.00E+00	3.81E-07	1.43E-08	5.81E-08	0.00E+00	7.24E-08	8.62E-09	3.37E-08	0.00E+00	4.24E-08
95	464419.2	3809622	8.86E-08	2.84E-07	0.00E+00	3.73E-07	8.86E-08	2.84E-07	0.00E+00	3.73E-07	1.40E-08	5.69E-08	0.00E+00	7.09E-08	8.44E-09	3.30E-08	0.00E+00	4.15E-08
96	464439.2	3809622	8.68E-08	2.78E-07	0.00E+00	3.65E-07	8.68E-08	2.78E-07	0.00E+00	3.65E-07	1.37E-08	5.58E-08	0.00E+00	6.95E-08	8.27E-09	3.24E-08	0.00E+00	4.06E-08
97	464459.2	3809622	8.50E-08	2.73E-07	0.00E+00	3.58E-07	8.50E-08	2.73E-07	0.00E+00	3.58E-07	1.34E-08	5.47E-08	0.00E+00	6.

108	463939.2	3809642	1.65E-07	5.29E-07	0.00E+00	6.93E-07	1.65E-07	5.29E-07	0.00E+00	6.93E-07	2.60E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.15E-08	0.00E+00	7.72E-08
109	463959.2	3809642	1.60E-07	5.13E-07	0.00E+00	6.73E-07	1.60E-07	5.13E-07	0.00E+00	6.73E-07	2.53E-08	1.03E-07	0.00E+00	1.28E-07	1.53E-08	5.97E-08	0.00E+00	7.50E-08
110	463979.2	3809642	1.55E-07	4.99E-07	0.00E+00	6.54E-07	1.55E-07	4.99E-07	0.00E+00	6.54E-07	2.46E-08	9.99E-08	0.00E+00	1.24E-07	1.48E-08	5.80E-08	0.00E+00	7.28E-08
111	464139.2	3809642	1.25E-07	4.01E-07	0.00E+00	5.27E-07	1.25E-07	4.01E-07	0.00E+00	5.27E-07	1.98E-08	8.04E-08	0.00E+00	1.00E-07	1.19E-08	4.67E-08	0.00E+00	5.86E-08
112	464159.2	3809642	1.22E-07	3.91E-07	0.00E+00	5.13E-07	1.22E-07	3.91E-07	0.00E+00	5.13E-07	1.93E-08	7.84E-08	0.00E+00	9.77E-08	1.16E-08	4.55E-08	0.00E+00	5.71E-08
113	464179.2	3809642	1.19E-07	3.82E-07	0.00E+00	5.00E-07	1.19E-07	3.82E-07	0.00E+00	5.00E-07	1.88E-08	7.65E-08	0.00E+00	9.52E-08	1.13E-08	4.44E-08	0.00E+00	5.57E-08
114	464199.2	3809642	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.83E-08	7.46E-08	0.00E+00	9.29E-08	1.11E-08	4.33E-08	0.00E+00	5.43E-08
115	464219.2	3809642	1.13E-07	3.63E-07	0.00E+00	4.77E-07	1.13E-07	3.63E-07	0.00E+00	4.77E-07	1.79E-08	7.28E-08	0.00E+00	9.07E-08	1.08E-08	4.23E-08	0.00E+00	5.31E-08
116	464239.2	3809642	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.75E-08	7.11E-08	0.00E+00	8.86E-08	1.05E-08	4.13E-08	0.00E+00	5.18E-08
117	464259.2	3809642	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.71E-08	6.94E-08	0.00E+00	8.65E-08	1.03E-08	4.03E-08	0.00E+00	5.06E-08
118	464279.2	3809642	1.05E-07	3.38E-07	0.00E+00	4.44E-07	1.05E-07	3.38E-07	0.00E+00	4.44E-07	1.67E-08	6.78E-08	0.00E+00	8.45E-08	1.00E-08	3.93E-08	0.00E+00	4.94E-08
119	464299.2	3809642	1.03E-07	3.30E-07	0.00E+00	4.33E-07	1.03E-07	3.30E-07	0.00E+00	4.33E-07	1.63E-08	6.62E-08	0.00E+00	8.25E-08	9.82E-09	3.84E-08	0.00E+00	4.82E-08
120	464319.2	3809642	1.01E-07	3.23E-07	0.00E+00	4.23E-07	1.01E-07	3.23E-07	0.00E+00	4.23E-07	1.59E-08	6.47E-08	0.00E+00	8.06E-08	9.59E-09	3.75E-08	0.00E+00	4.71E-08
121	464339.2	3809642	9.84E-08	3.16E-07	0.00E+00	4.14E-07	9.84E-08	3.16E-07	0.00E+00	4.14E-07	1.56E-08	6.33E-08	0.00E+00	7.88E-08	9.38E-09	3.67E-08	0.00E+00	4.61E-08
122	464359.2	3809642	9.63E-08	3.09E-07	0.00E+00	4.05E-07	9.63E-08	3.09E-07	0.00E+00	4.05E-07	1.52E-08	6.19E-08	0.00E+00	7.71E-08	9.17E-09	3.59E-08	0.00E+00	4.51E-08
123	464379.2	3809642	9.41E-08	3.02E-07	0.00E+00	3.96E-07	9.41E-08	3.02E-07	0.00E+00	3.96E-07	1.49E-08	6.05E-08	0.00E+00	7.54E-08	8.97E-09	3.51E-08	0.00E+00	4.41E-08
124	464399.2	3809642	9.21E-08	2.96E-07	0.00E+00	3.88E-07	9.21E-08	2.96E-07	0.00E+00	3.88E-07	1.46E-08	5.92E-08	0.00E+00	7.38E-08	8.78E-09	3.44E-08	0.00E+00	4.31E-08
125	464419.2	3809642	9.02E-08	2.89E-07	0.00E+00	3.79E-07	9.02E-08	2.89E-07	0.00E+00	3.79E-07	1.42E-08	5.80E-08	0.00E+00	7.22E-08	8.59E-09	3.36E-08	0.00E+00	4.22E-08
126	464439.2	3809642	8.82E-08	2.83E-07	0.00E+00	3.71E-07	8.82E-08	2.83E-07	0.00E+00	3.71E-07	1.39E-08	5.67E-08	0.00E+00	7.06E-08	8.40E-09	3.29E-08	0.00E+00	4.13E-08
127	464459.2	3809642	8.64E-08	2.77E-07	0.00E+00	3.63E-07	8.64E-08	2.77E-07	0.00E+00	3.63E-07	1.36E-08	5.55E-08	0.00E+00	6.92E-08	8.23E-09	3.22E-08	0.00E+00	4.05E-08
128	464479.2	3809642	8.46E-08	2.71E-07	0.00E+00	3.56E-07	8.46E-08	2.71E-07	0.00E+00	3.56E-07	1.34E-08	5.44E-08	0.00E+00	6.77E-08	8.06E-09	3.16E-08	0.00E+00	3.96E-08
129	464499.2	3809642	8.28E-08	2.66E-07	0.00E+00	3.48E-07	8.28E-08	2.66E-07	0.00E+00	3.48E-07	1.31E-08	5.32E-08	0.00E+00	6.63E-08	7.89E-09	3.09E-08	0.00E+00	3.88E-08
130	464519.2	3809642	8.11E-08	2.60E-07	0.00E+00	3.41E-07	8.11E-08	2.60E-07	0.00E+00	3.41E-07	1.28E-08	5.21E-08	0.00E+00	6.49E-08	7.73E-09	3.02E-08	0.00E+00	3.80E-08
131	463779.2	3809662	2.08E-07	6.66E-07	0.00E+00	8.74E-07	2.08E-07	6.66E-07	0.00E+00	8.74E-07	3.28E-08	1.34E-07	0.00E+00	1.66E-07	1.98E-08	7.75E-08	0.00E+00	9.73E-08
132	463799.2	3809662	2.02E-07	6.50E-07	0.00E+00	8.52E-07	2.02E-07	6.50E-07	0.00E+00	8.52E-07	3.20E-08	1.30E-07	0.00E+00	1.62E-07	1.93E-08	7.55E-08	0.00E+00	9.48E-08
133	463819.2	3809662	1.98E-07	6.34E-07	0.00E+00	8.31E-07	1.98E-07	6.34E-07	0.00E+00	8.31E-07	3.12E-08	1.27E-07	0.00E+00	1.58E-07	1.88E-08	7.37E-08	0.00E+00	9.25E-08
134	463839.2	3809662	1.93E-07	6.19E-07	0.00E+00	8.12E-07	1.93E-07	6.19E-07	0.00E+00	8.12E-07	3.05E-08	1.24E-07	0.00E+00	1.54E-07	1.84E-08	7.20E-08	0.00E+00	9.03E-08
135	463859.2	3809662	1.88E-07	6.02E-07	0.00E+00	7.89E-07	1.88E-07	6.02E-07	0.00E+00	7.89E-07	2.96E-08	1.21E-07	0.00E+00	1.50E-07	1.79E-08	7.00E-08	0.00E+00	8.79E-08
136	463879.2	3809662	1.83E-07	5.87E-07	0.00E+00	7.69E-07	1.83E-07	5.87E-07	0.00E+00	7.69E-07	2.89E-08	1.18E-07	0.00E+00	1.46E-07	1.74E-08	6.82E-08	0.00E+00	8.56E-08
137	463899.2	3809662	1.79E-07	5.73E-07	0.00E+00	7.51E-07	1.79E-07	5.73E-07	0.00E+00	7.51E-07	2.82E-08	1.15E-07	0.00E+00	1.43E-07	1.70E-08	6.66E-08	0.00E+00	8.36E-08
138	463919.2	3809662	1.74E-07	5.59E-07	0.00E+00	7.33E-07	1.74E-07	5.59E-07	0.00E+00	7.33E-07	2.75E-08	1.12E-07	0.00E+00	1.39E-07	1.66E-08	6.49E-08	0.00E+00	8.15E-08
139	463939.2	3809662	1.69E-07	5.43E-07	0.00E+00	7.13E-07	1.69E-07	5.43E-07	0.00E+00	7.13E-07	2.68E-08	1.09E-07	0.00E+00	1.36E-07	1.61E-08	6.32E-08	0.00E+00	7.93E-08
140	463959.2	3809662	1.64E-07	5.27E-07	0.00E+00	6.92E-07	1.64E-07	5.27E-07	0.00E+00	6.92E-07	2.60E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.13E-08	0.00E+00	7.70E-08
141	463979.2	3809662	1.60E-07	5.12E-07	0.00E+00	6.71E-07	1.60E-07	5.12E-07	0.00E+00	6.71E-07	2.52E-08	1.03E-07	0.00E+00	1.28E-07	1.52E-08	5.95E-08	0.00E+00	7.47E-08
142	464059.2	3809662	1.43E-07	4.58E-07	0.00E+00	6.01E-07	1.43E-07	4.58E-07	0.00E+00	6.01E-07	2.26E-08	9.18E-08	0.00E+00	1.14E-07	1.36E-08	5.33E-08	0.00E+00	6.69E-08
143	464079.2	3809662	1.39E-07	4.45E-07	0.00E+00	5.84E-07	1.39E-07	4.45E-07	0.00E+00	5.84E-07	2.19E-08	8.93E-08	0.00E+00	1.11E-07	1.32E-08	5.18E-08	0.00E+00	6.50E-08
144	464099.2	3809662	1.35E-07	4.34E-07	0.00E+00	5.69E-07	1.35E-07	4.34E-07	0.00E+00	5.69E-07	2.14E-08	8.69E-08	0.00E+00	1.08E-07	1.29E-08	5.04E-08	0.00E+00	6.33E-08
145	464119.2	3809662	1.32E-07	4.23E-07	0.00E+00	5.54E-07	1.32E-07	4.23E-07	0.00E+00	5.54E-07	2.08E-08	8.47E-08	0.00E+00	1.05E-07	1.26E-08	4.91E-08	0.00E+00	6.17E-08
146	464139.2	3809662	1.28E-07	4.12E-07	0.00E+00	5.40E-07	1.28E-07	4.12E-07	0.00E+00	5.40E-07	2.03E-08	8.25E-08	0.00E+00	1.03E-07	1.22E-08	4.79E-08	0.00E+00	6.01E-08
147	464159.2	3809662	1.25E-07	4.01E-07	0.00E+00	5.26E-07	1.25E-07	4.01E-07	0.00E+00	5.26E-07	1.97E-08	8.03E-08	0.00E+00	1.00E-07	1.19E-08	4.66E-08	0.00E+00	5.85E-08
148	464179.2	3809662	1.22E-07	3.91E-07	0.00E+00	5.12E-07	1.22E-07	3.91E-07	0.00E+00	5.12E-07	1.92E-08	7.83E-08	0.00E+00	9.75E-08	1.16E-08	4.54E-08	0.00E+00	5.70E-08
149	464199.2	3809662	1.19E-07	3.81E-07	0.00E+00	5.00E-07	1.19E-07	3.81E-07	0.00E+00	5.00E-07	1.88E-08	7.64E-08	0.00E+00	9.51E-08	1.13E-08	4.43E-08	0.00E+00	5.56E-08
150	464219.2	3809662	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.83E-08	7.45E-08	0.00E+00	9.28E-08	1.10E-08	4.32E-08	0.00E+00	5.43E-08
151	464239.2	3809662	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.79E-08	7.27E-08	0.00E+00	9.05E-08	1.08E-08	4.22E-08	0.00E+00	5.29E-08
152	464259.2	3809662	1.10E-07	3.54E-07	0.00E+00	4.64E-07	1.10E-07	3.54E-07	0.00E+00	4.64E-07	1.74E-08	7.08E-08	0.00E+00	8.83E-08	1.05E-08	4.11E-08	0.00E+00	5.16E-08
153	464279.2	3809662	1.08E-07	3.45E-07	0.00E+00	4.53E-07	1.08E-07	3.45E-07	0.00E+00	4.53E-07	1.70E-08	6.92E-08	0.00E+00	8.62E-08	1.03E-08	4.01E-08	0.00E+00	5.04E-08
154	464299.2	3809662	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.75E-08	0.00E+00	8.41E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
155	464319.2	3809662	1.02E-07	3.29E-07	0.00E+00	4.31E-07	1.02E-07	3.29E-07	0.00E+00	4.31E-07	1.62E-08	6.59E-08	0.00E+00	8.21E-08	9.77E-09	3.82E-08	0.00E+00	4.80E-08
156	464339.2	3809662	1.00E-07	3.21E-07	0.00E+00	4.22E-07	1.00E-07	3.21E-07	0.00E+00	4.22E-07	1.58E-08	6.44E-08	0.00E+00	8.02E-08	9.55E-09	3.74E-08	0.00E+00	4.69E-08
157	464359.2	3809662	9.80E-08	3.14E-07	0.00E+00	4.12E-07	9.80E-08	3.14E-07	0.00E+00	4.12E-07	1.55E-08	6.30E-08	0.00E+00	7.85E-08	9.34E-09	3.65E-08	0.00E+00	4.59E-08
158	464379.2	3809662	9.58E-08	3.07E-07	0.00E+00	4.03E-07	9.58E-08	3.07E-07	0.00E+00	4.03E-07	1.51E-08	6.16E-08	0.00E+00	7.68E-08	9.13E-09	3.58E-08	0.00E+00	4.49E-08
159	464399.2	3809662	9.37E-08	3.01E-07	0.00E+00	3.94E-07	9.37E-08	3.01E-07	0.00E+00	3.94E-07	1.48E-08	6.03E-08	0.00E+00	7.51E-08	8.93E-09	3.50E-08	0.00E+00	4.39E-08
160	464419.2	3809662	9.16E-08	2.94E-07	0.00E+00	3.86E-07	9.16E-08	2.94E-07	0.00E+00	3.86E-07	1.45E-08	5.89E-08	0.00E+00	7.34E-08	8.73E-09	3.42E-08	0.00E+00	4.29E-08
161	464439.2	3809662	8.95E-08	2.87E-07	0.00E+00	3.77E-07	8.95E-08	2.87E-07	0.00E+00	3.77E-07	1.41E-08	5.76E-08	0.00E+00	7.17E-08	8.53E-09	3.34E-08	0.00E+00	4.19E-08
162	464459.2	3809662	8.77E-08	2.81E-07	0.00E+00	3.69E-07	8.77E-08	2.81E-07	0.00E+00	3.69E-07	1.39E-08	5.64E-08	0.00E+00	7.02E-08	8.36E-09	3.27E-08	0.00E+00	4.11E-08
163	464479.2	3809662	8.58E-08	2.75E-07	0.00E+00	3.61E-07	8.58E-08	2.75E-07	0.00E+00	3.61E-07	1.36E-08	5.52E-08	0.00E+00	6.88E-08	8.18E-09	3.20E-08	0.00E+00	4.02E-08
164	464499.2	3809662	8.40E-08	2.70E-07	0.00E+00	3.54E-07	8.40E-08	2.70E-07	0.00E+00	3.54E-07	1.33E-08	5.40E-08	0.00E+00	6.73E-08	8.01E-09	3.14E-08	0.00E+00	3.94E-08
165	464519.2	3809662	8.22E-08	2.64E-07	0.00E+00	3.46E-07	8.22E-08	2.64E-07	0.00E+00	3.46E-07	1.30E-08	5.28E-08	0.00E+00	6.58E-08	7.83E-09	3.07E-08	0.00E+00	3.85E-08
166	463779.2	3809682	2.11E-07	6.77E-07	0.00E+00	8.89E-07	2.11E-07	6.77E-07	0.00E+00	8.89E-07	3.34E-08	1.36E-07	0.00E+00	1.69E-07	2.01E-08	7.88E-08	0.00E+00	9.89E-08
167	463799.2	3809682	2.08E-07	6.66E-07	0.00E+00	8.73E-07	2.08E-07	6.66E-07	0.00E+00	8.73E-07	3.28E-08	1.33E-07	0.00E+00	1.66E-07	1.98E-08	7.74E-08	0.00E+00	9.72E-08
168	463819.2	3809682	2.03E-07	6.51E-07	0.00E+00	8.54E-07	2.03E-07	6.51E-07	0.00E+00	8.54E-07	3.21E-08	1.30E-07	0.00E+00	1.63E-07	1.93E-08	7.57E-08	0.00E+00	9.51E-08
169	463839.2	3809682	1.97E-07	6.33E-07	0.00E+00	8.31E-07	1.97E-07	6.33E-07	0.00E+00	8.31E-07	3.12E-08	1.27E-07	0.00E+00	1.58E-07	1.88E-08	7.37E-08	0.00E+00	9.25E-08
170	463859.2	3809682	1.92E-07	6.16E-07	0.00E+00	8.08E-07	1.92E-07	6.16E-07	0.00E+00	8.08E-07	3.03E-08	1.23E-07	0.00E+00	1.54E-07	1.83E-08	7.16E-08	0.00E+00	8.99E-08
171	463879.2	3809682	1.87E-07	6.00E-07	0.00E+00	7.88E-07	1.87E-07	6.00E-07	0.00E+00	7.88E-07	2.96E-08	1.20E-07	0.00E+00	1.50E-07	1.78E-08	6.98E-08	0.00E+00	8.77E-08
172	463899.2	3809682	1.83E-07	5.87E-07	0.00E+00	7.70E-07	1.83E-07	5.87E-07	0.00E+00	7.70E-07	2.89E-08	1.18E-07	0.00E+00	1.46E-07	1.74E-08	6.82E-08	0.00E+00	8.56E-08
173	463919.2	3809682	1.79E-07	5.73E-07	0.00E+00	7.51E-07	1.79E-07	5.73E-07	0.00E+00	7.51E-07	2.82E-08	1.15E-07	0.00E+00	1.43E-07	1.70E-08	6.66E-08	0.00E+00	8.36E-08
174	463939.2	3809682	1.74E-07	5.58E-07	0.00E+00	7.32E-07	1.74E-07	5.58E-07	0.00E+00	7.32E-07	2.75E-08	1.12E-07	0.00E+00	1.39E-07	1.66E-08	6.49E-08	0.00E+00	8.14E-08
175	463959.2	3809682	1.69E-07	5.42E-07	0.00E+00	7.11E-07	1.69E-07	5.42E-07	0.00E+00	7.11E-07	2.67E-08	1.09E-07	0.00E+00	1.35E-07	1.61E-08	6.30E-08	0.00E+00	7.92E-08
176	463979.2	3809682	1.64E-07	5.26E-07	0.00E+00	6.90E-07	1.64E-07	5.26E-07	0.00E+00	6.90E-07	2.59E-08	1.05E-07	0.00E+00	1.31E-07	1.56E-08	6.12E-08	0.00E+00	7.68E-08
177	463999.2	3809682	1.59E-07	5.11E-07	0.00E+00	6.70E-07	1.59E-07	5.11E-07	0.00E+00	6.70E-07	2.52E-08	1.02E-07	0.00E+00	1.28E-07	1.52E-08	5.94E-08	0.00E+00	7.46E-08
178	464019.2	3809682	1.55E-07	4.96E-07	0.00E+00	6.51E-07	1.55E-07	4.96E-07	0.00E+00	6.51E-07	2.44E-08	9.95E-08	0.00E+00	1.24E-07	1.47E-08	5.77E-08	0.00E+00	7.25E-08
179	464039.2	3809682	1.51E-07	4.83E-07	0.00E+00	6.34E-07	1.51E-07	4.83E-07	0.00E+00	6.34E-07	2.38E-08	9.68E-08	0.00E+00	1.21E-07	1.44E-08	5.62E-08	0.00E+00	7.05E-08
180	464059.2	3809682	1.47E-07	4.70E-07	0.00E+00	6.17E-07	1.47E-07	4.70E-07	0.00E+00	6.17E-07	2.32E-08	9.42E-08	0.00E+00	1.17E-07	1.40E-08	5.47E-08	0.00E+00	6.87E-08
181	464079.2	3809682	1.43E-07	4.57E-07	0.00E+00	6.00E-07	1.43E-07	4.57E-07	0.00E+00	6.00E-07	2.25E-08	9.16E-08	0.00E+00	1.14E-07	1.36E-08	5.32E-08	0.00E+00	6.68E-08
182	464099.2	3809682	1.39E-07	4.45E-07	0.00E+00	5.84E-07	1.39E-07	4.45E-07	0.00E+00	5.84E-07	2.19E-08	8.92E-08	0.00E+00	1.11E-07	1.32E-08	5.18E-08	0.00E+00	6.50E-08
183	464119.2	3809682	1.35E-07	4.33E-07	0.00E+00	5.68E-07	1.35E-07	4.33E-07	0.00E+00	5.68E-07	2.13E-08	8.68E-08	0.00E+00	1.08E-07	1.29E-08	5.03E-08	0.00E+00	6.32E-08
184	464139.2	3809682	1.31E-07	4.21E-07	0.00E+00	5.52E-07	1.31E-07	4.21E-07	0.00E+00	5.52E-07	2.07E-08	8.44E-08	0.00E+00	1.05E-07	1.25E-08	4.90E-08	0.00E+00	6.15E-08
185	464159.2	3809682	1.28E-07	4.10E-07	0.00E+00	5.38E-07	1.28E-07	4.10E-07	0.00E+00	5.38E-07	2.02E-08	8.22E-08	0.00E+00	1.02E-07	1.22E-08	4.77E-08	0.00E+00	5.99E-08
186	464179.2	3809682	1.25E-07	4.00E-07	0.00E+00	5.24E-07	1.25E-07	4.00E-07	0.00E+00	5.24E-07	1.97E-08	8.01E-08	0.00E+00	9.98E-08	1.19E-08	4.65E-08	0.00E+00	5.83E-08
187	464199.2	3809682	1.21E-07	3.90E-07	0.00E+00	5.11E-07	1.21E-07	3.90E-07	0.00E+00	5.11E-07	1.92E-08	7.81E-08	0.00E+00	9.73E-08	1.16E-08	4.53E-08	0.00E+00	5.69E-08
188	464219.2	3809682	1.18E-07	3.79E-07	0.00E+00	4.98E-07	1.18E-07	3.79E-07	0.00E+00	4.98E-07	1.87E-08	7.60E-08	0.00E+00	9.47E-08	1.13E-08	4.41E-08	0.00E+00	5.54E-08
189	464239.2	3809682	1.15E-07	3.70E-07	0.00E+00	4.85E-07	1.15E-07	3.70E-07	0.00E+00	4.85E-07	1.82E-08	7.41E-08	0.00E+00	9.23E-08	1.10E-08	4.30E-08	0.00E+00	5.40E-08
190	464259.2	3809682	1.12E-07	3.61E-07	0.00E+00	4.73E-07	1.12E-07	3.61E-07	0.00E+00	4.73E-07	1.78E-08	7.23E-08	0.00E+00	9.01E-08	1.07E-08	4.20E-08	0.00E+00	5.27E-08
191	464279.2	3809682	1.10E-07	3.52E-07	0.00E+00	4.61E-07	1.10E-07	3.52E-07	0.00E+00	4.61E-07	1.73E-08	7.05E-08	0.00E+00	8.78E-08	1.04E-08	4.09E-08	0.00E+00	5.13E-08
192	464299.2	3809682	1.07E-07	3.43E-07	0.00E+00	4.50E-07	1.07E-07	3.43E-07	0.00E+00	4.50E-07	1.69E-08	6.87E-08	0.00E+00	8.56E-08	1.02E-08	3.99E-08	0.00E+00	5.01E-08
193	464319.2	3809682	1.04E-07	3.35E-07	0.00E+00	4.39E-07	1.04E-07	3.35E-07	0.00E+00	4.39E-07	1.65E-08	6.71E-08	0.00E+00	8.36E-08	9.95E-09	3.89E-08	0.00E+00	4.89E-08
194	464339.2	3809682	1.02E-07	3.27E-07	0.00E+00	4.29E-07	1.02E-07	3.27E-07	0.00E+00	4.29E-07	1.61E-08	6.56E-08	0.00E+00	8.17E-08	9.72E-09	3.81E-08	0.00E+00	4.78E-08
195	464359.2	3809682	9.97E-08	3.20E-07	0.00E+00	4.20E-07	9.97E-08	3.20E-07	0.00E+00	4.20E-07	1.58E-08	6.41E-08	0.00E+00	7.99E-08	9.50E-09	3.72E-08	0.00E+00	4.67E-08
196	464379.2	3809682	9.75E-08	3.13E-07	0.00E+00	4.10E-07	9.75E-08	3.13E-07	0.00E+00	4.10E-07	1.54E-08	6.27E-08	0.00E+00	7.81E-08	9.29E-09	3.64E-08	0.00E+00	4.57E-08
197	464399.2	3809682	9.52E-08	3.05E-07	0.00E+00	4.00E-07	9.52E-08	3.05E-07	0.00E+00	4.00E-07	1.50E-08	6.12E-08	0.00E+00	7.62E-08	9.07E-09	3.55E-08	0.00E+00	4.46E-08
198	464419.2	3809682	9.30E-08	2.98E-07	0.00E+00	3.91E-07	9.30E-08	2.98E-07	0.00E+00	3.91E-07	1.47E-08	5.98E-08	0.00E+00	7.45E-08	8.86E-09	3.47E-08	0.00E+00	4.35E-08
199	464439.2	3809682	9.10E-08	2.92E-07	0.00E+00	3.83E-07	9.10E-08	2.92E-07	0.00E+00	3.83E-07	1.44E-08	5.85E-08	0.00E+00	7.28E-08	8.67E-09	3.39E-08	0.00E+00	4.26E-08
200	464459.2	3809682	8.90E-08	2.86E-07	0.00E+00	3.75E-07	8.90E-08	2.86E-07	0.00E+00	3.75E-07	1.41E-08	5.72E-08	0.00E+00	7.13E-08	8.48E-09	3.32E-08	0.00E+00	4.17E-08
201	464479.2	3809682	8.71E-08	2.79E-07	0.00E+00	3.66E-07	8.71E-08	2.79E-07	0.00E+00	3.66E-07	1.38E-08	5.60E-08	0.00E+00	6.97E-08	8.30E-09	3.25E-08	0.00E+00	4.08E-08
202	464499.2	3809682	8.51E-08	2.73E-07	0.00E+00	3.58E-07	8.51E-08	2.73E-07	0.00E+00	3.58E-07	1.34E-08	5.47E-08	0.00E+00	6.81E-08	8.11E-09	3.17E-08	0.00E+00	3.98E-08
203	464519.2	3809682	8.33E-08	2.67E-07	0.00E+00	3.51E-07	8.33E-08	2.67E-07	0.00E+00	3.51E-07	1.32E-08	5.35E-08	0.00E+00	6.67E-08	7.94E-09	3.11E-08	0.00E+00	3.90E-08
204	463779.2	3809702	2.16E-07	6.92E-07	0.00E+00	9.08E-07	2.16E-07	6.92E-07	0.00E+00	9.08E-07	3.41E-08	1.39E-07	0.00E+00	1.73E-07	2.06E-08	8.05E-08	0.00E+00	1.01E-07
205	463799.2	3809702	2.12E-07	6.79E-07	0.00E+00	8.90E-07	2.12E-07	6.79E-07	0.00E+00	8.90E-07	3.34E-08	1.36E-07	0.00E+00	1.69E-07

218	464059.2	3809702	1.50E-07	4.82E-07	0.00E+00	6.32E-07	1.50E-07	4.82E-07	0.00E+00	6.32E-07	2.37E-08	9.65E-08	0.00E+00	1.20E-07	1.43E-08	5.60E-08	0.00E+00	7.03E-08
219	464079.2	3809702	1.46E-07	4.68E-07	0.00E+00	6.14E-07	1.46E-07	4.68E-07	0.00E+00	6.14E-07	2.31E-08	9.38E-08	0.00E+00	1.17E-07	1.39E-08	5.44E-08	0.00E+00	6.83E-08
220	464099.2	3809702	1.42E-07	4.55E-07	0.00E+00	5.97E-07	1.42E-07	4.55E-07	0.00E+00	5.97E-07	2.24E-08	9.12E-08	0.00E+00	1.14E-07	1.35E-08	5.29E-08	0.00E+00	6.65E-08
221	464119.2	3809702	1.38E-07	4.43E-07	0.00E+00	5.81E-07	1.38E-07	4.43E-07	0.00E+00	5.81E-07	2.18E-08	8.87E-08	0.00E+00	1.11E-07	1.32E-08	5.15E-08	0.00E+00	6.46E-08
222	464139.2	3809702	1.34E-07	4.31E-07	0.00E+00	5.65E-07	1.34E-07	4.31E-07	0.00E+00	5.65E-07	2.12E-08	8.63E-08	0.00E+00	1.07E-07	1.28E-08	5.01E-08	0.00E+00	6.29E-08
223	464159.2	3809702	1.31E-07	4.19E-07	0.00E+00	5.50E-07	1.31E-07	4.19E-07	0.00E+00	5.50E-07	2.06E-08	8.40E-08	0.00E+00	1.05E-07	1.25E-08	4.87E-08	0.00E+00	6.12E-08
224	464179.2	3809702	1.27E-07	4.08E-07	0.00E+00	5.35E-07	1.27E-07	4.08E-07	0.00E+00	5.35E-07	2.01E-08	8.18E-08	0.00E+00	1.02E-07	1.21E-08	4.75E-08	0.00E+00	5.96E-08
225	464199.2	3809702	1.24E-07	3.97E-07	0.00E+00	5.21E-07	1.24E-07	3.97E-07	0.00E+00	5.21E-07	1.96E-08	7.96E-08	0.00E+00	9.92E-08	1.18E-08	4.62E-08	0.00E+00	5.80E-08
226	464219.2	3809702	1.21E-07	3.87E-07	0.00E+00	5.07E-07	1.21E-07	3.87E-07	0.00E+00	5.07E-07	1.91E-08	7.75E-08	0.00E+00	9.66E-08	1.15E-08	4.50E-08	0.00E+00	5.65E-08
227	464239.2	3809702	1.17E-07	3.77E-07	0.00E+00	4.94E-07	1.17E-07	3.77E-07	0.00E+00	4.94E-07	1.86E-08	7.55E-08	0.00E+00	9.41E-08	1.12E-08	4.38E-08	0.00E+00	5.50E-08
228	464259.2	3809702	1.14E-07	3.67E-07	0.00E+00	4.81E-07	1.14E-07	3.67E-07	0.00E+00	4.81E-07	1.81E-08	7.36E-08	0.00E+00	9.16E-08	1.09E-08	4.27E-08	0.00E+00	5.36E-08
229	464279.2	3809702	1.12E-07	3.58E-07	0.00E+00	4.69E-07	1.12E-07	3.58E-07	0.00E+00	4.69E-07	1.76E-08	7.17E-08	0.00E+00	8.93E-08	1.06E-08	4.16E-08	0.00E+00	5.22E-08
230	464299.2	3809702	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.72E-08	6.99E-08	0.00E+00	8.71E-08	1.04E-08	4.06E-08	0.00E+00	5.10E-08
231	464319.2	3809702	1.06E-07	3.41E-07	0.00E+00	4.47E-07	1.06E-07	3.41E-07	0.00E+00	4.47E-07	1.68E-08	6.83E-08	0.00E+00	8.51E-08	1.01E-08	3.96E-08	0.00E+00	4.98E-08
232	464339.2	3809702	1.04E-07	3.32E-07	0.00E+00	4.36E-07	1.04E-07	3.32E-07	0.00E+00	4.36E-07	1.64E-08	6.66E-08	0.00E+00	8.30E-08	9.88E-09	3.87E-08	0.00E+00	4.85E-08
233	464359.2	3809702	1.01E-07	3.25E-07	0.00E+00	4.26E-07	1.01E-07	3.25E-07	0.00E+00	4.26E-07	1.60E-08	6.50E-08	0.00E+00	8.10E-08	9.64E-09	3.77E-08	0.00E+00	4.74E-08
234	464379.2	3809702	9.89E-08	3.17E-07	0.00E+00	4.16E-07	9.89E-08	3.17E-07	0.00E+00	4.16E-07	1.56E-08	6.36E-08	0.00E+00	7.92E-08	9.42E-09	3.69E-08	0.00E+00	4.63E-08
235	464399.2	3809702	9.65E-08	3.10E-07	0.00E+00	4.06E-07	9.65E-08	3.10E-07	0.00E+00	4.06E-07	1.53E-08	6.21E-08	0.00E+00	7.73E-08	9.20E-09	3.60E-08	0.00E+00	4.52E-08
236	464419.2	3809702	9.43E-08	3.02E-07	0.00E+00	3.97E-07	9.43E-08	3.02E-07	0.00E+00	3.97E-07	1.49E-08	6.06E-08	0.00E+00	7.55E-08	8.99E-09	3.52E-08	0.00E+00	4.42E-08
237	464439.2	3809702	9.21E-08	2.95E-07	0.00E+00	3.88E-07	9.21E-08	2.95E-07	0.00E+00	3.88E-07	1.46E-08	5.92E-08	0.00E+00	7.38E-08	8.78E-09	3.44E-08	0.00E+00	4.31E-08
238	464459.2	3809702	9.01E-08	2.89E-07	0.00E+00	3.79E-07	9.01E-08	2.89E-07	0.00E+00	3.79E-07	1.42E-08	5.79E-08	0.00E+00	7.22E-08	8.59E-09	3.36E-08	0.00E+00	4.22E-08
239	464479.2	3809702	8.81E-08	2.83E-07	0.00E+00	3.71E-07	8.81E-08	2.83E-07	0.00E+00	3.71E-07	1.39E-08	5.67E-08	0.00E+00	7.06E-08	8.40E-09	3.29E-08	0.00E+00	4.13E-08
240	464499.2	3809702	8.62E-08	2.76E-07	0.00E+00	3.63E-07	8.62E-08	2.76E-07	0.00E+00	3.63E-07	1.36E-08	5.54E-08	0.00E+00	6.90E-08	8.21E-09	3.21E-08	0.00E+00	4.04E-08
241	464519.2	3809702	8.44E-08	2.71E-07	0.00E+00	3.55E-07	8.44E-08	2.71E-07	0.00E+00	3.55E-07	1.33E-08	5.42E-08	0.00E+00	6.76E-08	8.04E-09	3.15E-08	0.00E+00	3.95E-08
242	463799.2	3809722	2.15E-07	6.91E-07	0.00E+00	9.06E-07	2.15E-07	6.91E-07	0.00E+00	9.06E-07	3.40E-08	1.38E-07	0.00E+00	1.72E-07	2.05E-08	8.03E-08	0.00E+00	1.01E-07
243	463819.2	3809722	2.10E-07	6.74E-07	0.00E+00	8.85E-07	2.10E-07	6.74E-07	0.00E+00	8.85E-07	3.32E-08	1.35E-07	0.00E+00	1.68E-07	2.00E-08	7.84E-08	0.00E+00	9.85E-08
244	463839.2	3809722	2.06E-07	6.59E-07	0.00E+00	8.65E-07	2.06E-07	6.59E-07	0.00E+00	8.65E-07	3.25E-08	1.32E-07	0.00E+00	1.65E-07	1.96E-08	7.67E-08	0.00E+00	9.63E-08
245	463859.2	3809722	2.01E-07	6.45E-07	0.00E+00	8.46E-07	2.01E-07	6.45E-07	0.00E+00	8.46E-07	3.18E-08	1.29E-07	0.00E+00	1.61E-07	1.92E-08	7.50E-08	0.00E+00	9.41E-08
246	463879.2	3809722	1.96E-07	6.29E-07	0.00E+00	8.25E-07	1.96E-07	6.29E-07	0.00E+00	8.25E-07	3.10E-08	1.26E-07	0.00E+00	1.57E-07	1.87E-08	7.32E-08	0.00E+00	9.19E-08
247	463899.2	3809722	1.91E-07	6.13E-07	0.00E+00	8.03E-07	1.91E-07	6.13E-07	0.00E+00	8.03E-07	3.02E-08	1.23E-07	0.00E+00	1.53E-07	1.82E-08	7.12E-08	0.00E+00	8.94E-08
248	463919.2	3809722	1.86E-07	5.98E-07	0.00E+00	7.84E-07	1.86E-07	5.98E-07	0.00E+00	7.84E-07	2.94E-08	1.20E-07	0.00E+00	1.49E-07	1.78E-08	6.95E-08	0.00E+00	8.73E-08
249	463939.2	3809722	1.82E-07	5.83E-07	0.00E+00	7.64E-07	1.82E-07	5.83E-07	0.00E+00	7.64E-07	2.87E-08	1.17E-07	0.00E+00	1.45E-07	1.73E-08	6.78E-08	0.00E+00	8.51E-08
250	463959.2	3809722	1.77E-07	5.67E-07	0.00E+00	7.44E-07	1.77E-07	5.67E-07	0.00E+00	7.44E-07	2.79E-08	1.14E-07	0.00E+00	1.42E-07	1.69E-08	6.60E-08	0.00E+00	8.28E-08
251	463979.2	3809722	1.72E-07	5.52E-07	0.00E+00	7.24E-07	1.72E-07	5.52E-07	0.00E+00	7.24E-07	2.72E-08	1.11E-07	0.00E+00	1.38E-07	1.64E-08	6.42E-08	0.00E+00	8.06E-08
252	463999.2	3809722	1.67E-07	5.37E-07	0.00E+00	7.04E-07	1.67E-07	5.37E-07	0.00E+00	7.04E-07	2.64E-08	1.08E-07	0.00E+00	1.34E-07	1.59E-08	6.24E-08	0.00E+00	7.83E-08
253	464019.2	3809722	1.62E-07	5.21E-07	0.00E+00	6.83E-07	1.62E-07	5.21E-07	0.00E+00	6.83E-07	2.57E-08	1.04E-07	0.00E+00	1.30E-07	1.55E-08	6.06E-08	0.00E+00	7.60E-08
254	464039.2	3809722	1.58E-07	5.06E-07	0.00E+00	6.64E-07	1.58E-07	5.06E-07	0.00E+00	6.64E-07	2.49E-08	1.01E-07	0.00E+00	1.26E-07	1.50E-08	5.89E-08	0.00E+00	7.39E-08
255	464059.2	3809722	1.53E-07	4.92E-07	0.00E+00	6.46E-07	1.53E-07	4.92E-07	0.00E+00	6.46E-07	2.43E-08	9.87E-08	0.00E+00	1.23E-07	1.46E-08	5.73E-08	0.00E+00	7.19E-08
256	464079.2	3809722	1.49E-07	4.79E-07	0.00E+00	6.28E-07	1.49E-07	4.79E-07	0.00E+00	6.28E-07	2.36E-08	9.59E-08	0.00E+00	1.19E-07	1.42E-08	5.56E-08	0.00E+00	6.99E-08
257	464099.2	3809722	1.45E-07	4.65E-07	0.00E+00	6.10E-07	1.45E-07	4.65E-07	0.00E+00	6.10E-07	2.29E-08	9.32E-08	0.00E+00	1.16E-07	1.38E-08	5.41E-08	0.00E+00	6.79E-08
258	464119.2	3809722	1.41E-07	4.52E-07	0.00E+00	5.93E-07	1.41E-07	4.52E-07	0.00E+00	5.93E-07	2.23E-08	9.06E-08	0.00E+00	1.13E-07	1.34E-08	5.26E-08	0.00E+00	6.60E-08
259	464139.2	3809722	1.37E-07	4.40E-07	0.00E+00	5.77E-07	1.37E-07	4.40E-07	0.00E+00	5.77E-07	2.17E-08	8.81E-08	0.00E+00	1.10E-07	1.31E-08	5.11E-08	0.00E+00	6.42E-08
260	464159.2	3809722	1.33E-07	4.28E-07	0.00E+00	5.61E-07	1.33E-07	4.28E-07	0.00E+00	5.61E-07	2.11E-08	8.57E-08	0.00E+00	1.07E-07	1.27E-08	4.98E-08	0.00E+00	6.25E-08
261	464179.2	3809722	1.30E-07	4.16E-07	0.00E+00	5.46E-07	1.30E-07	4.16E-07	0.00E+00	5.46E-07	2.05E-08	8.34E-08	0.00E+00	1.04E-07	1.24E-08	4.84E-08	0.00E+00	6.07E-08
262	464199.2	3809722	1.26E-07	4.04E-07	0.00E+00	5.30E-07	1.26E-07	4.04E-07	0.00E+00	5.30E-07	1.99E-08	8.10E-08	0.00E+00	1.01E-07	1.20E-08	4.70E-08	0.00E+00	5.90E-08
263	464219.2	3809722	1.23E-07	3.94E-07	0.00E+00	5.17E-07	1.23E-07	3.94E-07	0.00E+00	5.17E-07	1.94E-08	7.89E-08	0.00E+00	9.83E-08	1.17E-08	4.58E-08	0.00E+00	5.75E-08
264	464239.2	3809722	1.20E-07	3.83E-07	0.00E+00	5.03E-07	1.20E-07	3.83E-07	0.00E+00	5.03E-07	1.89E-08	7.68E-08	0.00E+00	9.57E-08	1.14E-08	4.46E-08	0.00E+00	5.60E-08
265	464259.2	3809722	1.16E-07	3.73E-07	0.00E+00	4.89E-07	1.16E-07	3.73E-07	0.00E+00	4.89E-07	1.84E-08	7.47E-08	0.00E+00	9.31E-08	1.11E-08	4.34E-08	0.00E+00	5.44E-08
266	464279.2	3809722	1.13E-07	3.64E-07	0.00E+00	4.77E-07	1.13E-07	3.64E-07	0.00E+00	4.77E-07	1.79E-08	7.29E-08	0.00E+00	9.08E-08	1.08E-08	4.23E-08	0.00E+00	5.31E-08
267	464299.2	3809722	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.75E-08	7.11E-08	0.00E+00	8.85E-08	1.05E-08	4.12E-08	0.00E+00	5.18E-08
268	464319.2	3809722	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.70E-08	6.93E-08	0.00E+00	8.64E-08	1.03E-08	4.02E-08	0.00E+00	5.05E-08
269	464339.2	3809722	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.76E-08	0.00E+00	8.42E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
270	464359.2	3809722	1.03E-07	3.29E-07	0.00E+00	4.31E-07	1.03E-07	3.29E-07	0.00E+00	4.31E-07	1.62E-08	6.59E-08	0.00E+00	8.21E-08	9.77E-09	3.82E-08	0.00E+00	4.80E-08
271	464379.2	3809722	1.00E-07	3.21E-07	0.00E+00	4.21E-07	1.00E-07	3.21E-07	0.00E+00	4.21E-07	1.58E-08	6.44E-08	0.00E+00	8.02E-08	9.54E-09	3.74E-08	0.00E+00	4.69E-08
272	464399.2	3809722	9.78E-08	3.14E-07	0.00E+00	4.12E-07	9.78E-08	3.14E-07	0.00E+00	4.12E-07	1.55E-08	6.29E-08	0.00E+00	7.83E-08	9.32E-09	3.65E-08	0.00E+00	4.58E-08
273	464419.2	3809722	9.55E-08	3.06E-07	0.00E+00	4.02E-07	9.55E-08	3.06E-07	0.00E+00	4.02E-07	1.51E-08	6.14E-08	0.00E+00	7.65E-08	9.10E-09	3.56E-08	0.00E+00	4.47E-08
274	464439.2	3809722	9.32E-08	2.99E-07	0.00E+00	3.92E-07	9.32E-08	2.99E-07	0.00E+00	3.92E-07	1.47E-08	5.99E-08	0.00E+00	7.46E-08	8.88E-09	3.47E-08	0.00E+00	4.36E-08
275	464459.2	3809722	9.11E-08	2.92E-07	0.00E+00	3.83E-07	9.11E-08	2.92E-07	0.00E+00	3.83E-07	1.44E-08	5.86E-08	0.00E+00	7.30E-08	8.68E-09	3.40E-08	0.00E+00	4.27E-08
276	464479.2	3809722	8.91E-08	2.86E-07	0.00E+00	3.75E-07	8.91E-08	2.86E-07	0.00E+00	3.75E-07	1.41E-08	5.73E-08	0.00E+00	7.14E-08	8.49E-09	3.32E-08	0.00E+00	4.17E-08
277	464499.2	3809722	8.72E-08	2.80E-07	0.00E+00	3.67E-07	8.72E-08	2.80E-07	0.00E+00	3.67E-07	1.38E-08	5.61E-08	0.00E+00	6.98E-08	8.31E-09	3.25E-08	0.00E+00	4.08E-08
278	464519.2	3809722	8.53E-08	2.74E-07	0.00E+00	3.59E-07	8.53E-08	2.74E-07	0.00E+00	3.59E-07	1.35E-08	5.48E-08	0.00E+00	6.83E-08	8.13E-09	3.18E-08	0.00E+00	4.00E-08
279	463799.2	3809742	2.19E-07	7.02E-07	0.00E+00	9.21E-07	2.19E-07	7.02E-07	0.00E+00	9.21E-07	3.46E-08	1.41E-07	0.00E+00	1.75E-07	2.08E-08	8.16E-08	0.00E+00	1.02E-07
280	463819.2	3809742	2.13E-07	6.83E-07	0.00E+00	8.96E-07	2.13E-07	6.83E-07	0.00E+00	8.96E-07	3.37E-08	1.37E-07	0.00E+00	1.71E-07	2.03E-08	7.94E-08	0.00E+00	9.97E-08
281	463839.2	3809742	2.08E-07	6.68E-07	0.00E+00	8.76E-07	2.08E-07	6.68E-07	0.00E+00	8.76E-07	3.29E-08	1.34E-07	0.00E+00	1.67E-07	1.98E-08	7.76E-08	0.00E+00	9.75E-08
282	463859.2	3809742	2.03E-07	6.53E-07	0.00E+00	8.56E-07	2.03E-07	6.53E-07	0.00E+00	8.56E-07	3.22E-08	1.31E-07	0.00E+00	1.63E-07	1.94E-08	7.59E-08	0.00E+00	9.53E-08
283	463879.2	3809742	1.99E-07	6.38E-07	0.00E+00	8.37E-07	1.99E-07	6.38E-07	0.00E+00	8.37E-07	3.14E-08	1.28E-07	0.00E+00	1.59E-07	1.90E-08	7.42E-08	0.00E+00	9.31E-08
284	463899.2	3809742	1.94E-07	6.23E-07	0.00E+00	8.18E-07	1.94E-07	6.23E-07	0.00E+00	8.18E-07	3.07E-08	1.25E-07	0.00E+00	1.56E-07	1.85E-08	7.25E-08	0.00E+00	9.10E-08
285	463919.2	3809742	1.89E-07	6.07E-07	0.00E+00	7.96E-07	1.89E-07	6.07E-07	0.00E+00	7.96E-07	2.99E-08	1.22E-07	0.00E+00	1.51E-07	1.80E-08	7.05E-08	0.00E+00	8.86E-08
286	463939.2	3809742	1.84E-07	5.91E-07	0.00E+00	7.76E-07	1.84E-07	5.91E-07	0.00E+00	7.76E-07	2.91E-08	1.19E-07	0.00E+00	1.48E-07	1.76E-08	6.88E-08	0.00E+00	8.63E-08
287	463959.2	3809742	1.80E-07	5.77E-07	0.00E+00	7.57E-07	1.80E-07	5.77E-07	0.00E+00	7.57E-07	2.84E-08	1.16E-07	0.00E+00	1.44E-07	1.72E-08	6.71E-08	0.00E+00	8.43E-08
288	463979.2	3809742	1.76E-07	5.63E-07	0.00E+00	7.39E-07	1.76E-07	5.63E-07	0.00E+00	7.39E-07	2.78E-08	1.13E-07	0.00E+00	1.41E-07	1.67E-08	6.55E-08	0.00E+00	8.23E-08
289	463999.2	3809742	1.71E-07	5.49E-07	0.00E+00	7.20E-07	1.71E-07	5.49E-07	0.00E+00	7.20E-07	2.70E-08	1.10E-07	0.00E+00	1.37E-07	1.63E-08	6.38E-08	0.00E+00	8.01E-08
290	464019.2	3809742	1.66E-07	5.33E-07	0.00E+00	6.99E-07	1.66E-07	5.33E-07	0.00E+00	6.99E-07	2.63E-08	1.07E-07	0.00E+00	1.33E-07	1.58E-08	6.20E-08	0.00E+00	7.78E-08
291	464039.2	3809742	1.61E-07	5.17E-07	0.00E+00	6.79E-07	1.61E-07	5.17E-07	0.00E+00	6.79E-07	2.55E-08	1.04E-07	0.00E+00	1.29E-07	1.54E-08	6.01E-08	0.00E+00	7.55E-08
292	464059.2	3809742	1.57E-07	5.02E-07	0.00E+00	6.59E-07	1.57E-07	5.02E-07	0.00E+00	6.59E-07	2.47E-08	1.01E-07	0.00E+00	1.25E-07	1.49E-08	5.84E-08	0.00E+00	7.34E-08
293	464079.2	3809742	1.52E-07	4.89E-07	0.00E+00	6.41E-07	1.52E-07	4.89E-07	0.00E+00	6.41E-07	2.41E-08	9.80E-08	0.00E+00	1.22E-07	1.45E-08	5.68E-08	0.00E+00	7.14E-08
294	464099.2	3809742	1.48E-07	4.75E-07	0.00E+00	6.23E-07	1.48E-07	4.75E-07	0.00E+00	6.23E-07	2.34E-08	9.51E-08	0.00E+00	1.19E-07	1.41E-08	5.52E-08	0.00E+00	6.93E-08
295	464119.2	3809742	1.44E-07	4.61E-07	0.00E+00	6.05E-07	1.44E-07	4.61E-07	0.00E+00	6.05E-07	2.27E-08	9.24E-08	0.00E+00	1.15E-07	1.37E-08	5.36E-08	0.00E+00	6.73E-08
296	464139.2	3809742	1.40E-07	4.48E-07	0.00E+00	5.88E-07	1.40E-07	4.48E-07	0.00E+00	5.88E-07	2.21E-08	8.98E-08	0.00E+00	1.12E-07	1.33E-08	5.21E-08	0.00E+00	6.54E-08
297	464159.2	3809742	1.36E-07	4.36E-07	0.00E+00	5.72E-07	1.36E-07	4.36E-07	0.00E+00	5.72E-07	2.15E-08	8.73E-08	0.00E+00	1.09E-07	1.29E-08	5.07E-08	0.00E+00	6.36E-08
298	464179.2	3809742	1.32E-07	4.24E-07	0.00E+00	5.56E-07	1.32E-07	4.24E-07	0.00E+00	5.56E-07	2.09E-08	8.49E-08	0.00E+00	1.06E-07	1.26E-08	4.93E-08	0.00E+00	6.18E-08
299	464199.2	3809742	1.28E-07	4.11E-07	0.00E+00	5.40E-07	1.28E-07	4.11E-07	0.00E+00	5.40E-07	2.03E-08	8.24E-08	0.00E+00	1.03E-07	1.22E-08	4.78E-08	0.00E+00	6.00E-08
300	464219.2	3809742	1.25E-07	4.00E-07	0.00E+00	5.25E-07	1.25E-07	4.00E-07	0.00E+00	5.25E-07	1.97E-08	8.02E-08	0.00E+00	1.00E-07	1.19E-08	4.66E-08	0.00E+00	5.85E-08
301	464239.2	3809742	1.21E-07	3.90E-07	0.00E+00	5.11E-07	1.21E-07	3.90E-07	0.00E+00	5.11E-07	1.92E-08	7.81E-08	0.00E+00	9.73E-08	1.16E-08	4.53E-08	0.00E+00	5.69E-08
302	464259.2	3809742	1.18E-07	3.79E-07	0.00E+00	4.97E-07	1.18E-07	3.79E-07	0.00E+00	4.97E-07	1.87E-08	7.59E-08	0.00E+00	9.46E-08	1.13E-08	4.40E-08	0.00E+00	5.53E-08
303	464279.2	3809742	1.15E-07	3.69E-07	0.00E+00	4.84E-07	1.15E-07	3.69E-07	0.00E+00	4.84E-07	1.82E-08	7.40E-08	0.00E+00	9.22E-08	1.10E-08	4.29E-08	0.00E+00	5.39E-08
304	464299.2	3809742	1.12E-07	3.60E-07	0.00E+00	4.72E-07	1.12E-07	3.60E-07	0.00E+00	4.72E-07	1.77E-08	7.21E-08	0.00E+00	8.98E-08	1.07E-08	4.18E-08	0.00E+00	5.25E-08
305	464319.2	3809742	1.09E-07	3.50E-07	0.00E+00	4.59E-07	1.09E-07	3.50E-07	0.00E+00	4.59E-07	1.72E-08	7.01E-08	0.00E+00	8.74E-08	1.04E-08	4.07E-08	0.00E+00	5.11E-08
306	464339.2	3809742	1.06E-07	3.41E-07	0.00E+00	4.48E-07	1.06E-07	3.41E-07	0.00E+00	4.48E-07	1.68E-08	6.84E-08	0.00E+00	8.52E-08	1.01E-08	3.97E-08	0.00E+00	4.98E-08
307	464359.2	3809742	1.04E-07	3.33E-07	0.00E+00	4.37E-07	1.04E-07	3.33E-07	0.00E+00	4.37E-07	1.64E-08	6.68E-08	0.00E+00	8.32E-08	9.90E-09	3.87E-08	0.00E+00	4.86E-08
308	464379.2	3809742	1.01E-07	3.25E-07	0.00E+00	4.27E-07	1.01E-07	3.25E-07	0.00E+00	4.27E-07	1.60E-08	6.52E-08	0.00E+00	8.12E-08	9.67E-09	3.78E-08	0.00E+00	4.75E-08
309	464399.2	3809742	9.89E-08	3.17E-07	0.00E+00	4.16E-07	9.89E-08	3.17E-07	0.00E+00	4.16E-07	1.56E-08	6.36E-08	0.00E+00	7.92E-08	9.42E-09	3.69E-08	0.00E+00	4.63E-08
310	464419.2	3809742	9.65E-08	3.09E-07	0.00E+00	4.06E-07	9.65E-08	3.09E-07	0.00E+00	4.06E-07	1.52E-08	6.20E-08	0.00E+00	7.73E-08	9.19E-09	3.60E-08	0.00E+00	4.52E-08
311	464439.2	3809742	9.42E-08	3.02E-07	0.00E+00	3.97E-07	9.42E-08	3.02E-07	0.00E+00	3.97E-07	1.49E-08	6.06E-08	0.00E+00	7.55E-08	8.98E-09	3.52E-08	0.00E+00	4.41E-08
312	464459.2	3809742	9.21E-08	2.96E-07	0.00E+00	3.88E-07	9.21E-08	2.96E-07	0.00E+00	3.88E-07	1.46E-08	5.92E-08	0.00E+00	7.38E-08	8.78E-09	3.44E-08	0.00E+00	4.32E-08
313	464479.2	3809742	9.01E-08	2.89E-07	0.00E+00	3.79E-07	9.01E-08	2.89E-07	0.00E+00	3.79E-07	1.42E-08	5.79E-08	0.00E+00	7.22E-08	8.59E-09	3.36E-08	0.00E+00	4.22E-08
314	464499.2	3809742	8.82E-08	2.83E-07	0.00E+00	3.71E-07	8.82E-08	2.83E-07	0.00E+00	3.71E-07	1.39E-08	5.67E-08	0.00E+00	7.06E-08	8.40E-09	3.29E-08	0.00E+00	4.13E-08
315	464519.2	3809742	8.61E-08	2.76E-07	0.00E+00	3.62E-07	8.61E-08	2.76E-07	0.00E+00	3.62E-07	1.36E-08	5.53E-08	0.00E+00	6.89E-08

328	464059.2	3809762	1.6E-07	5.12E-07	0.00E+00	6.72E-07	1.60E-07	5.12E-07	0.00E+00	6.72E-07	2.52E-08	1.03E-07	0.00E+00	1.28E-07	1.52E-08	5.95E-08	0.00E+00	7.47E-08
329	464079.2	3809762	1.55E-07	4.97E-07	0.00E+00	6.52E-07	1.55E-07	4.97E-07	0.00E+00	6.52E-07	2.45E-08	9.96E-08	0.00E+00	1.24E-07	1.48E-08	5.78E-08	0.00E+00	7.26E-08
330	464099.2	3809762	1.51E-07	4.83E-07	0.00E+00	6.34E-07	1.51E-07	4.83E-07	0.00E+00	6.34E-07	2.38E-08	9.68E-08	0.00E+00	1.21E-07	1.44E-08	5.62E-08	0.00E+00	7.05E-08
331	464119.2	3809762	1.46E-07	4.69E-07	0.00E+00	6.16E-07	1.46E-07	4.69E-07	0.00E+00	6.16E-07	2.31E-08	9.41E-08	0.00E+00	1.17E-07	1.39E-08	5.46E-08	0.00E+00	6.85E-08
332	464139.2	3809762	1.42E-07	4.56E-07	0.00E+00	5.98E-07	1.42E-07	4.56E-07	0.00E+00	5.98E-07	2.25E-08	9.14E-08	0.00E+00	1.14E-07	1.35E-08	5.30E-08	0.00E+00	6.66E-08
333	464159.2	3809762	1.38E-07	4.43E-07	0.00E+00	5.81E-07	1.38E-07	4.43E-07	0.00E+00	5.81E-07	2.18E-08	8.88E-08	0.00E+00	1.11E-07	1.32E-08	5.15E-08	0.00E+00	6.47E-08
334	464179.2	3809762	1.34E-07	4.3E-07	0.00E+00	5.65E-07	1.34E-07	4.30E-07	0.00E+00	5.65E-07	2.12E-08	8.62E-08	0.00E+00	1.07E-07	1.28E-08	5.00E-08	0.00E+00	6.28E-08
335	464199.2	3809762	1.3E-07	4.18E-07	0.00E+00	5.48E-07	1.30E-07	4.18E-07	0.00E+00	5.48E-07	2.06E-08	8.37E-08	0.00E+00	1.04E-07	1.24E-08	4.86E-08	0.00E+00	6.10E-08
336	464219.2	3809762	1.27E-07	4.06E-07	0.00E+00	5.33E-07	1.27E-07	4.06E-07	0.00E+00	5.33E-07	2.00E-08	8.14E-08	0.00E+00	1.01E-07	1.21E-08	4.73E-08	0.00E+00	5.93E-08
337	464239.2	3809762	1.23E-07	3.95E-07	0.00E+00	5.18E-07	1.23E-07	3.95E-07	0.00E+00	5.18E-07	1.95E-08	7.92E-08	0.00E+00	9.87E-08	1.17E-08	4.60E-08	0.00E+00	5.77E-08
338	464259.2	3809762	1.2E-07	3.84E-07	0.00E+00	5.04E-07	1.20E-07	3.84E-07	0.00E+00	5.04E-07	1.89E-08	7.69E-08	0.00E+00	9.59E-08	1.14E-08	4.46E-08	0.00E+00	5.61E-08
339	464279.2	3809762	1.17E-07	3.74E-07	0.00E+00	4.91E-07	1.17E-07	3.74E-07	0.00E+00	4.91E-07	1.84E-08	7.50E-08	0.00E+00	9.34E-08	1.11E-08	4.35E-08	0.00E+00	5.46E-08
340	464299.2	3809762	1.14E-07	3.64E-07	0.00E+00	4.78E-07	1.14E-07	3.64E-07	0.00E+00	4.78E-07	1.79E-08	7.30E-08	0.00E+00	9.09E-08	1.08E-08	4.23E-08	0.00E+00	5.32E-08
341	464319.2	3809762	1.1E-07	3.54E-07	0.00E+00	4.65E-07	1.10E-07	3.54E-07	0.00E+00	4.65E-07	1.74E-08	7.10E-08	0.00E+00	8.84E-08	1.05E-08	4.12E-08	0.00E+00	5.17E-08
342	464339.2	3809762	1.08E-07	3.45E-07	0.00E+00	4.53E-07	1.08E-07	3.45E-07	0.00E+00	4.53E-07	1.70E-08	6.92E-08	0.00E+00	8.62E-08	1.03E-08	4.02E-08	0.00E+00	5.04E-08
343	464359.2	3809762	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.75E-08	0.00E+00	8.41E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
344	464379.2	3809762	1.02E-07	3.28E-07	0.00E+00	4.31E-07	1.02E-07	3.28E-07	0.00E+00	4.31E-07	1.62E-08	6.58E-08	0.00E+00	8.20E-08	9.76E-09	3.82E-08	0.00E+00	4.79E-08
345	464399.2	3809762	9.98E-08	3.2E-07	0.00E+00	4.20E-07	9.98E-08	3.20E-07	0.00E+00	4.20E-07	1.58E-08	6.42E-08	0.00E+00	8.00E-08	9.51E-09	3.72E-08	0.00E+00	4.68E-08
346	464419.2	3809762	9.74E-08	3.13E-07	0.00E+00	4.10E-07	9.74E-08	3.13E-07	0.00E+00	4.10E-07	1.54E-08	6.26E-08	0.00E+00	7.80E-08	9.29E-09	3.63E-08	0.00E+00	4.56E-08
347	464439.2	3809762	9.52E-08	3.05E-07	0.00E+00	4.01E-07	9.52E-08	3.05E-07	0.00E+00	4.01E-07	1.50E-08	6.12E-08	0.00E+00	7.63E-08	9.07E-09	3.55E-08	0.00E+00	4.46E-08
348	464459.2	3809762	9.31E-08	2.99E-07	0.00E+00	3.92E-07	9.31E-08	2.99E-07	0.00E+00	3.92E-07	1.47E-08	5.98E-08	0.00E+00	7.45E-08	8.87E-09	3.47E-08	0.00E+00	4.36E-08
349	464479.2	3809762	9.09E-08	2.92E-07	0.00E+00	3.83E-07	9.09E-08	2.92E-07	0.00E+00	3.83E-07	1.44E-08	5.85E-08	0.00E+00	7.28E-08	8.67E-09	3.39E-08	0.00E+00	4.26E-08
350	464499.2	3809762	8.88E-08	2.85E-07	0.00E+00	3.74E-07	8.88E-08	2.85E-07	0.00E+00	3.74E-07	1.40E-08	5.71E-08	0.00E+00	7.11E-08	8.46E-09	3.31E-08	0.00E+00	4.16E-08
351	464519.2	3809762	8.68E-08	2.78E-07	0.00E+00	3.65E-07	8.68E-08	2.78E-07	0.00E+00	3.65E-07	1.37E-08	5.58E-08	0.00E+00	6.95E-08	8.27E-09	3.24E-08	0.00E+00	4.06E-08
352	463839.2	3809782	2.14E-07	6.88E-07	0.00E+00	9.02E-07	2.14E-07	6.88E-07	0.00E+00	9.02E-07	3.39E-08	1.38E-07	0.00E+00	1.72E-07	2.04E-08	8.00E-08	0.00E+00	1.00E-07
353	463859.2	3809782	2.09E-07	6.7E-07	0.00E+00	8.79E-07	2.09E-07	6.70E-07	0.00E+00	8.79E-07	3.30E-08	1.34E-07	0.00E+00	1.67E-07	1.99E-08	7.80E-08	0.00E+00	9.79E-08
354	463879.2	3809782	2.04E-07	6.54E-07	0.00E+00	8.58E-07	2.04E-07	6.54E-07	0.00E+00	8.58E-07	3.22E-08	1.31E-07	0.00E+00	1.63E-07	1.94E-08	7.61E-08	0.00E+00	9.55E-08
355	463899.2	3809782	1.99E-07	6.39E-07	0.00E+00	8.39E-07	1.99E-07	6.39E-07	0.00E+00	8.39E-07	3.15E-08	1.28E-07	0.00E+00	1.60E-07	1.90E-08	7.43E-08	0.00E+00	9.33E-08
356	463919.2	3809782	1.94E-07	6.21E-07	0.00E+00	8.15E-07	1.94E-07	6.21E-07	0.00E+00	8.15E-07	3.06E-08	1.25E-07	0.00E+00	1.55E-07	1.85E-08	7.22E-08	0.00E+00	9.07E-08
357	463939.2	3809782	1.88E-07	6.03E-07	0.00E+00	7.91E-07	1.88E-07	6.03E-07	0.00E+00	7.91E-07	2.97E-08	1.21E-07	0.00E+00	1.50E-07	1.79E-08	7.01E-08	0.00E+00	8.80E-08
358	463959.2	3809782	1.82E-07	5.84E-07	0.00E+00	7.66E-07	1.82E-07	5.84E-07	0.00E+00	7.66E-07	2.87E-08	1.17E-07	0.00E+00	1.46E-07	1.73E-08	6.79E-08	0.00E+00	8.52E-08
359	463979.2	3809782	1.78E-07	5.7E-07	0.00E+00	7.48E-07	1.78E-07	5.70E-07	0.00E+00	7.48E-07	2.81E-08	1.14E-07	0.00E+00	1.42E-07	1.69E-08	6.63E-08	0.00E+00	8.33E-08
360	463999.2	3809782	1.74E-07	5.59E-07	0.00E+00	7.34E-07	1.74E-07	5.59E-07	0.00E+00	7.34E-07	2.76E-08	1.12E-07	0.00E+00	1.40E-07	1.66E-08	6.50E-08	0.00E+00	8.17E-08
361	464019.2	3809782	1.71E-07	5.5E-07	0.00E+00	7.21E-07	1.71E-07	5.50E-07	0.00E+00	7.21E-07	2.71E-08	1.10E-07	0.00E+00	1.37E-07	1.63E-08	6.39E-08	0.00E+00	8.02E-08
362	464039.2	3809782	1.67E-07	5.35E-07	0.00E+00	7.02E-07	1.67E-07	5.35E-07	0.00E+00	7.02E-07	2.64E-08	1.07E-07	0.00E+00	1.34E-07	1.59E-08	6.23E-08	0.00E+00	7.82E-08
363	464059.2	3809782	1.62E-07	5.2E-07	0.00E+00	6.82E-07	1.62E-07	5.20E-07	0.00E+00	6.82E-07	2.56E-08	1.04E-07	0.00E+00	1.30E-07	1.55E-08	6.05E-08	0.00E+00	7.60E-08
364	464079.2	3809782	1.57E-07	5.05E-07	0.00E+00	6.62E-07	1.57E-07	5.05E-07	0.00E+00	6.62E-07	2.49E-08	1.01E-07	0.00E+00	1.26E-07	1.50E-08	5.87E-08	0.00E+00	7.37E-08
365	464099.2	3809782	1.53E-07	4.9E-07	0.00E+00	6.43E-07	1.53E-07	4.90E-07	0.00E+00	6.43E-07	2.42E-08	9.83E-08	0.00E+00	1.22E-07	1.46E-08	5.70E-08	0.00E+00	7.16E-08
366	464119.2	3809782	1.48E-07	4.76E-07	0.00E+00	6.25E-07	1.48E-07	4.76E-07	0.00E+00	6.25E-07	2.35E-08	9.55E-08	0.00E+00	1.19E-07	1.42E-08	5.54E-08	0.00E+00	6.95E-08
367	464139.2	3809782	1.44E-07	4.62E-07	0.00E+00	6.07E-07	1.44E-07	4.62E-07	0.00E+00	6.07E-07	2.28E-08	9.27E-08	0.00E+00	1.15E-07	1.37E-08	5.38E-08	0.00E+00	6.75E-08
368	464159.2	3809782	1.4E-07	4.49E-07	0.00E+00	5.89E-07	1.40E-07	4.49E-07	0.00E+00	5.89E-07	2.21E-08	9.00E-08	0.00E+00	1.12E-07	1.33E-08	5.22E-08	0.00E+00	6.56E-08
369	464179.2	3809782	1.36E-07	4.36E-07	0.00E+00	5.72E-07	1.36E-07	4.36E-07	0.00E+00	5.72E-07	2.15E-08	8.74E-08	0.00E+00	1.09E-07	1.30E-08	5.07E-08	0.00E+00	6.37E-08
370	464199.2	3809782	1.32E-07	4.23E-07	0.00E+00	5.55E-07	1.32E-07	4.23E-07	0.00E+00	5.55E-07	2.08E-08	8.48E-08	0.00E+00	1.06E-07	1.26E-08	4.92E-08	0.00E+00	6.18E-08
371	464219.2	3809782	1.28E-07	4.11E-07	0.00E+00	5.40E-07	1.28E-07	4.11E-07	0.00E+00	5.40E-07	2.03E-08	8.24E-08	0.00E+00	1.03E-07	1.22E-08	4.78E-08	0.00E+00	6.01E-08
372	464239.2	3809782	1.25E-07	4E-07	0.00E+00	5.25E-07	1.25E-07	4.00E-07	0.00E+00	5.25E-07	1.97E-08	8.01E-08	0.00E+00	9.98E-08	1.19E-08	4.65E-08	0.00E+00	5.84E-08
373	464259.2	3809782	1.21E-07	3.89E-07	0.00E+00	5.10E-07	1.21E-07	3.89E-07	0.00E+00	5.10E-07	1.91E-08	7.79E-08	0.00E+00	9.70E-08	1.15E-08	4.52E-08	0.00E+00	5.67E-08
374	464279.2	3809782	1.18E-07	3.78E-07	0.00E+00	4.96E-07	1.18E-07	3.78E-07	0.00E+00	4.96E-07	1.86E-08	7.58E-08	0.00E+00	9.44E-08	1.12E-08	4.40E-08	0.00E+00	5.52E-08
375	464299.2	3809782	1.15E-07	3.68E-07	0.00E+00	4.83E-07	1.15E-07	3.68E-07	0.00E+00	4.83E-07	1.81E-08	7.38E-08	0.00E+00	9.19E-08	1.09E-08	4.28E-08	0.00E+00	5.37E-08
376	464319.2	3809782	1.12E-07	3.58E-07	0.00E+00	4.70E-07	1.12E-07	3.58E-07	0.00E+00	4.70E-07	1.76E-08	7.17E-08	0.00E+00	8.94E-08	1.06E-08	4.16E-08	0.00E+00	5.23E-08
377	464339.2	3809782	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.72E-08	6.99E-08	0.00E+00	8.71E-08	1.04E-08	4.06E-08	0.00E+00	5.09E-08
378	464359.2	3809782	1.06E-07	3.4E-07	0.00E+00	4.46E-07	1.06E-07	3.40E-07	0.00E+00	4.46E-07	1.67E-08	6.81E-08	0.00E+00	8.48E-08	1.01E-08	3.95E-08	0.00E+00	4.96E-08
379	464379.2	3809782	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.03E-07	3.31E-07	0.00E+00	4.34E-07	1.63E-08	6.63E-08	0.00E+00	8.26E-08	9.83E-09	3.85E-08	0.00E+00	4.83E-08
380	464399.2	3809782	1.01E-07	3.23E-07	0.00E+00	4.24E-07	1.01E-07	3.23E-07	0.00E+00	4.24E-07	1.59E-08	6.47E-08	0.00E+00	8.06E-08	9.60E-09	3.76E-08	0.00E+00	4.72E-08
381	464419.2	3809782	9.83E-08	3.15E-07	0.00E+00	4.14E-07	9.83E-08	3.15E-07	0.00E+00	4.14E-07	1.55E-08	6.32E-08	0.00E+00	7.88E-08	9.37E-09	3.67E-08	0.00E+00	4.60E-08
382	464439.2	3809782	9.61E-08	3.08E-07	0.00E+00	4.04E-07	9.61E-08	3.08E-07	0.00E+00	4.04E-07	1.52E-08	6.17E-08	0.00E+00	7.69E-08	9.15E-09	3.58E-08	0.00E+00	4.50E-08
383	464459.2	3809782	9.38E-08	3.01E-07	0.00E+00	3.95E-07	9.38E-08	3.01E-07	0.00E+00	3.95E-07	1.48E-08	6.03E-08	0.00E+00	7.51E-08	8.94E-09	3.50E-08	0.00E+00	4.39E-08
384	464479.2	3809782	9.16E-08	2.94E-07	0.00E+00	3.85E-07	9.16E-08	2.94E-07	0.00E+00	3.85E-07	1.45E-08	5.89E-08	0.00E+00	7.33E-08	8.73E-09	3.42E-08	0.00E+00	4.29E-08
385	464499.2	3809782	8.93E-08	2.87E-07	0.00E+00	3.76E-07	8.93E-08	2.87E-07	0.00E+00	3.76E-07	1.41E-08	5.74E-08	0.00E+00	7.16E-08	8.52E-09	3.33E-08	0.00E+00	4.18E-08
386	464519.2	3809782	8.74E-08	2.8E-07	0.00E+00	3.68E-07	8.74E-08	2.80E-07	0.00E+00	3.68E-07	1.38E-08	5.62E-08	0.00E+00	7.00E-08	8.33E-09	3.26E-08	0.00E+00	4.09E-08
387	463859.2	3809802	2.1E-07	6.75E-07	0.00E+00	8.86E-07	2.10E-07	6.75E-07	0.00E+00	8.86E-07	3.33E-08	1.35E-07	0.00E+00	1.69E-07	2.01E-08	7.85E-08	0.00E+00	9.85E-08
388	463879.2	3809802	2.05E-07	6.57E-07	0.00E+00	8.62E-07	2.05E-07	6.57E-07	0.00E+00	8.62E-07	3.24E-08	1.32E-07	0.00E+00	1.64E-07	1.95E-08	7.64E-08	0.00E+00	9.59E-08
389	463899.2	3809802	2E-07	6.41E-07	0.00E+00	8.41E-07	2.00E-07	6.41E-07	0.00E+00	8.41E-07	3.16E-08	1.29E-07	0.00E+00	1.60E-07	1.91E-08	7.46E-08	0.00E+00	9.36E-08
390	463919.2	3809802	1.94E-07	6.23E-07	0.00E+00	8.17E-07	1.94E-07	6.23E-07	0.00E+00	8.17E-07	3.07E-08	1.25E-07	0.00E+00	1.56E-07	1.85E-08	7.24E-08	0.00E+00	9.10E-08
391	463939.2	3809802	1.89E-07	6.05E-07	0.00E+00	7.94E-07	1.89E-07	6.05E-07	0.00E+00	7.94E-07	2.98E-08	1.21E-07	0.00E+00	1.51E-07	1.80E-08	7.04E-08	0.00E+00	8.83E-08
392	463959.2	3809802	1.83E-07	5.88E-07	0.00E+00	7.71E-07	1.83E-07	5.88E-07	0.00E+00	7.71E-07	2.90E-08	1.18E-07	0.00E+00	1.47E-07	1.75E-08	6.84E-08	0.00E+00	8.58E-08
393	463979.2	3809802	1.79E-07	5.75E-07	0.00E+00	7.54E-07	1.79E-07	5.75E-07	0.00E+00	7.54E-07	2.83E-08	1.15E-07	0.00E+00	1.43E-07	1.71E-08	6.68E-08	0.00E+00	8.39E-08
394	463999.2	3809802	1.75E-07	5.62E-07	0.00E+00	7.37E-07	1.75E-07	5.62E-07	0.00E+00	7.37E-07	2.77E-08	1.13E-07	0.00E+00	1.40E-07	1.67E-08	6.53E-08	0.00E+00	8.20E-08
395	464019.2	3809802	1.71E-07	5.5E-07	0.00E+00	7.21E-07	1.71E-07	5.50E-07	0.00E+00	7.21E-07	2.71E-08	1.10E-07	0.00E+00	1.37E-07	1.63E-08	6.39E-08	0.00E+00	8.02E-08
396	464039.2	3809802	1.68E-07	5.4E-07	0.00E+00	7.08E-07	1.68E-07	5.40E-07	0.00E+00	7.08E-07	2.66E-08	1.08E-07	0.00E+00	1.35E-07	1.60E-08	6.28E-08	0.00E+00	7.88E-08
397	464059.2	3809802	1.64E-07	5.27E-07	0.00E+00	6.91E-07	1.64E-07	5.27E-07	0.00E+00	6.91E-07	2.60E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.13E-08	0.00E+00	7.69E-08
398	464079.2	3809802	1.6E-07	5.12E-07	0.00E+00	6.71E-07	1.60E-07	5.12E-07	0.00E+00	6.71E-07	2.52E-08	1.03E-07	0.00E+00	1.28E-07	1.52E-08	5.95E-08	0.00E+00	7.47E-08
399	464099.2	3809802	1.55E-07	4.96E-07	0.00E+00	6.51E-07	1.55E-07	4.96E-07	0.00E+00	6.51E-07	2.44E-08	9.95E-08	0.00E+00	1.24E-07	1.47E-08	5.77E-08	0.00E+00	7.25E-08
400	464119.2	3809802	1.5E-07	4.81E-07	0.00E+00	6.32E-07	1.50E-07	4.81E-07	0.00E+00	6.32E-07	2.37E-08	9.65E-08	0.00E+00	1.20E-07	1.43E-08	5.60E-08	0.00E+00	7.03E-08
401	464139.2	3809802	1.46E-07	4.67E-07	0.00E+00	6.13E-07	1.46E-07	4.67E-07	0.00E+00	6.13E-07	2.30E-08	9.36E-08	0.00E+00	1.17E-07	1.39E-08	5.43E-08	0.00E+00	6.82E-08
402	464159.2	3809802	1.41E-07	4.54E-07	0.00E+00	5.95E-07	1.41E-07	4.54E-07	0.00E+00	5.95E-07	2.23E-08	9.09E-08	0.00E+00	1.13E-07	1.35E-08	5.27E-08	0.00E+00	6.62E-08
403	464179.2	3809802	1.37E-07	4.4E-07	0.00E+00	5.78E-07	1.37E-07	4.40E-07	0.00E+00	5.78E-07	2.17E-08	8.83E-08	0.00E+00	1.10E-07	1.31E-08	5.12E-08	0.00E+00	6.43E-08
404	464199.2	3809802	1.33E-07	4.28E-07	0.00E+00	5.61E-07	1.33E-07	4.28E-07	0.00E+00	5.61E-07	2.11E-08	8.57E-08	0.00E+00	1.07E-07	1.27E-08	4.98E-08	0.00E+00	6.25E-08
405	464219.2	3809802	1.29E-07	4.15E-07	0.00E+00	5.45E-07	1.29E-07	4.15E-07	0.00E+00	5.45E-07	2.04E-08	8.32E-08	0.00E+00	1.04E-07	1.23E-08	4.83E-08	0.00E+00	6.06E-08
406	464239.2	3809802	1.26E-07	4.03E-07	0.00E+00	5.29E-07	1.26E-07	4.03E-07	0.00E+00	5.29E-07	1.99E-08	8.08E-08	0.00E+00	1.01E-07	1.20E-08	4.69E-08	0.00E+00	5.89E-08
407	464259.2	3809802	1.22E-07	3.92E-07	0.00E+00	5.15E-07	1.22E-07	3.92E-07	0.00E+00	5.15E-07	1.93E-08	7.86E-08	0.00E+00	9.80E-08	1.17E-08	4.56E-08	0.00E+00	5.73E-08
408	464279.2	3809802	1.19E-07	3.81E-07	0.00E+00	5.00E-07	1.19E-07	3.81E-07	0.00E+00	5.00E-07	1.88E-08	7.64E-08	0.00E+00	9.52E-08	1.13E-08	4.43E-08	0.00E+00	5.56E-08
409	464299.2	3809802	1.16E-07	3.71E-07	0.00E+00	4.86E-07	1.16E-07	3.71E-07	0.00E+00	4.86E-07	1.83E-08	7.43E-08	0.00E+00	9.26E-08	1.10E-08	4.31E-08	0.00E+00	5.41E-08
410	464319.2	3809802	1.13E-07	3.61E-07	0.00E+00	4.74E-07	1.13E-07	3.61E-07	0.00E+00	4.74E-07	1.78E-08	7.24E-08	0.00E+00	9.02E-08	1.07E-08	4.20E-08	0.00E+00	5.27E-08
411	464339.2	3809802	1.09E-07	3.51E-07	0.00E+00	4.61E-07	1.09E-07	3.51E-07	0.00E+00	4.61E-07	1.73E-08	7.04E-08	0.00E+00	8.77E-08	1.04E-08	4.08E-08	0.00E+00	5.13E-08
412	464359.2	3809802	1.07E-07	3.42E-07	0.00E+00	4.49E-07	1.07E-07	3.42E-07	0.00E+00	4.49E-07	1.68E-08	6.85E-08	0.00E+00	8.54E-08	1.02E-08	3.98E-08	0.00E+00	4.99E-08
413	464379.2	3809802	1.04E-07	3.34E-07	0.00E+00	4.38E-07	1.04E-07	3.34E-07	0.00E+00	4.38E-07	1.64E-08	6.68E-08	0.00E+00	8.33E-08	9.91E-09	3.88E-08	0.00E+00	4.87E-08
414	464399.2	3809802	1.01E-07	3.26E-07	0.00E+00	4.27E-07	1.01E-07	3.26E-07	0.00E+00	4.27E-07	1.60E-08	6.52E-08	0.00E+00	8.13E-08	9.67E-09	3.79E-08	0.00E+00	4.75E-08
415	464419.2	3809802	9.91E-08	3.18E-07	0.00E+00	4.17E-07	9.91E-08	3.18E-07	0.00E+00	4.17E-07	1.57E-08	6.37E-08	0.00E+00	7.93E-08	9.44E-09	3.70E-08	0.00E+00	4.64E-08
416	464439.2	3809802	9.67E-08	3.1E-07	0.00E+00	4.07E-07	9.67E-08	3.10E-07	0.00E+00	4.07E-07	1.53E-08	6.22E-08	0.00E+00	7.75E-08	9.22E-09	3.61E-08	0.00E+00	4.53E-08
417	464459.2	3809802	9.43E-08	3.03E-07	0.00E+00	3.97E-07	9.43E-08	3.03E-07	0.00E+00	3.97E-07	1.49E-08	6.06E-08	0.00E+00	7.55E-08	8.99E-09	3.52E-08	0.00E+00	4.42E-08
418	464479.2	3809802	9.2E-08	2.95E-07	0.00E+00	3.87E-07	9.20E-08	2.95E-07	0.00E+00	3.87E-07	1.45E-08	5.92E-08	0.00E+00	7.37E-08	8.77E-09	3.43E-08	0.00E+00	4.31E-08
419	464499.2	3809802	8.99E-08	2.88E-07	0.00E+00	3.78E-07	8.99E-08	2.88E-07	0.00E+00	3.78E-07	1.42E-08	5.78E-08	0.00E+00	7.20E-08	8.57E-09	3.35E-08	0.00E+00	4.21E-08
420	464519.2	3809802	8.79E-08	2.82E-07	0.00E+00	3.70E-07	8.79E-08	2.82E-07	0.00E+00	3.70E-07	1.39E-08	5.65E-08	0.00E+00	7.04E-08	8.38E-09	3.28E-08	0.00E+00	4.12E-08
421	463879.2	3809822	2.06E-07	6.6E-07	0.00E+00	8.66E-07	2.06E-07	6.60E-07	0.00E+00	8.66E-07	3.25E-08	1.32E-07	0.00E+00	1.65E-07	1.96E-08	7.67E-08	0.00E+00	9.63E-08
422	463899.2	3809822	2E-07	6.42E-07	0.00E+00	8.42E-07	2.00E-07	6.42E-07	0.00E+00	8.42E-07	3.16E-08	1.29E-07	0.00E+00	1.60E-07	1.91E-08	7.46E-08	0.00E+00	9.37E-08
423	463919.2	3809822	1.94E-07	6.23E-07	0.00E+00	8.17E-07	1.94E-07	6.23E-07	0.00E+00	8.17E-07	3.07E-08	1.25E-07	0.00E+00	1.56E-07	1.85E-08	7.24E-08	0.00E+00	9.09E-08
424	463939.2	3809822	1.89E-07	6.05E-07	0.00E+00	7.93E-07	1.89E-07	6.05E-07	0.00E+00	7.93E-07	2.98E-08	1.21E-07	0.00E+00	1.51E-07	1.80E-08	7.03E-08	0.00E+00	8.83E-08
425	463959.2	3809822	1.83E-07	5.88E-07	0.00E+00	7.71E-07	1.83E-07	5.88E-07	0.00E+00	7.71E-07	2.90E-08	1.18E-07	0.00E+00	1.47E-07	1.75E

438	464219.2	3809822	1.3E-07	4.18E-07	0.00E+00	5.49E-07	1.30E-07	4.18E-07	0.00E+00	5.49E-07	2.06E-08	8.38E-08	0.00E+00	1.04E-07	1.24E-08	4.86E-08	0.00E+00	6.11E-08
439	464239.2	3809822	1.27E-07	4.07E-07	0.00E+00	5.33E-07	1.27E-07	4.07E-07	0.00E+00	5.33E-07	2.00E-08	8.15E-08	0.00E+00	1.02E-07	1.21E-08	4.73E-08	0.00E+00	5.94E-08
440	464259.2	3809822	1.23E-07	3.96E-07	0.00E+00	5.19E-07	1.23E-07	3.96E-07	0.00E+00	5.19E-07	1.95E-08	7.93E-08	0.00E+00	9.87E-08	1.17E-08	4.60E-08	0.00E+00	5.77E-08
441	464279.2	3809822	1.2E-07	3.84E-07	0.00E+00	5.04E-07	1.20E-07	3.84E-07	0.00E+00	5.04E-07	1.89E-08	7.70E-08	0.00E+00	9.59E-08	1.14E-08	4.47E-08	0.00E+00	5.61E-08
442	464299.2	3809822	1.16E-07	3.73E-07	0.00E+00	4.89E-07	1.16E-07	3.73E-07	0.00E+00	4.89E-07	1.84E-08	7.48E-08	0.00E+00	9.32E-08	1.11E-08	4.34E-08	0.00E+00	5.45E-08
443	464319.2	3809822	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.79E-08	7.27E-08	0.00E+00	9.06E-08	1.08E-08	4.22E-08	0.00E+00	5.30E-08
444	464339.2	3809822	1.1E-07	3.53E-07	0.00E+00	4.63E-07	1.10E-07	3.53E-07	0.00E+00	4.63E-07	1.74E-08	7.08E-08	0.00E+00	8.82E-08	1.05E-08	4.11E-08	0.00E+00	5.16E-08
445	464359.2	3809822	1.07E-07	3.44E-07	0.00E+00	4.52E-07	1.07E-07	3.44E-07	0.00E+00	4.52E-07	1.70E-08	6.90E-08	0.00E+00	8.59E-08	1.02E-08	4.00E-08	0.00E+00	5.02E-08
446	464379.2	3809822	1.05E-07	3.36E-07	0.00E+00	4.40E-07	1.05E-07	3.36E-07	0.00E+00	4.40E-07	1.65E-08	6.73E-08	0.00E+00	8.38E-08	9.97E-09	3.90E-08	0.00E+00	4.90E-08
447	464399.2	3809822	1.02E-07	3.27E-07	0.00E+00	4.29E-07	1.02E-07	3.27E-07	0.00E+00	4.29E-07	1.61E-08	6.55E-08	0.00E+00	8.17E-08	9.72E-09	3.80E-08	0.00E+00	4.77E-08
448	464419.2	3809822	9.94E-08	3.19E-07	0.00E+00	4.18E-07	9.94E-08	3.19E-07	0.00E+00	4.18E-07	1.57E-08	6.39E-08	0.00E+00	7.96E-08	9.48E-09	3.71E-08	0.00E+00	4.66E-08
449	464439.2	3809822	9.71E-08	3.11E-07	0.00E+00	4.09E-07	9.71E-08	3.11E-07	0.00E+00	4.09E-07	1.53E-08	6.24E-08	0.00E+00	7.78E-08	9.25E-09	3.62E-08	0.00E+00	4.55E-08
450	464459.2	3809822	9.47E-08	3.04E-07	0.00E+00	3.99E-07	9.47E-08	3.04E-07	0.00E+00	3.99E-07	1.50E-08	6.09E-08	0.00E+00	7.59E-08	9.03E-09	3.53E-08	0.00E+00	4.44E-08
451	464479.2	3809822	9.24E-08	2.96E-07	0.00E+00	3.89E-07	9.24E-08	2.96E-07	0.00E+00	3.89E-07	1.46E-08	5.94E-08	0.00E+00	7.40E-08	8.81E-09	3.45E-08	0.00E+00	4.33E-08
452	464499.2	3809822	9.02E-08	2.89E-07	0.00E+00	3.80E-07	9.02E-08	2.89E-07	0.00E+00	3.80E-07	1.43E-08	5.80E-08	0.00E+00	7.22E-08	8.60E-09	3.36E-08	0.00E+00	4.22E-08
453	464519.2	3809822	8.82E-08	2.83E-07	0.00E+00	3.71E-07	8.82E-08	2.83E-07	0.00E+00	3.71E-07	1.39E-08	5.67E-08	0.00E+00	7.06E-08	8.40E-09	3.29E-08	0.00E+00	4.13E-08
454	463899.2	3809842	2E-07	6.41E-07	0.00E+00	8.41E-07	2.00E-07	6.41E-07	0.00E+00	8.41E-07	3.16E-08	1.28E-07	0.00E+00	1.60E-07	1.90E-08	7.45E-08	0.00E+00	9.36E-08
455	463919.2	3809842	1.94E-07	6.21E-07	0.00E+00	8.15E-07	1.94E-07	6.21E-07	0.00E+00	8.15E-07	3.06E-08	1.25E-07	0.00E+00	1.55E-07	1.85E-08	7.23E-08	0.00E+00	9.07E-08
456	463939.2	3809842	1.88E-07	6.03E-07	0.00E+00	7.92E-07	1.88E-07	6.03E-07	0.00E+00	7.92E-07	2.97E-08	1.21E-07	0.00E+00	1.51E-07	1.79E-08	7.02E-08	0.00E+00	8.81E-08
457	463959.2	3809842	1.83E-07	5.87E-07	0.00E+00	7.70E-07	1.83E-07	5.87E-07	0.00E+00	7.70E-07	2.89E-08	1.18E-07	0.00E+00	1.46E-07	1.74E-08	6.82E-08	0.00E+00	8.56E-08
458	463979.2	3809842	1.78E-07	5.73E-07	0.00E+00	7.51E-07	1.78E-07	5.73E-07	0.00E+00	7.51E-07	2.82E-08	1.15E-07	0.00E+00	1.43E-07	1.70E-08	6.66E-08	0.00E+00	8.36E-08
459	463999.2	3809842	1.74E-07	5.59E-07	0.00E+00	7.34E-07	1.74E-07	5.59E-07	0.00E+00	7.34E-07	2.75E-08	1.12E-07	0.00E+00	1.40E-07	1.66E-08	6.50E-08	0.00E+00	8.16E-08
460	464019.2	3809842	1.7E-07	5.47E-07	0.00E+00	7.17E-07	1.70E-07	5.47E-07	0.00E+00	7.17E-07	2.69E-08	1.10E-07	0.00E+00	1.36E-07	1.62E-08	6.36E-08	0.00E+00	7.98E-08
461	464039.2	3809842	1.67E-07	5.37E-07	0.00E+00	7.04E-07	1.67E-07	5.37E-07	0.00E+00	7.04E-07	2.64E-08	1.08E-07	0.00E+00	1.34E-07	1.60E-08	6.24E-08	0.00E+00	7.84E-08
462	464059.2	3809842	1.64E-07	5.27E-07	0.00E+00	6.91E-07	1.64E-07	5.27E-07	0.00E+00	6.91E-07	2.59E-08	1.06E-07	0.00E+00	1.31E-07	1.56E-08	6.12E-08	0.00E+00	7.69E-08
463	464079.2	3809842	1.61E-07	5.16E-07	0.00E+00	6.76E-07	1.61E-07	5.16E-07	0.00E+00	6.76E-07	2.54E-08	1.03E-07	0.00E+00	1.29E-07	1.53E-08	6.00E-08	0.00E+00	7.53E-08
464	464099.2	3809842	1.57E-07	5.03E-07	0.00E+00	6.60E-07	1.57E-07	5.03E-07	0.00E+00	6.60E-07	2.48E-08	1.01E-07	0.00E+00	1.26E-07	1.49E-08	5.85E-08	0.00E+00	7.34E-08
465	464119.2	3809842	1.52E-07	4.89E-07	0.00E+00	6.42E-07	1.52E-07	4.89E-07	0.00E+00	6.42E-07	2.41E-08	9.80E-08	0.00E+00	1.22E-07	1.45E-08	5.69E-08	0.00E+00	7.14E-08
466	464139.2	3809842	1.48E-07	4.75E-07	0.00E+00	6.22E-07	1.48E-07	4.75E-07	0.00E+00	6.22E-07	2.34E-08	9.51E-08	0.00E+00	1.18E-07	1.41E-08	5.52E-08	0.00E+00	6.93E-08
467	464159.2	3809842	1.44E-07	4.6E-07	0.00E+00	6.04E-07	1.44E-07	4.60E-07	0.00E+00	6.04E-07	2.27E-08	9.22E-08	0.00E+00	1.15E-07	1.37E-08	5.35E-08	0.00E+00	6.72E-08
468	464179.2	3809842	1.39E-07	4.46E-07	0.00E+00	5.86E-07	1.39E-07	4.46E-07	0.00E+00	5.86E-07	2.20E-08	8.95E-08	0.00E+00	1.11E-07	1.33E-08	5.19E-08	0.00E+00	6.52E-08
469	464199.2	3809842	1.35E-07	4.33E-07	0.00E+00	5.67E-07	1.35E-07	4.33E-07	0.00E+00	5.67E-07	2.13E-08	8.67E-08	0.00E+00	1.08E-07	1.29E-08	5.03E-08	0.00E+00	6.32E-08
470	464219.2	3809842	1.31E-07	4.2E-07	0.00E+00	5.51E-07	1.31E-07	4.20E-07	0.00E+00	5.51E-07	2.07E-08	8.42E-08	0.00E+00	1.05E-07	1.25E-08	4.89E-08	0.00E+00	6.14E-08
471	464239.2	3809842	1.27E-07	4.09E-07	0.00E+00	5.36E-07	1.27E-07	4.09E-07	0.00E+00	5.36E-07	2.01E-08	8.19E-08	0.00E+00	1.02E-07	1.21E-08	4.75E-08	0.00E+00	5.96E-08
472	464259.2	3809842	1.24E-07	3.97E-07	0.00E+00	5.21E-07	1.24E-07	3.97E-07	0.00E+00	5.21E-07	1.96E-08	7.96E-08	0.00E+00	9.92E-08	1.18E-08	4.62E-08	0.00E+00	5.80E-08
473	464279.2	3809842	1.2E-07	3.86E-07	0.00E+00	5.06E-07	1.20E-07	3.86E-07	0.00E+00	5.06E-07	1.90E-08	7.73E-08	0.00E+00	9.63E-08	1.15E-08	4.49E-08	0.00E+00	5.63E-08
474	464299.2	3809842	1.17E-07	3.75E-07	0.00E+00	4.92E-07	1.17E-07	3.75E-07	0.00E+00	4.92E-07	1.85E-08	7.51E-08	0.00E+00	9.36E-08	1.11E-08	4.36E-08	0.00E+00	5.47E-08
475	464319.2	3809842	1.14E-07	3.64E-07	0.00E+00	4.78E-07	1.14E-07	3.64E-07	0.00E+00	4.78E-07	1.79E-08	7.30E-08	0.00E+00	9.09E-08	1.08E-08	4.24E-08	0.00E+00	5.32E-08
476	464339.2	3809842	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.75E-08	7.11E-08	0.00E+00	8.86E-08	1.05E-08	4.12E-08	0.00E+00	5.18E-08
477	464359.2	3809842	1.08E-07	3.46E-07	0.00E+00	4.53E-07	1.08E-07	3.46E-07	0.00E+00	4.53E-07	1.70E-08	6.93E-08	0.00E+00	8.63E-08	1.03E-08	4.02E-08	0.00E+00	5.05E-08
478	464379.2	3809842	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.75E-08	0.00E+00	8.41E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
479	464399.2	3809842	1.02E-07	3.28E-07	0.00E+00	4.30E-07	1.02E-07	3.28E-07	0.00E+00	4.30E-07	1.62E-08	6.57E-08	0.00E+00	8.19E-08	9.75E-09	3.81E-08	0.00E+00	4.79E-08
480	464419.2	3809842	9.97E-08	3.2E-07	0.00E+00	4.20E-07	9.97E-08	3.20E-07	0.00E+00	4.20E-07	1.58E-08	6.41E-08	0.00E+00	7.98E-08	9.50E-09	3.72E-08	0.00E+00	4.67E-08
481	464439.2	3809842	9.73E-08	3.12E-07	0.00E+00	4.10E-07	9.73E-08	3.12E-07	0.00E+00	4.10E-07	1.54E-08	6.26E-08	0.00E+00	7.79E-08	9.27E-09	3.63E-08	0.00E+00	4.56E-08
482	464459.2	3809842	9.5E-08	3.05E-07	0.00E+00	4.00E-07	9.50E-08	3.05E-07	0.00E+00	4.00E-07	1.50E-08	6.11E-08	0.00E+00	7.61E-08	9.05E-09	3.54E-08	0.00E+00	4.45E-08
483	464479.2	3809842	9.27E-08	2.97E-07	0.00E+00	3.90E-07	9.27E-08	2.97E-07	0.00E+00	3.90E-07	1.46E-08	5.96E-08	0.00E+00	7.42E-08	8.83E-09	3.46E-08	0.00E+00	4.34E-08
484	464499.2	3809842	9.04E-08	2.9E-07	0.00E+00	3.80E-07	9.04E-08	2.90E-07	0.00E+00	3.80E-07	1.43E-08	5.81E-08	0.00E+00	7.24E-08	8.61E-09	3.37E-08	0.00E+00	4.23E-08
485	464519.2	3809842	8.83E-08	2.83E-07	0.00E+00	3.72E-07	8.83E-08	2.83E-07	0.00E+00	3.72E-07	1.40E-08	5.68E-08	0.00E+00	7.07E-08	8.42E-09	3.29E-08	0.00E+00	4.14E-08
486	463919.2	3809862	1.93E-07	6.19E-07	0.00E+00	8.12E-07	1.93E-07	6.19E-07	0.00E+00	8.12E-07	3.05E-08	1.24E-07	0.00E+00	1.55E-07	1.84E-08	7.20E-08	0.00E+00	9.04E-08
487	463939.2	3809862	1.87E-07	6.01E-07	0.00E+00	7.89E-07	1.87E-07	6.01E-07	0.00E+00	7.89E-07	2.96E-08	1.21E-07	0.00E+00	1.50E-07	1.79E-08	6.99E-08	0.00E+00	8.78E-08
488	463959.2	3809862	1.83E-07	5.87E-07	0.00E+00	7.69E-07	1.83E-07	5.87E-07	0.00E+00	7.69E-07	2.89E-08	1.18E-07	0.00E+00	1.46E-07	1.74E-08	6.82E-08	0.00E+00	8.56E-08
489	463979.2	3809862	1.78E-07	5.7E-07	0.00E+00	7.48E-07	1.78E-07	5.70E-07	0.00E+00	7.48E-07	2.81E-08	1.14E-07	0.00E+00	1.42E-07	1.69E-08	6.63E-08	0.00E+00	8.32E-08
490	463999.2	3809862	1.73E-07	5.56E-07	0.00E+00	7.29E-07	1.73E-07	5.56E-07	0.00E+00	7.29E-07	2.74E-08	1.11E-07	0.00E+00	1.39E-07	1.65E-08	6.46E-08	0.00E+00	8.11E-08
491	464019.2	3809862	1.69E-07	5.43E-07	0.00E+00	7.12E-07	1.69E-07	5.43E-07	0.00E+00	7.12E-07	2.67E-08	1.09E-07	0.00E+00	1.36E-07	1.61E-08	6.31E-08	0.00E+00	7.93E-08
492	464039.2	3809862	1.66E-07	5.34E-07	0.00E+00	7.00E-07	1.66E-07	5.34E-07	0.00E+00	7.00E-07	2.63E-08	1.07E-07	0.00E+00	1.33E-07	1.59E-08	6.20E-08	0.00E+00	7.79E-08
493	464059.2	3809862	1.63E-07	5.23E-07	0.00E+00	6.86E-07	1.63E-07	5.23E-07	0.00E+00	6.86E-07	2.58E-08	1.05E-07	0.00E+00	1.31E-07	1.55E-08	6.08E-08	0.00E+00	7.64E-08
494	464079.2	3809862	1.59E-07	5.11E-07	0.00E+00	6.71E-07	1.59E-07	5.11E-07	0.00E+00	6.71E-07	2.52E-08	1.02E-07	0.00E+00	1.28E-07	1.52E-08	5.95E-08	0.00E+00	7.46E-08
495	464099.2	3809862	1.56E-07	4.99E-07	0.00E+00	6.55E-07	1.56E-07	4.99E-07	0.00E+00	6.55E-07	2.46E-08	1.00E-07	0.00E+00	1.25E-07	1.48E-08	5.81E-08	0.00E+00	7.29E-08
496	464119.2	3809862	1.52E-07	4.87E-07	0.00E+00	6.38E-07	1.52E-07	4.87E-07	0.00E+00	6.38E-07	2.40E-08	9.75E-08	0.00E+00	1.21E-07	1.45E-08	5.66E-08	0.00E+00	7.10E-08
497	464139.2	3809862	1.48E-07	4.73E-07	0.00E+00	6.21E-07	1.48E-07	4.73E-07	0.00E+00	6.21E-07	2.33E-08	9.48E-08	0.00E+00	1.18E-07	1.41E-08	5.50E-08	0.00E+00	6.91E-08
498	464159.2	3809862	1.43E-07	4.59E-07	0.00E+00	6.02E-07	1.43E-07	4.59E-07	0.00E+00	6.02E-07	2.26E-08	9.20E-08	0.00E+00	1.15E-07	1.36E-08	5.34E-08	0.00E+00	6.70E-08
499	464179.2	3809862	1.39E-07	4.45E-07	0.00E+00	5.84E-07	1.39E-07	4.45E-07	0.00E+00	5.84E-07	2.19E-08	8.93E-08	0.00E+00	1.11E-07	1.32E-08	5.18E-08	0.00E+00	6.50E-08
500	464199.2	3809862	1.35E-07	4.32E-07	0.00E+00	5.67E-07	1.35E-07	4.32E-07	0.00E+00	5.67E-07	2.13E-08	8.66E-08	0.00E+00	1.08E-07	1.28E-08	5.03E-08	0.00E+00	6.31E-08
501	464219.2	3809862	1.31E-07	4.2E-07	0.00E+00	5.51E-07	1.31E-07	4.20E-07	0.00E+00	5.51E-07	2.07E-08	8.42E-08	0.00E+00	1.05E-07	1.25E-08	4.88E-08	0.00E+00	6.13E-08
502	464239.2	3809862	1.27E-07	4.08E-07	0.00E+00	5.36E-07	1.27E-07	4.08E-07	0.00E+00	5.36E-07	2.01E-08	8.18E-08	0.00E+00	1.02E-07	1.21E-08	4.75E-08	0.00E+00	5.96E-08
503	464259.2	3809862	1.24E-07	3.97E-07	0.00E+00	5.21E-07	1.24E-07	3.97E-07	0.00E+00	5.21E-07	1.96E-08	7.96E-08	0.00E+00	9.91E-08	1.18E-08	4.62E-08	0.00E+00	5.80E-08
504	464279.2	3809862	1.2E-07	3.86E-07	0.00E+00	5.07E-07	1.20E-07	3.86E-07	0.00E+00	5.07E-07	1.90E-08	7.74E-08	0.00E+00	9.64E-08	1.15E-08	4.49E-08	0.00E+00	5.64E-08
505	464299.2	3809862	1.17E-07	3.76E-07	0.00E+00	4.93E-07	1.17E-07	3.76E-07	0.00E+00	4.93E-07	1.85E-08	7.53E-08	0.00E+00	9.38E-08	1.12E-08	4.37E-08	0.00E+00	5.48E-08
506	464319.2	3809862	1.14E-07	3.66E-07	0.00E+00	4.80E-07	1.14E-07	3.66E-07	0.00E+00	4.80E-07	1.80E-08	7.33E-08	0.00E+00	9.13E-08	1.09E-08	4.25E-08	0.00E+00	5.34E-08
507	464339.2	3809862	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.75E-08	7.12E-08	0.00E+00	8.87E-08	1.06E-08	4.13E-08	0.00E+00	5.19E-08
508	464359.2	3809862	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.70E-08	6.93E-08	0.00E+00	8.64E-08	1.03E-08	4.02E-08	0.00E+00	5.05E-08
509	464379.2	3809862	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.76E-08	0.00E+00	8.42E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
510	464399.2	3809862	1.03E-07	3.29E-07	0.00E+00	4.31E-07	1.03E-07	3.29E-07	0.00E+00	4.31E-07	1.62E-08	6.59E-08	0.00E+00	8.21E-08	9.77E-09	3.82E-08	0.00E+00	4.80E-08
511	464419.2	3809862	1E-07	3.21E-07	0.00E+00	4.21E-07	1.00E-07	3.21E-07	0.00E+00	4.21E-07	1.58E-08	6.43E-08	0.00E+00	8.01E-08	9.53E-09	3.73E-08	0.00E+00	4.68E-08
512	464439.2	3809862	9.76E-08	3.13E-07	0.00E+00	4.11E-07	9.76E-08	3.13E-07	0.00E+00	4.11E-07	1.54E-08	6.27E-08	0.00E+00	7.82E-08	9.30E-09	3.64E-08	0.00E+00	4.57E-08
513	464459.2	3809862	9.51E-08	3.05E-07	0.00E+00	4.00E-07	9.51E-08	3.05E-07	0.00E+00	4.00E-07	1.50E-08	6.11E-08	0.00E+00	7.62E-08	9.06E-09	3.55E-08	0.00E+00	4.45E-08
514	464479.2	3809862	9.27E-08	2.98E-07	0.00E+00	3.90E-07	9.27E-08	2.98E-07	0.00E+00	3.90E-07	1.47E-08	5.96E-08	0.00E+00	7.43E-08	8.84E-09	3.46E-08	0.00E+00	4.34E-08
515	464499.2	3809862	9.06E-08	2.91E-07	0.00E+00	3.81E-07	9.06E-08	2.91E-07	0.00E+00	3.81E-07	1.43E-08	5.82E-08	0.00E+00	7.25E-08	8.63E-09	3.38E-08	0.00E+00	4.24E-08
516	464519.2	3809862	8.85E-08	2.84E-07	0.00E+00	3.73E-07	8.85E-08	2.84E-07	0.00E+00	3.73E-07	1.40E-08	5.69E-08	0.00E+00	7.09E-08	8.44E-09	3.30E-08	0.00E+00	4.15E-08
517	463959.2	3809882	1.82E-07	5.83E-07	0.00E+00	7.65E-07	1.82E-07	5.83E-07	0.00E+00	7.65E-07	2.87E-08	1.17E-07	0.00E+00	1.46E-07	1.73E-08	6.78E-08	0.00E+00	8.51E-08
518	463979.2	3809882	1.77E-07	5.68E-07	0.00E+00	7.44E-07	1.77E-07	5.68E-07	0.00E+00	7.44E-07	2.80E-08	1.14E-07	0.00E+00	1.42E-07	1.69E-08	6.60E-08	0.00E+00	8.28E-08
519	463999.2	3809882	1.73E-07	5.53E-07	0.00E+00	7.26E-07	1.73E-07	5.53E-07	0.00E+00	7.26E-07	2.73E-08	1.11E-07	0.00E+00	1.38E-07	1.64E-08	6.44E-08	0.00E+00	8.08E-08
520	464019.2	3809882	1.69E-07	5.41E-07	0.00E+00	7.09E-07	1.69E-07	5.41E-07	0.00E+00	7.09E-07	2.66E-08	1.08E-07	0.00E+00	1.35E-07	1.61E-08	6.29E-08	0.00E+00	7.89E-08
521	464039.2	3809882	1.65E-07	5.3E-07	0.00E+00	6.95E-07	1.65E-07	5.30E-07	0.00E+00	6.95E-07	2.61E-08	1.06E-07	0.00E+00	1.32E-07	1.57E-08	6.16E-08	0.00E+00	7.73E-08
522	464059.2	3809882	1.62E-07	5.19E-07	0.00E+00	6.80E-07	1.62E-07	5.19E-07	0.00E+00	6.80E-07	2.55E-08	1.04E-07	0.00E+00	1.29E-07	1.54E-08	6.03E-08	0.00E+00	7.57E-08
523	464079.2	3809882	1.58E-07	5.07E-07	0.00E+00	6.65E-07	1.58E-07	5.07E-07	0.00E+00	6.65E-07	2.50E-08	1.02E-07	0.00E+00	1.27E-07	1.51E-08	5.90E-08	0.00E+00	7.40E-08
524	464099.2	3809882	1.54E-07	4.96E-07	0.00E+00	6.50E-07	1.54E-07	4.96E-07	0.00E+00	6.50E-07	2.44E-08	9.93E-08	0.00E+00	1.24E-07	1.47E-08	5.76E-08	0.00E+00	7.23E-08
525	464119.2	3809882	1.51E-07	4.83E-07	0.00E+00	6.34E-07	1.51E-07	4.83E-07	0.00E+00	6.34E-07	2.38E-08	9.69E-08	0.00E+00	1.21E-07	1.44E-08	5.62E-08	0.00E+00	7.06E-08
526	464139.2	3809882	1.47E-07	4.7E-07	0.00E+00	6.17E-07	1.47E-07	4.70E-07	0.00E+00	6.17E-07	2.32E-08	9.43E-08	0.00E+00	1.17E-07	1.40E-08	5.47E-08	0.00E+00	6.87E-08
527	464159.2	3809882	1.42E-07	4.56E-07	0.00E+00	5.99E-07	1.42E-07	4.56E-07	0.00E+00	5.99E-07	2.25E-08	9.14E-08	0.00E+00	1.14E-07	1.36E-08	5.31E-08	0.00E+00	6.66E-08
528	464179.2	3809882	1.38E-07	4.43E-07	0.00E+00	5.81E-07	1.38E-07	4.43E-07	0.00E+00	5.81E-07	2.18E-08	8.88E-08	0.00E+00	1.11E-07	1.32E-08	5.15E-08	0.00E+00	6.47E-08
529	464199.2	3809882	1.34E-07	4.31E-07	0.00E+00	5.66E-07	1.34E-07	4.31E-07	0.00E+00	5.66E-07	2.12E-08	8.64E-08	0.00E+00	1.08E-07	1.28E-08	5.01E-08	0.00E+00	6.29E-08
530	464219.2	3809882	1.31E-07	4.19E-07	0.00E+00	5.49E-07	1.31E-07	4.19E-07	0.00E+00	5.49E-07	2.06E-08	8.39E-08	0.00E+00	1.05E-07	1.24E-08	4.87E-08	0.00E+00	6.12E-08
531	464239.2	3809882	1.27E-07	4.07E-07	0.00E+00	5.34E-07	1.27E-07	4.07E-07	0.00E+00	5.34E-07	2.01E-08	8.16E-08	0.00E+00	1.02E-07	1.21E-08	4.73E-08	0.00E+00	5.94E-08
532	464259.2	3809882	1.23E-07	3.96E-07	0.00E+00	5.19E-07	1.23E-07	3.96E-07	0.00E+00	5.19E-07	1.95E-08	7.93E-08	0.00E+00	9.88E-08	1.18E-08	4.60E-08	0.00E+00	5.78E-08
533	464279.2	3809882	1.2E-07	3.86E-07	0.00E+00	5.06E-07	1.20E-07	3.86E-07	0.00E+00	5.06E-07	1.90E-08	7.73E-08	0.00E+00	9.63E-08	1.15E-08	4.49E-08	0.00E+00	5.63E-08
534	464299.2	3809882	1.17E-07	3.76E-07	0.00E+00	4.93E-07	1.17E-07	3.76E-07	0.00E+00	4.93E-07	1.85E-08	7.53E-08	0.00E+00	9.38E-08	1.12E-08	4.37E-08	0.00E+00	5.48E-08
535	464319.2	3809882	1.14E-07	3.66E-07	0.00E+00	4.80E-07	1.14E-07	3.66E-07	0.00E+00	4.80E-07	1.80E-08	7.33E-08	0.00E+00	9.13E-08	1.

548	464099.2	3809902	1.53E-07	4.91E-07	0.00E+00	6.44E-07	1.53E-07	4.91E-07	0.00E+00	6.44E-07	2.42E-08	9.84E-08	0.00E+00	1.23E-07	1.46E-08	5.71E-08	0.00E+00	7.17E-08
549	464119.2	3809902	1.49E-07	4.79E-07	0.00E+00	6.29E-07	1.49E-07	4.79E-07	0.00E+00	6.29E-07	2.36E-08	9.60E-08	0.00E+00	1.20E-07	1.42E-08	5.57E-08	0.00E+00	6.99E-08
550	464139.2	3809902	1.46E-07	4.67E-07	0.00E+00	6.12E-07	1.46E-07	4.67E-07	0.00E+00	6.12E-07	2.30E-08	9.36E-08	0.00E+00	1.17E-07	1.39E-08	5.43E-08	0.00E+00	6.82E-08
551	464159.2	3809902	1.41E-07	4.53E-07	0.00E+00	5.95E-07	1.41E-07	4.53E-07	0.00E+00	5.95E-07	2.23E-08	9.08E-08	0.00E+00	1.13E-07	1.35E-08	5.27E-08	0.00E+00	6.62E-08
552	464179.2	3809902	1.37E-07	4.41E-07	0.00E+00	5.78E-07	1.37E-07	4.41E-07	0.00E+00	5.78E-07	2.17E-08	8.84E-08	0.00E+00	1.10E-07	1.31E-08	5.13E-08	0.00E+00	6.44E-08
553	464199.2	3809902	1.34E-07	4.3E-07	0.00E+00	5.64E-07	1.34E-07	4.30E-07	0.00E+00	5.64E-07	2.12E-08	8.61E-08	0.00E+00	1.07E-07	1.28E-08	5.00E-08	0.00E+00	6.27E-08
554	464219.2	3809902	1.3E-07	4.17E-07	0.00E+00	5.48E-07	1.30E-07	4.17E-07	0.00E+00	5.48E-07	2.06E-08	8.36E-08	0.00E+00	1.04E-07	1.24E-08	4.85E-08	0.00E+00	6.09E-08
555	464239.2	3809902	1.26E-07	4.06E-07	0.00E+00	5.32E-07	1.26E-07	4.06E-07	0.00E+00	5.32E-07	2.00E-08	8.13E-08	0.00E+00	1.01E-07	1.21E-08	4.72E-08	0.00E+00	5.92E-08
556	464259.2	3809902	1.23E-07	3.95E-07	0.00E+00	5.18E-07	1.23E-07	3.95E-07	0.00E+00	5.18E-07	1.94E-08	7.91E-08	0.00E+00	9.86E-08	1.17E-08	4.59E-08	0.00E+00	5.76E-08
557	464279.2	3809902	1.2E-07	3.85E-07	0.00E+00	5.05E-07	1.20E-07	3.85E-07	0.00E+00	5.05E-07	1.90E-08	7.71E-08	0.00E+00	9.61E-08	1.14E-08	4.48E-08	0.00E+00	5.62E-08
558	464299.2	3809902	1.17E-07	3.75E-07	0.00E+00	4.92E-07	1.17E-07	3.75E-07	0.00E+00	4.92E-07	1.85E-08	7.52E-08	0.00E+00	9.37E-08	1.11E-08	4.36E-08	0.00E+00	5.48E-08
559	464319.2	3809902	1.14E-07	3.65E-07	0.00E+00	4.79E-07	1.14E-07	3.65E-07	0.00E+00	4.79E-07	1.80E-08	7.32E-08	0.00E+00	9.12E-08	1.08E-08	4.25E-08	0.00E+00	5.33E-08
560	464339.2	3809902	1.11E-07	3.56E-07	0.00E+00	4.67E-07	1.11E-07	3.56E-07	0.00E+00	4.67E-07	1.75E-08	7.13E-08	0.00E+00	8.88E-08	1.06E-08	4.14E-08	0.00E+00	5.19E-08
561	464359.2	3809902	1.08E-07	3.47E-07	0.00E+00	4.55E-07	1.08E-07	3.47E-07	0.00E+00	4.55E-07	1.71E-08	6.94E-08	0.00E+00	8.65E-08	1.03E-08	4.03E-08	0.00E+00	5.06E-08
562	464379.2	3809902	1.05E-07	3.38E-07	0.00E+00	4.43E-07	1.05E-07	3.38E-07	0.00E+00	4.43E-07	1.66E-08	6.77E-08	0.00E+00	8.43E-08	1.00E-08	3.93E-08	0.00E+00	4.93E-08
563	464399.2	3809902	1.03E-07	3.29E-07	0.00E+00	4.32E-07	1.03E-07	3.29E-07	0.00E+00	4.32E-07	1.62E-08	6.60E-08	0.00E+00	8.22E-08	9.78E-09	3.83E-08	0.00E+00	4.81E-08
564	464419.2	3809902	1E-07	3.21E-07	0.00E+00	4.21E-07	1.00E-07	3.21E-07	0.00E+00	4.21E-07	1.58E-08	6.43E-08	0.00E+00	8.01E-08	9.53E-09	3.73E-08	0.00E+00	4.69E-08
565	464439.2	3809902	9.74E-08	3.13E-07	0.00E+00	4.10E-07	9.74E-08	3.13E-07	0.00E+00	4.10E-07	1.54E-08	6.26E-08	0.00E+00	7.80E-08	9.28E-09	3.63E-08	0.00E+00	4.56E-08
566	464459.2	3809902	9.51E-08	3.05E-07	0.00E+00	4.00E-07	9.51E-08	3.05E-07	0.00E+00	4.00E-07	1.50E-08	6.11E-08	0.00E+00	7.62E-08	9.06E-09	3.55E-08	0.00E+00	4.45E-08
567	464479.2	3809902	9.28E-08	2.98E-07	0.00E+00	3.91E-07	9.28E-08	2.98E-07	0.00E+00	3.91E-07	1.47E-08	5.97E-08	0.00E+00	7.44E-08	8.85E-09	3.46E-08	0.00E+00	4.35E-08
568	464499.2	3809902	9.06E-08	2.91E-07	0.00E+00	3.81E-07	9.06E-08	2.91E-07	0.00E+00	3.81E-07	1.43E-08	5.83E-08	0.00E+00	7.26E-08	8.64E-09	3.38E-08	0.00E+00	4.24E-08
569	464519.2	3809902	8.84E-08	2.84E-07	0.00E+00	3.72E-07	8.84E-08	2.84E-07	0.00E+00	3.72E-07	1.40E-08	5.68E-08	0.00E+00	7.08E-08	8.42E-09	3.30E-08	0.00E+00	4.14E-08
570	464079.2	3809922	1.56E-07	4.99E-07	0.00E+00	6.55E-07	1.56E-07	4.99E-07	0.00E+00	6.55E-07	2.46E-08	1.00E-07	0.00E+00	1.25E-07	1.48E-08	5.81E-08	0.00E+00	7.29E-08
571	464099.2	3809922	1.52E-07	4.86E-07	0.00E+00	6.38E-07	1.52E-07	4.86E-07	0.00E+00	6.38E-07	2.40E-08	9.75E-08	0.00E+00	1.21E-07	1.44E-08	5.65E-08	0.00E+00	7.10E-08
572	464119.2	3809922	1.48E-07	4.74E-07	0.00E+00	6.22E-07	1.48E-07	4.74E-07	0.00E+00	6.22E-07	2.34E-08	9.51E-08	0.00E+00	1.18E-07	1.41E-08	5.52E-08	0.00E+00	6.93E-08
573	464139.2	3809922	1.45E-07	4.64E-07	0.00E+00	6.08E-07	1.45E-07	4.64E-07	0.00E+00	6.08E-07	2.28E-08	9.30E-08	0.00E+00	1.16E-07	1.38E-08	5.39E-08	0.00E+00	6.77E-08
574	464159.2	3809922	1.41E-07	4.52E-07	0.00E+00	5.92E-07	1.41E-07	4.52E-07	0.00E+00	5.92E-07	2.22E-08	9.05E-08	0.00E+00	1.13E-07	1.34E-08	5.25E-08	0.00E+00	6.59E-08
575	464179.2	3809922	1.37E-07	4.4E-07	0.00E+00	5.77E-07	1.37E-07	4.40E-07	0.00E+00	5.77E-07	2.17E-08	8.82E-08	0.00E+00	1.10E-07	1.31E-08	5.11E-08	0.00E+00	6.42E-08
576	464199.2	3809922	1.34E-07	4.29E-07	0.00E+00	5.62E-07	1.34E-07	4.29E-07	0.00E+00	5.62E-07	2.11E-08	8.59E-08	0.00E+00	1.07E-07	1.27E-08	4.98E-08	0.00E+00	6.26E-08
577	464219.2	3809922	1.3E-07	4.16E-07	0.00E+00	5.46E-07	1.30E-07	4.16E-07	0.00E+00	5.46E-07	2.05E-08	8.34E-08	0.00E+00	1.04E-07	1.24E-08	4.84E-08	0.00E+00	6.08E-08
578	464239.2	3809922	1.26E-07	4.05E-07	0.00E+00	5.31E-07	1.26E-07	4.05E-07	0.00E+00	5.31E-07	2.00E-08	8.12E-08	0.00E+00	1.01E-07	1.20E-08	4.71E-08	0.00E+00	5.91E-08
579	464259.2	3809922	1.23E-07	3.95E-07	0.00E+00	5.18E-07	1.23E-07	3.95E-07	0.00E+00	5.18E-07	1.95E-08	7.92E-08	0.00E+00	9.86E-08	1.17E-08	4.59E-08	0.00E+00	5.77E-08
580	464279.2	3809922	1.2E-07	3.84E-07	0.00E+00	5.04E-07	1.20E-07	3.84E-07	0.00E+00	5.04E-07	1.89E-08	7.70E-08	0.00E+00	9.60E-08	1.14E-08	4.47E-08	0.00E+00	5.61E-08
581	464299.2	3809922	1.17E-07	3.74E-07	0.00E+00	4.91E-07	1.17E-07	3.74E-07	0.00E+00	4.91E-07	1.84E-08	7.50E-08	0.00E+00	9.34E-08	1.11E-08	4.35E-08	0.00E+00	5.46E-08
582	464319.2	3809922	1.14E-07	3.64E-07	0.00E+00	4.78E-07	1.14E-07	3.64E-07	0.00E+00	4.78E-07	1.79E-08	7.30E-08	0.00E+00	9.09E-08	1.08E-08	4.23E-08	0.00E+00	5.32E-08
583	464339.2	3809922	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.11E-07	3.55E-07	0.00E+00	4.65E-07	1.75E-08	7.11E-08	0.00E+00	8.85E-08	1.05E-08	4.12E-08	0.00E+00	5.18E-08
584	464359.2	3809922	1.08E-07	3.46E-07	0.00E+00	4.53E-07	1.08E-07	3.46E-07	0.00E+00	4.53E-07	1.70E-08	6.92E-08	0.00E+00	8.63E-08	1.03E-08	4.02E-08	0.00E+00	5.04E-08
585	464379.2	3809922	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.05E-07	3.37E-07	0.00E+00	4.42E-07	1.66E-08	6.75E-08	0.00E+00	8.41E-08	1.00E-08	3.92E-08	0.00E+00	4.92E-08
586	464399.2	3809922	1.02E-07	3.28E-07	0.00E+00	4.31E-07	1.02E-07	3.28E-07	0.00E+00	4.31E-07	1.62E-08	6.58E-08	0.00E+00	8.20E-08	9.75E-09	3.82E-08	0.00E+00	4.79E-08
587	464419.2	3809922	9.98E-08	3.2E-07	0.00E+00	4.20E-07	9.98E-08	3.20E-07	0.00E+00	4.20E-07	1.58E-08	6.42E-08	0.00E+00	7.99E-08	9.51E-09	3.72E-08	0.00E+00	4.67E-08
588	464439.2	3809922	9.74E-08	3.12E-07	0.00E+00	4.10E-07	9.74E-08	3.12E-07	0.00E+00	4.10E-07	1.54E-08	6.26E-08	0.00E+00	7.80E-08	9.28E-09	3.63E-08	0.00E+00	4.56E-08
589	464459.2	3809922	9.5E-08	3.05E-07	0.00E+00	4.00E-07	9.50E-08	3.05E-07	0.00E+00	4.00E-07	1.50E-08	6.11E-08	0.00E+00	7.61E-08	9.06E-09	3.54E-08	0.00E+00	4.45E-08
590	464479.2	3809922	9.27E-08	2.97E-07	0.00E+00	3.90E-07	9.27E-08	2.97E-07	0.00E+00	3.90E-07	1.46E-08	5.96E-08	0.00E+00	7.42E-08	8.83E-09	3.46E-08	0.00E+00	4.34E-08
591	464499.2	3809922	9.03E-08	2.9E-07	0.00E+00	3.80E-07	9.03E-08	2.90E-07	0.00E+00	3.80E-07	1.43E-08	5.81E-08	0.00E+00	7.23E-08	8.61E-09	3.37E-08	0.00E+00	4.23E-08
592	464519.2	3809922	8.82E-08	2.83E-07	0.00E+00	3.71E-07	8.82E-08	2.83E-07	0.00E+00	3.71E-07	1.39E-08	5.67E-08	0.00E+00	7.07E-08	8.41E-09	3.29E-08	0.00E+00	4.13E-08
593	464099.2	3809942	1.5E-07	4.8E-07	0.00E+00	6.29E-07	1.50E-07	4.80E-07	0.00E+00	6.29E-07	2.36E-08	9.61E-08	0.00E+00	1.20E-07	1.42E-08	5.58E-08	0.00E+00	7.00E-08
594	464119.2	3809942	1.46E-07	4.69E-07	0.00E+00	6.15E-07	1.46E-07	4.69E-07	0.00E+00	6.15E-07	2.31E-08	9.39E-08	0.00E+00	1.17E-07	1.39E-08	5.45E-08	0.00E+00	6.84E-08
595	464139.2	3809942	1.43E-07	4.59E-07	0.00E+00	6.01E-07	1.43E-07	4.59E-07	0.00E+00	6.01E-07	2.26E-08	9.19E-08	0.00E+00	1.14E-07	1.36E-08	5.33E-08	0.00E+00	6.69E-08
596	464159.2	3809942	1.4E-07	4.48E-07	0.00E+00	5.87E-07	1.40E-07	4.48E-07	0.00E+00	5.87E-07	2.21E-08	8.97E-08	0.00E+00	1.12E-07	1.33E-08	5.21E-08	0.00E+00	6.54E-08
597	464179.2	3809942	1.36E-07	4.37E-07	0.00E+00	5.74E-07	1.36E-07	4.37E-07	0.00E+00	5.74E-07	2.15E-08	8.76E-08	0.00E+00	1.09E-07	1.30E-08	5.09E-08	0.00E+00	6.38E-08
598	464199.2	3809942	1.33E-07	4.27E-07	0.00E+00	5.60E-07	1.33E-07	4.27E-07	0.00E+00	5.60E-07	2.10E-08	8.56E-08	0.00E+00	1.07E-07	1.27E-08	4.97E-08	0.00E+00	6.24E-08
599	464219.2	3809942	1.3E-07	4.16E-07	0.00E+00	5.45E-07	1.30E-07	4.16E-07	0.00E+00	5.45E-07	2.05E-08	8.33E-08	0.00E+00	1.04E-07	1.23E-08	4.83E-08	0.00E+00	6.07E-08
600	464239.2	3809942	1.26E-07	4.05E-07	0.00E+00	5.31E-07	1.26E-07	4.05E-07	0.00E+00	5.31E-07	1.99E-08	8.11E-08	0.00E+00	1.01E-07	1.20E-08	4.70E-08	0.00E+00	5.91E-08
601	464259.2	3809942	1.23E-07	3.94E-07	0.00E+00	5.17E-07	1.23E-07	3.94E-07	0.00E+00	5.17E-07	1.94E-08	7.89E-08	0.00E+00	9.83E-08	1.17E-08	4.58E-08	0.00E+00	5.75E-08
602	464279.2	3809942	1.19E-07	3.83E-07	0.00E+00	5.02E-07	1.19E-07	3.83E-07	0.00E+00	5.02E-07	1.89E-08	7.68E-08	0.00E+00	9.56E-08	1.14E-08	4.45E-08	0.00E+00	5.59E-08
603	464299.2	3809942	1.16E-07	3.73E-07	0.00E+00	4.89E-07	1.16E-07	3.73E-07	0.00E+00	4.89E-07	1.84E-08	7.47E-08	0.00E+00	9.31E-08	1.11E-08	4.34E-08	0.00E+00	5.45E-08
604	464319.2	3809942	1.13E-07	3.64E-07	0.00E+00	4.77E-07	1.13E-07	3.64E-07	0.00E+00	4.77E-07	1.79E-08	7.29E-08	0.00E+00	9.08E-08	1.08E-08	4.23E-08	0.00E+00	5.31E-08
605	464339.2	3809942	1.1E-07	3.54E-07	0.00E+00	4.65E-07	1.10E-07	3.54E-07	0.00E+00	4.65E-07	1.74E-08	7.10E-08	0.00E+00	8.84E-08	1.05E-08	4.12E-08	0.00E+00	5.17E-08
606	464359.2	3809942	1.08E-07	3.45E-07	0.00E+00	4.53E-07	1.08E-07	3.45E-07	0.00E+00	4.53E-07	1.70E-08	6.91E-08	0.00E+00	8.61E-08	1.02E-08	4.01E-08	0.00E+00	5.04E-08
607	464379.2	3809942	1.05E-07	3.36E-07	0.00E+00	4.41E-07	1.05E-07	3.36E-07	0.00E+00	4.41E-07	1.66E-08	6.74E-08	0.00E+00	8.39E-08	9.99E-09	3.91E-08	0.00E+00	4.91E-08
608	464399.2	3809942	1.02E-07	3.28E-07	0.00E+00	4.30E-07	1.02E-07	3.28E-07	0.00E+00	4.30E-07	1.61E-08	6.57E-08	0.00E+00	8.18E-08	9.74E-09	3.81E-08	0.00E+00	4.78E-08
609	464419.2	3809942	9.97E-08	3.2E-07	0.00E+00	4.19E-07	9.97E-08	3.20E-07	0.00E+00	4.19E-07	1.57E-08	6.41E-08	0.00E+00	7.98E-08	9.50E-09	3.72E-08	0.00E+00	4.67E-08
610	464439.2	3809942	9.72E-08	3.12E-07	0.00E+00	4.09E-07	9.72E-08	3.12E-07	0.00E+00	4.09E-07	1.54E-08	6.25E-08	0.00E+00	7.79E-08	9.27E-09	3.63E-08	0.00E+00	4.55E-08
611	464459.2	3809942	9.48E-08	3.04E-07	0.00E+00	3.99E-07	9.48E-08	3.04E-07	0.00E+00	3.99E-07	1.50E-08	6.09E-08	0.00E+00	7.59E-08	9.03E-09	3.53E-08	0.00E+00	4.44E-08
612	464479.2	3809942	9.24E-08	2.96E-07	0.00E+00	3.89E-07	9.24E-08	2.96E-07	0.00E+00	3.89E-07	1.46E-08	5.94E-08	0.00E+00	7.40E-08	8.80E-09	3.45E-08	0.00E+00	4.33E-08
613	464499.2	3809942	9.01E-08	2.89E-07	0.00E+00	3.79E-07	9.01E-08	2.89E-07	0.00E+00	3.79E-07	1.42E-08	5.79E-08	0.00E+00	7.22E-08	8.59E-09	3.36E-08	0.00E+00	4.22E-08
614	464519.2	3809942	8.81E-08	2.83E-07	0.00E+00	3.71E-07	8.81E-08	2.83E-07	0.00E+00	3.71E-07	1.39E-08	5.66E-08	0.00E+00	7.05E-08	8.39E-09	3.28E-08	0.00E+00	4.12E-08
615	464119.2	3809962	1.44E-07	4.63E-07	0.00E+00	6.08E-07	1.44E-07	4.63E-07	0.00E+00	6.08E-07	2.28E-08	9.28E-08	0.00E+00	1.16E-07	1.38E-08	5.39E-08	0.00E+00	6.76E-08
616	464139.2	3809962	1.41E-07	4.54E-07	0.00E+00	5.95E-07	1.41E-07	4.54E-07	0.00E+00	5.95E-07	2.23E-08	9.09E-08	0.00E+00	1.13E-07	1.35E-08	5.28E-08	0.00E+00	6.62E-08
617	464159.2	3809962	1.38E-07	4.44E-07	0.00E+00	5.82E-07	1.38E-07	4.44E-07	0.00E+00	5.82E-07	2.19E-08	8.89E-08	0.00E+00	1.11E-07	1.32E-08	5.16E-08	0.00E+00	6.48E-08
618	464179.2	3809962	1.35E-07	4.34E-07	0.00E+00	5.69E-07	1.35E-07	4.34E-07	0.00E+00	5.69E-07	2.14E-08	8.70E-08	0.00E+00	1.08E-07	1.29E-08	5.05E-08	0.00E+00	6.34E-08
619	464199.2	3809962	1.32E-07	4.25E-07	0.00E+00	5.57E-07	1.32E-07	4.25E-07	0.00E+00	5.57E-07	2.09E-08	8.51E-08	0.00E+00	1.06E-07	1.26E-08	4.94E-08	0.00E+00	6.20E-08
620	464219.2	3809962	1.29E-07	4.14E-07	0.00E+00	5.44E-07	1.29E-07	4.14E-07	0.00E+00	5.44E-07	2.04E-08	8.30E-08	0.00E+00	1.03E-07	1.23E-08	4.82E-08	0.00E+00	6.05E-08
621	464239.2	3809962	1.26E-07	4.04E-07	0.00E+00	5.29E-07	1.26E-07	4.04E-07	0.00E+00	5.29E-07	1.99E-08	8.09E-08	0.00E+00	1.01E-07	1.20E-08	4.69E-08	0.00E+00	5.89E-08
622	464259.2	3809962	1.22E-07	3.93E-07	0.00E+00	5.15E-07	1.22E-07	3.93E-07	0.00E+00	5.15E-07	1.93E-08	7.87E-08	0.00E+00	9.80E-08	1.17E-08	4.56E-08	0.00E+00	5.73E-08
623	464279.2	3809962	1.19E-07	3.82E-07	0.00E+00	5.01E-07	1.19E-07	3.82E-07	0.00E+00	5.01E-07	1.88E-08	7.65E-08	0.00E+00	9.53E-08	1.13E-08	4.44E-08	0.00E+00	5.57E-08
624	464299.2	3809962	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.16E-07	3.72E-07	0.00E+00	4.88E-07	1.83E-08	7.45E-08	0.00E+00	9.28E-08	1.10E-08	4.32E-08	0.00E+00	5.43E-08
625	464319.2	3809962	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.79E-08	7.27E-08	0.00E+00	9.06E-08	1.08E-08	4.22E-08	0.00E+00	5.30E-08
626	464339.2	3809962	1.1E-07	3.53E-07	0.00E+00	4.64E-07	1.10E-07	3.53E-07	0.00E+00	4.64E-07	1.74E-08	7.08E-08	0.00E+00	8.82E-08	1.05E-08	4.11E-08	0.00E+00	5.16E-08
627	464359.2	3809962	1.07E-07	3.44E-07	0.00E+00	4.52E-07	1.07E-07	3.44E-07	0.00E+00	4.52E-07	1.70E-08	6.90E-08	0.00E+00	8.60E-08	1.02E-08	4.00E-08	0.00E+00	5.03E-08
628	464379.2	3809962	1.05E-07	3.36E-07	0.00E+00	4.40E-07	1.05E-07	3.36E-07	0.00E+00	4.40E-07	1.65E-08	6.73E-08	0.00E+00	8.38E-08	9.97E-09	3.90E-08	0.00E+00	4.90E-08
629	464399.2	3809962	1.02E-07	3.27E-07	0.00E+00	4.29E-07	1.02E-07	3.27E-07	0.00E+00	4.29E-07	1.61E-08	6.56E-08	0.00E+00	8.17E-08	9.72E-09	3.80E-08	0.00E+00	4.78E-08
630	464419.2	3809962	9.94E-08	3.19E-07	0.00E+00	4.18E-07	9.94E-08	3.19E-07	0.00E+00	4.18E-07	1.57E-08	6.39E-08	0.00E+00	7.96E-08	9.47E-09	3.71E-08	0.00E+00	4.66E-08
631	464439.2	3809962	9.69E-08	3.11E-07	0.00E+00	4.08E-07	9.69E-08	3.11E-07	0.00E+00	4.08E-07	1.53E-08	6.23E-08	0.00E+00	7.76E-08	9.24E-09	3.62E-08	0.00E+00	4.54E-08
632	464459.2	3809962	9.44E-08	3.03E-07	0.00E+00	3.97E-07	9.44E-08	3.03E-07	0.00E+00	3.97E-07	1.49E-08	6.07E-08	0.00E+00	7.56E-08	9.00E-09	3.52E-08	0.00E+00	4.42E-08
633	464479.2	3809962	9.21E-08	2.95E-07	0.00E+00	3.87E-07	9.21E-08	2.95E-07	0.00E+00	3.87E-07	1.45E-08	5.92E-08	0.00E+00	7.37E-08	8.77E-09	3.43E-08	0.00E+00	4.31E-08
634	464499.2	3809962	8.99E-08	2.88E-07	0.00E+00	3.78E-07	8.99E-08	2.88E-07	0.00E+00	3.78E-07	1.42E-08	5.78E-08	0.00E+00	7.20E-08	8.57E-09	3.35E-08	0.00E+00	4.21E-08
635	464519.2	3809962	8.78E-08	2.82E-07	0.00E+00	3.69E-07	8.78E-08	2.82E-07	0.00E+00	3.69E-07	1.39E-08	5.64E-08	0.00E+00	7.03E-08	8.37E-09	3.27E-08	0.00E+00	4.11E-08
636	464139.2	3809982	1.41E-07	4.51E-07	0.00E+00	5.92E-07	1.41E-07	4.51E-07	0.00E+00	5.92E-07	2.22E-08	9.05E-08	0.00E+00	1.13E-07	1.34E-08	5.25E-08	0.00E+00	6.59E-08
637	464159.2	3809982	1.37E-07	4.4E-07	0.00E+00	5.77E-07	1.37E-07	4.40E-07	0.00E+00	5.77E-07	2.17E-08	8.82E-08	0.00E+00	1.10E-07	1.31E-08	5.12E-08	0.00E+00	6.43E-08
638	464179.2	3809982	1.34E-07	4.3E-07	0.00E+00	5.64E-07	1.34E-07	4.30E-07	0.00E+00	5.64E-07	2.12E-08	8.62E-08	0.00E+00	1.07E-07	1.28E-08	5.00E-08	0.00E+00	6.28E-08
639	464199.2	3809982	1.31E-07	4.21E-07	0.00E+00	5.52E-07	1.31E-07	4.21E-07	0.00E+00	5.52E-07	2.07E-08	8.43E-08	0.00E+00	1.05E-07	1.25E-08	4.89E-08	0.00E+00	6.14E-08
640	464219.2	3809982	1.28E-07	4.12E-07	0.00E+00	5.40E-07	1.28E-07	4.12E-07	0.00E+00	5.40E-07	2.03E-08	8.25E-08	0.00E+00	1.03E-07	1.22E-08	4.79E-08	0.00E+00	6.01E-08
641	464239.2	3809982	1.25E-07	4.02E-07	0.00E+00	5.27E-07	1.25E-07	4.02E-07	0.00E+00	5.27E-07	1.98E-08	8.06E-08	0.00E+00	1.00E-07	1.19E-08	4.67E-08	0.00E+00	5.87E-08
642	464259.2	3809982	1.22E-07	3.92E-07	0.00E+00	5.14E-07	1.22E-07	3.92E-07	0.00E+00	5.14E-07	1.93E-08	7.85E-08	0.00E+00	9.78E-08	1.16E-08	4.56E-08	0.00E+00	5.72E-08
643	464279.2	3809982	1.19E-07	3.81E-07	0.00E+00	5.00E-07	1.19E-07	3.81E-07	0.00E+00	5.00E-07	1.88E-08	7.64E-08	0.00E+00	9.51E-08	1.13E-08	4.43E-08	0.00E+00	5.56E-08
644	464299.2	3809982	1.16E-07	3.71E-07	0.00E+00	4.86E-07	1.16E-07	3.71E-07	0.00E+00	4.86E-07	1.83E-08	7.43E-08	0.00E+00	9.26E-08	1.10E-08	4.31E-08	0.00E+00	5.41E-08
645	464319.2	3809982	1.13E-07	3.61E-07	0.00E+00	4.73E-07	1.13E-07	3.61E-07	0.00E+00	4.73E-07	1.78E-08	7.23E-08	0.00E+00	9.01E-08

658	464199.2	3810002	1.3E-07	4.18E-07	0.00E+00	5.49E-07	1.30E-07	4.18E-07	0.00E+00	5.49E-07	2.06E-08	8.38E-08	0.00E+00	1.04E-07	1.24E-08	4.86E-08	0.00E+00	6.10E-08
659	464219.2	3810002	1.27E-07	4.08E-07	0.00E+00	5.36E-07	1.27E-07	4.08E-07	0.00E+00	5.36E-07	2.01E-08	8.19E-08	0.00E+00	1.02E-07	1.21E-08	4.75E-08	0.00E+00	5.96E-08
660	464239.2	3810002	1.24E-07	3.99E-07	0.00E+00	5.23E-07	1.24E-07	3.99E-07	0.00E+00	5.23E-07	1.96E-08	7.99E-08	0.00E+00	9.95E-08	1.18E-08	4.64E-08	0.00E+00	5.82E-08
661	464259.2	3810002	1.21E-07	3.89E-07	0.00E+00	5.10E-07	1.21E-07	3.89E-07	0.00E+00	5.10E-07	1.92E-08	7.79E-08	0.00E+00	9.71E-08	1.16E-08	4.52E-08	0.00E+00	5.68E-08
662	464279.2	3810002	1.18E-07	3.79E-07	0.00E+00	4.98E-07	1.18E-07	3.79E-07	0.00E+00	4.98E-07	1.87E-08	7.60E-08	0.00E+00	9.47E-08	1.13E-08	4.41E-08	0.00E+00	5.54E-08
663	464299.2	3810002	1.15E-07	3.7E-07	0.00E+00	4.85E-07	1.15E-07	3.70E-07	0.00E+00	4.85E-07	1.82E-08	7.41E-08	0.00E+00	9.23E-08	1.10E-08	4.30E-08	0.00E+00	5.40E-08
664	464319.2	3810002	1.12E-07	3.6E-07	0.00E+00	4.72E-07	1.12E-07	3.60E-07	0.00E+00	4.72E-07	1.77E-08	7.21E-08	0.00E+00	8.98E-08	1.07E-08	4.18E-08	0.00E+00	5.25E-08
665	464339.2	3810002	1.09E-07	3.51E-07	0.00E+00	4.60E-07	1.09E-07	3.51E-07	0.00E+00	4.60E-07	1.73E-08	7.03E-08	0.00E+00	8.76E-08	1.04E-08	4.08E-08	0.00E+00	5.12E-08
666	464359.2	3810002	1.07E-07	3.42E-07	0.00E+00	4.48E-07	1.07E-07	3.42E-07	0.00E+00	4.48E-07	1.68E-08	6.85E-08	0.00E+00	8.53E-08	1.02E-08	3.97E-08	0.00E+00	4.99E-08
667	464379.2	3810002	1.04E-07	3.33E-07	0.00E+00	4.37E-07	1.04E-07	3.33E-07	0.00E+00	4.37E-07	1.64E-08	6.67E-08	0.00E+00	8.31E-08	9.89E-09	3.87E-08	0.00E+00	4.86E-08
668	464399.2	3810002	1.01E-07	3.25E-07	0.00E+00	4.26E-07	1.01E-07	3.25E-07	0.00E+00	4.26E-07	1.60E-08	6.51E-08	0.00E+00	8.10E-08	9.64E-09	3.77E-08	0.00E+00	4.74E-08
669	464419.2	3810002	9.86E-08	3.16E-07	0.00E+00	4.15E-07	9.86E-08	3.16E-07	0.00E+00	4.15E-07	1.56E-08	6.34E-08	0.00E+00	7.90E-08	9.40E-09	3.68E-08	0.00E+00	4.62E-08
670	464439.2	3810002	9.61E-08	3.08E-07	0.00E+00	4.04E-07	9.61E-08	3.08E-07	0.00E+00	4.04E-07	1.52E-08	6.18E-08	0.00E+00	7.69E-08	9.16E-09	3.58E-08	0.00E+00	4.50E-08
671	464459.2	3810002	9.37E-08	3.01E-07	0.00E+00	3.94E-07	9.37E-08	3.01E-07	0.00E+00	3.94E-07	1.48E-08	6.03E-08	0.00E+00	7.51E-08	8.93E-09	3.50E-08	0.00E+00	4.39E-08
672	464479.2	3810002	9.15E-08	2.93E-07	0.00E+00	3.85E-07	9.15E-08	2.93E-07	0.00E+00	3.85E-07	1.45E-08	5.88E-08	0.00E+00	7.32E-08	8.72E-09	3.41E-08	0.00E+00	4.28E-08
673	464499.2	3810002	8.92E-08	2.86E-07	0.00E+00	3.75E-07	8.92E-08	2.86E-07	0.00E+00	3.75E-07	1.41E-08	5.73E-08	0.00E+00	7.14E-08	8.50E-09	3.33E-08	0.00E+00	4.18E-08
674	464519.2	3810002	8.7E-08	2.79E-07	0.00E+00	3.66E-07	8.70E-08	2.79E-07	0.00E+00	3.66E-07	1.37E-08	5.59E-08	0.00E+00	6.97E-08	8.29E-09	3.25E-08	0.00E+00	4.07E-08
675	464179.2	3810022	1.32E-07	4.24E-07	0.00E+00	5.56E-07	1.32E-07	4.24E-07	0.00E+00	5.56E-07	2.09E-08	8.50E-08	0.00E+00	1.06E-07	1.26E-08	4.93E-08	0.00E+00	6.19E-08
676	464199.2	3810022	1.29E-07	4.15E-07	0.00E+00	5.45E-07	1.29E-07	4.15E-07	0.00E+00	5.45E-07	2.04E-08	8.32E-08	0.00E+00	1.04E-07	1.23E-08	4.83E-08	0.00E+00	6.06E-08
677	464219.2	3810022	1.26E-07	4.05E-07	0.00E+00	5.31E-07	1.26E-07	4.05E-07	0.00E+00	5.31E-07	2.00E-08	8.12E-08	0.00E+00	1.01E-07	1.20E-08	4.71E-08	0.00E+00	5.91E-08
678	464239.2	3810022	1.23E-07	3.95E-07	0.00E+00	5.19E-07	1.23E-07	3.95E-07	0.00E+00	5.19E-07	1.95E-08	7.92E-08	0.00E+00	9.87E-08	1.17E-08	4.60E-08	0.00E+00	5.77E-08
679	464259.2	3810022	1.2E-07	3.86E-07	0.00E+00	5.06E-07	1.20E-07	3.86E-07	0.00E+00	5.06E-07	1.90E-08	7.73E-08	0.00E+00	9.63E-08	1.15E-08	4.48E-08	0.00E+00	5.63E-08
680	464279.2	3810022	1.18E-07	3.77E-07	0.00E+00	4.95E-07	1.18E-07	3.77E-07	0.00E+00	4.95E-07	1.86E-08	7.56E-08	0.00E+00	9.42E-08	1.12E-08	4.39E-08	0.00E+00	5.51E-08
681	464299.2	3810022	1.15E-07	3.68E-07	0.00E+00	4.83E-07	1.15E-07	3.68E-07	0.00E+00	4.83E-07	1.81E-08	7.38E-08	0.00E+00	9.19E-08	1.09E-08	4.28E-08	0.00E+00	5.38E-08
682	464319.2	3810022	1.12E-07	3.59E-07	0.00E+00	4.70E-07	1.12E-07	3.59E-07	0.00E+00	4.70E-07	1.77E-08	7.18E-08	0.00E+00	8.95E-08	1.07E-08	4.17E-08	0.00E+00	5.23E-08
683	464339.2	3810022	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.72E-08	7.00E-08	0.00E+00	8.72E-08	1.04E-08	4.06E-08	0.00E+00	5.10E-08
684	464359.2	3810022	1.06E-07	3.4E-07	0.00E+00	4.46E-07	1.06E-07	3.40E-07	0.00E+00	4.46E-07	1.68E-08	6.82E-08	0.00E+00	8.49E-08	1.01E-08	3.96E-08	0.00E+00	4.97E-08
685	464379.2	3810022	1.03E-07	3.31E-07	0.00E+00	4.35E-07	1.03E-07	3.31E-07	0.00E+00	4.35E-07	1.63E-08	6.64E-08	0.00E+00	8.27E-08	9.85E-09	3.85E-08	0.00E+00	4.84E-08
686	464399.2	3810022	1.01E-07	3.23E-07	0.00E+00	4.24E-07	1.01E-07	3.23E-07	0.00E+00	4.24E-07	1.59E-08	6.47E-08	0.00E+00	8.06E-08	9.60E-09	3.76E-08	0.00E+00	4.72E-08
687	464419.2	3810022	9.82E-08	3.15E-07	0.00E+00	4.13E-07	9.82E-08	3.15E-07	0.00E+00	4.13E-07	1.55E-08	6.31E-08	0.00E+00	7.86E-08	9.36E-09	3.66E-08	0.00E+00	4.60E-08
688	464439.2	3810022	9.58E-08	3.07E-07	0.00E+00	4.03E-07	9.58E-08	3.07E-07	0.00E+00	4.03E-07	1.51E-08	6.16E-08	0.00E+00	7.67E-08	9.13E-09	3.57E-08	0.00E+00	4.48E-08
689	464459.2	3810022	9.34E-08	3E-07	0.00E+00	3.93E-07	9.34E-08	3.00E-07	0.00E+00	3.93E-07	1.48E-08	6.00E-08	0.00E+00	7.48E-08	8.90E-09	3.48E-08	0.00E+00	4.37E-08
690	464479.2	3810022	9.1E-08	2.92E-07	0.00E+00	3.83E-07	9.10E-08	2.92E-07	0.00E+00	3.83E-07	1.44E-08	5.85E-08	0.00E+00	7.29E-08	8.68E-09	3.40E-08	0.00E+00	4.26E-08
691	464499.2	3810022	8.87E-08	2.85E-07	0.00E+00	3.73E-07	8.87E-08	2.85E-07	0.00E+00	3.73E-07	1.40E-08	5.70E-08	0.00E+00	7.10E-08	8.45E-09	3.31E-08	0.00E+00	4.15E-08
692	464519.2	3810022	8.66E-08	2.78E-07	0.00E+00	3.64E-07	8.66E-08	2.78E-07	0.00E+00	3.64E-07	1.37E-08	5.57E-08	0.00E+00	6.94E-08	8.25E-09	3.23E-08	0.00E+00	4.06E-08
693	464219.2	3810042	1.25E-07	4.02E-07	0.00E+00	5.28E-07	1.25E-07	4.02E-07	0.00E+00	5.28E-07	1.98E-08	8.06E-08	0.00E+00	1.00E-07	1.19E-08	4.68E-08	0.00E+00	5.87E-08
694	464239.2	3810042	1.23E-07	3.93E-07	0.00E+00	5.15E-07	1.23E-07	3.93E-07	0.00E+00	5.15E-07	1.94E-08	7.87E-08	0.00E+00	9.81E-08	1.17E-08	4.57E-08	0.00E+00	5.74E-08
695	464259.2	3810042	1.19E-07	3.83E-07	0.00E+00	5.03E-07	1.19E-07	3.83E-07	0.00E+00	5.03E-07	1.89E-08	7.68E-08	0.00E+00	9.57E-08	1.14E-08	4.46E-08	0.00E+00	5.60E-08
696	464279.2	3810042	1.17E-07	3.74E-07	0.00E+00	4.91E-07	1.17E-07	3.74E-07	0.00E+00	4.91E-07	1.84E-08	7.50E-08	0.00E+00	9.34E-08	1.11E-08	4.35E-08	0.00E+00	5.46E-08
697	464299.2	3810042	1.14E-07	3.65E-07	0.00E+00	4.79E-07	1.14E-07	3.65E-07	0.00E+00	4.79E-07	1.80E-08	7.32E-08	0.00E+00	9.12E-08	1.09E-08	4.25E-08	0.00E+00	5.33E-08
698	464319.2	3810042	1.11E-07	3.56E-07	0.00E+00	4.68E-07	1.11E-07	3.56E-07	0.00E+00	4.68E-07	1.76E-08	7.14E-08	0.00E+00	8.90E-08	1.06E-08	4.14E-08	0.00E+00	5.20E-08
699	464339.2	3810042	1.08E-07	3.48E-07	0.00E+00	4.56E-07	1.08E-07	3.48E-07	0.00E+00	4.56E-07	1.71E-08	6.97E-08	0.00E+00	8.68E-08	1.03E-08	4.04E-08	0.00E+00	5.08E-08
700	464359.2	3810042	1.06E-07	3.39E-07	0.00E+00	4.45E-07	1.06E-07	3.39E-07	0.00E+00	4.45E-07	1.67E-08	6.80E-08	0.00E+00	8.47E-08	1.01E-08	3.94E-08	0.00E+00	4.95E-08
701	464379.2	3810042	1.03E-07	3.3E-07	0.00E+00	4.34E-07	1.03E-07	3.30E-07	0.00E+00	4.34E-07	1.63E-08	6.62E-08	0.00E+00	8.25E-08	9.82E-09	3.84E-08	0.00E+00	4.82E-08
702	464399.2	3810042	1E-07	3.22E-07	0.00E+00	4.22E-07	1.00E-07	3.22E-07	0.00E+00	4.22E-07	1.59E-08	6.45E-08	0.00E+00	8.04E-08	9.57E-09	3.74E-08	0.00E+00	4.70E-08
703	464419.2	3810042	9.79E-08	3.14E-07	0.00E+00	4.12E-07	9.79E-08	3.14E-07	0.00E+00	4.12E-07	1.55E-08	6.29E-08	0.00E+00	7.84E-08	9.33E-09	3.65E-08	0.00E+00	4.58E-08
704	464439.2	3810042	9.55E-08	3.06E-07	0.00E+00	4.02E-07	9.55E-08	3.06E-07	0.00E+00	4.02E-07	1.51E-08	6.14E-08	0.00E+00	7.65E-08	9.10E-09	3.56E-08	0.00E+00	4.47E-08
705	464459.2	3810042	9.29E-08	2.98E-07	0.00E+00	3.91E-07	9.29E-08	2.98E-07	0.00E+00	3.91E-07	1.47E-08	5.97E-08	0.00E+00	7.44E-08	8.86E-09	3.47E-08	0.00E+00	4.35E-08
706	464479.2	3810042	9.06E-08	2.91E-07	0.00E+00	3.81E-07	9.06E-08	2.91E-07	0.00E+00	3.81E-07	1.43E-08	5.82E-08	0.00E+00	7.25E-08	8.63E-09	3.38E-08	0.00E+00	4.24E-08
707	464499.2	3810042	8.84E-08	2.84E-07	0.00E+00	3.72E-07	8.84E-08	2.84E-07	0.00E+00	3.72E-07	1.40E-08	5.68E-08	0.00E+00	7.08E-08	8.43E-09	3.30E-08	0.00E+00	4.14E-08
708	464519.2	3810042	8.62E-08	2.76E-07	0.00E+00	3.63E-07	8.62E-08	2.76E-07	0.00E+00	3.63E-07	1.36E-08	5.54E-08	0.00E+00	6.90E-08	8.21E-09	3.21E-08	0.00E+00	4.03E-08
709	464239.2	3810062	1.21E-07	3.89E-07	0.00E+00	5.11E-07	1.21E-07	3.89E-07	0.00E+00	5.11E-07	1.92E-08	7.80E-08	0.00E+00	9.72E-08	1.16E-08	4.53E-08	0.00E+00	5.68E-08
710	464259.2	3810062	1.18E-07	3.8E-07	0.00E+00	4.98E-07	1.18E-07	3.80E-07	0.00E+00	4.98E-07	1.87E-08	7.61E-08	0.00E+00	9.48E-08	1.13E-08	4.42E-08	0.00E+00	5.55E-08
711	464279.2	3810062	1.16E-07	3.71E-07	0.00E+00	4.87E-07	1.16E-07	3.71E-07	0.00E+00	4.87E-07	1.83E-08	7.44E-08	0.00E+00	9.27E-08	1.10E-08	4.32E-08	0.00E+00	5.42E-08
712	464299.2	3810062	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.13E-07	3.63E-07	0.00E+00	4.76E-07	1.79E-08	7.27E-08	0.00E+00	9.06E-08	1.08E-08	4.22E-08	0.00E+00	5.30E-08
713	464319.2	3810062	1.1E-07	3.54E-07	0.00E+00	4.65E-07	1.10E-07	3.54E-07	0.00E+00	4.65E-07	1.75E-08	7.10E-08	0.00E+00	8.85E-08	1.05E-08	4.12E-08	0.00E+00	5.17E-08
714	464339.2	3810062	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.70E-08	6.93E-08	0.00E+00	8.64E-08	1.03E-08	4.02E-08	0.00E+00	5.05E-08
715	464359.2	3810062	1.05E-07	3.38E-07	0.00E+00	4.43E-07	1.05E-07	3.38E-07	0.00E+00	4.43E-07	1.66E-08	6.77E-08	0.00E+00	8.43E-08	1.00E-08	3.93E-08	0.00E+00	4.93E-08
716	464379.2	3810062	1.03E-07	3.3E-07	0.00E+00	4.32E-07	1.03E-07	3.30E-07	0.00E+00	4.32E-07	1.62E-08	6.60E-08	0.00E+00	8.23E-08	9.79E-09	3.83E-08	0.00E+00	4.81E-08
717	464399.2	3810062	1E-07	3.21E-07	0.00E+00	4.21E-07	1.00E-07	3.21E-07	0.00E+00	4.21E-07	1.58E-08	6.44E-08	0.00E+00	8.02E-08	9.54E-09	3.73E-08	0.00E+00	4.69E-08
718	464419.2	3810062	9.75E-08	3.13E-07	0.00E+00	4.10E-07	9.75E-08	3.13E-07	0.00E+00	4.10E-07	1.54E-08	6.27E-08	0.00E+00	7.81E-08	9.30E-09	3.64E-08	0.00E+00	4.57E-08
719	464439.2	3810062	9.5E-08	3.05E-07	0.00E+00	4.00E-07	9.50E-08	3.05E-07	0.00E+00	4.00E-07	1.50E-08	6.11E-08	0.00E+00	7.61E-08	9.05E-09	3.54E-08	0.00E+00	4.45E-08
720	464459.2	3810062	9.25E-08	2.97E-07	0.00E+00	3.89E-07	9.25E-08	2.97E-07	0.00E+00	3.89E-07	1.46E-08	5.95E-08	0.00E+00	7.41E-08	8.82E-09	3.45E-08	0.00E+00	4.33E-08
721	464479.2	3810062	9.02E-08	2.89E-07	0.00E+00	3.80E-07	9.02E-08	2.89E-07	0.00E+00	3.80E-07	1.43E-08	5.80E-08	0.00E+00	7.22E-08	8.60E-09	3.36E-08	0.00E+00	4.22E-08
722	464499.2	3810062	8.79E-08	2.82E-07	0.00E+00	3.70E-07	8.79E-08	2.82E-07	0.00E+00	3.70E-07	1.39E-08	5.65E-08	0.00E+00	7.04E-08	8.38E-09	3.28E-08	0.00E+00	4.12E-08
723	464519.2	3810062	8.58E-08	2.75E-07	0.00E+00	3.61E-07	8.58E-08	2.75E-07	0.00E+00	3.61E-07	1.36E-08	5.51E-08	0.00E+00	6.87E-08	8.18E-09	3.20E-08	0.00E+00	4.02E-08
724	464259.2	3810082	1.17E-07	3.77E-07	0.00E+00	4.94E-07	1.17E-07	3.77E-07	0.00E+00	4.94E-07	1.86E-08	7.55E-08	0.00E+00	9.41E-08	1.12E-08	4.38E-08	0.00E+00	5.50E-08
725	464279.2	3810082	1.15E-07	3.69E-07	0.00E+00	4.84E-07	1.15E-07	3.69E-07	0.00E+00	4.84E-07	1.82E-08	7.39E-08	0.00E+00	9.21E-08	1.10E-08	4.29E-08	0.00E+00	5.38E-08
726	464299.2	3810082	1.12E-07	3.61E-07	0.00E+00	4.73E-07	1.12E-07	3.61E-07	0.00E+00	4.73E-07	1.78E-08	7.23E-08	0.00E+00	9.00E-08	1.07E-08	4.19E-08	0.00E+00	5.26E-08
727	464319.2	3810082	1.1E-07	3.52E-07	0.00E+00	4.62E-07	1.10E-07	3.52E-07	0.00E+00	4.62E-07	1.73E-08	7.06E-08	0.00E+00	8.79E-08	1.05E-08	4.09E-08	0.00E+00	5.14E-08
728	464339.2	3810082	1.07E-07	3.44E-07	0.00E+00	4.51E-07	1.07E-07	3.44E-07	0.00E+00	4.51E-07	1.69E-08	6.89E-08	0.00E+00	8.58E-08	1.02E-08	4.00E-08	0.00E+00	5.02E-08
729	464359.2	3810082	1.05E-07	3.36E-07	0.00E+00	4.40E-07	1.05E-07	3.36E-07	0.00E+00	4.40E-07	1.65E-08	6.73E-08	0.00E+00	8.38E-08	9.98E-09	3.90E-08	0.00E+00	4.90E-08
730	464379.2	3810082	1.02E-07	3.28E-07	0.00E+00	4.30E-07	1.02E-07	3.28E-07	0.00E+00	4.30E-07	1.61E-08	6.57E-08	0.00E+00	8.19E-08	9.74E-09	3.81E-08	0.00E+00	4.79E-08
731	464399.2	3810082	9.97E-08	3.2E-07	0.00E+00	4.19E-07	9.97E-08	3.20E-07	0.00E+00	4.19E-07	1.57E-08	6.41E-08	0.00E+00	7.98E-08	9.50E-09	3.72E-08	0.00E+00	4.67E-08
732	464419.2	3810082	9.71E-08	3.11E-07	0.00E+00	4.09E-07	9.71E-08	3.11E-07	0.00E+00	4.09E-07	1.53E-08	6.24E-08	0.00E+00	7.78E-08	9.25E-09	3.62E-08	0.00E+00	4.55E-08
733	464439.2	3810082	9.45E-08	3.03E-07	0.00E+00	3.98E-07	9.45E-08	3.03E-07	0.00E+00	3.98E-07	1.49E-08	6.07E-08	0.00E+00	7.57E-08	9.00E-09	3.52E-08	0.00E+00	4.42E-08
734	464459.2	3810082	9.21E-08	2.95E-07	0.00E+00	3.88E-07	9.21E-08	2.95E-07	0.00E+00	3.88E-07	1.46E-08	5.92E-08	0.00E+00	7.38E-08	8.78E-09	3.44E-08	0.00E+00	4.31E-08
735	464479.2	3810082	8.98E-08	2.88E-07	0.00E+00	3.78E-07	8.98E-08	2.88E-07	0.00E+00	3.78E-07	1.42E-08	5.77E-08	0.00E+00	7.19E-08	8.56E-09	3.35E-08	0.00E+00	4.20E-08
736	464499.2	3810082	8.75E-08	2.81E-07	0.00E+00	3.68E-07	8.75E-08	2.81E-07	0.00E+00	3.68E-07	1.38E-08	5.62E-08	0.00E+00	7.00E-08	8.33E-09	3.26E-08	0.00E+00	4.10E-08
737	464519.2	3810082	8.54E-08	2.74E-07	0.00E+00	3.59E-07	8.54E-08	2.74E-07	0.00E+00	3.59E-07	1.35E-08	5.49E-08	0.00E+00	6.84E-08	8.14E-09	3.19E-08	0.00E+00	4.00E-08
738	464279.2	3810102	1.14E-07	3.66E-07	0.00E+00	4.80E-07	1.14E-07	3.66E-07	0.00E+00	4.80E-07	1.80E-08	7.34E-08	0.00E+00	9.14E-08	1.09E-08	4.26E-08	0.00E+00	5.34E-08
739	464299.2	3810102	1.11E-07	3.57E-07	0.00E+00	4.69E-07	1.11E-07	3.57E-07	0.00E+00	4.69E-07	1.76E-08	7.16E-08	0.00E+00	8.92E-08	1.06E-08	4.16E-08	0.00E+00	5.22E-08
740	464319.2	3810102	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.09E-07	3.49E-07	0.00E+00	4.58E-07	1.72E-08	7.00E-08	0.00E+00	8.72E-08	1.04E-08	4.06E-08	0.00E+00	5.10E-08
741	464339.2	3810102	1.06E-07	3.41E-07	0.00E+00	4.47E-07	1.06E-07	3.41E-07	0.00E+00	4.47E-07	1.68E-08	6.83E-08	0.00E+00	8.51E-08	1.01E-08	3.97E-08	0.00E+00	4.98E-08
742	464359.2	3810102	1.04E-07	3.33E-07	0.00E+00	4.36E-07	1.04E-07	3.33E-07	0.00E+00	4.36E-07	1.64E-08	6.67E-08	0.00E+00	8.31E-08	9.88E-09	3.87E-08	0.00E+00	4.86E-08
743	464379.2	3810102	1.01E-07	3.24E-07	0.00E+00	4.25E-07	1.01E-07	3.24E-07	0.00E+00	4.25E-07	1.60E-08	6.50E-08	0.00E+00	8.09E-08	9.63E-09	3.77E-08	0.00E+00	4.73E-08
744	464399.2	3810102	9.88E-08	3.17E-07	0.00E+00	4.16E-07	9.88E-08	3.17E-07	0.00E+00	4.16E-07	1.56E-08	6.35E-08	0.00E+00	7.91E-08	9.41E-09	3.68E-08	0.00E+00	4.63E-08
745	464419.2	3810102	9.64E-08	3.09E-07	0.00E+00	4.06E-07	9.64E-08	3.09E-07	0.00E+00	4.06E-07	1.52E-08	6.20E-08	0.00E+00	7.72E-08	9.19E-09	3.60E-08	0.00E+00	4.52E-08
746	464439.2	3810102	9.4E-08	3.02E-07	0.00E+00	3.96E-07	9.40E-08	3.02E-07	0.00E+00	3.96E-07	1.49E-08	6.04E-08	0.00E+00	7.53E-08	8.96E-09	3.51E-08	0.00E+00	4.40E-08
747	464459.2	3810102	9.15E-08	2.93E-07	0.00E+00	3.85E-07	9.15E-08	2.93E-07	0.00E+00	3.85E-07	1.45E-08	5.88E-08	0.00E+00	7.33E-08	8.72E-09	3.41E-08	0.00E+00	4.28E-08
748	464479.2	3810102	8.91E-08	2.86E-07	0.00E+00	3.75E-07	8.91E-08	2.86E-07	0.00E+00	3.75E-07	1.41E-08	5.73E-08	0.00E+00	7.14E-08	8.49E-09	3.32E-08	0.00E+00	4.17E-08
749	464499.2	3810102	8.7E-08	2.79E-07	0.00E+00	3.66E-07	8.70E-08	2.79E-07	0.00E+00	3.66E-07	1.37E-08	5.59E-08	0.00E+00	6.97E-08	8.29E-09	3.25E-08	0.00E+00	4.07E-08
750	464519.2	3810102	8.5E-08	2.73E-07	0.00E+00	3.58E-07	8.50E-08	2.73E-07	0.00E+00	3.58E-07	1.34E-08	5.46E-08	0.00E+00	6.81E-08	8.10E-09	3.17E-08	0.00E+00	3.98E-08
751	464299.2	3810122	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.11E-07	3.55E-07	0.00E+00	4.66E-07	1.75E-08	7.12E-08	0.00E+00	8.87E-08	1.06E-08	4.13E-08	0.00E+00	5.19E-08
752	464319.2	3810122	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.08E-07	3.46E-07	0.00E+00	4.54E-07	1.71E-08	6.94E-08	0.00E+00	8.65E-08	1.03E-08	4.03E-08	0.00E+00	5.06E-08
753	464339.2	3810122	1.05E-07	3.38E-07	0.00E+00	4.43E-07	1.05E-07	3.38E-07	0.00E+00	4.43E-07	1.66E-08	6.77E-08	0.00E+00	8.43E-08	1.00E-08	3.93E-08	0.00E+00	4.93E-08
754	464359.2	3810122	1.03E-07	3.29E-07	0.00E+00	4.32E-07	1.03E-07	3.29E-07	0.00E+00	4.32E-07	1.62E-08	6.60E-08	0.00E+00	8.22E-08	9.79E-09	3.83E-08	0.00E+00	4.81E-08
755	464379.2	3810122	1E-07	3.22E-07	0.00E+00	4.22E-07	1.00E-07	3.22E-07	0.00E+00	4.22E-07	1.58E-08	6.44E-08	0.00E+00	8.03E-08	9.55E-09

768	464419.2	3810142	9.48E-08	3.04E-07	0.00E+00	3.99E-07	9.48E-08	3.04E-07	0.00E+00	3.99E-07	1.50E-08	6.09E-08	0.00E+00	7.59E-08	9.03E-09	3.54E-08	0.00E+00	4.44E-08
769	464439.2	3810142	9.27E-08	2.97E-07	0.00E+00	3.90E-07	9.27E-08	2.97E-07	0.00E+00	3.90E-07	1.46E-08	5.96E-08	0.00E+00	7.42E-08	8.83E-09	3.46E-08	0.00E+00	4.34E-08
770	464459.2	3810142	9.05E-08	2.9E-07	0.00E+00	3.81E-07	9.05E-08	2.90E-07	0.00E+00	3.81E-07	1.43E-08	5.82E-08	0.00E+00	7.25E-08	8.62E-09	3.38E-08	0.00E+00	4.24E-08
771	464479.2	3810142	8.84E-08	2.83E-07	0.00E+00	3.72E-07	8.84E-08	2.83E-07	0.00E+00	3.72E-07	1.40E-08	5.68E-08	0.00E+00	7.08E-08	8.42E-09	3.30E-08	0.00E+00	4.14E-08
772	464499.2	3810142	8.63E-08	2.77E-07	0.00E+00	3.63E-07	8.63E-08	2.77E-07	0.00E+00	3.63E-07	1.36E-08	5.55E-08	0.00E+00	6.91E-08	8.22E-09	3.22E-08	0.00E+00	4.04E-08
773	464519.2	3810142	8.45E-08	2.71E-07	0.00E+00	3.56E-07	8.45E-08	2.71E-07	0.00E+00	3.56E-07	1.34E-08	5.43E-08	0.00E+00	6.77E-08	8.05E-09	3.15E-08	0.00E+00	3.96E-08
774	463261.3	3810382	1.09E-06	3.51E-06	0.00E+00	4.60E-06	1.09E-06	3.51E-06	0.00E+00	4.60E-06	1.73E-07	7.02E-07	0.00E+00	8.75E-07	1.04E-07	4.08E-07	0.00E+00	5.12E-07
775	463243.8	3810394	1.06E-06	3.4E-06	0.00E+00	4.46E-06	1.06E-06	3.40E-06	0.00E+00	4.46E-06	1.67E-07	6.81E-07	0.00E+00	8.49E-07	1.01E-07	3.95E-07	0.00E+00	4.96E-07
776	463243.8	3810399	1.04E-06	3.34E-06	0.00E+00	4.39E-06	1.04E-06	3.34E-06	0.00E+00	4.39E-06	1.65E-07	6.70E-07	0.00E+00	8.35E-07	9.93E-08	3.89E-07	0.00E+00	4.88E-07
777	463126.9	3810941	2.32E-07	7.43E-07	0.00E+00	9.75E-07	2.32E-07	7.43E-07	0.00E+00	9.75E-07	3.66E-08	1.49E-07	0.00E+00	1.86E-07	2.21E-08	8.64E-08	0.00E+00	1.09E-07
778	463126.7	3810933	2.35E-07	7.54E-07	0.00E+00	9.89E-07	2.35E-07	7.54E-07	0.00E+00	9.89E-07	3.71E-08	1.51E-07	0.00E+00	1.88E-07	2.24E-08	8.77E-08	0.00E+00	1.10E-07
779	463126.9	3810927	2.38E-07	7.62E-07	0.00E+00	1.00E-06	2.38E-07	7.62E-07	0.00E+00	1.00E-06	3.75E-08	1.53E-07	0.00E+00	1.90E-07	2.26E-08	8.86E-08	0.00E+00	1.11E-07
780	463130.8	3810919	2.42E-07	7.78E-07	0.00E+00	1.02E-06	2.42E-07	7.78E-07	0.00E+00	1.02E-06	3.83E-08	1.56E-07	0.00E+00	1.94E-07	2.31E-08	9.04E-08	0.00E+00	1.14E-07
781	463257.7	3810733	4.11E-07	1.32E-06	0.00E+00	1.73E-06	4.11E-07	1.32E-06	0.00E+00	1.73E-06	6.50E-08	2.64E-07	0.00E+00	3.29E-07	3.92E-08	1.53E-07	0.00E+00	1.93E-07
782	463257.2	3810725	4.19E-07	1.34E-06	0.00E+00	1.76E-06	4.19E-07	1.34E-06	0.00E+00	1.76E-06	6.62E-08	2.69E-07	0.00E+00	3.36E-07	3.99E-08	1.56E-07	0.00E+00	1.96E-07
783	463256.4	3810717	4.28E-07	1.37E-06	0.00E+00	1.80E-06	4.28E-07	1.37E-06	0.00E+00	1.80E-06	6.76E-08	2.75E-07	0.00E+00	3.42E-07	4.08E-08	1.60E-07	0.00E+00	2.00E-07
784	463187.1	3810723	3.94E-07	1.27E-06	0.00E+00	1.66E-06	3.94E-07	1.27E-06	0.00E+00	1.66E-06	6.23E-08	2.54E-07	0.00E+00	3.16E-07	3.76E-08	1.47E-07	0.00E+00	1.85E-07
785	463232.8	3810889	2.92E-07	9.35E-07	0.00E+00	1.23E-06	2.92E-07	9.35E-07	0.00E+00	1.23E-06	4.61E-08	1.87E-07	0.00E+00	2.34E-07	2.78E-08	1.09E-07	0.00E+00	1.37E-07
786	463232.6	3810881	2.96E-07	9.49E-07	0.00E+00	1.25E-06	2.96E-07	9.49E-07	0.00E+00	1.25E-06	4.68E-08	1.90E-07	0.00E+00	2.37E-07	2.82E-08	1.10E-07	0.00E+00	1.39E-07
787	463225.6	3810881	2.94E-07	9.43E-07	0.00E+00	1.24E-06	2.94E-07	9.43E-07	0.00E+00	1.24E-06	4.64E-08	1.89E-07	0.00E+00	2.35E-07	2.80E-08	1.10E-07	0.00E+00	1.38E-07
788	463224	3810889	2.89E-07	9.27E-07	0.00E+00	1.22E-06	2.89E-07	9.27E-07	0.00E+00	1.22E-06	4.57E-08	1.86E-07	0.00E+00	2.31E-07	2.75E-08	1.08E-07	0.00E+00	1.35E-07
789	462054.2	3810685	4.3E-08	1.38E-07	0.00E+00	1.81E-07	4.30E-08	1.38E-07	0.00E+00	1.81E-07	6.80E-09	2.77E-08	0.00E+00	3.45E-08	4.10E-09	1.60E-08	0.00E+00	2.01E-08
790	462055.5	3810680	4.33E-08	1.39E-07	0.00E+00	1.82E-07	4.33E-08	1.39E-07	0.00E+00	1.82E-07	6.84E-09	2.78E-08	0.00E+00	3.47E-08	4.12E-09	1.61E-08	0.00E+00	2.03E-08
791	462016.9	3810544	4.38E-08	1.41E-07	0.00E+00	1.84E-07	4.38E-08	1.41E-07	0.00E+00	1.84E-07	6.92E-09	2.82E-08	0.00E+00	3.51E-08	4.18E-09	1.63E-08	0.00E+00	2.05E-08
792	462016.4	3810534	4.4E-08	1.41E-07	0.00E+00	1.85E-07	4.40E-08	1.41E-07	0.00E+00	1.85E-07	6.95E-09	2.83E-08	0.00E+00	3.52E-08	4.19E-09	1.64E-08	0.00E+00	2.06E-08
793	462016.4	3810524	4.41E-08	1.42E-07	0.00E+00	1.86E-07	4.41E-08	1.42E-07	0.00E+00	1.86E-07	6.97E-09	2.84E-08	0.00E+00	3.53E-08	4.20E-09	1.65E-08	0.00E+00	2.07E-08
794	462013.1	3810480	4.46E-08	1.43E-07	0.00E+00	1.88E-07	4.46E-08	1.43E-07	0.00E+00	1.88E-07	7.04E-09	2.87E-08	0.00E+00	3.57E-08	4.25E-09	1.66E-08	0.00E+00	2.09E-08
795	461998.8	3810437	4.43E-08	1.42E-07	0.00E+00	1.86E-07	4.43E-08	1.42E-07	0.00E+00	1.86E-07	7.00E-09	2.85E-08	0.00E+00	3.55E-08	4.22E-09	1.65E-08	0.00E+00	2.07E-08
796	461997.4	3810425	4.43E-08	1.42E-07	0.00E+00	1.87E-07	4.43E-08	1.42E-07	0.00E+00	1.87E-07	7.00E-09	2.85E-08	0.00E+00	3.55E-08	4.22E-09	1.65E-08	0.00E+00	2.08E-08
797	462022.1	3810400	4.59E-08	1.47E-07	0.00E+00	1.93E-07	4.59E-08	1.47E-07	0.00E+00	1.93E-07	7.24E-09	2.95E-08	0.00E+00	3.67E-08	4.37E-09	1.71E-08	0.00E+00	2.15E-08
798	462036.3	3810396	4.68E-08	1.5E-07	0.00E+00	1.97E-07	4.68E-08	1.50E-07	0.00E+00	1.97E-07	7.39E-09	3.01E-08	0.00E+00	3.74E-08	4.46E-09	1.74E-08	0.00E+00	2.19E-08
799	461988.4	3810383	4.37E-08	1.4E-07	0.00E+00	1.84E-07	4.37E-08	1.40E-07	0.00E+00	1.84E-07	6.91E-09	2.81E-08	0.00E+00	3.50E-08	4.17E-09	1.63E-08	0.00E+00	2.05E-08
800	461983.1	3810394	4.34E-08	1.39E-07	0.00E+00	1.83E-07	4.34E-08	1.39E-07	0.00E+00	1.83E-07	6.86E-09	2.79E-08	0.00E+00	3.48E-08	4.14E-09	1.62E-08	0.00E+00	2.03E-08
801	462655.7	3809186	3.95E-08	1.27E-07	0.00E+00	1.66E-07	3.95E-08	1.27E-07	0.00E+00	1.66E-07	6.24E-09	2.54E-08	0.00E+00	3.16E-08	3.76E-09	1.47E-08	0.00E+00	1.85E-08
802	462642	3809187	3.9E-08	1.25E-07	0.00E+00	1.64E-07	3.90E-08	1.25E-07	0.00E+00	1.64E-07	6.17E-09	2.51E-08	0.00E+00	3.13E-08	3.72E-09	1.46E-08	0.00E+00	1.83E-08
803	462636.5	3809188	3.89E-08	1.25E-07	0.00E+00	1.64E-07	3.89E-08	1.25E-07	0.00E+00	1.64E-07	6.14E-09	2.50E-08	0.00E+00	3.11E-08	3.71E-09	1.45E-08	0.00E+00	1.82E-08
804	462630.2	3809188	3.87E-08	1.24E-07	0.00E+00	1.63E-07	3.87E-08	1.24E-07	0.00E+00	1.63E-07	6.11E-09	2.49E-08	0.00E+00	3.10E-08	3.69E-09	1.44E-08	0.00E+00	1.81E-08
805	462563.1	3809182	3.55E-08	1.14E-07	0.00E+00	1.49E-07	3.55E-08	1.14E-07	0.00E+00	1.49E-07	5.60E-09	2.28E-08	0.00E+00	2.84E-08	3.38E-09	1.32E-08	0.00E+00	1.66E-08
806	462563.1	3809186	3.57E-08	1.14E-07	0.00E+00	1.50E-07	3.57E-08	1.14E-07	0.00E+00	1.50E-07	5.64E-09	2.29E-08	0.00E+00	2.86E-08	3.40E-09	1.33E-08	0.00E+00	1.67E-08
807	462556	3809186	3.55E-08	1.14E-07	0.00E+00	1.49E-07	3.55E-08	1.14E-07	0.00E+00	1.49E-07	5.60E-09	2.28E-08	0.00E+00	2.84E-08	3.38E-09	1.32E-08	0.00E+00	1.66E-08
808	462554.3	3809181	3.51E-08	1.13E-07	0.00E+00	1.48E-07	3.51E-08	1.13E-07	0.00E+00	1.48E-07	5.55E-09	2.26E-08	0.00E+00	2.81E-08	3.35E-09	1.31E-08	0.00E+00	1.64E-08
809	462159.8	3809423	3.04E-08	9.74E-08	0.00E+00	1.28E-07	3.04E-08	9.74E-08	0.00E+00	1.28E-07	4.80E-09	1.95E-08	0.00E+00	2.43E-08	2.89E-09	1.13E-08	0.00E+00	1.42E-08
810	462154.7	3809417	3E-08	9.61E-08	0.00E+00	1.26E-07	3.00E-08	9.61E-08	0.00E+00	1.26E-07	4.74E-09	1.93E-08	0.00E+00	2.40E-08	2.86E-09	1.12E-08	0.00E+00	1.40E-08
811	462141.3	3809420	2.92E-08	9.35E-08	0.00E+00	1.23E-07	2.92E-08	9.35E-08	0.00E+00	1.23E-07	4.61E-09	1.87E-08	0.00E+00	2.34E-08	2.78E-09	1.09E-08	0.00E+00	1.37E-08
812	462070.3	3809381	2.52E-08	8.09E-08	0.00E+00	1.06E-07	2.52E-08	8.09E-08	0.00E+00	1.06E-07	3.98E-09	1.62E-08	0.00E+00	2.02E-08	2.40E-09	9.40E-09	0.00E+00	1.18E-08
813	462046.9	3809382	2.44E-08	7.83E-08	0.00E+00	1.03E-07	2.44E-08	7.83E-08	0.00E+00	1.03E-07	3.86E-09	1.57E-08	0.00E+00	1.96E-08	2.33E-09	9.11E-09	0.00E+00	1.14E-08
814	461989.3	3809381	2.25E-08	7.22E-08	0.00E+00	9.48E-08	2.25E-08	7.22E-08	0.00E+00	9.48E-08	3.56E-09	1.45E-08	0.00E+00	1.80E-08	2.15E-09	8.40E-09	0.00E+00	1.05E-08

			UnMitigated			T2			T2L3			T4		
			1.45E-03	5.02E-03	0.00E+00	1.45E-03	5.02E-03	0.00E+00	2.28E-04	1.01E-03	0.00E+00	1.38E-04	5.84E-04	0.00E+00
			Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3
1	464159.2	3809562	1.45E-04	5.05E-04	0.00E+00	1.45E-04	5.05E-04	0.00E+00	2.30E-05	1.01E-04	0.00E+00	1.39E-05	5.87E-05	0.00E+00
2	464179.2	3809562	1.42E-04	4.94E-04	0.00E+00	1.42E-04	4.94E-04	0.00E+00	2.25E-05	9.90E-05	0.00E+00	1.36E-05	5.74E-05	0.00E+00
3	464199.2	3809562	1.39E-04	4.83E-04	0.00E+00	1.39E-04	4.83E-04	0.00E+00	2.20E-05	9.68E-05	0.00E+00	1.33E-05	5.62E-05	0.00E+00
4	464219.2	3809562	1.36E-04	4.72E-04	0.00E+00	1.36E-04	4.72E-04	0.00E+00	2.15E-05	9.47E-05	0.00E+00	1.30E-05	5.49E-05	0.00E+00
5	464239.2	3809562	1.33E-04	4.62E-04	0.00E+00	1.33E-04	4.62E-04	0.00E+00	2.10E-05	9.26E-05	0.00E+00	1.27E-05	5.37E-05	0.00E+00
6	464259.2	3809562	1.30E-04	4.52E-04	0.00E+00	1.30E-04	4.52E-04	0.00E+00	2.06E-05	9.07E-05	0.00E+00	1.24E-05	5.26E-05	0.00E+00
7	464279.2	3809562	1.27E-04	4.43E-04	0.00E+00	1.27E-04	4.43E-04	0.00E+00	2.01E-05	8.87E-05	0.00E+00	1.21E-05	5.15E-05	0.00E+00
8	464299.2	3809562	1.25E-04	4.33E-04	0.00E+00	1.25E-04	4.33E-04	0.00E+00	1.97E-05	8.68E-05	0.00E+00	1.19E-05	5.04E-05	0.00E+00
9	464319.2	3809562	1.22E-04	4.25E-04	0.00E+00	1.22E-04	4.25E-04	0.00E+00	1.93E-05	8.51E-05	0.00E+00	1.16E-05	4.94E-05	0.00E+00
10	464339.2	3809562	1.20E-04	4.16E-04	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.34E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
11	464359.2	3809562	1.17E-04	4.08E-04	0.00E+00	1.17E-04	4.08E-04	0.00E+00	1.85E-05	8.17E-05	0.00E+00	1.12E-05	4.74E-05	0.00E+00
12	464379.2	3809562	1.15E-04	3.99E-04	0.00E+00	1.15E-04	3.99E-04	0.00E+00	1.82E-05	8.00E-05	0.00E+00	1.10E-05	4.64E-05	0.00E+00
13	464399.2	3809562	1.13E-04	3.92E-04	0.00E+00	1.13E-04	3.92E-04	0.00E+00	1.78E-05	7.85E-05	0.00E+00	1.07E-05	4.55E-05	0.00E+00
14	464419.2	3809562	1.11E-04	3.84E-04	0.00E+00	1.11E-04	3.84E-04	0.00E+00	1.75E-05	7.70E-05	0.00E+00	1.05E-05	4.47E-05	0.00E+00
15	464439.2	3809562	1.09E-04	3.77E-04	0.00E+00	1.09E-04	3.77E-04	0.00E+00	1.71E-05	7.55E-05	0.00E+00	1.03E-05	4.38E-05	0.00E+00
16	463759.2	3809582	2.54E-04	8.83E-04	0.00E+00	2.54E-04	8.83E-04	0.00E+00	4.01E-05	1.77E-04	0.00E+00	2.42E-05	1.03E-04	0.00E+00
17	463779.2	3809582	2.47E-04	8.60E-04	0.00E+00	2.47E-04	8.60E-04	0.00E+00	3.91E-05	1.72E-04	0.00E+00	2.36E-05	9.99E-05	0.00E+00
18	463799.2	3809582	2.41E-04	8.37E-04	0.00E+00	2.41E-04	8.37E-04	0.00E+00	3.81E-05	1.68E-04	0.00E+00	2.30E-05	9.73E-05	0.00E+00
19	463819.2	3809582	2.35E-04	8.15E-04	0.00E+00	2.35E-04	8.15E-04	0.00E+00	3.71E-05	1.63E-04	0.00E+00	2.24E-05	9.47E-05	0.00E+00
20	463839.2	3809582	2.29E-04	7.94E-04	0.00E+00	2.29E-04	7.94E-04	0.00E+00	3.61E-05	1.59E-04	0.00E+00	2.18E-05	9.23E-05	0.00E+00
21	463859.2	3809582	2.24E-04	7.77E-04	0.00E+00	2.24E-04	7.77E-04	0.00E+00	3.53E-05	1.56E-04	0.00E+00	2.13E-05	9.03E-05	0.00E+00
22	463879.2	3809582	2.18E-04	7.57E-04	0.00E+00	2.18E-04	7.57E-04	0.00E+00	3.44E-05	1.52E-04	0.00E+00	2.08E-05	8.80E-05	0.00E+00
23	463899.2	3809582	2.12E-04	7.35E-04	0.00E+00	2.12E-04	7.35E-04	0.00E+00	3.34E-05	1.47E-04	0.00E+00	2.02E-05	8.55E-05	0.00E+00
24	463919.2	3809582	2.05E-04	7.13E-04	0.00E+00	2.05E-04	7.13E-04	0.00E+00	3.24E-05	1.43E-04	0.00E+00	1.96E-05	8.29E-05	0.00E+00
25	463939.2	3809582	1.99E-04	6.91E-04	0.00E+00	1.99E-04	6.91E-04	0.00E+00	3.15E-05	1.39E-04	0.00E+00	1.90E-05	8.04E-05	0.00E+00
26	464159.2	3809582	1.49E-04	5.19E-04	0.00E+00	1.49E-04	5.19E-04	0.00E+00	2.36E-05	1.04E-04	0.00E+00	1.42E-05	6.03E-05	0.00E+00
27	464179.2	3809582	1.46E-04	5.07E-04	0.00E+00	1.46E-04	5.07E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.89E-05	0.00E+00
28	464199.2	3809582	1.43E-04	4.96E-04	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.25E-05	9.93E-05	0.00E+00	1.36E-05	5.76E-05	0.00E+00
29	464219.2	3809582	1.40E-04	4.85E-04	0.00E+00	1.40E-04	4.85E-04	0.00E+00	2.20E-05	9.71E-05	0.00E+00	1.33E-05	5.63E-05	0.00E+00
30	464239.2	3809582	1.36E-04	4.74E-04	0.00E+00	1.36E-04	4.74E-04	0.00E+00	2.16E-05	9.49E-05	0.00E+00	1.30E-05	5.51E-05	0.00E+00
31	464259.2	3809582	1.33E-04	4.63E-04	0.00E+00	1.33E-04	4.63E-04	0.00E+00	2.11E-05	9.29E-05	0.00E+00	1.27E-05	5.39E-05	0.00E+00
32	464279.2	3809582	1.31E-04	4.53E-04	0.00E+00	1.31E-04	4.53E-04	0.00E+00	2.06E-05	9.08E-05	0.00E+00	1.24E-05	5.27E-05	0.00E+00
33	464299.2	3809582	1.28E-04	4.44E-04	0.00E+00	1.28E-04	4.44E-04	0.00E+00	2.02E-05	8.89E-05	0.00E+00	1.22E-05	5.16E-05	0.00E+00
34	464319.2	3809582	1.25E-04	4.35E-04	0.00E+00	1.25E-04	4.35E-04	0.00E+00	1.98E-05	8.71E-05	0.00E+00	1.19E-05	5.05E-05	0.00E+00
35	464339.2	3809582	1.23E-04	4.26E-04	0.00E+00	1.23E-04	4.26E-04	0.00E+00	1.94E-05	8.53E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
36	464359.2	3809582	1.20E-04	4.17E-04	0.00E+00	1.20E-04	4.17E-04	0.00E+00	1.90E-05	8.35E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
37	464379.2	3809582	1.17E-04	4.08E-04	0.00E+00	1.17E-04	4.08E-04	0.00E+00	1.86E-05	8.18E-05	0.00E+00	1.12E-05	4.74E-05	0.00E+00
38	464399.2	3809582	1.15E-04	4.00E-04	0.00E+00	1.15E-04	4.00E-04	0.00E+00	1.82E-05	8.02E-05	0.00E+00	1.10E-05	4.65E-05	0.00E+00
39	464419.2	3809582	1.13E-04	3.92E-04	0.00E+00	1.13E-04	3.92E-04	0.00E+00	1.78E-05	7.86E-05	0.00E+00	1.08E-05	4.56E-05	0.00E+00
40	464439.2	3809582	1.11E-04	3.84E-04	0.00E+00	1.11E-04	3.84E-04	0.00E+00	1.75E-05	7.70E-05	0.00E+00	1.05E-05	4.47E-05	0.00E+00
41	464459.2	3809582	1.08E-04	3.77E-04	0.00E+00	1.08E-04	3.77E-04	0.00E+00	1.71E-05	7.55E-05	0.00E+00	1.03E-05	4.38E-05	0.00E+00
42	463759.2	3809602	2.61E-04	9.07E-04	0.00E+00	2.61E-04	9.07E-04	0.00E+00	4.13E-05	1.82E-04	0.00E+00	2.49E-05	1.06E-04	0.00E+00
43	463779.2	3809602	2.54E-04	8.83E-04	0.00E+00	2.54E-04	8.83E-04	0.00E+00	4.02E-05	1.77E-04	0.00E+00	2.42E-05	1.03E-04	0.00E+00
44	463799.2	3809602	2.48E-04	8.60E-04	0.00E+00	2.48E-04	8.60E-04	0.00E+00	3.91E-05	1.72E-04	0.00E+00	2.36E-05	1.00E-04	0.00E+00
45	463819.2	3809602	2.41E-04	8.37E-04	0.00E+00	2.41E-04	8.37E-04	0.00E+00	3.81E-05	1.68E-04	0.00E+00	2.30E-05	9.74E-05	0.00E+00
46	463839.2	3809602	2.34E-04	8.15E-04	0.00E+00	2.34E-04	8.15E-04	0.00E+00	3.71E-05	1.63E-04	0.00E+00	2.23E-05	9.47E-05	0.00E+00
47	463859.2	3809602	2.30E-04	7.97E-04	0.00E+00	2.30E-04	7.97E-04	0.00E+00	3.63E-05	1.60E-04	0.00E+00	2.19E-05	9.27E-05	0.00E+00
48	463879.2	3809602	2.24E-04	7.78E-04	0.00E+00	2.24E-04	7.78E-04	0.00E+00	3.54E-05	1.56E-04	0.00E+00	2.13E-05	9.05E-05	0.00E+00
49	463899.2	3809602	2.18E-04	7.57E-04	0.00E+00	2.18E-04	7.57E-04	0.00E+00	3.44E-05	1.52E-04	0.00E+00	2.08E-05	8.80E-05	0.00E+00
50	463919.2	3809602	2.12E-04	7.35E-04	0.00E+00	2.12E-04	7.35E-04	0.00E+00	3.34E-05	1.47E-04	0.00E+00	2.02E-05	8.55E-05	0.00E+00
51	463939.2	3809602	2.05E-04	7.13E-04	0.00E+00	2.05E-04	7.13E-04	0.00E+00	3.24E-05	1.43E-04	0.00E+00	1.96E-05	8.29E-05	0.00E+00
52	463959.2	3809602	1.99E-04	6.92E-04	0.00E+00	1.99E-04	6.92E-04	0.00E+00	3.15E-05	1.39E-04	0.00E+00	1.90E-05	8.05E-05	0.00E+00
53	464159.2	3809602	1.53E-04	5.33E-04	0.00E+00	1.53E-04	5.33E-04	0.00E+00	2.42E-05	1.07E-04	0.00E+00	1.46E-05	6.19E-05	0.00E+00
54	464179.2	3809602	1.50E-04	5.20E-04	0.00E+00	1.50E-04	5.20E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.05E-05	0.00E+00
55	464199.2	3809602	1.46E-04	5.08E-04	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.91E-05	0.00E+00
56	464219.2	3809602	1.43E-04	4.97E-04	0.00E+00	1.43E-04	4.97E-04	0.00E+00	2.26E-05	9.95E-05	0.00E+00	1.36E-05	5.78E-05	0.00E+00
57	464239.2	3809602	1.40E-04	4.86E-04	0.00E+00	1.40E-04	4.86E-04	0.00E+00	2.21E-05	9.73E-05	0.00E+00	1.33E-05	5.65E-05	0.00E+00
58	464259.2	3809602	1.37E-04	4.74E-04	0.00E+00	1.37E-04	4.74E-04	0.00E+00	2.16E-05	9.51E-05	0.00E+00	1.30E-05	5.52E-05	0.00E+00
59	464279.2	3809602	1.34E-04	4.64E-04	0.00E+00	1.34E-04	4.64E-04	0.00E+00	2.11E-05	9.30E-05	0.00E+00	1.27E-05	5.40E-05	0.00E+00
60	464299.2	3809602	1.31E-04	4.54E-04	0.00E+00	1.31E-04	4.54E-04	0.00E+00	2.07E-05	9.10E-05	0.00E+00	1.25E-05	5.28E-05	0.00E+00
61	464319.2	3809602	1.28E-04	4.45E-04	0.00E+00	1.28E-04	4.45E-04	0.00E+00	2.02E-05	8.91E-05	0.00E+00	1.22E-05	5.17E-05	0.00E+00
62	464339.2	3809602	1.25E-04	4.35E-04	0.00E+00	1.25E-04	4.35E-04	0.00E+00	1.98E-05	8.71E-05	0.00E+00	1.19E-05	5.06E-05	0.00E+00
63	464359.2	3809602	1.22E-04	4.25E-04	0.00E+00	1.22E-04	4.25E-04	0.00E+00	1.94E-05	8.52E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
64	464379.2	3809602	1.20E-04	4.17E-04	0.00E+00	1.20E-04	4.17E-04	0.00E+00	1.90E-05	8.35E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
65	464399.2	3809602	1.18E-04	4.08E-04	0.00E+00	1.18E-04	4.08E-04	0.00E+00	1.86E-05	8.18E-05	0.00E+00	1.12E-05	4.75E-05	0.00E+00
66	464419.2	3809602	1.15E-04	4.00E-04	0.00E+00	1.15E-04	4.00E-04	0.00E+00	1.82E-05	8.01E-05	0.00E+00	1.10E-05	4.65E-05	0.00E+00
67	464439.2	3809602	1.13E-04	3.91E-04	0.00E+00	1.13E-04	3.91E-04	0.00E+00	1.78E-05	7.84E-05	0.00E+00	1.07E-05	4.55E-05	0.00E+00
68	464459.2	3809602	1.10E-04	3.84E-04	0.00E+00	1.10E-04	3.84E-04	0.00E+00	1.75E-05	7.69E-05	0.00E+00	1.05E-05	4.46E-05	0.00E+00
69	464479.2	3809602	1.08E-04	3.76E-04	0.00E+00	1.08E-04	3.76E-04	0.00E+00	1.71E-05	7.54E-05	0.00E+00	1.03E-05	4.37E-05	0.00E+00
70	463759.2	3809622	2.67E-04	9.29E-04	0.00E+00	2.67E-04	9.29E-04	0.00E+00	4.23E-05	1.86E-04	0.00E+00	2.55E-05	1.08E-04	0.00E+00
71	463779.2	3809622	2.60E-04	9.04E-04	0.00E+00	2.60E-04	9.04E-04	0.00E+00	4.11E-05	1.81E-04	0.00E+00	2.48E-05	1.05E-04	0.00E+00
72	463799.2	3809622	2.54E-04	8.84E-04	0.00E+00	2.54E-04	8.84E-04	0.00E+00	4.02E-05	1.77E-04	0.00E+00	2.43E-05	1.03E-04	0.00E+00
73	463819.2	3809622	2.48E-04	8.62E-04	0.00E+00	2.48E-04	8.62E-04	0.00E+00	3.92E-05	1.73E-04	0.00E+00	2.36E-05	1.00E-04	0.00E+00
74	463839.2	3809622	2.41E-04	8.38E-04	0.00E+00	2.41E-04	8.38E-04	0.00E+00	3.81E-05	1.68E-04	0.00E+00	2.30E-05	9.75E-05	0.00E+00
75	463859.2	3809622	2.36E-04	8.19E-04	0.00E+00	2.36E-04	8.19E-04	0.00E+00	3.72E-05	1.64E-04	0.00E+00	2.25E-05	9.52E-05	0.00E+00
76	463879.2	3809622	2.30E-04	7.99E-04	0.00E+00	2.30E-04	7.99E-04	0.00E+00	3.63E-05	1.60E-04	0.00E+00	2.19E-05	9.29E-05	0.00E+00
77	463899.2	3809622	2.24E-04	7.78E-04	0.00E+00	2.24E-04	7.78E-04	0.00E+00	3.54E-05	1.56E-04	0.00E+00	2.14E-05	9.05E-05	0.00E+00
78	463919.2	3809622	2.18E-04	7.57E-04	0.00E+00	2.18E-04	7.57E-04	0.00E+00	3.45E-05	1.52E-04	0.00E+00	2.08E-05	8.81E-05	0.00E+00
79	463939.2	3809622	2.12E-04	7.36E-04	0.00E+00	2.12E-04	7.36E-04	0.00E+00	3.35E-05	1.47E-04	0.00E+00	2.02E-05	8.56E-05	0.00E+00
80	463959.2	3809622	2.06E-04	7.14E-04	0.00E+00	2.06E-04	7.14E-04	0.00E+00	3.25E-05	1.43E-04	0.00E+00	1.96E-05	8.31E-05	0.00E+00
81	464139.2	3809622	1.61E-04	5.60E-04	0.00E+00	1.61E-04	5.60E-04	0.00E+00	2.55E-05	1.12E-04	0.00E+00	1.54E-05	6.51E-05	0.00E+00
82	464159.2	3809622	1.57E-04	5.47E-04	0.00E+00	1.57E-04	5.47E-04	0.00E+00	2.49E-05	1.10E-04	0.00E+00	1.50E-05	6.36E-05	0.00E+00
83	464179.2	3809622	1.54E-04	5.33E-04	0.00E+00	1.54E-04	5.33E-04	0.00E+00	2.43E-05	1.07E-04	0.00E+00	1.46E-05	6.20E-05	0.00E+00
84	464199.2	3809622	1.50E-04	5.20E-04	0.00E+00	1.50E-04	5.20E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.05E-05	0.00E+00
85	464219.2	3809622	1.46E-04	5.08E-04	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.91E-05	0.00E+00
86	464239.2	3809622	1.43E-04	4.97E-04	0.00E+00	1.43E-04	4.97E-04	0.00E+00	2.26E-05	9.96E-05	0.00E+00	1.36E-05	5.78E-05	0.00E+00
87	464259.2	3809622	1.40E-04	4.86E-04	0.00E+00	1.40E-04	4.86E-04	0.00E+00	2.21E-05	9.73E-05	0.00E+00	1.33E-05	5.65E-05	0.00E+00
88	464279.2	3809622	1.37E-04	4.74E-04	0.00E+00	1.37E-04	4.74E-04	0.00E+00	2.16E-05	9.51E-05	0.00E+00	1.30E-05	5.52E-05	0.00E+00

89	464299.2	3809622	1.33E-04	4.64E-04	0.00E+00	1.33E-04	4.64E-04	0.00E+00	2.11E-05	9.29E-05	0.00E+00	1.27E-05	5.39E-05	0.00E+00
90	464319.2	3809622	1.31E-04	4.54E-04	0.00E+00	1.31E-04	4.54E-04	0.00E+00	2.06E-05	9.09E-05	0.00E+00	1.24E-05	5.27E-05	0.00E+00
91	464339.2	3809622	1.28E-04	4.44E-04	0.00E+00	1.28E-04	4.44E-04	0.00E+00	2.02E-05	8.90E-05	0.00E+00	1.22E-05	5.16E-05	0.00E+00
92	464359.2	3809622	1.25E-04	4.34E-04	0.00E+00	1.25E-04	4.34E-04	0.00E+00	1.97E-05	8.70E-05	0.00E+00	1.19E-05	5.05E-05	0.00E+00
93	464379.2	3809622	1.22E-04	4.24E-04	0.00E+00	1.22E-04	4.24E-04	0.00E+00	1.93E-05	8.50E-05	0.00E+00	1.16E-05	4.93E-05	0.00E+00
94	464399.2	3809622	1.20E-04	4.16E-04	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.33E-05	0.00E+00	1.14E-05	4.83E-05	0.00E+00
95	464419.2	3809622	1.17E-04	4.07E-04	0.00E+00	1.17E-04	4.07E-04	0.00E+00	1.85E-05	8.16E-05	0.00E+00	1.12E-05	4.73E-05	0.00E+00
96	464439.2	3809622	1.15E-04	3.99E-04	0.00E+00	1.15E-04	3.99E-04	0.00E+00	1.81E-05	7.99E-05	0.00E+00	1.09E-05	4.64E-05	0.00E+00
97	464459.2	3809622	1.13E-04	3.91E-04	0.00E+00	1.13E-04	3.91E-04	0.00E+00	1.78E-05	7.83E-05	0.00E+00	1.07E-05	4.54E-05	0.00E+00
98	464479.2	3809622	1.10E-04	3.83E-04	0.00E+00	1.10E-04	3.83E-04	0.00E+00	1.74E-05	7.67E-05	0.00E+00	1.05E-05	4.45E-05	0.00E+00
99	463759.2	3809642	2.74E-04	9.53E-04	0.00E+00	2.74E-04	9.53E-04	0.00E+00	4.34E-05	1.91E-04	0.00E+00	2.61E-05	1.11E-04	0.00E+00
100	463779.2	3809642	2.68E-04	9.30E-04	0.00E+00	2.68E-04	9.30E-04	0.00E+00	4.23E-05	1.86E-04	0.00E+00	2.55E-05	1.08E-04	0.00E+00
101	463799.2	3809642	2.61E-04	9.07E-04	0.00E+00	2.61E-04	9.07E-04	0.00E+00	4.13E-05	1.82E-04	0.00E+00	2.49E-05	1.05E-04	0.00E+00
102	463819.2	3809642	2.55E-04	8.85E-04	0.00E+00	2.55E-04	8.85E-04	0.00E+00	4.02E-05	1.77E-04	0.00E+00	2.43E-05	1.03E-04	0.00E+00
103	463839.2	3809642	2.48E-04	8.63E-04	0.00E+00	2.48E-04	8.63E-04	0.00E+00	3.92E-05	1.73E-04	0.00E+00	2.37E-05	1.00E-04	0.00E+00
104	463859.2	3809642	2.42E-04	8.41E-04	0.00E+00	2.42E-04	8.41E-04	0.00E+00	3.82E-05	1.68E-04	0.00E+00	2.31E-05	9.77E-05	0.00E+00
105	463879.2	3809642	2.36E-04	8.20E-04	0.00E+00	2.36E-04	8.20E-04	0.00E+00	3.73E-05	1.64E-04	0.00E+00	2.25E-05	9.53E-05	0.00E+00
106	463899.2	3809642	2.30E-04	7.99E-04	0.00E+00	2.30E-04	7.99E-04	0.00E+00	3.64E-05	1.60E-04	0.00E+00	2.19E-05	9.30E-05	0.00E+00
107	463919.2	3809642	2.24E-04	7.79E-04	0.00E+00	2.24E-04	7.79E-04	0.00E+00	3.54E-05	1.56E-04	0.00E+00	2.14E-05	9.06E-05	0.00E+00
108	463939.2	3809642	2.18E-04	7.57E-04	0.00E+00	2.18E-04	7.57E-04	0.00E+00	3.44E-05	1.52E-04	0.00E+00	2.08E-05	8.81E-05	0.00E+00
109	463959.2	3809642	2.12E-04	7.36E-04	0.00E+00	2.12E-04	7.36E-04	0.00E+00	3.35E-05	1.47E-04	0.00E+00	2.02E-05	8.55E-05	0.00E+00
110	463979.2	3809642	2.06E-04	7.14E-04	0.00E+00	2.06E-04	7.14E-04	0.00E+00	3.25E-05	1.43E-04	0.00E+00	1.96E-05	8.31E-05	0.00E+00
111	464139.2	3809642	1.66E-04	5.75E-04	0.00E+00	1.66E-04	5.75E-04	0.00E+00	2.62E-05	1.15E-04	0.00E+00	1.58E-05	6.69E-05	0.00E+00
112	464159.2	3809642	1.61E-04	5.61E-04	0.00E+00	1.61E-04	5.61E-04	0.00E+00	2.55E-05	1.12E-04	0.00E+00	1.54E-05	6.52E-05	0.00E+00
113	464179.2	3809642	1.57E-04	5.47E-04	0.00E+00	1.57E-04	5.47E-04	0.00E+00	2.49E-05	1.10E-04	0.00E+00	1.50E-05	6.36E-05	0.00E+00
114	464199.2	3809642	1.53E-04	5.33E-04	0.00E+00	1.53E-04	5.33E-04	0.00E+00	2.43E-05	1.07E-04	0.00E+00	1.46E-05	6.20E-05	0.00E+00
115	464219.2	3809642	1.50E-04	5.21E-04	0.00E+00	1.50E-04	5.21E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.05E-05	0.00E+00
116	464239.2	3809642	1.46E-04	5.08E-04	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.91E-05	0.00E+00
117	464259.2	3809642	1.43E-04	4.96E-04	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.26E-05	9.94E-05	0.00E+00	1.36E-05	5.77E-05	0.00E+00
118	464279.2	3809642	1.40E-04	4.85E-04	0.00E+00	1.40E-04	4.85E-04	0.00E+00	2.20E-05	9.71E-05	0.00E+00	1.33E-05	5.63E-05	0.00E+00
119	464299.2	3809642	1.36E-04	4.73E-04	0.00E+00	1.36E-04	4.73E-04	0.00E+00	2.15E-05	9.49E-05	0.00E+00	1.30E-05	5.50E-05	0.00E+00
120	464319.2	3809642	1.33E-04	4.62E-04	0.00E+00	1.33E-04	4.62E-04	0.00E+00	2.10E-05	9.27E-05	0.00E+00	1.27E-05	5.38E-05	0.00E+00
121	464339.2	3809642	1.30E-04	4.52E-04	0.00E+00	1.30E-04	4.52E-04	0.00E+00	2.06E-05	9.06E-05	0.00E+00	1.24E-05	5.26E-05	0.00E+00
122	464359.2	3809642	1.27E-04	4.42E-04	0.00E+00	1.27E-04	4.42E-04	0.00E+00	2.01E-05	8.86E-05	0.00E+00	1.21E-05	5.14E-05	0.00E+00
123	464379.2	3809642	1.25E-04	4.33E-04	0.00E+00	1.25E-04	4.33E-04	0.00E+00	1.97E-05	8.67E-05	0.00E+00	1.19E-05	5.03E-05	0.00E+00
124	464399.2	3809642	1.22E-04	4.23E-04	0.00E+00	1.22E-04	4.23E-04	0.00E+00	1.93E-05	8.48E-05	0.00E+00	1.16E-05	4.92E-05	0.00E+00
125	464419.2	3809642	1.19E-04	4.14E-04	0.00E+00	1.19E-04	4.14E-04	0.00E+00	1.88E-05	8.30E-05	0.00E+00	1.14E-05	4.82E-05	0.00E+00
126	464439.2	3809642	1.17E-04	4.05E-04	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.12E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
127	464459.2	3809642	1.14E-04	3.97E-04	0.00E+00	1.14E-04	3.97E-04	0.00E+00	1.81E-05	7.95E-05	0.00E+00	1.09E-05	4.62E-05	0.00E+00
128	464479.2	3809642	1.12E-04	3.89E-04	0.00E+00	1.12E-04	3.89E-04	0.00E+00	1.77E-05	7.79E-05	0.00E+00	1.07E-05	4.52E-05	0.00E+00
129	464499.2	3809642	1.10E-04	3.81E-04	0.00E+00	1.10E-04	3.81E-04	0.00E+00	1.73E-05	7.63E-05	0.00E+00	1.04E-05	4.43E-05	0.00E+00
130	464519.2	3809642	1.07E-04	3.73E-04	0.00E+00	1.07E-04	3.73E-04	0.00E+00	1.69E-05	7.47E-05	0.00E+00	1.02E-05	4.33E-05	0.00E+00
131	463779.2	3809662	2.75E-04	9.54E-04	0.00E+00	2.75E-04	9.54E-04	0.00E+00	4.34E-05	1.91E-04	0.00E+00	2.62E-05	1.11E-04	0.00E+00
132	463799.2	3809662	2.68E-04	9.30E-04	0.00E+00	2.68E-04	9.30E-04	0.00E+00	4.23E-05	1.86E-04	0.00E+00	2.55E-05	1.08E-04	0.00E+00
133	463819.2	3809662	2.61E-04	9.08E-04	0.00E+00	2.61E-04	9.08E-04	0.00E+00	4.13E-05	1.82E-04	0.00E+00	2.49E-05	1.06E-04	0.00E+00
134	463839.2	3809662	2.55E-04	8.87E-04	0.00E+00	2.55E-04	8.87E-04	0.00E+00	4.03E-05	1.78E-04	0.00E+00	2.43E-05	1.03E-04	0.00E+00
135	463859.2	3809662	2.48E-04	8.62E-04	0.00E+00	2.48E-04	8.62E-04	0.00E+00	3.92E-05	1.73E-04	0.00E+00	2.37E-05	1.00E-04	0.00E+00
136	463879.2	3809662	2.42E-04	8.40E-04	0.00E+00	2.42E-04	8.40E-04	0.00E+00	3.82E-05	1.68E-04	0.00E+00	2.31E-05	9.77E-05	0.00E+00
137	463899.2	3809662	2.36E-04	8.20E-04	0.00E+00	2.36E-04	8.20E-04	0.00E+00	3.73E-05	1.64E-04	0.00E+00	2.25E-05	9.54E-05	0.00E+00
138	463919.2	3809662	2.30E-04	8.00E-04	0.00E+00	2.30E-04	8.00E-04	0.00E+00	3.64E-05	1.60E-04	0.00E+00	2.20E-05	9.30E-05	0.00E+00
139	463939.2	3809662	2.24E-04	7.78E-04	0.00E+00	2.24E-04	7.78E-04	0.00E+00	3.54E-05	1.56E-04	0.00E+00	2.13E-05	9.05E-05	0.00E+00
140	463959.2	3809662	2.17E-04	7.55E-04	0.00E+00	2.17E-04	7.55E-04	0.00E+00	3.44E-05	1.51E-04	0.00E+00	2.07E-05	8.78E-05	0.00E+00
141	463979.2	3809662	2.11E-04	7.33E-04	0.00E+00	2.11E-04	7.33E-04	0.00E+00	3.34E-05	1.47E-04	0.00E+00	2.01E-05	8.53E-05	0.00E+00
142	464059.2	3809662	1.89E-04	6.56E-04	0.00E+00	1.89E-04	6.56E-04	0.00E+00	2.99E-05	1.32E-04	0.00E+00	1.80E-05	7.63E-05	0.00E+00
143	464079.2	3809662	1.84E-04	6.38E-04	0.00E+00	1.84E-04	6.38E-04	0.00E+00	2.90E-05	1.28E-04	0.00E+00	1.75E-05	7.42E-05	0.00E+00
144	464099.2	3809662	1.79E-04	6.21E-04	0.00E+00	1.79E-04	6.21E-04	0.00E+00	2.83E-05	1.25E-04	0.00E+00	1.70E-05	7.22E-05	0.00E+00
145	464119.2	3809662	1.74E-04	6.05E-04	0.00E+00	1.74E-04	6.05E-04	0.00E+00	2.75E-05	1.21E-04	0.00E+00	1.66E-05	7.04E-05	0.00E+00
146	464139.2	3809662	1.70E-04	5.90E-04	0.00E+00	1.70E-04	5.90E-04	0.00E+00	2.68E-05	1.18E-04	0.00E+00	1.62E-05	6.86E-05	0.00E+00
147	464159.2	3809662	1.65E-04	5.74E-04	0.00E+00	1.65E-04	5.74E-04	0.00E+00	2.61E-05	1.15E-04	0.00E+00	1.58E-05	6.68E-05	0.00E+00
148	464179.2	3809662	1.61E-04	5.60E-04	0.00E+00	1.61E-04	5.60E-04	0.00E+00	2.55E-05	1.12E-04	0.00E+00	1.54E-05	6.51E-05	0.00E+00
149	464199.2	3809662	1.57E-04	5.46E-04	0.00E+00	1.57E-04	5.46E-04	0.00E+00	2.48E-05	1.09E-04	0.00E+00	1.50E-05	6.35E-05	0.00E+00
150	464219.2	3809662	1.53E-04	5.33E-04	0.00E+00	1.53E-04	5.33E-04	0.00E+00	2.42E-05	1.07E-04	0.00E+00	1.46E-05	6.19E-05	0.00E+00
151	464239.2	3809662	1.50E-04	5.19E-04	0.00E+00	1.50E-04	5.19E-04	0.00E+00	2.36E-05	1.04E-04	0.00E+00	1.43E-05	6.04E-05	0.00E+00
152	464259.2	3809662	1.46E-04	5.06E-04	0.00E+00	1.46E-04	5.06E-04	0.00E+00	2.30E-05	1.01E-04	0.00E+00	1.39E-05	5.89E-05	0.00E+00
153	464279.2	3809662	1.42E-04	4.95E-04	0.00E+00	1.42E-04	4.95E-04	0.00E+00	2.25E-05	9.91E-05	0.00E+00	1.36E-05	5.75E-05	0.00E+00
154	464299.2	3809662	1.39E-04	4.83E-04	0.00E+00	1.39E-04	4.83E-04	0.00E+00	2.20E-05	9.67E-05	0.00E+00	1.32E-05	5.61E-05	0.00E+00
155	464319.2	3809662	1.36E-04	4.71E-04	0.00E+00	1.36E-04	4.71E-04	0.00E+00	2.14E-05	9.44E-05	0.00E+00	1.29E-05	5.48E-05	0.00E+00
156	464339.2	3809662	1.33E-04	4.60E-04	0.00E+00	1.33E-04	4.60E-04	0.00E+00	2.09E-05	9.23E-05	0.00E+00	1.26E-05	5.35E-05	0.00E+00
157	464359.2	3809662	1.30E-04	4.50E-04	0.00E+00	1.30E-04	4.50E-04	0.00E+00	2.05E-05	9.02E-05	0.00E+00	1.24E-05	5.24E-05	0.00E+00
158	464379.2	3809662	1.27E-04	4.40E-04	0.00E+00	1.27E-04	4.40E-04	0.00E+00	2.00E-05	8.83E-05	0.00E+00	1.21E-05	5.12E-05	0.00E+00
159	464399.2	3809662	1.24E-04	4.31E-04	0.00E+00	1.24E-04	4.31E-04	0.00E+00	1.96E-05	8.63E-05	0.00E+00	1.18E-05	5.01E-05	0.00E+00
160	464419.2	3809662	1.21E-04	4.21E-04	0.00E+00	1.21E-04	4.21E-04	0.00E+00	1.92E-05	8.44E-05	0.00E+00	1.16E-05	4.90E-05	0.00E+00
161	464439.2	3809662	1.18E-04	4.12E-04	0.00E+00	1.18E-04	4.12E-04	0.00E+00	1.87E-05	8.25E-05	0.00E+00	1.13E-05	4.79E-05	0.00E+00
162	464459.2	3809662	1.16E-04	4.03E-04	0.00E+00	1.16E-04	4.03E-04	0.00E+00	1.83E-05	8.07E-05	0.00E+00	1.11E-05	4.68E-05	0.00E+00
163	464479.2	3809662	1.14E-04	3.95E-04	0.00E+00	1.14E-04	3.95E-04	0.00E+00	1.79E-05	7.91E-05	0.00E+00	1.08E-05	4.59E-05	0.00E+00
164	464499.2	3809662	1.11E-04	3.86E-04	0.00E+00	1.11E-04	3.86E-04	0.00E+00	1.76E-05	7.74E-05	0.00E+00	1.06E-05	4.49E-05	0.00E+00
165	464519.2	3809662	1.09E-04	3.78E-04	0.00E+00	1.09E-04	3.78E-04	0.00E+00	1.72E-05	7.57E-05	0.00E+00	1.04E-05	4.39E-05	0.00E+00
166	463779.2	3809682	2.79E-04	9.70E-04	0.00E+00	2.79E-04	9.70E-04	0.00E+00	4.41E-05	1.94E-04	0.00E+00	2.66E-05	1.13E-04	0.00E+00
167	463799.2	3809682	2.75E-04	9.54E-04	0.00E+00	2.75E-04	9.54E-04	0.00E+00	4.34E-05	1.91E-04	0.00E+00	2.62E-05	1.11E-04	0.00E+00
168	463819.2	3809682	2.69E-04	9.33E-04	0.00E+00	2.69E-04	9.33E-04	0.00E+00	4.24E-05	1.87E-04	0.00E+00	2.56E-05	1.08E-04	0.00E+00
169	463839.2	3809682	2.61E-04	9.07E-04	0.00E+00	2.61E-04	9.07E-04	0.00E+00	4.13E-05	1.82E-04	0.00E+00	2.49E-05	1.06E-04	0.00E+00
170	463859.2	3809682	2.54E-04	8.82E-04	0.00E+00	2.54E-04	8.82E-04	0.00E+00	4.01E-05	1.77E-04	0.00E+00	2.42E-05	1.03E-04	0.00E+00
171	463879.2	3809682	2.48E-04	8.60E-04	0.00E+00	2.48E-04	8.60E-04	0.00E+00	3.91E-05	1.72E-04	0.00E+00	2.36E-05	1.00E-04	0.00E+00
172	463899.2	3809682	2.42E-04	8.40E-04	0.00E+00	2.42E-04	8.40E-04	0.00E+00	3.82E-05	1.68E-04	0.00E+00	2.31E-05	9.77E-05	0.00E+00
173	463919.2	3809682	2.36E-04	8.21E-04	0.00E+00	2.36E-04	8.21E-04	0.00E+00	3.73E-05	1.64E-04	0.00E+00	2.25E-05	9.54E-05	0.00E+00
174	463939.2	3809682	2.30E-04	7.99E-04	0.00E+00	2.30E-04	7.99E-04	0.00E+00	3.63E-05	1.60E-04	0.00E+00	2.19E-05	9.29E-05	0.00E+00
175	463959.2	3809682	2.24E-04	7.77E-04	0.00E+00	2.24E-04	7.77E-04	0.00E+00	3.53E-05	1.56E-04	0.00E+00	2.13E-05	9.03E-05	0.00E+00
176	463979.2	3809682	2.17E-04	7.54E-04	0.00E+00	2.17E-04	7.54E-04	0.00E+00	3.43E-05	1.51E-04	0.00E+00	2.07E-05	8.76E-05	0.00E+00
177	463999.2	3809682	2.11E-04	7.32E-04	0.00E+00	2.11E-04	7.32E-04	0.00E+00	3.33E-05	1.47E-04	0.00E+00	2.01E-05	8.51E-05	0.00E+00
178	464019.2	3809682	2.05E-04	7.11E-04	0.00E+00	2.05E-04	7.11E-04	0.00E+00	3.23E-05	1.42E-04	0.00E+00	1.95E-05	8.27E-05	0.00E+00
179	464039.2	3809682	1.99E-04	6.92E-04	0.00E+00	1.99E-04	6.92E-04	0.00E+00	3.15E-05	1.39E-04	0.00E+00	1.90E-05	8.05E-05	0.00E+00

180	464059.2	3809682	1.94E-04	6.74E-04	0.00E+00	1.94E-04	6.74E-04	0.00E+00	3.06E-05	1.35E-04	0.00E+00	1.85E-05	7.83E-05	0.00E+00
181	464079.2	3809682	1.89E-04	6.55E-04	0.00E+00	1.89E-04	6.55E-04	0.00E+00	2.98E-05	1.31E-04	0.00E+00	1.80E-05	7.62E-05	0.00E+00
182	464099.2	3809682	1.84E-04	6.38E-04	0.00E+00	1.84E-04	6.38E-04	0.00E+00	2.90E-05	1.28E-04	0.00E+00	1.75E-05	7.41E-05	0.00E+00
183	464119.2	3809682	1.79E-04	6.20E-04	0.00E+00	1.79E-04	6.20E-04	0.00E+00	2.82E-05	1.24E-04	0.00E+00	1.70E-05	7.21E-05	0.00E+00
184	464139.2	3809682	1.74E-04	6.03E-04	0.00E+00	1.74E-04	6.03E-04	0.00E+00	2.74E-05	1.21E-04	0.00E+00	1.65E-05	7.01E-05	0.00E+00
185	464159.2	3809682	1.69E-04	5.87E-04	0.00E+00	1.69E-04	5.87E-04	0.00E+00	2.67E-05	1.18E-04	0.00E+00	1.61E-05	6.83E-05	0.00E+00
186	464179.2	3809682	1.65E-04	5.73E-04	0.00E+00	1.65E-04	5.73E-04	0.00E+00	2.60E-05	1.15E-04	0.00E+00	1.57E-05	6.66E-05	0.00E+00
187	464199.2	3809682	1.61E-04	5.58E-04	0.00E+00	1.61E-04	5.58E-04	0.00E+00	2.54E-05	1.12E-04	0.00E+00	1.53E-05	6.49E-05	0.00E+00
188	464219.2	3809682	1.56E-04	5.44E-04	0.00E+00	1.56E-04	5.44E-04	0.00E+00	2.47E-05	1.09E-04	0.00E+00	1.49E-05	6.32E-05	0.00E+00
189	464239.2	3809682	1.53E-04	5.30E-04	0.00E+00	1.53E-04	5.30E-04	0.00E+00	2.41E-05	1.06E-04	0.00E+00	1.45E-05	6.16E-05	0.00E+00
190	464259.2	3809682	1.49E-04	5.17E-04	0.00E+00	1.49E-04	5.17E-04	0.00E+00	2.35E-05	1.04E-04	0.00E+00	1.42E-05	6.01E-05	0.00E+00
191	464279.2	3809682	1.45E-04	5.04E-04	0.00E+00	1.45E-04	5.04E-04	0.00E+00	2.29E-05	1.01E-04	0.00E+00	1.38E-05	5.86E-05	0.00E+00
192	464299.2	3809682	1.41E-04	4.91E-04	0.00E+00	1.41E-04	4.91E-04	0.00E+00	2.23E-05	9.85E-05	0.00E+00	1.35E-05	5.71E-05	0.00E+00
193	464319.2	3809682	1.38E-04	4.80E-04	0.00E+00	1.38E-04	4.80E-04	0.00E+00	2.18E-05	9.62E-05	0.00E+00	1.32E-05	5.58E-05	0.00E+00
194	464339.2	3809682	1.35E-04	4.69E-04	0.00E+00	1.35E-04	4.69E-04	0.00E+00	2.13E-05	9.40E-05	0.00E+00	1.29E-05	5.45E-05	0.00E+00
195	464359.2	3809682	1.32E-04	4.58E-04	0.00E+00	1.32E-04	4.58E-04	0.00E+00	2.08E-05	9.18E-05	0.00E+00	1.26E-05	5.33E-05	0.00E+00
196	464379.2	3809682	1.29E-04	4.48E-04	0.00E+00	1.29E-04	4.48E-04	0.00E+00	2.04E-05	8.98E-05	0.00E+00	1.23E-05	5.21E-05	0.00E+00
197	464399.2	3809682	1.26E-04	4.37E-04	0.00E+00	1.26E-04	4.37E-04	0.00E+00	1.99E-05	8.76E-05	0.00E+00	1.20E-05	5.09E-05	0.00E+00
198	464419.2	3809682	1.23E-04	4.27E-04	0.00E+00	1.23E-04	4.27E-04	0.00E+00	1.94E-05	8.56E-05	0.00E+00	1.17E-05	4.97E-05	0.00E+00
199	464439.2	3809682	1.20E-04	4.18E-04	0.00E+00	1.20E-04	4.18E-04	0.00E+00	1.90E-05	8.38E-05	0.00E+00	1.15E-05	4.86E-05	0.00E+00
200	464459.2	3809682	1.18E-04	4.09E-04	0.00E+00	1.18E-04	4.09E-04	0.00E+00	1.86E-05	8.20E-05	0.00E+00	1.12E-05	4.76E-05	0.00E+00
201	464479.2	3809682	1.15E-04	4.00E-04	0.00E+00	1.15E-04	4.00E-04	0.00E+00	1.82E-05	8.02E-05	0.00E+00	1.10E-05	4.65E-05	0.00E+00
202	464499.2	3809682	1.13E-04	3.91E-04	0.00E+00	1.13E-04	3.91E-04	0.00E+00	1.78E-05	7.83E-05	0.00E+00	1.07E-05	4.55E-05	0.00E+00
203	464519.2	3809682	1.10E-04	3.83E-04	0.00E+00	1.10E-04	3.83E-04	0.00E+00	1.74E-05	7.67E-05	0.00E+00	1.05E-05	4.45E-05	0.00E+00
204	463779.2	3809702	2.86E-04	9.92E-04	0.00E+00	2.86E-04	9.92E-04	0.00E+00	4.51E-05	1.99E-04	0.00E+00	2.72E-05	1.15E-04	0.00E+00
205	463799.2	3809702	2.80E-04	9.72E-04	0.00E+00	2.80E-04	9.72E-04	0.00E+00	4.42E-05	1.95E-04	0.00E+00	2.67E-05	1.13E-04	0.00E+00
206	463819.2	3809702	2.74E-04	9.51E-04	0.00E+00	2.74E-04	9.51E-04	0.00E+00	4.33E-05	1.91E-04	0.00E+00	2.61E-05	1.11E-04	0.00E+00
207	463839.2	3809702	2.67E-04	9.27E-04	0.00E+00	2.67E-04	9.27E-04	0.00E+00	4.22E-05	1.86E-04	0.00E+00	2.54E-05	1.08E-04	0.00E+00
208	463859.2	3809702	2.60E-04	9.05E-04	0.00E+00	2.60E-04	9.05E-04	0.00E+00	4.11E-05	1.81E-04	0.00E+00	2.48E-05	1.05E-04	0.00E+00
209	463879.2	3809702	2.54E-04	8.82E-04	0.00E+00	2.54E-04	8.82E-04	0.00E+00	4.01E-05	1.77E-04	0.00E+00	2.42E-05	1.03E-04	0.00E+00
210	463899.2	3809702	2.48E-04	8.60E-04	0.00E+00	2.48E-04	8.60E-04	0.00E+00	3.91E-05	1.72E-04	0.00E+00	2.36E-05	1.00E-04	0.00E+00
211	463919.2	3809702	2.42E-04	8.40E-04	0.00E+00	2.42E-04	8.40E-04	0.00E+00	3.82E-05	1.68E-04	0.00E+00	2.30E-05	9.76E-05	0.00E+00
212	463939.2	3809702	2.36E-04	8.18E-04	0.00E+00	2.36E-04	8.18E-04	0.00E+00	3.72E-05	1.64E-04	0.00E+00	2.24E-05	9.51E-05	0.00E+00
213	463959.2	3809702	2.29E-04	7.96E-04	0.00E+00	2.29E-04	7.96E-04	0.00E+00	3.62E-05	1.59E-04	0.00E+00	2.18E-05	9.25E-05	0.00E+00
214	463979.2	3809702	2.23E-04	7.73E-04	0.00E+00	2.23E-04	7.73E-04	0.00E+00	3.52E-05	1.55E-04	0.00E+00	2.12E-05	8.99E-05	0.00E+00
215	463999.2	3809702	2.16E-04	7.51E-04	0.00E+00	2.16E-04	7.51E-04	0.00E+00	3.41E-05	1.50E-04	0.00E+00	2.06E-05	8.73E-05	0.00E+00
216	464019.2	3809702	2.10E-04	7.29E-04	0.00E+00	2.10E-04	7.29E-04	0.00E+00	3.31E-05	1.46E-04	0.00E+00	2.00E-05	8.47E-05	0.00E+00
217	464039.2	3809702	2.04E-04	7.09E-04	0.00E+00	2.04E-04	7.09E-04	0.00E+00	3.23E-05	1.42E-04	0.00E+00	1.95E-05	8.25E-05	0.00E+00
218	464059.2	3809702	1.99E-04	6.90E-04	0.00E+00	1.99E-04	6.90E-04	0.00E+00	3.14E-05	1.38E-04	0.00E+00	1.89E-05	8.02E-05	0.00E+00
219	464079.2	3809702	1.93E-04	6.71E-04	0.00E+00	1.93E-04	6.71E-04	0.00E+00	3.05E-05	1.34E-04	0.00E+00	1.84E-05	7.80E-05	0.00E+00
220	464099.2	3809702	1.88E-04	6.52E-04	0.00E+00	1.88E-04	6.52E-04	0.00E+00	2.97E-05	1.31E-04	0.00E+00	1.79E-05	7.58E-05	0.00E+00
221	464119.2	3809702	1.83E-04	6.34E-04	0.00E+00	1.83E-04	6.34E-04	0.00E+00	2.89E-05	1.27E-04	0.00E+00	1.74E-05	7.38E-05	0.00E+00
222	464139.2	3809702	1.78E-04	6.17E-04	0.00E+00	1.78E-04	6.17E-04	0.00E+00	2.81E-05	1.24E-04	0.00E+00	1.69E-05	7.17E-05	0.00E+00
223	464159.2	3809702	1.73E-04	6.01E-04	0.00E+00	1.73E-04	6.01E-04	0.00E+00	2.73E-05	1.20E-04	0.00E+00	1.65E-05	6.98E-05	0.00E+00
224	464179.2	3809702	1.68E-04	5.85E-04	0.00E+00	1.68E-04	5.85E-04	0.00E+00	2.66E-05	1.17E-04	0.00E+00	1.60E-05	6.80E-05	0.00E+00
225	464199.2	3809702	1.64E-04	5.69E-04	0.00E+00	1.64E-04	5.69E-04	0.00E+00	2.59E-05	1.14E-04	0.00E+00	1.56E-05	6.62E-05	0.00E+00
226	464219.2	3809702	1.60E-04	5.54E-04	0.00E+00	1.60E-04	5.54E-04	0.00E+00	2.52E-05	1.11E-04	0.00E+00	1.52E-05	6.44E-05	0.00E+00
227	464239.2	3809702	1.55E-04	5.40E-04	0.00E+00	1.55E-04	5.40E-04	0.00E+00	2.46E-05	1.08E-04	0.00E+00	1.48E-05	6.28E-05	0.00E+00
228	464259.2	3809702	1.51E-04	5.26E-04	0.00E+00	1.51E-04	5.26E-04	0.00E+00	2.39E-05	1.05E-04	0.00E+00	1.44E-05	6.11E-05	0.00E+00
229	464279.2	3809702	1.48E-04	5.13E-04	0.00E+00	1.48E-04	5.13E-04	0.00E+00	2.33E-05	1.03E-04	0.00E+00	1.41E-05	5.96E-05	0.00E+00
230	464299.2	3809702	1.44E-04	5.00E-04	0.00E+00	1.44E-04	5.00E-04	0.00E+00	2.27E-05	1.00E-04	0.00E+00	1.37E-05	5.81E-05	0.00E+00
231	464319.2	3809702	1.41E-04	4.88E-04	0.00E+00	1.41E-04	4.88E-04	0.00E+00	2.22E-05	9.78E-05	0.00E+00	1.34E-05	5.68E-05	0.00E+00
232	464339.2	3809702	1.37E-04	4.76E-04	0.00E+00	1.37E-04	4.76E-04	0.00E+00	2.17E-05	9.54E-05	0.00E+00	1.31E-05	5.54E-05	0.00E+00
233	464359.2	3809702	1.34E-04	4.65E-04	0.00E+00	1.34E-04	4.65E-04	0.00E+00	2.11E-05	9.32E-05	0.00E+00	1.28E-05	5.41E-05	0.00E+00
234	464379.2	3809702	1.31E-04	4.54E-04	0.00E+00	1.31E-04	4.54E-04	0.00E+00	2.07E-05	9.11E-05	0.00E+00	1.25E-05	5.28E-05	0.00E+00
235	464399.2	3809702	1.28E-04	4.44E-04	0.00E+00	1.28E-04	4.44E-04	0.00E+00	2.02E-05	8.89E-05	0.00E+00	1.22E-05	5.16E-05	0.00E+00
236	464419.2	3809702	1.25E-04	4.33E-04	0.00E+00	1.25E-04	4.33E-04	0.00E+00	1.97E-05	8.68E-05	0.00E+00	1.19E-05	5.04E-05	0.00E+00
237	464439.2	3809702	1.22E-04	4.23E-04	0.00E+00	1.22E-04	4.23E-04	0.00E+00	1.93E-05	8.48E-05	0.00E+00	1.16E-05	4.92E-05	0.00E+00
238	464459.2	3809702	1.19E-04	4.14E-04	0.00E+00	1.19E-04	4.14E-04	0.00E+00	1.88E-05	8.30E-05	0.00E+00	1.14E-05	4.81E-05	0.00E+00
239	464479.2	3809702	1.17E-04	4.05E-04	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.12E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
240	464499.2	3809702	1.14E-04	3.96E-04	0.00E+00	1.14E-04	3.96E-04	0.00E+00	1.80E-05	7.94E-05	0.00E+00	1.09E-05	4.60E-05	0.00E+00
241	464519.2	3809702	1.12E-04	3.88E-04	0.00E+00	1.12E-04	3.88E-04	0.00E+00	1.76E-05	7.77E-05	0.00E+00	1.06E-05	4.51E-05	0.00E+00
242	463799.2	3809722	2.85E-04	9.89E-04	0.00E+00	2.85E-04	9.89E-04	0.00E+00	4.50E-05	1.98E-04	0.00E+00	2.71E-05	1.15E-04	0.00E+00
243	463819.2	3809722	2.78E-04	9.66E-04	0.00E+00	2.78E-04	9.66E-04	0.00E+00	4.39E-05	1.94E-04	0.00E+00	2.65E-05	1.12E-04	0.00E+00
244	463839.2	3809722	2.72E-04	9.45E-04	0.00E+00	2.72E-04	9.45E-04	0.00E+00	4.30E-05	1.89E-04	0.00E+00	2.59E-05	1.10E-04	0.00E+00
245	463859.2	3809722	2.66E-04	9.24E-04	0.00E+00	2.66E-04	9.24E-04	0.00E+00	4.20E-05	1.85E-04	0.00E+00	2.53E-05	1.07E-04	0.00E+00
246	463879.2	3809722	2.59E-04	9.01E-04	0.00E+00	2.59E-04	9.01E-04	0.00E+00	4.10E-05	1.81E-04	0.00E+00	2.47E-05	1.05E-04	0.00E+00
247	463899.2	3809722	2.53E-04	8.78E-04	0.00E+00	2.53E-04	8.78E-04	0.00E+00	3.99E-05	1.76E-04	0.00E+00	2.41E-05	1.02E-04	0.00E+00
248	463919.2	3809722	2.47E-04	8.57E-04	0.00E+00	2.47E-04	8.57E-04	0.00E+00	3.90E-05	1.72E-04	0.00E+00	2.35E-05	9.96E-05	0.00E+00
249	463939.2	3809722	2.40E-04	8.35E-04	0.00E+00	2.40E-04	8.35E-04	0.00E+00	3.80E-05	1.67E-04	0.00E+00	2.29E-05	9.71E-05	0.00E+00
250	463959.2	3809722	2.34E-04	8.13E-04	0.00E+00	2.34E-04	8.13E-04	0.00E+00	3.70E-05	1.63E-04	0.00E+00	2.23E-05	9.45E-05	0.00E+00
251	463979.2	3809722	2.28E-04	7.91E-04	0.00E+00	2.28E-04	7.91E-04	0.00E+00	3.60E-05	1.58E-04	0.00E+00	2.17E-05	9.20E-05	0.00E+00
252	463999.2	3809722	2.21E-04	7.69E-04	0.00E+00	2.21E-04	7.69E-04	0.00E+00	3.50E-05	1.54E-04	0.00E+00	2.11E-05	8.94E-05	0.00E+00
253	464019.2	3809722	2.15E-04	7.46E-04	0.00E+00	2.15E-04	7.46E-04	0.00E+00	3.39E-05	1.49E-04	0.00E+00	2.05E-05	8.67E-05	0.00E+00
254	464039.2	3809722	2.09E-04	7.26E-04	0.00E+00	2.09E-04	7.26E-04	0.00E+00	3.30E-05	1.45E-04	0.00E+00	1.99E-05	8.44E-05	0.00E+00
255	464059.2	3809722	2.03E-04	7.05E-04	0.00E+00	2.03E-04	7.05E-04	0.00E+00	3.21E-05	1.41E-04	0.00E+00	1.94E-05	8.20E-05	0.00E+00
256	464079.2	3809722	1.97E-04	6.86E-04	0.00E+00	1.97E-04	6.86E-04	0.00E+00	3.12E-05	1.37E-04	0.00E+00	1.88E-05	7.97E-05	0.00E+00
257	464099.2	3809722	1.92E-04	6.66E-04	0.00E+00	1.92E-04	6.66E-04	0.00E+00	3.03E-05	1.34E-04	0.00E+00	1.83E-05	7.75E-05	0.00E+00
258	464119.2	3809722	1.86E-04	6.48E-04	0.00E+00	1.86E-04	6.48E-04	0.00E+00	2.95E-05	1.30E-04	0.00E+00	1.78E-05	7.53E-05	0.00E+00
259	464139.2	3809722	1.81E-04	6.30E-04	0.00E+00	1.81E-04	6.30E-04	0.00E+00	2.87E-05	1.26E-04	0.00E+00	1.73E-05	7.33E-05	0.00E+00
260	464159.2	3809722	1.76E-04	6.13E-04	0.00E+00	1.76E-04	6.13E-04	0.00E+00	2.79E-05	1.23E-04	0.00E+00	1.68E-05	7.13E-05	0.00E+00
261	464179.2	3809722	1.72E-04	5.96E-04	0.00E+00	1.72E-04	5.96E-04	0.00E+00	2.71E-05	1.19E-04	0.00E+00	1.64E-05	6.93E-05	0.00E+00
262	464199.2	3809722	1.67E-04	5.79E-04	0.00E+00	1.67E-04	5.79E-04	0.00E+00	2.63E-05	1.16E-04	0.00E+00	1.59E-05	6.73E-05	0.00E+00
263	464219.2	3809722	1.62E-04	5.64E-04	0.00E+00	1.62E-04	5.64E-04	0.00E+00	2.57E-05	1.13E-04	0.00E+00	1.55E-05	6.56E-05	0.00E+00
264	464239.2	3809722	1.58E-04	5.49E-04	0.00E+00	1.58E-04	5.49E-04	0.00E+00	2.50E-05	1.10E-04	0.00E+00	1.51E-05	6.39E-05	0.00E+00
265	464259.2	3809722	1.54E-04	5.34E-04	0.00E+00	1.54E-04	5.34E-04	0.00E+00	2.43E-05	1.07E-04	0.00E+00	1.47E-05	6.21E-05	0.00E+00
266	464279.2	3809722	1.50E-04	5.21E-04	0.00E+00	1.50E-04	5.21E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.06E-05	0.00E+00
267	464299.2	3809722	1.46E-04	5.08E-04	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.91E-05	0.00E+00
268	464319.2	3809722	1.43E-04	4.96E-04	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.25E-05	9.93E-05	0.00E+00	1.36E-05	5.76E-05	0.00E+00
269	464339.2	3809722	1.39E-04	4.83E-04	0.00E+00	1.39E-04	4.83E-04	0.00E+00	2.20E-05	9.68E-05	0.00E+00	1.32E-05	5.61E-05	0.00E+00
270	464359.2	3809722	1.36E-04	4.71E-04	0.00E+00	1.36E-04	4.71E-04	0.00E+00	2.14E-05	9.44E-05	0.00E+00	1.29E-05	5.48E-05	0.00E+00

271	464379.2	3809722	1.32E-04	4.60E-04	0.00E+00	1.32E-04	4.60E-04	0.00E+00	2.09E-05	9.22E-05	0.00E+00	1.26E-05	5.35E-05	0.00E+00
272	464399.2	3809722	1.29E-04	4.49E-04	0.00E+00	1.29E-04	4.49E-04	0.00E+00	2.04E-05	9.01E-05	0.00E+00	1.23E-05	5.23E-05	0.00E+00
273	464419.2	3809722	1.26E-04	4.39E-04	0.00E+00	1.26E-04	4.39E-04	0.00E+00	2.00E-05	8.79E-05	0.00E+00	1.20E-05	5.10E-05	0.00E+00
274	464439.2	3809722	1.23E-04	4.28E-04	0.00E+00	1.23E-04	4.28E-04	0.00E+00	1.95E-05	8.58E-05	0.00E+00	1.17E-05	4.98E-05	0.00E+00
275	464459.2	3809722	1.21E-04	4.19E-04	0.00E+00	1.21E-04	4.19E-04	0.00E+00	1.90E-05	8.39E-05	0.00E+00	1.15E-05	4.87E-05	0.00E+00
276	464479.2	3809722	1.18E-04	4.10E-04	0.00E+00	1.18E-04	4.10E-04	0.00E+00	1.86E-05	8.21E-05	0.00E+00	1.12E-05	4.76E-05	0.00E+00
277	464499.2	3809722	1.15E-04	4.01E-04	0.00E+00	1.15E-04	4.01E-04	0.00E+00	1.82E-05	8.03E-05	0.00E+00	1.10E-05	4.66E-05	0.00E+00
278	464519.2	3809722	1.13E-04	3.92E-04	0.00E+00	1.13E-04	3.92E-04	0.00E+00	1.78E-05	7.86E-05	0.00E+00	1.08E-05	4.56E-05	0.00E+00
279	463799.2	3809742	2.89E-04	1.01E-03	0.00E+00	2.89E-04	1.01E-03	0.00E+00	4.57E-05	2.01E-04	0.00E+00	2.76E-05	1.17E-04	0.00E+00
280	463819.2	3809742	2.82E-04	9.79E-04	0.00E+00	2.82E-04	9.79E-04	0.00E+00	4.45E-05	1.96E-04	0.00E+00	2.69E-05	1.14E-04	0.00E+00
281	463839.2	3809742	2.75E-04	9.56E-04	0.00E+00	2.75E-04	9.56E-04	0.00E+00	4.35E-05	1.92E-04	0.00E+00	2.62E-05	1.11E-04	0.00E+00
282	463859.2	3809742	2.69E-04	9.35E-04	0.00E+00	2.69E-04	9.35E-04	0.00E+00	4.25E-05	1.87E-04	0.00E+00	2.57E-05	1.09E-04	0.00E+00
283	463879.2	3809742	2.63E-04	9.14E-04	0.00E+00	2.63E-04	9.14E-04	0.00E+00	4.16E-05	1.83E-04	0.00E+00	2.51E-05	1.06E-04	0.00E+00
284	463899.2	3809742	2.57E-04	8.93E-04	0.00E+00	2.57E-04	8.93E-04	0.00E+00	4.06E-05	1.79E-04	0.00E+00	2.45E-05	1.04E-04	0.00E+00
285	463919.2	3809742	2.50E-04	8.69E-04	0.00E+00	2.50E-04	8.69E-04	0.00E+00	3.95E-05	1.74E-04	0.00E+00	2.38E-05	1.01E-04	0.00E+00
286	463939.2	3809742	2.44E-04	8.47E-04	0.00E+00	2.44E-04	8.47E-04	0.00E+00	3.85E-05	1.70E-04	0.00E+00	2.32E-05	9.85E-05	0.00E+00
287	463959.2	3809742	2.38E-04	8.27E-04	0.00E+00	2.38E-04	8.27E-04	0.00E+00	3.76E-05	1.66E-04	0.00E+00	2.27E-05	9.62E-05	0.00E+00
288	463979.2	3809742	2.32E-04	8.07E-04	0.00E+00	2.32E-04	8.07E-04	0.00E+00	3.67E-05	1.62E-04	0.00E+00	2.21E-05	9.39E-05	0.00E+00
289	463999.2	3809742	2.26E-04	7.86E-04	0.00E+00	2.26E-04	7.86E-04	0.00E+00	3.57E-05	1.57E-04	0.00E+00	2.16E-05	9.14E-05	0.00E+00
290	464019.2	3809742	2.20E-04	7.64E-04	0.00E+00	2.20E-04	7.64E-04	0.00E+00	3.47E-05	1.53E-04	0.00E+00	2.10E-05	8.88E-05	0.00E+00
291	464039.2	3809742	2.13E-04	7.41E-04	0.00E+00	2.13E-04	7.41E-04	0.00E+00	3.37E-05	1.48E-04	0.00E+00	2.03E-05	8.62E-05	0.00E+00
292	464059.2	3809742	2.07E-04	7.20E-04	0.00E+00	2.07E-04	7.20E-04	0.00E+00	3.27E-05	1.44E-04	0.00E+00	1.97E-05	8.37E-05	0.00E+00
293	464079.2	3809742	2.02E-04	7.00E-04	0.00E+00	2.02E-04	7.00E-04	0.00E+00	3.19E-05	1.40E-04	0.00E+00	1.92E-05	8.14E-05	0.00E+00
294	464099.2	3809742	1.96E-04	6.80E-04	0.00E+00	1.96E-04	6.80E-04	0.00E+00	3.09E-05	1.36E-04	0.00E+00	1.87E-05	7.91E-05	0.00E+00
295	464119.2	3809742	1.90E-04	6.61E-04	0.00E+00	1.90E-04	6.61E-04	0.00E+00	3.01E-05	1.32E-04	0.00E+00	1.81E-05	7.68E-05	0.00E+00
296	464139.2	3809742	1.85E-04	6.42E-04	0.00E+00	1.85E-04	6.42E-04	0.00E+00	2.92E-05	1.29E-04	0.00E+00	1.76E-05	7.47E-05	0.00E+00
297	464159.2	3809742	1.80E-04	6.24E-04	0.00E+00	1.80E-04	6.24E-04	0.00E+00	2.84E-05	1.25E-04	0.00E+00	1.71E-05	7.26E-05	0.00E+00
298	464179.2	3809742	1.75E-04	6.07E-04	0.00E+00	1.75E-04	6.07E-04	0.00E+00	2.76E-05	1.22E-04	0.00E+00	1.66E-05	7.06E-05	0.00E+00
299	464199.2	3809742	1.70E-04	5.89E-04	0.00E+00	1.70E-04	5.89E-04	0.00E+00	2.68E-05	1.18E-04	0.00E+00	1.62E-05	6.85E-05	0.00E+00
300	464219.2	3809742	1.65E-04	5.74E-04	0.00E+00	1.65E-04	5.74E-04	0.00E+00	2.61E-05	1.15E-04	0.00E+00	1.57E-05	6.67E-05	0.00E+00
301	464239.2	3809742	1.61E-04	5.58E-04	0.00E+00	1.61E-04	5.58E-04	0.00E+00	2.54E-05	1.12E-04	0.00E+00	1.53E-05	6.49E-05	0.00E+00
302	464259.2	3809742	1.56E-04	5.43E-04	0.00E+00	1.56E-04	5.43E-04	0.00E+00	2.47E-05	1.09E-04	0.00E+00	1.49E-05	6.31E-05	0.00E+00
303	464279.2	3809742	1.52E-04	5.29E-04	0.00E+00	1.52E-04	5.29E-04	0.00E+00	2.41E-05	1.06E-04	0.00E+00	1.45E-05	6.15E-05	0.00E+00
304	464299.2	3809742	1.48E-04	5.15E-04	0.00E+00	1.48E-04	5.15E-04	0.00E+00	2.34E-05	1.03E-04	0.00E+00	1.41E-05	5.99E-05	0.00E+00
305	464319.2	3809742	1.44E-04	5.01E-04	0.00E+00	1.44E-04	5.01E-04	0.00E+00	2.28E-05	1.00E-04	0.00E+00	1.38E-05	5.83E-05	0.00E+00
306	464339.2	3809742	1.41E-04	4.89E-04	0.00E+00	1.41E-04	4.89E-04	0.00E+00	2.22E-05	9.80E-05	0.00E+00	1.34E-05	5.69E-05	0.00E+00
307	464359.2	3809742	1.37E-04	4.77E-04	0.00E+00	1.37E-04	4.77E-04	0.00E+00	2.17E-05	9.57E-05	0.00E+00	1.31E-05	5.55E-05	0.00E+00
308	464379.2	3809742	1.34E-04	4.66E-04	0.00E+00	1.34E-04	4.66E-04	0.00E+00	2.12E-05	9.34E-05	0.00E+00	1.28E-05	5.42E-05	0.00E+00
309	464399.2	3809742	1.31E-04	4.54E-04	0.00E+00	1.31E-04	4.54E-04	0.00E+00	2.07E-05	9.10E-05	0.00E+00	1.25E-05	5.28E-05	0.00E+00
310	464419.2	3809742	1.28E-04	4.43E-04	0.00E+00	1.28E-04	4.43E-04	0.00E+00	2.02E-05	8.88E-05	0.00E+00	1.22E-05	5.15E-05	0.00E+00
311	464439.2	3809742	1.25E-04	4.33E-04	0.00E+00	1.25E-04	4.33E-04	0.00E+00	1.97E-05	8.68E-05	0.00E+00	1.19E-05	5.04E-05	0.00E+00
312	464459.2	3809742	1.22E-04	4.23E-04	0.00E+00	1.22E-04	4.23E-04	0.00E+00	1.93E-05	8.49E-05	0.00E+00	1.16E-05	4.92E-05	0.00E+00
313	464479.2	3809742	1.19E-04	4.14E-04	0.00E+00	1.19E-04	4.14E-04	0.00E+00	1.88E-05	8.30E-05	0.00E+00	1.14E-05	4.82E-05	0.00E+00
314	464499.2	3809742	1.17E-04	4.05E-04	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.12E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
315	464519.2	3809742	1.14E-04	3.96E-04	0.00E+00	1.14E-04	3.96E-04	0.00E+00	1.80E-05	7.93E-05	0.00E+00	1.09E-05	4.60E-05	0.00E+00
316	463819.2	3809762	2.87E-04	9.98E-04	0.00E+00	2.87E-04	9.98E-04	0.00E+00	4.54E-05	2.00E-04	0.00E+00	2.74E-05	1.16E-04	0.00E+00
317	463839.2	3809762	2.80E-04	9.72E-04	0.00E+00	2.80E-04	9.72E-04	0.00E+00	4.42E-05	1.95E-04	0.00E+00	2.67E-05	1.13E-04	0.00E+00
318	463859.2	3809762	2.73E-04	9.49E-04	0.00E+00	2.73E-04	9.49E-04	0.00E+00	4.32E-05	1.90E-04	0.00E+00	2.60E-05	1.10E-04	0.00E+00
319	463879.2	3809762	2.67E-04	9.28E-04	0.00E+00	2.67E-04	9.28E-04	0.00E+00	4.22E-05	1.86E-04	0.00E+00	2.54E-05	1.08E-04	0.00E+00
320	463899.2	3809762	2.61E-04	9.07E-04	0.00E+00	2.61E-04	9.07E-04	0.00E+00	4.12E-05	1.82E-04	0.00E+00	2.49E-05	1.05E-04	0.00E+00
321	463919.2	3809762	2.54E-04	8.81E-04	0.00E+00	2.54E-04	8.81E-04	0.00E+00	4.01E-05	1.77E-04	0.00E+00	2.42E-05	1.02E-04	0.00E+00
322	463939.2	3809762	2.47E-04	8.57E-04	0.00E+00	2.47E-04	8.57E-04	0.00E+00	3.90E-05	1.72E-04	0.00E+00	2.35E-05	9.96E-05	0.00E+00
323	463959.2	3809762	2.40E-04	8.33E-04	0.00E+00	2.40E-04	8.33E-04	0.00E+00	3.79E-05	1.67E-04	0.00E+00	2.29E-05	9.69E-05	0.00E+00
324	463979.2	3809762	2.34E-04	8.14E-04	0.00E+00	2.34E-04	8.14E-04	0.00E+00	3.70E-05	1.63E-04	0.00E+00	2.23E-05	9.46E-05	0.00E+00
325	463999.2	3809762	2.29E-04	7.96E-04	0.00E+00	2.29E-04	7.96E-04	0.00E+00	3.62E-05	1.59E-04	0.00E+00	2.18E-05	9.25E-05	0.00E+00
326	464019.2	3809762	2.24E-04	7.78E-04	0.00E+00	2.24E-04	7.78E-04	0.00E+00	3.54E-05	1.56E-04	0.00E+00	2.13E-05	9.05E-05	0.00E+00
327	464039.2	3809762	0.000217	0.000755	0.00E+00	2.17E-04	7.55E-04	0.00E+00	3.44E-05	1.51E-04	0.00E+00	2.07E-05	8.78E-05	0.00E+00
328	464059.2	3809762	0.000211	0.000733	0.00E+00	2.11E-04	7.33E-04	0.00E+00	3.34E-05	1.47E-04	0.00E+00	2.01E-05	8.53E-05	0.00E+00
329	464079.2	3809762	0.000205	0.000712	0.00E+00	2.05E-04	7.12E-04	0.00E+00	3.24E-05	1.43E-04	0.00E+00	1.95E-05	8.28E-05	0.00E+00
330	464099.2	3809762	0.000199	0.000692	0.00E+00	1.99E-04	6.92E-04	0.00E+00	3.15E-05	1.39E-04	0.00E+00	1.90E-05	8.05E-05	0.00E+00
331	464119.2	3809762	0.000194	0.000672	0.00E+00	1.94E-04	6.72E-04	0.00E+00	3.06E-05	1.35E-04	0.00E+00	1.84E-05	7.82E-05	0.00E+00
332	464139.2	3809762	0.000188	0.000653	0.00E+00	1.88E-04	6.53E-04	0.00E+00	2.97E-05	1.31E-04	0.00E+00	1.79E-05	7.59E-05	0.00E+00
333	464159.2	3809762	0.000183	0.000635	0.00E+00	1.83E-04	6.35E-04	0.00E+00	2.89E-05	1.27E-04	0.00E+00	1.74E-05	7.38E-05	0.00E+00
334	464179.2	3809762	0.000177	0.000617	0.00E+00	1.77E-04	6.17E-04	0.00E+00	2.80E-05	1.24E-04	0.00E+00	1.69E-05	7.17E-05	0.00E+00
335	464199.2	3809762	0.000172	0.000598	0.00E+00	1.72E-04	5.98E-04	0.00E+00	2.72E-05	1.20E-04	0.00E+00	1.64E-05	6.96E-05	0.00E+00
336	464219.2	3809762	0.000168	0.000582	0.00E+00	1.68E-04	5.82E-04	0.00E+00	2.65E-05	1.17E-04	0.00E+00	1.60E-05	6.77E-05	0.00E+00
337	464239.2	3809762	0.000163	0.000566	0.00E+00	1.63E-04	5.66E-04	0.00E+00	2.58E-05	1.13E-04	0.00E+00	1.55E-05	6.58E-05	0.00E+00
338	464259.2	3809762	0.000158	0.00055	0.00E+00	1.58E-04	5.50E-04	0.00E+00	2.50E-05	1.10E-04	0.00E+00	1.51E-05	6.40E-05	0.00E+00
339	464279.2	3809762	0.000154	0.000536	0.00E+00	1.54E-04	5.36E-04	0.00E+00	2.44E-05	1.07E-04	0.00E+00	1.47E-05	6.23E-05	0.00E+00
340	464299.2	3809762	0.00015	0.000522	0.00E+00	1.50E-04	5.22E-04	0.00E+00	2.37E-05	1.05E-04	0.00E+00	1.43E-05	6.07E-05	0.00E+00
341	464319.2	3809762	0.000146	0.000507	0.00E+00	1.46E-04	5.07E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.90E-05	0.00E+00
342	464339.2	3809762	0.000142	0.000495	0.00E+00	1.42E-04	4.95E-04	0.00E+00	2.25E-05	9.92E-05	0.00E+00	1.36E-05	5.75E-05	0.00E+00
343	464359.2	3809762	0.000139	0.000483	0.00E+00	1.39E-04	4.83E-04	0.00E+00	2.20E-05	9.67E-05	0.00E+00	1.32E-05	5.61E-05	0.00E+00
344	464379.2	3809762	0.000135	0.00047	0.00E+00	1.35E-04	4.70E-04	0.00E+00	2.14E-05	9.43E-05	0.00E+00	1.29E-05	5.47E-05	0.00E+00
345	464399.2	3809762	0.000132	0.000459	0.00E+00	1.32E-04	4.59E-04	0.00E+00	2.09E-05	9.19E-05	0.00E+00	1.26E-05	5.33E-05	0.00E+00
346	464419.2	3809762	0.000129	0.000448	0.00E+00	1.29E-04	4.48E-04	0.00E+00	2.04E-05	8.97E-05	0.00E+00	1.23E-05	5.21E-05	0.00E+00
347	464439.2	3809762	0.000126	0.000438	0.00E+00	1.26E-04	4.38E-04	0.00E+00	1.99E-05	8.77E-05	0.00E+00	1.20E-05	5.09E-05	0.00E+00
348	464459.2	3809762	0.000123	0.000428	0.00E+00	1.23E-04	4.28E-04	0.00E+00	1.95E-05	8.57E-05	0.00E+00	1.17E-05	4.97E-05	0.00E+00
349	464479.2	3809762	0.00012	0.000418	0.00E+00	1.20E-04	4.18E-04	0.00E+00	1.90E-05	8.37E-05	0.00E+00	1.15E-05	4.86E-05	0.00E+00
350	464499.2	3809762	0.000117	0.000408	0.00E+00	1.17E-04	4.08E-04	0.00E+00	1.86E-05	8.18E-05	0.00E+00	1.12E-05	4.75E-05	0.00E+00
351	464519.2	3809762	0.000115	0.000399	0.00E+00	1.15E-04	3.99E-04	0.00E+00	1.81E-05	7.99E-05	0.00E+00	1.09E-05	4.64E-05	0.00E+00
352	463839.2	3809782	0.000284	0.000985	0.00E+00	2.84E-04	9.85E-04	0.00E+00	4.48E-05	1.97E-04	0.00E+00	2.70E-05	1.15E-04	0.00E+00
353	463859.2	3809782	0.000276	0.00096	0.00E+00	2.76E-04	9.60E-04	0.00E+00	4.37E-05	1.92E-04	0.00E+00	2.64E-05	1.12E-04	0.00E+00
354	463879.2	3809782	0.00027	0.000937	0.00E+00	2.70E-04	9.37E-04	0.00E+00	4.26E-05	1.88E-04	0.00E+00	2.57E-05	1.09E-04	0.00E+00
355	463899.2	3809782	0.000264	0.000916	0.00E+00	2.64E-04	9.16E-04	0.00E+00	4.17E-05	1.84E-04	0.00E+00	2.51E-05	1.06E-04	0.00E+00
356	463919.2	3809782	0.000256	0.00089	0.00E+00	2.56E-04	8.90E-04	0.00E+00	4.05E-05	1.78E-04	0.00E+00	2.44E-05	1.04E-04	0.00E+00
357	463939.2	3809782	0.000249	0.000863	0.00E+00	2.49E-04	8.63E-04	0.00E+00	3.93E-05	1.73E-04	0.00E+00	2.37E-05	1.00E-04	0.00E+00
358	463959.2	3809782	0.000241	0.000836	0.00E+00	2.41E-04	8.36E-04	0.00E+00	3.80E-05	1.68E-04	0.00E+00	2.29E-05	9.72E-05	0.00E+00
359	463979.2	3809782	0.000235	0.000817	0.00E+00	2.35E-04	8.17E-04	0.00E+00	3.72E-05	1.64E-04	0.00E+00	2.24E-05	9.50E-05	0.00E+00
360	463999.2	3809782	0.000231	0.000801	0.00E+00	2.31E-04	8.01E-04	0.00E+00	3.65E-05	1.61E-04	0.00E+00	2.20E-05	9.32E-05	0.00E+00
361	464019.2	3809782	0.000227	0.000787	0.00E+00	2.27E-04	7.87E-04	0.00E+00	3.58E-05	1.58E-04	0.00E+00	2.16E-05	9.16E-05	0.00E+00

362	464039.2	3809782	0.000221	0.000767	0.00E+00	2.21E-04	7.67E-04	0.00E+00	3.49E-05	1.54E-04	0.00E+00	2.10E-05	8.92E-05	0.00E+00
363	464059.2	3809782	0.000215	0.000745	0.00E+00	2.15E-04	7.45E-04	0.00E+00	3.39E-05	1.49E-04	0.00E+00	2.04E-05	8.67E-05	0.00E+00
364	464079.2	3809782	0.000208	0.000723	0.00E+00	2.08E-04	7.23E-04	0.00E+00	3.29E-05	1.45E-04	0.00E+00	1.98E-05	8.41E-05	0.00E+00
365	464099.2	3809782	0.000202	0.000703	0.00E+00	2.02E-04	7.03E-04	0.00E+00	3.20E-05	1.41E-04	0.00E+00	1.93E-05	8.17E-05	0.00E+00
366	464119.2	3809782	0.000196	0.000682	0.00E+00	1.96E-04	6.82E-04	0.00E+00	3.10E-05	1.37E-04	0.00E+00	1.87E-05	7.93E-05	0.00E+00
367	464139.2	3809782	0.000191	0.000662	0.00E+00	1.91E-04	6.62E-04	0.00E+00	3.01E-05	1.33E-04	0.00E+00	1.82E-05	7.70E-05	0.00E+00
368	464159.2	3809782	0.000185	0.000643	0.00E+00	1.85E-04	6.43E-04	0.00E+00	2.93E-05	1.29E-04	0.00E+00	1.77E-05	7.48E-05	0.00E+00
369	464179.2	3809782	0.00018	0.000625	0.00E+00	1.80E-04	6.25E-04	0.00E+00	2.84E-05	1.25E-04	0.00E+00	1.71E-05	7.26E-05	0.00E+00
370	464199.2	3809782	0.000175	0.000606	0.00E+00	1.75E-04	6.06E-04	0.00E+00	2.76E-05	1.21E-04	0.00E+00	1.66E-05	7.05E-05	0.00E+00
371	464219.2	3809782	0.00017	0.000589	0.00E+00	1.70E-04	5.89E-04	0.00E+00	2.68E-05	1.18E-04	0.00E+00	1.62E-05	6.85E-05	0.00E+00
372	464239.2	3809782	0.000165	0.000573	0.00E+00	1.65E-04	5.73E-04	0.00E+00	2.61E-05	1.15E-04	0.00E+00	1.57E-05	6.66E-05	0.00E+00
373	464259.2	3809782	0.00016	0.000557	0.00E+00	1.60E-04	5.57E-04	0.00E+00	2.53E-05	1.12E-04	0.00E+00	1.53E-05	6.47E-05	0.00E+00
374	464279.2	3809782	0.000156	0.000542	0.00E+00	1.56E-04	5.42E-04	0.00E+00	2.46E-05	1.09E-04	0.00E+00	1.49E-05	6.30E-05	0.00E+00
375	464299.2	3809782	0.000152	0.000527	0.00E+00	1.52E-04	5.27E-04	0.00E+00	2.40E-05	1.06E-04	0.00E+00	1.45E-05	6.13E-05	0.00E+00
376	464319.2	3809782	0.000148	0.000513	0.00E+00	1.48E-04	5.13E-04	0.00E+00	2.33E-05	1.03E-04	0.00E+00	1.41E-05	5.96E-05	0.00E+00
377	464339.2	3809782	0.000144	0.0005	0.00E+00	1.44E-04	5.00E-04	0.00E+00	2.27E-05	1.00E-04	0.00E+00	1.37E-05	5.81E-05	0.00E+00
378	464359.2	3809782	0.00014	0.000487	0.00E+00	1.40E-04	4.87E-04	0.00E+00	2.21E-05	9.76E-05	0.00E+00	1.34E-05	5.66E-05	0.00E+00
379	464379.2	3809782	0.000136	0.000474	0.00E+00	1.36E-04	4.74E-04	0.00E+00	2.16E-05	9.50E-05	0.00E+00	1.30E-05	5.51E-05	0.00E+00
380	464399.2	3809782	0.000133	0.000463	0.00E+00	1.33E-04	4.63E-04	0.00E+00	2.11E-05	9.27E-05	0.00E+00	1.27E-05	5.38E-05	0.00E+00
381	464419.2	3809782	0.00013	0.000452	0.00E+00	1.30E-04	4.52E-04	0.00E+00	2.06E-05	9.06E-05	0.00E+00	1.24E-05	5.25E-05	0.00E+00
382	464439.2	3809782	0.000127	0.000441	0.00E+00	1.27E-04	4.41E-04	0.00E+00	2.01E-05	8.85E-05	0.00E+00	1.21E-05	5.13E-05	0.00E+00
383	464459.2	3809782	0.000124	0.000431	0.00E+00	1.24E-04	4.31E-04	0.00E+00	1.96E-05	8.64E-05	0.00E+00	1.18E-05	5.01E-05	0.00E+00
384	464479.2	3809782	0.000121	0.000421	0.00E+00	1.21E-04	4.21E-04	0.00E+00	1.91E-05	8.43E-05	0.00E+00	1.15E-05	4.89E-05	0.00E+00
385	464499.2	3809782	0.000118	0.000411	0.00E+00	1.18E-04	4.11E-04	0.00E+00	1.87E-05	8.23E-05	0.00E+00	1.13E-05	4.77E-05	0.00E+00
386	464519.2	3809782	0.000116	0.000402	0.00E+00	1.16E-04	4.02E-04	0.00E+00	1.83E-05	8.05E-05	0.00E+00	1.10E-05	4.67E-05	0.00E+00
387	463859.2	3809802	0.000278	0.000967	0.00E+00	2.78E-04	9.67E-04	0.00E+00	4.40E-05	1.94E-04	0.00E+00	2.65E-05	1.12E-04	0.00E+00
388	463879.2	3809802	0.000271	0.000941	0.00E+00	2.71E-04	9.41E-04	0.00E+00	4.28E-05	1.89E-04	0.00E+00	2.58E-05	1.09E-04	0.00E+00
389	463899.2	3809802	0.000264	0.000919	0.00E+00	2.64E-04	9.19E-04	0.00E+00	4.18E-05	1.84E-04	0.00E+00	2.52E-05	1.07E-04	0.00E+00
390	463919.2	3809802	0.000257	0.000893	0.00E+00	2.57E-04	8.93E-04	0.00E+00	4.06E-05	1.79E-04	0.00E+00	2.45E-05	1.04E-04	0.00E+00
391	463939.2	3809802	0.00025	0.000867	0.00E+00	2.50E-04	8.67E-04	0.00E+00	3.94E-05	1.74E-04	0.00E+00	2.38E-05	1.01E-04	0.00E+00
392	463959.2	3809802	0.000242	0.000842	0.00E+00	2.42E-04	8.42E-04	0.00E+00	3.83E-05	1.69E-04	0.00E+00	2.31E-05	9.79E-05	0.00E+00
393	463979.2	3809802	0.000237	0.000823	0.00E+00	2.37E-04	8.23E-04	0.00E+00	3.74E-05	1.65E-04	0.00E+00	2.26E-05	9.57E-05	0.00E+00
394	463999.2	3809802	0.000232	0.000805	0.00E+00	2.32E-04	8.05E-04	0.00E+00	3.66E-05	1.61E-04	0.00E+00	2.21E-05	9.36E-05	0.00E+00
395	464019.2	3809802	0.000227	0.000787	0.00E+00	2.27E-04	7.87E-04	0.00E+00	3.58E-05	1.58E-04	0.00E+00	2.16E-05	9.16E-05	0.00E+00
396	464039.2	3809802	0.000223	0.000773	0.00E+00	2.23E-04	7.73E-04	0.00E+00	3.52E-05	1.55E-04	0.00E+00	2.12E-05	8.99E-05	0.00E+00
397	464059.2	3809802	0.000217	0.000755	0.00E+00	2.17E-04	7.55E-04	0.00E+00	3.43E-05	1.51E-04	0.00E+00	2.07E-05	8.78E-05	0.00E+00
398	464079.2	3809802	0.000211	0.000733	0.00E+00	2.11E-04	7.33E-04	0.00E+00	3.34E-05	1.47E-04	0.00E+00	2.01E-05	8.53E-05	0.00E+00
399	464099.2	3809802	0.000205	0.000711	0.00E+00	2.05E-04	7.11E-04	0.00E+00	3.23E-05	1.42E-04	0.00E+00	1.95E-05	8.27E-05	0.00E+00
400	464119.2	3809802	0.000199	0.00069	0.00E+00	1.99E-04	6.90E-04	0.00E+00	3.14E-05	1.38E-04	0.00E+00	1.89E-05	8.02E-05	0.00E+00
401	464139.2	3809802	0.000193	0.000669	0.00E+00	1.93E-04	6.69E-04	0.00E+00	3.04E-05	1.34E-04	0.00E+00	1.84E-05	7.78E-05	0.00E+00
402	464159.2	3809802	0.000187	0.00065	0.00E+00	1.87E-04	6.50E-04	0.00E+00	2.96E-05	1.30E-04	0.00E+00	1.78E-05	7.55E-05	0.00E+00
403	464179.2	3809802	0.000182	0.000631	0.00E+00	1.82E-04	6.31E-04	0.00E+00	2.87E-05	1.26E-04	0.00E+00	1.73E-05	7.34E-05	0.00E+00
404	464199.2	3809802	0.000176	0.000613	0.00E+00	1.76E-04	6.13E-04	0.00E+00	2.79E-05	1.23E-04	0.00E+00	1.68E-05	7.13E-05	0.00E+00
405	464219.2	3809802	0.000171	0.000595	0.00E+00	1.71E-04	5.95E-04	0.00E+00	2.71E-05	1.19E-04	0.00E+00	1.63E-05	6.92E-05	0.00E+00
406	464239.2	3809802	0.000166	0.000578	0.00E+00	1.66E-04	5.78E-04	0.00E+00	2.63E-05	1.16E-04	0.00E+00	1.59E-05	6.72E-05	0.00E+00
407	464259.2	3809802	0.000162	0.000562	0.00E+00	1.62E-04	5.62E-04	0.00E+00	2.56E-05	1.13E-04	0.00E+00	1.54E-05	6.54E-05	0.00E+00
408	464279.2	3809802	0.000157	0.000546	0.00E+00	1.57E-04	5.46E-04	0.00E+00	2.48E-05	1.09E-04	0.00E+00	1.50E-05	6.35E-05	0.00E+00
409	464299.2	3809802	0.000153	0.000531	0.00E+00	1.53E-04	5.31E-04	0.00E+00	2.42E-05	1.06E-04	0.00E+00	1.46E-05	6.18E-05	0.00E+00
410	464319.2	3809802	0.000149	0.000517	0.00E+00	1.49E-04	5.17E-04	0.00E+00	2.35E-05	1.04E-04	0.00E+00	1.42E-05	6.02E-05	0.00E+00
411	464339.2	3809802	0.000145	0.000503	0.00E+00	1.45E-04	5.03E-04	0.00E+00	2.29E-05	1.01E-04	0.00E+00	1.38E-05	5.85E-05	0.00E+00
412	464359.2	3809802	0.000141	0.00049	0.00E+00	1.41E-04	4.90E-04	0.00E+00	2.23E-05	9.82E-05	0.00E+00	1.34E-05	5.70E-05	0.00E+00
413	464379.2	3809802	0.000138	0.000478	0.00E+00	1.38E-04	4.78E-04	0.00E+00	2.17E-05	9.58E-05	0.00E+00	1.31E-05	5.56E-05	0.00E+00
414	464399.2	3809802	0.000134	0.000466	0.00E+00	1.34E-04	4.66E-04	0.00E+00	2.12E-05	9.35E-05	0.00E+00	1.28E-05	5.42E-05	0.00E+00
415	464419.2	3809802	0.000131	0.000455	0.00E+00	1.31E-04	4.55E-04	0.00E+00	2.07E-05	9.12E-05	0.00E+00	1.25E-05	5.29E-05	0.00E+00
416	464439.2	3809802	0.000128	0.000445	0.00E+00	1.28E-04	4.45E-04	0.00E+00	2.02E-05	8.91E-05	0.00E+00	1.22E-05	5.17E-05	0.00E+00
417	464459.2	3809802	0.000125	0.000433	0.00E+00	1.25E-04	4.33E-04	0.00E+00	1.97E-05	8.68E-05	0.00E+00	1.19E-05	5.04E-05	0.00E+00
418	464479.2	3809802	0.000122	0.000423	0.00E+00	1.22E-04	4.23E-04	0.00E+00	1.92E-05	8.47E-05	0.00E+00	1.16E-05	4.92E-05	0.00E+00
419	464499.2	3809802	0.000119	0.000413	0.00E+00	1.19E-04	4.13E-04	0.00E+00	1.88E-05	8.28E-05	0.00E+00	1.13E-05	4.81E-05	0.00E+00
420	464519.2	3809802	0.000116	0.000404	0.00E+00	1.16E-04	4.04E-04	0.00E+00	1.84E-05	8.10E-05	0.00E+00	1.11E-05	4.70E-05	0.00E+00
421	463879.2	3809822	0.000272	0.000946	0.00E+00	2.72E-04	9.46E-04	0.00E+00	4.30E-05	1.89E-04	0.00E+00	2.59E-05	1.10E-04	0.00E+00
422	463899.2	3809822	0.000265	0.000919	0.00E+00	2.65E-04	9.19E-04	0.00E+00	4.18E-05	1.84E-04	0.00E+00	2.52E-05	1.07E-04	0.00E+00
423	463919.2	3809822	0.000257	0.000892	0.00E+00	2.57E-04	8.92E-04	0.00E+00	4.06E-05	1.79E-04	0.00E+00	2.45E-05	1.04E-04	0.00E+00
424	463939.2	3809822	0.000249	0.000867	0.00E+00	2.49E-04	8.67E-04	0.00E+00	3.94E-05	1.74E-04	0.00E+00	2.38E-05	1.01E-04	0.00E+00
425	463959.2	3809822	0.000242	0.000842	0.00E+00	2.42E-04	8.42E-04	0.00E+00	3.83E-05	1.69E-04	0.00E+00	2.31E-05	9.79E-05	0.00E+00
426	463979.2	3809822	0.000237	0.000823	0.00E+00	2.37E-04	8.23E-04	0.00E+00	3.74E-05	1.65E-04	0.00E+00	2.26E-05	9.57E-05	0.00E+00
427	463999.2	3809822	0.000232	0.000804	0.00E+00	2.32E-04	8.04E-04	0.00E+00	3.66E-05	1.61E-04	0.00E+00	2.21E-05	9.35E-05	0.00E+00
428	464019.2	3809822	0.000226	0.000786	0.00E+00	2.26E-04	7.86E-04	0.00E+00	3.58E-05	1.58E-04	0.00E+00	2.16E-05	9.14E-05	0.00E+00
429	464039.2	3809822	0.000223	0.000773	0.00E+00	2.23E-04	7.73E-04	0.00E+00	3.52E-05	1.55E-04	0.00E+00	2.12E-05	8.99E-05	0.00E+00
430	464059.2	3809822	0.000218	0.000757	0.00E+00	2.18E-04	7.57E-04	0.00E+00	3.44E-05	1.52E-04	0.00E+00	2.08E-05	8.80E-05	0.00E+00
431	464079.2	3809822	0.000213	0.000738	0.00E+00	2.13E-04	7.38E-04	0.00E+00	3.36E-05	1.48E-04	0.00E+00	2.03E-05	8.58E-05	0.00E+00
432	464099.2	3809822	0.000207	0.000718	0.00E+00	2.07E-04	7.18E-04	0.00E+00	3.26E-05	1.44E-04	0.00E+00	1.97E-05	8.35E-05	0.00E+00
433	464119.2	3809822	0.000201	0.000697	0.00E+00	2.01E-04	6.97E-04	0.00E+00	3.17E-05	1.40E-04	0.00E+00	1.91E-05	8.10E-05	0.00E+00
434	464139.2	3809822	0.000195	0.000676	0.00E+00	1.95E-04	6.76E-04	0.00E+00	3.07E-05	1.35E-04	0.00E+00	1.85E-05	7.86E-05	0.00E+00
435	464159.2	3809822	0.000189	0.000656	0.00E+00	1.89E-04	6.56E-04	0.00E+00	2.98E-05	1.31E-04	0.00E+00	1.80E-05	7.63E-05	0.00E+00
436	464179.2	3809822	0.000183	0.000636	0.00E+00	1.83E-04	6.36E-04	0.00E+00	2.89E-05	1.28E-04	0.00E+00	1.75E-05	7.40E-05	0.00E+00
437	464199.2	3809822	0.000178	0.000617	0.00E+00	1.78E-04	6.17E-04	0.00E+00	2.81E-05	1.24E-04	0.00E+00	1.69E-05	7.18E-05	0.00E+00
438	464219.2	3809822	0.000173	0.000599	0.00E+00	1.73E-04	5.99E-04	0.00E+00	2.73E-05	1.20E-04	0.00E+00	1.64E-05	6.97E-05	0.00E+00
439	464239.2	3809822	0.000168	0.000582	0.00E+00	1.68E-04	5.82E-04	0.00E+00	2.65E-05	1.17E-04	0.00E+00	1.60E-05	6.77E-05	0.00E+00
440	464259.2	3809822	0.000163	0.000567	0.00E+00	1.63E-04	5.67E-04	0.00E+00	2.58E-05	1.14E-04	0.00E+00	1.55E-05	6.59E-05	0.00E+00
441	464279.2	3809822	0.000158	0.00055	0.00E+00	1.58E-04	5.50E-04	0.00E+00	2.50E-05	1.10E-04	0.00E+00	1.51E-05	6.40E-05	0.00E+00
442	464299.2	3809822	0.000154	0.000535	0.00E+00	1.54E-04	5.35E-04	0.00E+00	2.43E-05	1.07E-04	0.00E+00	1.47E-05	6.22E-05	0.00E+00
443	464319.2	3809822	0.00015	0.00052	0.00E+00	1.50E-04	5.20E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.05E-05	0.00E+00
444	464339.2	3809822	0.000146	0.000506	0.00E+00	1.46E-04	5.06E-04	0.00E+00	2.30E-05	1.01E-04	0.00E+00	1.39E-05	5.88E-05	0.00E+00
445	464359.2	3809822	0.000142	0.000493	0.00E+00	1.42E-04	4.93E-04	0.00E+00	2.24E-05	9.88E-05	0.00E+00	1.35E-05	5.73E-05	0.00E+00
446	464379.2	3809822	0.000138	0.000481	0.00E+00	1.38E-04	4.81E-04	0.00E+00	2.19E-05	9.64E-05	0.00E+00	1.32E-05	5.59E-05	0.00E+00
447	464399.2	3809822	0.000135	0.000469	0.00E+00	1.35E-04	4.69E-04	0.00E+00	2.13E-05	9.39E-05	0.00E+00	1.29E-05	5.45E-05	0.00E+00
448	464419.2	3809822	0.000132	0.000457	0.00E+00	1.32E-04	4.57E-04	0.00E+00	2.08E-05	9.16E-05	0.00E+00	1.25E-05	5.31E-05	0.00E+00
449	464439.2	3809822	0.000128	0.000446	0.00E+00	1.28E-04	4.46E-04	0.00E+00	2.03E-05	8.94E-05	0.00E+00	1.22E-05	5.19E-05	0.00E+00
450	464459.2	3809822	0.000125	0.000435	0.00E+00	1.25E-04	4.35E-04	0.00E+00	1.98E-05	8.72E-05	0.00E+00	1.19E-05	5.06E-05	0.00E+00
451	464479.2	3809822	0.000122	0.000425	0.00E+00	1.22E-04	4.25E-04	0.00E+00	1.93E-05	8.51E-05	0.00E+00	1.17E-05	4.94E-05	0.00E+00
452	464499.2	3809822	0.000119	0.000415	0.00E+00	1.19E-04	4.15E-04	0.00E+00	1.89E-05	8.31E-05	0.00E+00	1.14E-05	4.82E-05	0.00E+00

453	464519.2	3809822	0.000117	0.000405	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.12E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
454	463899.2	3809842	0.000264	0.000918	0.00E+00	2.64E-04	9.18E-04	0.00E+00	4.18E-05	1.84E-04	0.00E+00	2.52E-05	1.07E-04	0.00E+00
455	463919.2	3809842	0.000256	0.00089	0.00E+00	2.56E-04	8.90E-04	0.00E+00	4.05E-05	1.78E-04	0.00E+00	2.44E-05	1.04E-04	0.00E+00
456	463939.2	3809842	0.000249	0.000864	0.00E+00	2.49E-04	8.64E-04	0.00E+00	3.93E-05	1.73E-04	0.00E+00	2.37E-05	1.01E-04	0.00E+00
457	463959.2	3809842	0.000242	0.000841	0.00E+00	2.42E-04	8.41E-04	0.00E+00	3.82E-05	1.68E-04	0.00E+00	2.31E-05	9.77E-05	0.00E+00
458	463979.2	3809842	0.000236	0.00082	0.00E+00	2.36E-04	8.20E-04	0.00E+00	3.73E-05	1.64E-04	0.00E+00	2.25E-05	9.54E-05	0.00E+00
459	463999.2	3809842	0.000231	0.000801	0.00E+00	2.31E-04	8.01E-04	0.00E+00	3.64E-05	1.61E-04	0.00E+00	2.20E-05	9.32E-05	0.00E+00
460	464019.2	3809842	0.000225	0.000783	0.00E+00	2.25E-04	7.83E-04	0.00E+00	3.56E-05	1.57E-04	0.00E+00	2.15E-05	9.11E-05	0.00E+00
461	464039.2	3809842	0.000221	0.000769	0.00E+00	2.21E-04	7.69E-04	0.00E+00	3.50E-05	1.54E-04	0.00E+00	2.11E-05	8.94E-05	0.00E+00
462	464059.2	3809842	0.000217	0.000755	0.00E+00	2.17E-04	7.55E-04	0.00E+00	3.43E-05	1.51E-04	0.00E+00	2.07E-05	8.77E-05	0.00E+00
463	464079.2	3809842	0.000213	0.000739	0.00E+00	2.13E-04	7.39E-04	0.00E+00	3.36E-05	1.48E-04	0.00E+00	2.03E-05	8.59E-05	0.00E+00
464	464099.2	3809842	0.000207	0.000721	0.00E+00	2.07E-04	7.21E-04	0.00E+00	3.28E-05	1.44E-04	0.00E+00	1.98E-05	8.38E-05	0.00E+00
465	464119.2	3809842	0.000202	0.000701	0.00E+00	2.02E-04	7.01E-04	0.00E+00	3.19E-05	1.40E-04	0.00E+00	1.92E-05	8.15E-05	0.00E+00
466	464139.2	3809842	0.000196	0.00068	0.00E+00	1.96E-04	6.80E-04	0.00E+00	3.09E-05	1.36E-04	0.00E+00	1.86E-05	7.90E-05	0.00E+00
467	464159.2	3809842	0.00019	0.000659	0.00E+00	1.90E-04	6.59E-04	0.00E+00	3.00E-05	1.32E-04	0.00E+00	1.81E-05	7.67E-05	0.00E+00
468	464179.2	3809842	0.000184	0.00064	0.00E+00	1.84E-04	6.40E-04	0.00E+00	2.91E-05	1.28E-04	0.00E+00	1.75E-05	7.44E-05	0.00E+00
469	464199.2	3809842	0.000178	0.00062	0.00E+00	1.78E-04	6.20E-04	0.00E+00	2.82E-05	1.24E-04	0.00E+00	1.70E-05	7.21E-05	0.00E+00
470	464219.2	3809842	0.000173	0.000602	0.00E+00	1.73E-04	6.02E-04	0.00E+00	2.74E-05	1.21E-04	0.00E+00	1.65E-05	7.00E-05	0.00E+00
471	464239.2	3809842	0.000169	0.000585	0.00E+00	1.69E-04	5.85E-04	0.00E+00	2.66E-05	1.17E-04	0.00E+00	1.61E-05	6.81E-05	0.00E+00
472	464259.2	3809842	0.000164	0.000569	0.00E+00	1.64E-04	5.69E-04	0.00E+00	2.59E-05	1.14E-04	0.00E+00	1.56E-05	6.62E-05	0.00E+00
473	464279.2	3809842	0.000159	0.000553	0.00E+00	1.59E-04	5.53E-04	0.00E+00	2.51E-05	1.11E-04	0.00E+00	1.52E-05	6.43E-05	0.00E+00
474	464299.2	3809842	0.000155	0.000537	0.00E+00	1.55E-04	5.37E-04	0.00E+00	2.44E-05	1.08E-04	0.00E+00	1.47E-05	6.24E-05	0.00E+00
475	464319.2	3809842	0.00015	0.000522	0.00E+00	1.50E-04	5.22E-04	0.00E+00	2.37E-05	1.05E-04	0.00E+00	1.43E-05	6.07E-05	0.00E+00
476	464339.2	3809842	0.000146	0.000508	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.91E-05	0.00E+00
477	464359.2	3809842	0.000143	0.000495	0.00E+00	1.43E-04	4.95E-04	0.00E+00	2.25E-05	9.92E-05	0.00E+00	1.36E-05	5.76E-05	0.00E+00
478	464379.2	3809842	0.000139	0.000483	0.00E+00	1.39E-04	4.83E-04	0.00E+00	2.20E-05	9.68E-05	0.00E+00	1.32E-05	5.61E-05	0.00E+00
479	464399.2	3809842	0.000135	0.00047	0.00E+00	1.35E-04	4.70E-04	0.00E+00	2.14E-05	9.42E-05	0.00E+00	1.29E-05	5.47E-05	0.00E+00
480	464419.2	3809842	0.000132	0.000458	0.00E+00	1.32E-04	4.58E-04	0.00E+00	2.08E-05	9.18E-05	0.00E+00	1.26E-05	5.33E-05	0.00E+00
481	464439.2	3809842	0.000129	0.000447	0.00E+00	1.29E-04	4.47E-04	0.00E+00	2.03E-05	8.96E-05	0.00E+00	1.23E-05	5.20E-05	0.00E+00
482	464459.2	3809842	0.000126	0.000437	0.00E+00	1.26E-04	4.37E-04	0.00E+00	1.99E-05	8.75E-05	0.00E+00	1.20E-05	5.08E-05	0.00E+00
483	464479.2	3809842	0.000123	0.000426	0.00E+00	1.23E-04	4.26E-04	0.00E+00	1.94E-05	8.54E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
484	464499.2	3809842	0.00012	0.000415	0.00E+00	1.20E-04	4.15E-04	0.00E+00	1.89E-05	8.32E-05	0.00E+00	1.14E-05	4.83E-05	0.00E+00
485	464519.2	3809842	0.000117	0.000406	0.00E+00	1.17E-04	4.06E-04	0.00E+00	1.85E-05	8.14E-05	0.00E+00	1.11E-05	4.72E-05	0.00E+00
486	463919.2	3809862	0.000255	0.000887	0.00E+00	2.55E-04	8.87E-04	0.00E+00	4.03E-05	1.78E-04	0.00E+00	2.43E-05	1.03E-04	0.00E+00
487	463939.2	3809862	0.000248	0.000862	0.00E+00	2.48E-04	8.62E-04	0.00E+00	3.92E-05	1.73E-04	0.00E+00	2.36E-05	1.00E-04	0.00E+00
488	463959.2	3809862	0.000242	0.00084	0.00E+00	2.42E-04	8.40E-04	0.00E+00	3.82E-05	1.68E-04	0.00E+00	2.31E-05	9.77E-05	0.00E+00
489	463979.2	3809862	0.000235	0.000817	0.00E+00	2.35E-04	8.17E-04	0.00E+00	3.72E-05	1.64E-04	0.00E+00	2.24E-05	9.50E-05	0.00E+00
490	463999.2	3809862	0.000229	0.000796	0.00E+00	2.29E-04	7.96E-04	0.00E+00	3.62E-05	1.60E-04	0.00E+00	2.18E-05	9.26E-05	0.00E+00
491	464019.2	3809862	0.000224	0.000778	0.00E+00	2.24E-04	7.78E-04	0.00E+00	3.54E-05	1.56E-04	0.00E+00	2.13E-05	9.05E-05	0.00E+00
492	464039.2	3809862	0.00022	0.000764	0.00E+00	2.20E-04	7.64E-04	0.00E+00	3.48E-05	1.53E-04	0.00E+00	2.10E-05	8.89E-05	0.00E+00
493	464059.2	3809862	0.000216	0.000749	0.00E+00	2.16E-04	7.49E-04	0.00E+00	3.41E-05	1.50E-04	0.00E+00	2.06E-05	8.71E-05	0.00E+00
494	464079.2	3809862	0.000211	0.000733	0.00E+00	2.11E-04	7.33E-04	0.00E+00	3.33E-05	1.47E-04	0.00E+00	2.01E-05	8.52E-05	0.00E+00
495	464099.2	3809862	0.000206	0.000715	0.00E+00	2.06E-04	7.15E-04	0.00E+00	3.25E-05	1.43E-04	0.00E+00	1.96E-05	8.32E-05	0.00E+00
496	464119.2	3809862	0.000201	0.000697	0.00E+00	2.01E-04	6.97E-04	0.00E+00	3.17E-05	1.40E-04	0.00E+00	1.91E-05	8.11E-05	0.00E+00
497	464139.2	3809862	0.000195	0.000678	0.00E+00	1.95E-04	6.78E-04	0.00E+00	3.08E-05	1.36E-04	0.00E+00	1.86E-05	7.88E-05	0.00E+00
498	464159.2	3809862	0.000189	0.000658	0.00E+00	1.89E-04	6.58E-04	0.00E+00	2.99E-05	1.32E-04	0.00E+00	1.80E-05	7.65E-05	0.00E+00
499	464179.2	3809862	0.000184	0.000638	0.00E+00	1.84E-04	6.38E-04	0.00E+00	2.90E-05	1.28E-04	0.00E+00	1.75E-05	7.42E-05	0.00E+00
500	464199.2	3809862	0.000178	0.000619	0.00E+00	1.78E-04	6.19E-04	0.00E+00	2.82E-05	1.24E-04	0.00E+00	1.70E-05	7.20E-05	0.00E+00
501	464219.2	3809862	0.000173	0.000602	0.00E+00	1.73E-04	6.02E-04	0.00E+00	2.74E-05	1.21E-04	0.00E+00	1.65E-05	7.00E-05	0.00E+00
502	464239.2	3809862	0.000168	0.000585	0.00E+00	1.68E-04	5.85E-04	0.00E+00	2.66E-05	1.17E-04	0.00E+00	1.60E-05	6.80E-05	0.00E+00
503	464259.2	3809862	0.000164	0.000569	0.00E+00	1.64E-04	5.69E-04	0.00E+00	2.59E-05	1.14E-04	0.00E+00	1.56E-05	6.61E-05	0.00E+00
504	464279.2	3809862	0.000159	0.000553	0.00E+00	1.59E-04	5.53E-04	0.00E+00	2.52E-05	1.11E-04	0.00E+00	1.52E-05	6.43E-05	0.00E+00
505	464299.2	3809862	0.000155	0.000538	0.00E+00	1.55E-04	5.38E-04	0.00E+00	2.45E-05	1.08E-04	0.00E+00	1.48E-05	6.26E-05	0.00E+00
506	464319.2	3809862	0.000151	0.000524	0.00E+00	1.51E-04	5.24E-04	0.00E+00	2.38E-05	1.05E-04	0.00E+00	1.44E-05	6.09E-05	0.00E+00
507	464339.2	3809862	0.000147	0.000509	0.00E+00	1.47E-04	5.09E-04	0.00E+00	2.32E-05	1.02E-04	0.00E+00	1.40E-05	5.92E-05	0.00E+00
508	464359.2	3809862	0.000143	0.000496	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.25E-05	9.93E-05	0.00E+00	1.36E-05	5.76E-05	0.00E+00
509	464379.2	3809862	0.000139	0.000483	0.00E+00	1.39E-04	4.83E-04	0.00E+00	2.20E-05	9.68E-05	0.00E+00	1.33E-05	5.62E-05	0.00E+00
510	464399.2	3809862	0.000136	0.000471	0.00E+00	1.36E-04	4.71E-04	0.00E+00	2.14E-05	9.44E-05	0.00E+00	1.29E-05	5.48E-05	0.00E+00
511	464419.2	3809862	0.000132	0.00046	0.00E+00	1.32E-04	4.60E-04	0.00E+00	2.09E-05	9.21E-05	0.00E+00	1.26E-05	5.34E-05	0.00E+00
512	464439.2	3809862	0.000129	0.000449	0.00E+00	1.29E-04	4.49E-04	0.00E+00	2.04E-05	8.99E-05	0.00E+00	1.23E-05	5.22E-05	0.00E+00
513	464459.2	3809862	0.000126	0.000437	0.00E+00	1.26E-04	4.37E-04	0.00E+00	1.99E-05	8.76E-05	0.00E+00	1.20E-05	5.08E-05	0.00E+00
514	464479.2	3809862	0.000123	0.000426	0.00E+00	1.23E-04	4.26E-04	0.00E+00	1.94E-05	8.54E-05	0.00E+00	1.17E-05	4.96E-05	0.00E+00
515	464499.2	3809862	0.00012	0.000416	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.34E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
516	464519.2	3809862	0.000117	0.000407	0.00E+00	1.17E-04	4.07E-04	0.00E+00	1.85E-05	8.15E-05	0.00E+00	1.12E-05	4.73E-05	0.00E+00
517	463959.2	3809882	0.00024	0.000835	0.00E+00	2.40E-04	8.35E-04	0.00E+00	3.80E-05	1.67E-04	0.00E+00	2.29E-05	9.71E-05	0.00E+00
518	463979.2	3809882	0.000234	0.000813	0.00E+00	2.34E-04	8.13E-04	0.00E+00	3.70E-05	1.63E-04	0.00E+00	2.23E-05	9.45E-05	0.00E+00
519	463999.2	3809882	0.000228	0.000793	0.00E+00	2.28E-04	7.93E-04	0.00E+00	3.61E-05	1.59E-04	0.00E+00	2.18E-05	9.22E-05	0.00E+00
520	464019.2	3809882	0.000223	0.000775	0.00E+00	2.23E-04	7.75E-04	0.00E+00	3.52E-05	1.55E-04	0.00E+00	2.13E-05	9.01E-05	0.00E+00
521	464039.2	3809882	0.000219	0.000759	0.00E+00	2.19E-04	7.59E-04	0.00E+00	3.45E-05	1.52E-04	0.00E+00	2.08E-05	8.83E-05	0.00E+00
522	464059.2	3809882	0.000214	0.000743	0.00E+00	2.14E-04	7.43E-04	0.00E+00	3.38E-05	1.49E-04	0.00E+00	2.04E-05	8.64E-05	0.00E+00
523	464079.2	3809882	0.000209	0.000726	0.00E+00	2.09E-04	7.26E-04	0.00E+00	3.30E-05	1.46E-04	0.00E+00	1.99E-05	8.45E-05	0.00E+00
524	464099.2	3809882	0.000204	0.00071	0.00E+00	2.04E-04	7.10E-04	0.00E+00	3.23E-05	1.42E-04	0.00E+00	1.95E-05	8.25E-05	0.00E+00
525	464119.2	3809882	0.000199	0.000692	0.00E+00	1.99E-04	6.92E-04	0.00E+00	3.15E-05	1.39E-04	0.00E+00	1.90E-05	8.05E-05	0.00E+00
526	464139.2	3809882	0.000194	0.000674	0.00E+00	1.94E-04	6.74E-04	0.00E+00	3.07E-05	1.35E-04	0.00E+00	1.85E-05	7.84E-05	0.00E+00
527	464159.2	3809882	0.000188	0.000654	0.00E+00	1.88E-04	6.54E-04	0.00E+00	2.97E-05	1.31E-04	0.00E+00	1.79E-05	7.60E-05	0.00E+00
528	464179.2	3809882	0.000183	0.000635	0.00E+00	1.83E-04	6.35E-04	0.00E+00	2.89E-05	1.27E-04	0.00E+00	1.74E-05	7.38E-05	0.00E+00
529	464199.2	3809882	0.000178	0.000618	0.00E+00	1.78E-04	6.18E-04	0.00E+00	2.81E-05	1.24E-04	0.00E+00	1.69E-05	7.18E-05	0.00E+00
530	464219.2	3809882	0.000173	0.0006	0.00E+00	1.73E-04	6.00E-04	0.00E+00	2.73E-05	1.20E-04	0.00E+00	1.65E-05	6.98E-05	0.00E+00
531	464239.2	3809882	0.000168	0.000583	0.00E+00	1.68E-04	5.83E-04	0.00E+00	2.65E-05	1.17E-04	0.00E+00	1.60E-05	6.78E-05	0.00E+00
532	464259.2	3809882	0.000163	0.000567	0.00E+00	1.63E-04	5.67E-04	0.00E+00	2.58E-05	1.14E-04	0.00E+00	1.56E-05	6.59E-05	0.00E+00
533	464279.2	3809882	0.000159	0.000553	0.00E+00	1.59E-04	5.53E-04	0.00E+00	2.51E-05	1.11E-04	0.00E+00	1.52E-05	6.43E-05	0.00E+00
534	464299.2	3809882	0.000155	0.000538	0.00E+00	1.55E-04	5.38E-04	0.00E+00	2.45E-05	1.08E-04	0.00E+00	1.48E-05	6.26E-05	0.00E+00
535	464319.2	3809882	0.000151	0.000524	0.00E+00	1.51E-04	5.24E-04	0.00E+00	2.38E-05	1.05E-04	0.00E+00	1.44E-05	6.09E-05	0.00E+00
536	464339.2	3809882	0.000147	0.00051	0.00E+00	1.47E-04	5.10E-04	0.00E+00	2.32E-05	1.02E-04	0.00E+00	1.40E-05	5.93E-05	0.00E+00
537	464359.2	3809882	0.000143	0.000496	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.26E-05	9.95E-05	0.00E+00	1.36E-05	5.77E-05	0.00E+00
538	464379.2	3809882	0.000139	0.000484	0.00E+00	1.39E-04	4.84E-04	0.00E+00	2.20E-05	9.70E-05	0.00E+00	1.33E-05	5.63E-05	0.00E+00
539	464399.2	3809882	0.000136	0.000472	0.00E+00	1.36E-04	4.72E-04	0.00E+00	2.15E-05	9.46E-05	0.00E+00	1.29E-05	5.49E-05	0.00E+00
540	464419.2	3809882	0.000132	0.00046	0.00E+00	1.32E-04	4.60E-04	0.00E+00	2.09E-05	9.22E-05	0.00E+00	1.26E-05	5.35E-05	0.00E+00
541	464439.2	3809882	0.000129	0.000448	0.00E+00	1.29E-04	4.48E-04	0.00E+00	2.04E-05	8.98E-05	0.00E+00	1.23E-05	5.21E-05	0.00E+00
542	464459.2	3809882	0.000126	0.000437	0.00E+00	1.26E-04	4.37E-04	0.00E+00	1.99E-05	8.76E-05	0.00E+00	1.20E-05	5.08E-05	0.00E+00
543	464479.2	3809882	0.000123	0.000427	0.00E+00	1.23E-04	4.27E-04	0.00E+00	1.94E-05	8.55E-05	0.00E+00	1.17E-05	4.96E-05	0.00E+00

544	464499.2	3809882	0.00012	0.000417	0.00E+00	1.20E-04	4.17E-04	0.00E+00	1.90E-05	8.35E-05	0.00E+00	1.14E-05	4.85E-05	0.00E+00
545	464519.2	3809882	0.000117	0.000407	0.00E+00	1.17E-04	4.07E-04	0.00E+00	1.85E-05	8.15E-05	0.00E+00	1.12E-05	4.73E-05	0.00E+00
546	464059.2	3809902	0.000212	0.000737	0.00E+00	2.12E-04	7.37E-04	0.00E+00	3.35E-05	1.48E-04	0.00E+00	2.02E-05	8.56E-05	0.00E+00
547	464079.2	3809902	0.000207	0.00072	0.00E+00	2.07E-04	7.20E-04	0.00E+00	3.28E-05	1.44E-04	0.00E+00	1.98E-05	8.37E-05	0.00E+00
548	464099.2	3809902	0.000203	0.000704	0.00E+00	2.03E-04	7.04E-04	0.00E+00	3.20E-05	1.41E-04	0.00E+00	1.93E-05	8.18E-05	0.00E+00
549	464119.2	3809902	0.000198	0.000686	0.00E+00	1.98E-04	6.86E-04	0.00E+00	3.12E-05	1.38E-04	0.00E+00	1.88E-05	7.98E-05	0.00E+00
550	464139.2	3809902	0.000193	0.000669	0.00E+00	1.93E-04	6.69E-04	0.00E+00	3.04E-05	1.34E-04	0.00E+00	1.84E-05	7.78E-05	0.00E+00
551	464159.2	3809902	0.000187	0.000649	0.00E+00	1.87E-04	6.49E-04	0.00E+00	2.95E-05	1.30E-04	0.00E+00	1.78E-05	7.55E-05	0.00E+00
552	464179.2	3809902	0.000182	0.000632	0.00E+00	1.82E-04	6.32E-04	0.00E+00	2.87E-05	1.27E-04	0.00E+00	1.73E-05	7.34E-05	0.00E+00
553	464199.2	3809902	0.000177	0.000616	0.00E+00	1.77E-04	6.16E-04	0.00E+00	2.80E-05	1.23E-04	0.00E+00	1.69E-05	7.16E-05	0.00E+00
554	464219.2	3809902	0.000172	0.000598	0.00E+00	1.72E-04	5.98E-04	0.00E+00	2.72E-05	1.20E-04	0.00E+00	1.64E-05	6.95E-05	0.00E+00
555	464239.2	3809902	0.000167	0.000581	0.00E+00	1.67E-04	5.81E-04	0.00E+00	2.64E-05	1.16E-04	0.00E+00	1.59E-05	6.76E-05	0.00E+00
556	464259.2	3809902	0.000163	0.000566	0.00E+00	1.63E-04	5.66E-04	0.00E+00	2.57E-05	1.13E-04	0.00E+00	1.55E-05	6.58E-05	0.00E+00
557	464279.2	3809902	0.000159	0.000552	0.00E+00	1.59E-04	5.52E-04	0.00E+00	2.51E-05	1.11E-04	0.00E+00	1.51E-05	6.41E-05	0.00E+00
558	464299.2	3809902	0.000155	0.000537	0.00E+00	1.55E-04	5.37E-04	0.00E+00	2.44E-05	1.08E-04	0.00E+00	1.47E-05	6.25E-05	0.00E+00
559	464319.2	3809902	0.000151	0.000523	0.00E+00	1.51E-04	5.23E-04	0.00E+00	2.38E-05	1.05E-04	0.00E+00	1.44E-05	6.08E-05	0.00E+00
560	464339.2	3809902	0.000147	0.00051	0.00E+00	1.47E-04	5.10E-04	0.00E+00	2.32E-05	1.02E-04	0.00E+00	1.40E-05	5.92E-05	0.00E+00
561	464359.2	3809902	0.000143	0.000496	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.26E-05	9.95E-05	0.00E+00	1.36E-05	5.77E-05	0.00E+00
562	464379.2	3809902	0.000139	0.000484	0.00E+00	1.39E-04	4.84E-04	0.00E+00	2.20E-05	9.70E-05	0.00E+00	1.33E-05	5.63E-05	0.00E+00
563	464399.2	3809902	0.000136	0.000472	0.00E+00	1.36E-04	4.72E-04	0.00E+00	2.15E-05	9.46E-05	0.00E+00	1.29E-05	5.49E-05	0.00E+00
564	464419.2	3809902	0.000132	0.00046	0.00E+00	1.32E-04	4.60E-04	0.00E+00	2.09E-05	9.21E-05	0.00E+00	1.26E-05	5.35E-05	0.00E+00
565	464439.2	3809902	0.000129	0.000448	0.00E+00	1.29E-04	4.48E-04	0.00E+00	2.04E-05	8.97E-05	0.00E+00	1.23E-05	5.21E-05	0.00E+00
566	464459.2	3809902	0.000126	0.000437	0.00E+00	1.26E-04	4.37E-04	0.00E+00	1.99E-05	8.76E-05	0.00E+00	1.20E-05	5.08E-05	0.00E+00
567	464479.2	3809902	0.000123	0.000427	0.00E+00	1.23E-04	4.27E-04	0.00E+00	1.94E-05	8.55E-05	0.00E+00	1.17E-05	4.96E-05	0.00E+00
568	464499.2	3809902	0.00012	0.000417	0.00E+00	1.20E-04	4.17E-04	0.00E+00	1.89E-05	8.35E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
569	464519.2	3809902	0.000117	0.000406	0.00E+00	1.17E-04	4.06E-04	0.00E+00	1.85E-05	8.14E-05	0.00E+00	1.11E-05	4.72E-05	0.00E+00
570	464079.2	3809922	0.000206	0.000715	0.00E+00	2.06E-04	7.15E-04	0.00E+00	3.25E-05	1.43E-04	0.00E+00	1.96E-05	8.32E-05	0.00E+00
571	464099.2	3809922	0.000201	0.000697	0.00E+00	2.01E-04	6.97E-04	0.00E+00	3.17E-05	1.40E-04	0.00E+00	1.91E-05	8.10E-05	0.00E+00
572	464119.2	3809922	0.000196	0.00068	0.00E+00	1.96E-04	6.80E-04	0.00E+00	3.09E-05	1.36E-04	0.00E+00	1.86E-05	7.90E-05	0.00E+00
573	464139.2	3809922	0.000191	0.000665	0.00E+00	1.91E-04	6.65E-04	0.00E+00	3.02E-05	1.33E-04	0.00E+00	1.82E-05	7.73E-05	0.00E+00
574	464159.2	3809922	0.000186	0.000647	0.00E+00	1.86E-04	6.47E-04	0.00E+00	2.94E-05	1.30E-04	0.00E+00	1.78E-05	7.52E-05	0.00E+00
575	464179.2	3809922	0.000181	0.00063	0.00E+00	1.81E-04	6.30E-04	0.00E+00	2.87E-05	1.26E-04	0.00E+00	1.73E-05	7.33E-05	0.00E+00
576	464199.2	3809922	0.000177	0.000614	0.00E+00	1.77E-04	6.14E-04	0.00E+00	2.79E-05	1.23E-04	0.00E+00	1.68E-05	7.14E-05	0.00E+00
577	464219.2	3809922	0.000172	0.000596	0.00E+00	1.72E-04	5.96E-04	0.00E+00	2.71E-05	1.20E-04	0.00E+00	1.64E-05	6.94E-05	0.00E+00
578	464239.2	3809922	0.000167	0.00058	0.00E+00	1.67E-04	5.80E-04	0.00E+00	2.64E-05	1.16E-04	0.00E+00	1.59E-05	6.75E-05	0.00E+00
579	464259.2	3809922	0.000163	0.000566	0.00E+00	1.63E-04	5.66E-04	0.00E+00	2.57E-05	1.13E-04	0.00E+00	1.55E-05	6.58E-05	0.00E+00
580	464279.2	3809922	0.000159	0.000551	0.00E+00	1.59E-04	5.51E-04	0.00E+00	2.51E-05	1.10E-04	0.00E+00	1.51E-05	6.40E-05	0.00E+00
581	464299.2	3809922	0.000154	0.000536	0.00E+00	1.54E-04	5.36E-04	0.00E+00	2.44E-05	1.07E-04	0.00E+00	1.47E-05	6.23E-05	0.00E+00
582	464319.2	3809922	0.00015	0.000522	0.00E+00	1.50E-04	5.22E-04	0.00E+00	2.37E-05	1.05E-04	0.00E+00	1.43E-05	6.07E-05	0.00E+00
583	464339.2	3809922	0.000146	0.000508	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.91E-05	0.00E+00
584	464359.2	3809922	0.000142	0.000495	0.00E+00	1.42E-04	4.95E-04	0.00E+00	2.25E-05	9.92E-05	0.00E+00	1.36E-05	5.75E-05	0.00E+00
585	464379.2	3809922	0.000139	0.000482	0.00E+00	1.39E-04	4.82E-04	0.00E+00	2.19E-05	9.67E-05	0.00E+00	1.32E-05	5.61E-05	0.00E+00
586	464399.2	3809922	0.000135	0.00047	0.00E+00	1.35E-04	4.70E-04	0.00E+00	2.14E-05	9.43E-05	0.00E+00	1.29E-05	5.47E-05	0.00E+00
587	464419.2	3809922	0.000132	0.000459	0.00E+00	1.32E-04	4.59E-04	0.00E+00	2.09E-05	9.19E-05	0.00E+00	1.26E-05	5.33E-05	0.00E+00
588	464439.2	3809922	0.000129	0.000447	0.00E+00	1.29E-04	4.47E-04	0.00E+00	2.04E-05	8.97E-05	0.00E+00	1.23E-05	5.20E-05	0.00E+00
589	464459.2	3809922	0.000126	0.000437	0.00E+00	1.26E-04	4.37E-04	0.00E+00	1.99E-05	8.75E-05	0.00E+00	1.20E-05	5.08E-05	0.00E+00
590	464479.2	3809922	0.000123	0.000426	0.00E+00	1.23E-04	4.26E-04	0.00E+00	1.94E-05	8.54E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
591	464499.2	3809922	0.00012	0.000415	0.00E+00	1.20E-04	4.15E-04	0.00E+00	1.89E-05	8.32E-05	0.00E+00	1.14E-05	4.83E-05	0.00E+00
592	464519.2	3809922	0.000117	0.000405	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.12E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
593	464099.2	3809942	0.000198	0.000687	0.00E+00	1.98E-04	6.87E-04	0.00E+00	3.13E-05	1.38E-04	0.00E+00	1.88E-05	7.99E-05	0.00E+00
594	464119.2	3809942	0.000193	0.000671	0.00E+00	1.93E-04	6.71E-04	0.00E+00	3.05E-05	1.35E-04	0.00E+00	1.84E-05	7.81E-05	0.00E+00
595	464139.2	3809942	0.000189	0.000657	0.00E+00	1.89E-04	6.57E-04	0.00E+00	2.99E-05	1.32E-04	0.00E+00	1.80E-05	7.64E-05	0.00E+00
596	464159.2	3809942	0.000185	0.000642	0.00E+00	1.85E-04	6.42E-04	0.00E+00	2.92E-05	1.29E-04	0.00E+00	1.76E-05	7.46E-05	0.00E+00
597	464179.2	3809942	0.00018	0.000627	0.00E+00	1.80E-04	6.27E-04	0.00E+00	2.85E-05	1.26E-04	0.00E+00	1.72E-05	7.28E-05	0.00E+00
598	464199.2	3809942	0.000176	0.000612	0.00E+00	1.76E-04	6.12E-04	0.00E+00	2.78E-05	1.23E-04	0.00E+00	1.68E-05	7.11E-05	0.00E+00
599	464219.2	3809942	0.000171	0.000596	0.00E+00	1.71E-04	5.96E-04	0.00E+00	2.71E-05	1.19E-04	0.00E+00	1.63E-05	6.92E-05	0.00E+00
600	464239.2	3809942	0.000167	0.00058	0.00E+00	1.67E-04	5.80E-04	0.00E+00	2.64E-05	1.16E-04	0.00E+00	1.59E-05	6.74E-05	0.00E+00
601	464259.2	3809942	0.000162	0.000564	0.00E+00	1.62E-04	5.64E-04	0.00E+00	2.57E-05	1.13E-04	0.00E+00	1.55E-05	6.56E-05	0.00E+00
602	464279.2	3809942	0.000158	0.000549	0.00E+00	1.58E-04	5.49E-04	0.00E+00	2.50E-05	1.10E-04	0.00E+00	1.51E-05	6.38E-05	0.00E+00
603	464299.2	3809942	0.000154	0.000534	0.00E+00	1.54E-04	5.34E-04	0.00E+00	2.43E-05	1.07E-04	0.00E+00	1.47E-05	6.21E-05	0.00E+00
604	464319.2	3809942	0.00015	0.000521	0.00E+00	1.50E-04	5.21E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.06E-05	0.00E+00
605	464339.2	3809942	0.000146	0.000507	0.00E+00	1.46E-04	5.07E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.90E-05	0.00E+00
606	464359.2	3809942	0.000142	0.000494	0.00E+00	1.42E-04	4.94E-04	0.00E+00	2.25E-05	9.90E-05	0.00E+00	1.36E-05	5.75E-05	0.00E+00
607	464379.2	3809942	0.000139	0.000482	0.00E+00	1.39E-04	4.82E-04	0.00E+00	2.19E-05	9.65E-05	0.00E+00	1.32E-05	5.60E-05	0.00E+00
608	464399.2	3809942	0.000135	0.00047	0.00E+00	1.35E-04	4.70E-04	0.00E+00	2.14E-05	9.41E-05	0.00E+00	1.29E-05	5.46E-05	0.00E+00
609	464419.2	3809942	0.000132	0.000458	0.00E+00	1.32E-04	4.58E-04	0.00E+00	2.08E-05	9.18E-05	0.00E+00	1.26E-05	5.32E-05	0.00E+00
610	464439.2	3809942	0.000129	0.000447	0.00E+00	1.29E-04	4.47E-04	0.00E+00	2.03E-05	8.95E-05	0.00E+00	1.23E-05	5.20E-05	0.00E+00
611	464459.2	3809942	0.000125	0.000435	0.00E+00	1.25E-04	4.35E-04	0.00E+00	1.98E-05	8.73E-05	0.00E+00	1.19E-05	5.06E-05	0.00E+00
612	464479.2	3809942	0.000122	0.000425	0.00E+00	1.22E-04	4.25E-04	0.00E+00	1.93E-05	8.51E-05	0.00E+00	1.16E-05	4.94E-05	0.00E+00
613	464499.2	3809942	0.000119	0.000414	0.00E+00	1.19E-04	4.14E-04	0.00E+00	1.88E-05	8.30E-05	0.00E+00	1.14E-05	4.82E-05	0.00E+00
614	464519.2	3809942	0.000117	0.000405	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.11E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
615	464119.2	3809962	0.000191	0.000664	0.00E+00	1.91E-04	6.64E-04	0.00E+00	3.02E-05	1.33E-04	0.00E+00	1.82E-05	7.72E-05	0.00E+00
616	464139.2	3809962	0.000187	0.00065	0.00E+00	1.87E-04	6.50E-04	0.00E+00	2.96E-05	1.30E-04	0.00E+00	1.78E-05	7.56E-05	0.00E+00
617	464159.2	3809962	0.000183	0.000636	0.00E+00	1.83E-04	6.36E-04	0.00E+00	2.89E-05	1.27E-04	0.00E+00	1.74E-05	7.39E-05	0.00E+00
618	464179.2	3809962	0.000179	0.000622	0.00E+00	1.79E-04	6.22E-04	0.00E+00	2.83E-05	1.25E-04	0.00E+00	1.71E-05	7.23E-05	0.00E+00
619	464199.2	3809962	0.000175	0.000608	0.00E+00	1.75E-04	6.08E-04	0.00E+00	2.77E-05	1.22E-04	0.00E+00	1.67E-05	7.07E-05	0.00E+00
620	464219.2	3809962	0.000171	0.000594	0.00E+00	1.71E-04	5.94E-04	0.00E+00	2.70E-05	1.19E-04	0.00E+00	1.63E-05	6.90E-05	0.00E+00
621	464239.2	3809962	0.000166	0.000578	0.00E+00	1.66E-04	5.78E-04	0.00E+00	2.63E-05	1.16E-04	0.00E+00	1.59E-05	6.72E-05	0.00E+00
622	464259.2	3809962	0.000162	0.000562	0.00E+00	1.62E-04	5.62E-04	0.00E+00	2.56E-05	1.13E-04	0.00E+00	1.54E-05	6.54E-05	0.00E+00
623	464279.2	3809962	0.000157	0.000547	0.00E+00	1.57E-04	5.47E-04	0.00E+00	2.49E-05	1.10E-04	0.00E+00	1.50E-05	6.36E-05	0.00E+00
624	464299.2	3809962	0.000153	0.000533	0.00E+00	1.53E-04	5.33E-04	0.00E+00	2.42E-05	1.07E-04	0.00E+00	1.46E-05	6.19E-05	0.00E+00
625	464319.2	3809962	0.00015	0.00052	0.00E+00	1.50E-04	5.20E-04	0.00E+00	2.36E-05	1.04E-04	0.00E+00	1.43E-05	6.04E-05	0.00E+00
626	464339.2	3809962	0.000146	0.000506	0.00E+00	1.46E-04	5.06E-04	0.00E+00	2.30E-05	1.01E-04	0.00E+00	1.39E-05	5.89E-05	0.00E+00
627	464359.2	3809962	0.000142	0.000493	0.00E+00	1.42E-04	4.93E-04	0.00E+00	2.24E-05	9.89E-05	0.00E+00	1.35E-05	5.74E-05	0.00E+00
628	464379.2	3809962	0.000138	0.000481	0.00E+00	1.38E-04	4.81E-04	0.00E+00	2.19E-05	9.63E-05	0.00E+00	1.32E-05	5.59E-05	0.00E+00
629	464399.2	3809962	0.000135	0.000469	0.00E+00	1.35E-04	4.69E-04	0.00E+00	2.13E-05	9.39E-05	0.00E+00	1.29E-05	5.45E-05	0.00E+00
630	464419.2	3809962	0.000132	0.000457	0.00E+00	1.32E-04	4.57E-04	0.00E+00	2.08E-05	9.16E-05	0.00E+00	1.25E-05	5.31E-05	0.00E+00
631	464439.2	3809962	0.000128	0.000446	0.00E+00	1.28E-04	4.46E-04	0.00E+00	2.03E-05	8.93E-05	0.00E+00	1.22E-05	5.18E-05	0.00E+00
632	464459.2	3809962	0.000125	0.000434	0.00E+00	1.25E-04	4.34E-04	0.00E+00	1.97E-05	8.69E-05	0.00E+00	1.19E-05	5.04E-05	0.00E+00
633	464479.2	3809962	0.000122	0.000423	0.00E+00	1.22E-04	4.23E-04	0.00E+00	1.92E-05	8.48E-05	0.00E+00	1.16E-05	4.92E-05	0.00E+00
634	464499.2	3809962	0.000119	0.000413	0.00E+00	1.19E-04	4.13E-04	0.00E+00	1.88E-05	8.28E-05	0.00E+00	1.13E-05	4.80E-05	0.00E+00

635	464519.2	3809962	0.000116	0.000403	0.00E+00	1.16E-04	4.03E-04	0.00E+00	1.84E-05	8.09E-05	0.00E+00	1.11E-05	4.69E-05	0.00E+00
636	464139.2	3809982	0.000186	0.000647	0.00E+00	1.86E-04	6.47E-04	0.00E+00	2.94E-05	1.30E-04	0.00E+00	1.77E-05	7.52E-05	0.00E+00
637	464159.2	3809982	0.000182	0.000631	0.00E+00	1.82E-04	6.31E-04	0.00E+00	2.87E-05	1.26E-04	0.00E+00	1.73E-05	7.33E-05	0.00E+00
638	464179.2	3809982	0.000177	0.000616	0.00E+00	1.77E-04	6.16E-04	0.00E+00	2.80E-05	1.23E-04	0.00E+00	1.69E-05	7.16E-05	0.00E+00
639	464199.2	3809982	0.000174	0.000603	0.00E+00	1.74E-04	6.03E-04	0.00E+00	2.74E-05	1.21E-04	0.00E+00	1.65E-05	7.01E-05	0.00E+00
640	464219.2	3809982	0.00017	0.00059	0.00E+00	1.70E-04	5.90E-04	0.00E+00	2.68E-05	1.18E-04	0.00E+00	1.62E-05	6.86E-05	0.00E+00
641	464239.2	3809982	0.000166	0.000576	0.00E+00	1.66E-04	5.76E-04	0.00E+00	2.62E-05	1.15E-04	0.00E+00	1.58E-05	6.70E-05	0.00E+00
642	464259.2	3809982	0.000162	0.000561	0.00E+00	1.62E-04	5.61E-04	0.00E+00	2.55E-05	1.13E-04	0.00E+00	1.54E-05	6.53E-05	0.00E+00
643	464279.2	3809982	0.000157	0.000546	0.00E+00	1.57E-04	5.46E-04	0.00E+00	2.48E-05	1.09E-04	0.00E+00	1.50E-05	6.35E-05	0.00E+00
644	464299.2	3809982	0.000153	0.000531	0.00E+00	1.53E-04	5.31E-04	0.00E+00	2.42E-05	1.06E-04	0.00E+00	1.46E-05	6.18E-05	0.00E+00
645	464319.2	3809982	0.000149	0.000517	0.00E+00	1.49E-04	5.17E-04	0.00E+00	2.35E-05	1.04E-04	0.00E+00	1.42E-05	6.01E-05	0.00E+00
646	464339.2	3809982	0.000145	0.000505	0.00E+00	1.45E-04	5.05E-04	0.00E+00	2.30E-05	1.01E-04	0.00E+00	1.38E-05	5.87E-05	0.00E+00
647	464359.2	3809982	0.000142	0.000492	0.00E+00	1.42E-04	4.92E-04	0.00E+00	2.24E-05	9.86E-05	0.00E+00	1.35E-05	5.72E-05	0.00E+00
648	464379.2	3809982	0.000138	0.00048	0.00E+00	1.38E-04	4.80E-04	0.00E+00	2.18E-05	9.61E-05	0.00E+00	1.32E-05	5.58E-05	0.00E+00
649	464399.2	3809982	0.000135	0.000468	0.00E+00	1.35E-04	4.68E-04	0.00E+00	2.13E-05	9.37E-05	0.00E+00	1.28E-05	5.44E-05	0.00E+00
650	464419.2	3809982	0.000131	0.000455	0.00E+00	1.31E-04	4.55E-04	0.00E+00	2.07E-05	9.12E-05	0.00E+00	1.25E-05	5.29E-05	0.00E+00
651	464439.2	3809982	0.000128	0.000443	0.00E+00	1.28E-04	4.43E-04	0.00E+00	2.02E-05	8.88E-05	0.00E+00	1.22E-05	5.15E-05	0.00E+00
652	464459.2	3809982	0.000124	0.000432	0.00E+00	1.24E-04	4.32E-04	0.00E+00	1.97E-05	8.66E-05	0.00E+00	1.19E-05	5.03E-05	0.00E+00
653	464479.2	3809982	0.000121	0.000422	0.00E+00	1.21E-04	4.22E-04	0.00E+00	1.92E-05	8.45E-05	0.00E+00	1.16E-05	4.91E-05	0.00E+00
654	464499.2	3809982	0.000119	0.000412	0.00E+00	1.19E-04	4.12E-04	0.00E+00	1.87E-05	8.26E-05	0.00E+00	1.13E-05	4.79E-05	0.00E+00
655	464519.2	3809982	0.000116	0.000402	0.00E+00	1.16E-04	4.02E-04	0.00E+00	1.83E-05	8.05E-05	0.00E+00	1.10E-05	4.67E-05	0.00E+00
656	464159.2	3810002	0.00018	0.000626	0.00E+00	1.80E-04	6.26E-04	0.00E+00	2.85E-05	1.25E-04	0.00E+00	1.72E-05	7.28E-05	0.00E+00
657	464179.2	3810002	0.000176	0.000612	0.00E+00	1.76E-04	6.12E-04	0.00E+00	2.78E-05	1.23E-04	0.00E+00	1.68E-05	7.12E-05	0.00E+00
658	464199.2	3810002	0.000172	0.000599	0.00E+00	1.72E-04	5.99E-04	0.00E+00	2.73E-05	1.20E-04	0.00E+00	1.64E-05	6.97E-05	0.00E+00
659	464219.2	3810002	0.000168	0.000585	0.00E+00	1.68E-04	5.85E-04	0.00E+00	2.66E-05	1.17E-04	0.00E+00	1.61E-05	6.80E-05	0.00E+00
660	464239.2	3810002	0.000164	0.000571	0.00E+00	1.64E-04	5.71E-04	0.00E+00	2.60E-05	1.14E-04	0.00E+00	1.57E-05	6.64E-05	0.00E+00
661	464259.2	3810002	0.00016	0.000557	0.00E+00	1.60E-04	5.57E-04	0.00E+00	2.53E-05	1.12E-04	0.00E+00	1.53E-05	6.48E-05	0.00E+00
662	464279.2	3810002	0.000157	0.000544	0.00E+00	1.57E-04	5.44E-04	0.00E+00	2.47E-05	1.09E-04	0.00E+00	1.49E-05	6.32E-05	0.00E+00
663	464299.2	3810002	0.000153	0.00053	0.00E+00	1.53E-04	5.30E-04	0.00E+00	2.41E-05	1.06E-04	0.00E+00	1.45E-05	6.16E-05	0.00E+00
664	464319.2	3810002	0.000148	0.000515	0.00E+00	1.48E-04	5.15E-04	0.00E+00	2.34E-05	1.03E-04	0.00E+00	1.41E-05	5.99E-05	0.00E+00
665	464339.2	3810002	0.000145	0.000503	0.00E+00	1.45E-04	5.03E-04	0.00E+00	2.29E-05	1.01E-04	0.00E+00	1.38E-05	5.84E-05	0.00E+00
666	464359.2	3810002	0.000141	0.00049	0.00E+00	1.41E-04	4.90E-04	0.00E+00	2.23E-05	9.81E-05	0.00E+00	1.34E-05	5.69E-05	0.00E+00
667	464379.2	3810002	0.000137	0.000477	0.00E+00	1.37E-04	4.77E-04	0.00E+00	2.17E-05	9.56E-05	0.00E+00	1.31E-05	5.55E-05	0.00E+00
668	464399.2	3810002	0.000134	0.000465	0.00E+00	1.34E-04	4.65E-04	0.00E+00	2.12E-05	9.32E-05	0.00E+00	1.28E-05	5.41E-05	0.00E+00
669	464419.2	3810002	0.00013	0.000453	0.00E+00	1.30E-04	4.53E-04	0.00E+00	2.06E-05	9.08E-05	0.00E+00	1.24E-05	5.27E-05	0.00E+00
670	464439.2	3810002	0.000127	0.000442	0.00E+00	1.27E-04	4.42E-04	0.00E+00	2.01E-05	8.85E-05	0.00E+00	1.21E-05	5.13E-05	0.00E+00
671	464459.2	3810002	0.000124	0.000431	0.00E+00	1.24E-04	4.31E-04	0.00E+00	1.96E-05	8.63E-05	0.00E+00	1.18E-05	5.01E-05	0.00E+00
672	464479.2	3810002	0.000121	0.00042	0.00E+00	1.21E-04	4.20E-04	0.00E+00	1.91E-05	8.42E-05	0.00E+00	1.15E-05	4.89E-05	0.00E+00
673	464499.2	3810002	0.000118	0.00041	0.00E+00	1.18E-04	4.10E-04	0.00E+00	1.86E-05	8.21E-05	0.00E+00	1.12E-05	4.77E-05	0.00E+00
674	464519.2	3810002	0.000115	0.0004	0.00E+00	1.15E-04	4.00E-04	0.00E+00	1.82E-05	8.01E-05	0.00E+00	1.10E-05	4.65E-05	0.00E+00
675	464179.2	3810022	0.000175	0.000608	0.00E+00	1.75E-04	6.08E-04	0.00E+00	2.76E-05	1.22E-04	0.00E+00	1.67E-05	7.06E-05	0.00E+00
676	464199.2	3810022	0.000171	0.000595	0.00E+00	1.71E-04	5.95E-04	0.00E+00	2.71E-05	1.19E-04	0.00E+00	1.63E-05	6.92E-05	0.00E+00
677	464219.2	3810022	0.000167	0.00058	0.00E+00	1.67E-04	5.80E-04	0.00E+00	2.64E-05	1.16E-04	0.00E+00	1.59E-05	6.75E-05	0.00E+00
678	464239.2	3810022	0.000163	0.000566	0.00E+00	1.63E-04	5.66E-04	0.00E+00	2.58E-05	1.13E-04	0.00E+00	1.55E-05	6.58E-05	0.00E+00
679	464259.2	3810022	0.000159	0.000552	0.00E+00	1.59E-04	5.52E-04	0.00E+00	2.51E-05	1.11E-04	0.00E+00	1.52E-05	6.42E-05	0.00E+00
680	464279.2	3810022	0.000156	0.00054	0.00E+00	1.56E-04	5.40E-04	0.00E+00	2.46E-05	1.08E-04	0.00E+00	1.48E-05	6.28E-05	0.00E+00
681	464299.2	3810022	0.000152	0.000528	0.00E+00	1.52E-04	5.28E-04	0.00E+00	2.40E-05	1.06E-04	0.00E+00	1.45E-05	6.13E-05	0.00E+00
682	464319.2	3810022	0.000148	0.000514	0.00E+00	1.48E-04	5.14E-04	0.00E+00	2.34E-05	1.03E-04	0.00E+00	1.41E-05	5.97E-05	0.00E+00
683	464339.2	3810022	0.000144	0.0005	0.00E+00	1.44E-04	5.00E-04	0.00E+00	2.28E-05	1.00E-04	0.00E+00	1.37E-05	5.82E-05	0.00E+00
684	464359.2	3810022	0.00014	0.000487	0.00E+00	1.40E-04	4.87E-04	0.00E+00	2.22E-05	9.77E-05	0.00E+00	1.34E-05	5.67E-05	0.00E+00
685	464379.2	3810022	0.000137	0.000475	0.00E+00	1.37E-04	4.75E-04	0.00E+00	2.16E-05	9.51E-05	0.00E+00	1.30E-05	5.52E-05	0.00E+00
686	464399.2	3810022	0.000133	0.000463	0.00E+00	1.33E-04	4.63E-04	0.00E+00	2.11E-05	9.27E-05	0.00E+00	1.27E-05	5.38E-05	0.00E+00
687	464419.2	3810022	0.00013	0.000451	0.00E+00	1.30E-04	4.51E-04	0.00E+00	2.05E-05	9.04E-05	0.00E+00	1.24E-05	5.25E-05	0.00E+00
688	464439.2	3810022	0.000127	0.00044	0.00E+00	1.27E-04	4.40E-04	0.00E+00	2.00E-05	8.82E-05	0.00E+00	1.21E-05	5.12E-05	0.00E+00
689	464459.2	3810022	0.000124	0.000429	0.00E+00	1.24E-04	4.29E-04	0.00E+00	1.95E-05	8.60E-05	0.00E+00	1.18E-05	4.99E-05	0.00E+00
690	464479.2	3810022	0.00012	0.000418	0.00E+00	1.20E-04	4.18E-04	0.00E+00	1.90E-05	8.38E-05	0.00E+00	1.15E-05	4.87E-05	0.00E+00
691	464499.2	3810022	0.000117	0.000408	0.00E+00	1.17E-04	4.08E-04	0.00E+00	1.85E-05	8.17E-05	0.00E+00	1.12E-05	4.74E-05	0.00E+00
692	464519.2	3810022	0.000115	0.000398	0.00E+00	1.15E-04	3.98E-04	0.00E+00	1.81E-05	7.98E-05	0.00E+00	1.09E-05	4.63E-05	0.00E+00
693	464219.2	3810042	0.000166	0.000576	0.00E+00	1.66E-04	5.76E-04	0.00E+00	2.62E-05	1.15E-04	0.00E+00	1.58E-05	6.70E-05	0.00E+00
694	464239.2	3810042	0.000162	0.000563	0.00E+00	1.62E-04	5.63E-04	0.00E+00	2.56E-05	1.13E-04	0.00E+00	1.54E-05	6.55E-05	0.00E+00
695	464259.2	3810042	0.000158	0.000549	0.00E+00	1.58E-04	5.49E-04	0.00E+00	2.50E-05	1.10E-04	0.00E+00	1.51E-05	6.38E-05	0.00E+00
696	464279.2	3810042	0.000154	0.000536	0.00E+00	1.54E-04	5.36E-04	0.00E+00	2.44E-05	1.07E-04	0.00E+00	1.47E-05	6.23E-05	0.00E+00
697	464299.2	3810042	0.000151	0.000523	0.00E+00	1.51E-04	5.23E-04	0.00E+00	2.38E-05	1.05E-04	0.00E+00	1.44E-05	6.08E-05	0.00E+00
698	464319.2	3810042	0.000147	0.000511	0.00E+00	1.47E-04	5.11E-04	0.00E+00	2.32E-05	1.02E-04	0.00E+00	1.40E-05	5.94E-05	0.00E+00
699	464339.2	3810042	0.000143	0.000498	0.00E+00	1.43E-04	4.98E-04	0.00E+00	2.27E-05	9.99E-05	0.00E+00	1.37E-05	5.79E-05	0.00E+00
700	464359.2	3810042	0.00014	0.000486	0.00E+00	1.40E-04	4.86E-04	0.00E+00	2.21E-05	9.74E-05	0.00E+00	1.33E-05	5.65E-05	0.00E+00
701	464379.2	3810042	0.000136	0.000473	0.00E+00	1.36E-04	4.73E-04	0.00E+00	2.15E-05	9.49E-05	0.00E+00	1.30E-05	5.50E-05	0.00E+00
702	464399.2	3810042	0.000133	0.000461	0.00E+00	1.33E-04	4.61E-04	0.00E+00	2.10E-05	9.25E-05	0.00E+00	1.27E-05	5.36E-05	0.00E+00
703	464419.2	3810042	0.00013	0.00045	0.00E+00	1.30E-04	4.50E-04	0.00E+00	2.05E-05	9.01E-05	0.00E+00	1.23E-05	5.23E-05	0.00E+00
704	464439.2	3810042	0.000126	0.000439	0.00E+00	1.26E-04	4.39E-04	0.00E+00	2.00E-05	8.79E-05	0.00E+00	1.20E-05	5.10E-05	0.00E+00
705	464459.2	3810042	0.000123	0.000427	0.00E+00	1.23E-04	4.27E-04	0.00E+00	1.94E-05	8.56E-05	0.00E+00	1.17E-05	4.97E-05	0.00E+00
706	464479.2	3810042	0.00012	0.000416	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.34E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
707	464499.2	3810042	0.000117	0.000406	0.00E+00	1.17E-04	4.06E-04	0.00E+00	1.85E-05	8.14E-05	0.00E+00	1.11E-05	4.72E-05	0.00E+00
708	464519.2	3810042	0.000114	0.000396	0.00E+00	1.14E-04	3.96E-04	0.00E+00	1.80E-05	7.93E-05	0.00E+00	1.09E-05	4.60E-05	0.00E+00
709	464239.2	3810062	0.000161	0.000558	0.00E+00	1.61E-04	5.58E-04	0.00E+00	2.54E-05	1.12E-04	0.00E+00	1.53E-05	6.49E-05	0.00E+00
710	464259.2	3810062	0.000157	0.000544	0.00E+00	1.57E-04	5.44E-04	0.00E+00	2.48E-05	1.09E-04	0.00E+00	1.49E-05	6.33E-05	0.00E+00
711	464279.2	3810062	0.000153	0.000532	0.00E+00	1.53E-04	5.32E-04	0.00E+00	2.42E-05	1.07E-04	0.00E+00	1.46E-05	6.19E-05	0.00E+00
712	464299.2	3810062	0.00015	0.00052	0.00E+00	1.50E-04	5.20E-04	0.00E+00	2.37E-05	1.04E-04	0.00E+00	1.43E-05	6.05E-05	0.00E+00
713	464319.2	3810062	0.000146	0.000508	0.00E+00	1.46E-04	5.08E-04	0.00E+00	2.31E-05	1.02E-04	0.00E+00	1.39E-05	5.90E-05	0.00E+00
714	464339.2	3810062	0.000143	0.000496	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.25E-05	9.93E-05	0.00E+00	1.36E-05	5.76E-05	0.00E+00
715	464359.2	3810062	0.000139	0.000484	0.00E+00	1.39E-04	4.84E-04	0.00E+00	2.20E-05	9.70E-05	0.00E+00	1.33E-05	5.63E-05	0.00E+00
716	464379.2	3810062	0.000136	0.000472	0.00E+00	1.36E-04	4.72E-04	0.00E+00	2.15E-05	9.46E-05	0.00E+00	1.30E-05	5.49E-05	0.00E+00
717	464399.2	3810062	0.000132	0.00046	0.00E+00	1.32E-04	4.60E-04	0.00E+00	2.09E-05	9.22E-05	0.00E+00	1.26E-05	5.35E-05	0.00E+00
718	464419.2	3810062	0.000129	0.000448	0.00E+00	1.29E-04	4.48E-04	0.00E+00	2.04E-05	8.98E-05	0.00E+00	1.23E-05	5.21E-05	0.00E+00
719	464439.2	3810062	0.000126	0.000436	0.00E+00	1.26E-04	4.36E-04	0.00E+00	1.99E-05	8.75E-05	0.00E+00	1.20E-05	5.08E-05	0.00E+00
720	464459.2	3810062	0.000122	0.000425	0.00E+00	1.22E-04	4.25E-04	0.00E+00	1.93E-05	8.52E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
721	464479.2	3810062	0.000119	0.000415	0.00E+00	1.19E-04	4.15E-04	0.00E+00	1.89E-05	8.31E-05	0.00E+00	1.14E-05	4.82E-05	0.00E+00
722	464499.2	3810062	0.000116	0.000404	0.00E+00	1.16E-04	4.04E-04	0.00E+00	1.84E-05	8.10E-05	0.00E+00	1.11E-05	4.70E-05	0.00E+00
723	464519.2	3810062	0.000113	0.000394	0.00E+00	1.13E-04	3.94E-04	0.00E+00	1.79E-05	7.90E-05	0.00E+00	1.08E-05	4.58E-05	0.00E+00
724	464259.2	3810082	0.000155	0.00054	0.00E+00	1.55E-04	5.40E-04	0.00E+00	2.46E-05	1.08E-04	0.00E+00	1.48E-05	6.28E-05	0.00E+00
725	464279.2	3810082	0.000152	0.000528	0.00E+00	1.52E-04	5.28E-04	0.00E+00	2.40E-05	1.06E-04	0.00E+00	1.45E-05	6.14E-05	0.00E+00

726	464299.2	3810082	0.000149	0.000517	0.00E+00	1.49E-04	5.17E-04	0.00E+00	2.35E-05	1.04E-04	0.00E+00	1.42E-05	6.01E-05	0.00E+00
727	464319.2	3810082	0.000145	0.000504	0.00E+00	1.45E-04	5.04E-04	0.00E+00	2.29E-05	1.01E-04	0.00E+00	1.38E-05	5.86E-05	0.00E+00
728	464339.2	3810082	0.000142	0.000493	0.00E+00	1.42E-04	4.93E-04	0.00E+00	2.24E-05	9.87E-05	0.00E+00	1.35E-05	5.73E-05	0.00E+00
729	464359.2	3810082	0.000138	0.000481	0.00E+00	1.38E-04	4.81E-04	0.00E+00	2.19E-05	9.64E-05	0.00E+00	1.32E-05	5.59E-05	0.00E+00
730	464379.2	3810082	0.000135	0.00047	0.00E+00	1.35E-04	4.70E-04	0.00E+00	2.14E-05	9.41E-05	0.00E+00	1.29E-05	5.46E-05	0.00E+00
731	464399.2	3810082	0.000132	0.000458	0.00E+00	1.32E-04	4.58E-04	0.00E+00	2.08E-05	9.18E-05	0.00E+00	1.26E-05	5.33E-05	0.00E+00
732	464419.2	3810082	0.000128	0.000446	0.00E+00	1.28E-04	4.46E-04	0.00E+00	2.03E-05	8.94E-05	0.00E+00	1.22E-05	5.19E-05	0.00E+00
733	464439.2	3810082	0.000125	0.000434	0.00E+00	1.25E-04	4.34E-04	0.00E+00	1.97E-05	8.70E-05	0.00E+00	1.19E-05	5.05E-05	0.00E+00
734	464459.2	3810082	0.000122	0.000423	0.00E+00	1.22E-04	4.23E-04	0.00E+00	1.93E-05	8.48E-05	0.00E+00	1.16E-05	4.92E-05	0.00E+00
735	464479.2	3810082	0.000119	0.000413	0.00E+00	1.19E-04	4.13E-04	0.00E+00	1.88E-05	8.27E-05	0.00E+00	1.13E-05	4.80E-05	0.00E+00
736	464499.2	3810082	0.000116	0.000402	0.00E+00	1.16E-04	4.02E-04	0.00E+00	1.83E-05	8.05E-05	0.00E+00	1.10E-05	4.67E-05	0.00E+00
737	464519.2	3810082	0.000113	0.000393	0.00E+00	1.13E-04	3.93E-04	0.00E+00	1.79E-05	7.87E-05	0.00E+00	1.08E-05	4.56E-05	0.00E+00
738	464279.2	3810102	0.000151	0.000524	0.00E+00	1.51E-04	5.24E-04	0.00E+00	2.39E-05	1.05E-04	0.00E+00	1.44E-05	6.10E-05	0.00E+00
739	464299.2	3810102	0.000147	0.000512	0.00E+00	1.47E-04	5.12E-04	0.00E+00	2.33E-05	1.03E-04	0.00E+00	1.41E-05	5.95E-05	0.00E+00
740	464319.2	3810102	0.000144	0.0005	0.00E+00	1.44E-04	5.00E-04	0.00E+00	2.28E-05	1.00E-04	0.00E+00	1.37E-05	5.82E-05	0.00E+00
741	464339.2	3810102	0.000141	0.000489	0.00E+00	1.41E-04	4.89E-04	0.00E+00	2.22E-05	9.79E-05	0.00E+00	1.34E-05	5.68E-05	0.00E+00
742	464359.2	3810102	0.000137	0.000477	0.00E+00	1.37E-04	4.77E-04	0.00E+00	2.17E-05	9.55E-05	0.00E+00	1.31E-05	5.54E-05	0.00E+00
743	464379.2	3810102	0.000134	0.000465	0.00E+00	1.34E-04	4.65E-04	0.00E+00	2.11E-05	9.31E-05	0.00E+00	1.27E-05	5.40E-05	0.00E+00
744	464399.2	3810102	0.000131	0.000454	0.00E+00	1.31E-04	4.54E-04	0.00E+00	2.06E-05	9.10E-05	0.00E+00	1.25E-05	5.28E-05	0.00E+00
745	464419.2	3810102	0.000128	0.000443	0.00E+00	1.28E-04	4.43E-04	0.00E+00	2.02E-05	8.88E-05	0.00E+00	1.22E-05	5.15E-05	0.00E+00
746	464439.2	3810102	0.000124	0.000432	0.00E+00	1.24E-04	4.32E-04	0.00E+00	1.97E-05	8.66E-05	0.00E+00	1.19E-05	5.02E-05	0.00E+00
747	464459.2	3810102	0.000121	0.00042	0.00E+00	1.21E-04	4.20E-04	0.00E+00	1.91E-05	8.42E-05	0.00E+00	1.15E-05	4.89E-05	0.00E+00
748	464479.2	3810102	0.000118	0.00041	0.00E+00	1.18E-04	4.10E-04	0.00E+00	1.86E-05	8.21E-05	0.00E+00	1.12E-05	4.76E-05	0.00E+00
749	464499.2	3810102	0.000115	0.0004	0.00E+00	1.15E-04	4.00E-04	0.00E+00	1.82E-05	8.01E-05	0.00E+00	1.10E-05	4.65E-05	0.00E+00
750	464519.2	3810102	0.000112	0.000391	0.00E+00	1.12E-04	3.91E-04	0.00E+00	1.78E-05	7.83E-05	0.00E+00	1.07E-05	4.54E-05	0.00E+00
751	464299.2	3810122	0.000147	0.000509	0.00E+00	1.47E-04	5.09E-04	0.00E+00	2.32E-05	1.02E-04	0.00E+00	1.40E-05	5.92E-05	0.00E+00
752	464319.2	3810122	0.000143	0.000496	0.00E+00	1.43E-04	4.96E-04	0.00E+00	2.26E-05	9.94E-05	0.00E+00	1.36E-05	5.77E-05	0.00E+00
753	464339.2	3810122	0.000139	0.000484	0.00E+00	1.39E-04	4.84E-04	0.00E+00	2.20E-05	9.69E-05	0.00E+00	1.33E-05	5.62E-05	0.00E+00
754	464359.2	3810122	0.000136	0.000472	0.00E+00	1.36E-04	4.72E-04	0.00E+00	2.15E-05	9.46E-05	0.00E+00	1.29E-05	5.49E-05	0.00E+00
755	464379.2	3810122	0.000133	0.000461	0.00E+00	1.33E-04	4.61E-04	0.00E+00	2.10E-05	9.23E-05	0.00E+00	1.26E-05	5.36E-05	0.00E+00
756	464399.2	3810122	0.000129	0.00045	0.00E+00	1.29E-04	4.50E-04	0.00E+00	2.05E-05	9.01E-05	0.00E+00	1.23E-05	5.23E-05	0.00E+00
757	464419.2	3810122	0.000126	0.000439	0.00E+00	1.26E-04	4.39E-04	0.00E+00	2.00E-05	8.80E-05	0.00E+00	1.20E-05	5.11E-05	0.00E+00
758	464439.2	3810122	0.000123	0.000429	0.00E+00	1.23E-04	4.29E-04	0.00E+00	1.95E-05	8.60E-05	0.00E+00	1.18E-05	4.99E-05	0.00E+00
759	464459.2	3810122	0.00012	0.000418	0.00E+00	1.20E-04	4.18E-04	0.00E+00	1.90E-05	8.38E-05	0.00E+00	1.15E-05	4.86E-05	0.00E+00
760	464479.2	3810122	0.000117	0.000408	0.00E+00	1.17E-04	4.08E-04	0.00E+00	1.85E-05	8.17E-05	0.00E+00	1.12E-05	4.74E-05	0.00E+00
761	464499.2	3810122	0.000115	0.000398	0.00E+00	1.15E-04	3.98E-04	0.00E+00	1.81E-05	7.98E-05	0.00E+00	1.09E-05	4.63E-05	0.00E+00
762	464519.2	3810122	0.000112	0.000389	0.00E+00	1.12E-04	3.89E-04	0.00E+00	1.77E-05	7.80E-05	0.00E+00	1.07E-05	4.53E-05	0.00E+00
763	464319.2	3810142	0.000142	0.000493	0.00E+00	1.42E-04	4.93E-04	0.00E+00	2.24E-05	9.88E-05	0.00E+00	1.35E-05	5.73E-05	0.00E+00
764	464339.2	3810142	0.000138	0.00048	0.00E+00	1.38E-04	4.80E-04	0.00E+00	2.18E-05	9.62E-05	0.00E+00	1.32E-05	5.58E-05	0.00E+00
765	464359.2	3810142	0.000135	0.000468	0.00E+00	1.35E-04	4.68E-04	0.00E+00	2.13E-05	9.38E-05	0.00E+00	1.28E-05	5.44E-05	0.00E+00
766	464379.2	3810142	0.000132	0.000458	0.00E+00	1.32E-04	4.58E-04	0.00E+00	2.08E-05	9.17E-05	0.00E+00	1.26E-05	5.32E-05	0.00E+00
767	464399.2	3810142	0.000128	0.000446	0.00E+00	1.28E-04	4.46E-04	0.00E+00	2.03E-05	8.94E-05	0.00E+00	1.22E-05	5.19E-05	0.00E+00
768	464419.2	3810142	0.000125	0.000436	0.00E+00	1.25E-04	4.36E-04	0.00E+00	1.98E-05	8.73E-05	0.00E+00	1.19E-05	5.06E-05	0.00E+00
769	464439.2	3810142	0.000123	0.000426	0.00E+00	1.23E-04	4.26E-04	0.00E+00	1.94E-05	8.54E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
770	464459.2	3810142	0.00012	0.000416	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.33E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
771	464479.2	3810142	0.000117	0.000406	0.00E+00	1.17E-04	4.06E-04	0.00E+00	1.85E-05	8.14E-05	0.00E+00	1.11E-05	4.72E-05	0.00E+00
772	464499.2	3810142	0.000114	0.000396	0.00E+00	1.14E-04	3.96E-04	0.00E+00	1.80E-05	7.95E-05	0.00E+00	1.09E-05	4.61E-05	0.00E+00
773	464519.2	3810142	0.000112	0.000388	0.00E+00	1.12E-04	3.88E-04	0.00E+00	1.77E-05	7.78E-05	0.00E+00	1.07E-05	4.52E-05	0.00E+00
774	463261.3	3810382	0.001446	0.005021	0.00E+00	1.45E-03	5.02E-03	0.00E+00	2.28E-04	1.01E-03	0.00E+00	1.38E-04	5.84E-04	0.00E+00
775	463243.8	3810394	0.001402	0.004871	0.00E+00	1.40E-03	4.87E-03	0.00E+00	2.22E-04	9.76E-04	0.00E+00	1.34E-04	5.66E-04	0.00E+00
776	463243.8	3810399	0.001379	0.00479	0.00E+00	1.38E-03	4.79E-03	0.00E+00	2.18E-04	9.60E-04	0.00E+00	1.31E-04	5.57E-04	0.00E+00
777	463126.9	3810941	0.000307	0.001065	0.00E+00	3.07E-04	1.07E-03	0.00E+00	4.84E-05	2.13E-04	0.00E+00	2.92E-05	1.24E-04	0.00E+00
778	463126.7	3810933	0.000311	0.00108	0.00E+00	3.11E-04	1.08E-03	0.00E+00	4.91E-05	2.16E-04	0.00E+00	2.96E-05	1.26E-04	0.00E+00
779	463126.9	3810927	0.000314	0.001092	0.00E+00	3.14E-04	1.09E-03	0.00E+00	4.97E-05	2.19E-04	0.00E+00	3.00E-05	1.27E-04	0.00E+00
780	463130.8	3810919	0.000321	0.001114	0.00E+00	3.21E-04	1.11E-03	0.00E+00	5.07E-05	2.23E-04	0.00E+00	3.06E-05	1.30E-04	0.00E+00
781	463257.7	3810733	0.000544	0.00189	0.00E+00	5.44E-04	1.89E-03	0.00E+00	8.60E-05	3.79E-04	0.00E+00	5.19E-05	2.20E-04	0.00E+00
782	463257.2	3810725	0.000555	0.001926	0.00E+00	5.55E-04	1.93E-03	0.00E+00	8.76E-05	3.86E-04	0.00E+00	5.29E-05	2.24E-04	0.00E+00
783	463256.4	3810717	0.000566	0.001965	0.00E+00	5.66E-04	1.97E-03	0.00E+00	8.94E-05	3.94E-04	0.00E+00	5.39E-05	2.29E-04	0.00E+00
784	463187.1	3810723	0.000522	0.001813	0.00E+00	5.22E-04	1.81E-03	0.00E+00	8.25E-05	3.63E-04	0.00E+00	4.97E-05	2.11E-04	0.00E+00
785	463232.8	3810889	0.000386	0.00134	0.00E+00	3.86E-04	1.34E-03	0.00E+00	6.10E-05	2.69E-04	0.00E+00	3.68E-05	1.56E-04	0.00E+00
786	463232.6	3810881	0.000391	0.00136	0.00E+00	3.91E-04	1.36E-03	0.00E+00	6.19E-05	2.73E-04	0.00E+00	3.73E-05	1.58E-04	0.00E+00
787	463225.6	3810881	0.000389	0.00135	0.00E+00	3.89E-04	1.35E-03	0.00E+00	6.14E-05	2.71E-04	0.00E+00	3.70E-05	1.57E-04	0.00E+00
788	463224	3810889	0.000382	0.001328	0.00E+00	3.82E-04	1.33E-03	0.00E+00	6.04E-05	2.66E-04	0.00E+00	3.64E-05	1.54E-04	0.00E+00
789	462054.2	3810685	5.69E-05	0.000198	0.00E+00	5.69E-05	1.98E-04	0.00E+00	8.99E-06	3.96E-05	0.00E+00	5.42E-06	2.30E-05	0.00E+00
790	462055.5	3810680	5.72E-05	0.000199	0.00E+00	5.72E-05	1.99E-04	0.00E+00	9.05E-06	3.99E-05	0.00E+00	5.46E-06	2.31E-05	0.00E+00
791	462016.9	3810544	5.8E-05	0.000201	0.00E+00	5.80E-05	2.01E-04	0.00E+00	9.16E-06	4.04E-05	0.00E+00	5.53E-06	2.34E-05	0.00E+00
792	462016.4	3810534	5.82E-05	0.000202	0.00E+00	5.82E-05	2.02E-04	0.00E+00	9.19E-06	4.05E-05	0.00E+00	5.54E-06	2.35E-05	0.00E+00
793	462016.4	3810524	5.84E-05	0.000203	0.00E+00	5.84E-05	2.03E-04	0.00E+00	9.22E-06	4.06E-05	0.00E+00	5.56E-06	2.36E-05	0.00E+00
794	462013.1	3810480	5.9E-05	0.000205	0.00E+00	5.90E-05	2.05E-04	0.00E+00	9.32E-06	4.11E-05	0.00E+00	5.62E-06	2.38E-05	0.00E+00
795	461998.8	3810437	5.86E-05	0.000203	0.00E+00	5.86E-05	2.03E-04	0.00E+00	9.26E-06	4.08E-05	0.00E+00	5.58E-06	2.37E-05	0.00E+00
796	461997.4	3810425	5.86E-05	0.000204	0.00E+00	5.86E-05	2.04E-04	0.00E+00	9.27E-06	4.08E-05	0.00E+00	5.59E-06	2.37E-05	0.00E+00
797	462022.1	3810400	6.07E-05	0.000211	0.00E+00	6.07E-05	2.11E-04	0.00E+00	9.59E-06	4.22E-05	0.00E+00	5.78E-06	2.45E-05	0.00E+00
798	462036.3	3810396	6.19E-05	0.000215	0.00E+00	6.19E-05	2.15E-04	0.00E+00	9.77E-06	4.31E-05	0.00E+00	5.89E-06	2.50E-05	0.00E+00
799	461988.4	3810383	5.79E-05	0.000201	0.00E+00	5.79E-05	2.01E-04	0.00E+00	9.14E-06	4.03E-05	0.00E+00	5.51E-06	2.34E-05	0.00E+00
800	461983.1	3810394	5.74E-05	0.0002	0.00E+00	5.74E-05	2.00E-04	0.00E+00	9.08E-06	4.00E-05	0.00E+00	5.47E-06	2.32E-05	0.00E+00
801	462655.7	3809186	5.22E-05	0.000181	0.00E+00	5.22E-05	1.81E-04	0.00E+00	8.25E-06	3.64E-05	0.00E+00	4.98E-06	2.11E-05	0.00E+00
802	462642	3809187	5.16E-05	0.000179	0.00E+00	5.16E-05	1.79E-04	0.00E+00	8.16E-06	3.60E-05	0.00E+00	4.92E-06	2.09E-05	0.00E+00
803	462636.5	3809188	5.14E-05	0.000179	0.00E+00	5.14E-05	1.79E-04	0.00E+00	8.13E-06	3.58E-05	0.00E+00	4.90E-06	2.08E-05	0.00E+00
804	462630.2	3809188	5.12E-05	0.000178	0.00E+00	5.12E-05	1.78E-04	0.00E+00	8.08E-06	3.56E-05	0.00E+00	4.88E-06	2.07E-05	0.00E+00
805	462563.1	3809182	4.69E-05	0.000163	0.00E+00	4.69E-05	1.63E-04	0.00E+00	7.41E-06	3.27E-05	0.00E+00	4.47E-06	1.90E-05	0.00E+00
806	462563.1	3809186	4.72E-05	0.000164	0.00E+00	4.72E-05	1.64E-04	0.00E+00	7.46E-06	3.28E-05	0.00E+00	4.50E-06	1.91E-05	0.00E+00
807	462556	3809186	4.69E-05	0.000163	0.00E+00	4.69E-05	1.63E-04	0.00E+00	7.41E-06	3.27E-05	0.00E+00	4.47E-06	1.89E-05	0.00E+00
808	462554.3	3809181	4.64E-05	0.000161	0.00E+00	4.64E-05	1.61E-04	0.00E+00	7.34E-06	3.23E-05	0.00E+00	4.43E-06	1.88E-05	0.00E+00
809	462159.8	3809423	4.02E-05	0.00014	0.00E+00	4.02E-05	1.40E-04	0.00E+00	6.35E-06	2.80E-05	0.00E+00	3.83E-06	1.62E-05	0.00E+00
810	462154.7	3809417	3.96E-05	0.000138	0.00E+00	3.96E-05	1.38E-04	0.00E+00	6.26E-06	2.76E-05	0.00E+00	3.78E-06	1.60E-05	0.00E+00
811	462141.3	3809420	3.86E-05	0.000134	0.00E+00	3.86E-05	1.34E-04	0.00E+00	6.10E-06	2.69E-05	0.00E+00	3.68E-06	1.56E-05	0.00E+00
812	462070.3	3809381	3.34E-05	0.000116	0.00E+00	3.34E-05	1.16E-04	0.00E+00	5.27E-06	2.32E-05	0.00E+00	3.18E-06	1.35E-05	0.00E+00
813	462046.9	3809382	3.23E-05	0.000112	0.00E+00	3.23E-05	1.12E-04	0.00E+00	5.10E-06	2.25E-05	0.00E+00	3.08E-06	1.30E-05	0.00E+00
814	461989.3	3809381	2.98E-05	0.000103	0.00E+00	2.98E-05	1.03E-04	0.00E+00	4.71E-06	2.07E-05	0.00E+00	2.84E-06	1.20E-05	0.00E+00

			UnMitigated	T2	T2L3	T4
			2.51E-02	2.51E-02	3.97E-03	2.39E-03
			Yr 1	Yr 1	Yr 1	Yr 1
1	464159.2	3809562	2.53E-03	2.53E-03	3.99E-04	2.41E-04
2	464179.2	3809562	2.47E-03	2.47E-03	3.90E-04	2.35E-04
3	464199.2	3809562	2.42E-03	2.42E-03	3.82E-04	2.30E-04
4	464219.2	3809562	2.36E-03	2.36E-03	3.73E-04	2.25E-04
5	464239.2	3809562	2.31E-03	2.31E-03	3.65E-04	2.20E-04
6	464259.2	3809562	2.26E-03	2.26E-03	3.57E-04	2.16E-04
7	464279.2	3809562	2.21E-03	2.21E-03	3.50E-04	2.11E-04
8	464299.2	3809562	2.17E-03	2.17E-03	3.42E-04	2.06E-04
9	464319.2	3809562	2.12E-03	2.12E-03	3.35E-04	2.02E-04
10	464339.2	3809562	2.08E-03	2.08E-03	3.29E-04	1.98E-04
11	464359.2	3809562	2.04E-03	2.04E-03	3.22E-04	1.94E-04
12	464379.2	3809562	2.00E-03	2.00E-03	3.15E-04	1.90E-04
13	464399.2	3809562	1.96E-03	1.96E-03	3.09E-04	1.87E-04
14	464419.2	3809562	1.92E-03	1.92E-03	3.04E-04	1.83E-04
15	464439.2	3809562	1.88E-03	1.88E-03	2.98E-04	1.80E-04
16	463759.2	3809582	4.41E-03	4.41E-03	6.97E-04	4.21E-04
17	463779.2	3809582	4.30E-03	4.30E-03	6.79E-04	4.10E-04
18	463799.2	3809582	4.18E-03	4.18E-03	6.61E-04	3.99E-04
19	463819.2	3809582	4.07E-03	4.07E-03	6.44E-04	3.88E-04
20	463839.2	3809582	3.97E-03	3.97E-03	6.27E-04	3.78E-04
21	463859.2	3809582	3.88E-03	3.88E-03	6.14E-04	3.70E-04
22	463879.2	3809582	3.79E-03	3.79E-03	5.98E-04	3.61E-04
23	463899.2	3809582	3.68E-03	3.68E-03	5.81E-04	3.50E-04
24	463919.2	3809582	3.56E-03	3.56E-03	5.63E-04	3.40E-04
25	463939.2	3809582	3.46E-03	3.46E-03	5.46E-04	3.29E-04
26	464159.2	3809582	2.59E-03	2.59E-03	4.10E-04	2.47E-04
27	464179.2	3809582	2.53E-03	2.53E-03	4.00E-04	2.42E-04
28	464199.2	3809582	2.48E-03	2.48E-03	3.92E-04	2.36E-04
29	464219.2	3809582	2.42E-03	2.42E-03	3.83E-04	2.31E-04
30	464239.2	3809582	2.37E-03	2.37E-03	3.74E-04	2.26E-04
31	464259.2	3809582	2.32E-03	2.32E-03	3.66E-04	2.21E-04
32	464279.2	3809582	2.27E-03	2.27E-03	3.58E-04	2.16E-04
33	464299.2	3809582	2.22E-03	2.22E-03	3.51E-04	2.11E-04
34	464319.2	3809582	2.17E-03	2.17E-03	3.43E-04	2.07E-04
35	464339.2	3809582	2.13E-03	2.13E-03	3.36E-04	2.03E-04
36	464359.2	3809582	2.08E-03	2.08E-03	3.29E-04	1.99E-04
37	464379.2	3809582	2.04E-03	2.04E-03	3.22E-04	1.94E-04
38	464399.2	3809582	2.00E-03	2.00E-03	3.16E-04	1.91E-04
39	464419.2	3809582	1.96E-03	1.96E-03	3.10E-04	1.87E-04
40	464439.2	3809582	1.92E-03	1.92E-03	3.04E-04	1.83E-04
41	464459.2	3809582	1.88E-03	1.88E-03	2.97E-04	1.79E-04
42	463759.2	3809602	4.54E-03	4.54E-03	7.17E-04	4.32E-04
43	463779.2	3809602	4.42E-03	4.42E-03	6.98E-04	4.21E-04
44	463799.2	3809602	4.30E-03	4.30E-03	6.80E-04	4.10E-04

45	463819.2	3809602	4.19E-03	4.19E-03	6.62E-04	3.99E-04
46	463839.2	3809602	4.07E-03	4.07E-03	6.44E-04	3.88E-04
47	463859.2	3809602	3.99E-03	3.99E-03	6.30E-04	3.80E-04
48	463879.2	3809602	3.89E-03	3.89E-03	6.15E-04	3.71E-04
49	463899.2	3809602	3.78E-03	3.78E-03	5.98E-04	3.61E-04
50	463919.2	3809602	3.68E-03	3.68E-03	5.81E-04	3.50E-04
51	463939.2	3809602	3.57E-03	3.57E-03	5.63E-04	3.40E-04
52	463959.2	3809602	3.46E-03	3.46E-03	5.47E-04	3.30E-04
53	464159.2	3809602	2.66E-03	2.66E-03	4.21E-04	2.54E-04
54	464179.2	3809602	2.60E-03	2.60E-03	4.11E-04	2.48E-04
55	464199.2	3809602	2.54E-03	2.54E-03	4.01E-04	2.42E-04
56	464219.2	3809602	2.48E-03	2.48E-03	3.92E-04	2.37E-04
57	464239.2	3809602	2.43E-03	2.43E-03	3.84E-04	2.31E-04
58	464259.2	3809602	2.37E-03	2.37E-03	3.75E-04	2.26E-04
59	464279.2	3809602	2.32E-03	2.32E-03	3.67E-04	2.21E-04
60	464299.2	3809602	2.27E-03	2.27E-03	3.59E-04	2.16E-04
61	464319.2	3809602	2.22E-03	2.22E-03	3.51E-04	2.12E-04
62	464339.2	3809602	2.17E-03	2.17E-03	3.43E-04	2.07E-04
63	464359.2	3809602	2.13E-03	2.13E-03	3.36E-04	2.03E-04
64	464379.2	3809602	2.08E-03	2.08E-03	3.29E-04	1.99E-04
65	464399.2	3809602	2.04E-03	2.04E-03	3.23E-04	1.95E-04
66	464419.2	3809602	2.00E-03	2.00E-03	3.16E-04	1.91E-04
67	464439.2	3809602	1.96E-03	1.96E-03	3.09E-04	1.86E-04
68	464459.2	3809602	1.92E-03	1.92E-03	3.03E-04	1.83E-04
69	464479.2	3809602	1.88E-03	1.88E-03	2.97E-04	1.79E-04
70	463759.2	3809622	4.64E-03	4.64E-03	7.34E-04	4.43E-04
71	463779.2	3809622	4.52E-03	4.52E-03	7.14E-04	4.31E-04
72	463799.2	3809622	4.42E-03	4.42E-03	6.98E-04	4.21E-04
73	463819.2	3809622	4.31E-03	4.31E-03	6.81E-04	4.11E-04
74	463839.2	3809622	4.19E-03	4.19E-03	6.62E-04	3.99E-04
75	463859.2	3809622	4.09E-03	4.09E-03	6.47E-04	3.90E-04
76	463879.2	3809622	3.99E-03	3.99E-03	6.31E-04	3.81E-04
77	463899.2	3809622	3.89E-03	3.89E-03	6.15E-04	3.71E-04
78	463919.2	3809622	3.79E-03	3.79E-03	5.98E-04	3.61E-04
79	463939.2	3809622	3.68E-03	3.68E-03	5.81E-04	3.51E-04
80	463959.2	3809622	3.57E-03	3.57E-03	5.64E-04	3.40E-04
81	464139.2	3809622	2.80E-03	2.80E-03	4.43E-04	2.67E-04
82	464159.2	3809622	2.73E-03	2.73E-03	4.32E-04	2.61E-04
83	464179.2	3809622	2.67E-03	2.67E-03	4.21E-04	2.54E-04
84	464199.2	3809622	2.60E-03	2.60E-03	4.11E-04	2.48E-04
85	464219.2	3809622	2.54E-03	2.54E-03	4.02E-04	2.42E-04
86	464239.2	3809622	2.48E-03	2.48E-03	3.93E-04	2.37E-04
87	464259.2	3809622	2.43E-03	2.43E-03	3.84E-04	2.31E-04
88	464279.2	3809622	2.37E-03	2.37E-03	3.75E-04	2.26E-04
89	464299.2	3809622	2.32E-03	2.32E-03	3.66E-04	2.21E-04
90	464319.2	3809622	2.27E-03	2.27E-03	3.58E-04	2.16E-04
91	464339.2	3809622	2.22E-03	2.22E-03	3.51E-04	2.12E-04

92	464359.2	3809622	2.17E-03	2.17E-03	3.43E-04	2.07E-04
93	464379.2	3809622	2.12E-03	2.12E-03	3.35E-04	2.02E-04
94	464399.2	3809622	2.08E-03	2.08E-03	3.28E-04	1.98E-04
95	464419.2	3809622	2.04E-03	2.04E-03	3.22E-04	1.94E-04
96	464439.2	3809622	1.99E-03	1.99E-03	3.15E-04	1.90E-04
97	464459.2	3809622	1.95E-03	1.95E-03	3.09E-04	1.86E-04
98	464479.2	3809622	1.91E-03	1.91E-03	3.02E-04	1.82E-04
99	463759.2	3809642	4.77E-03	4.77E-03	7.53E-04	4.54E-04
100	463779.2	3809642	4.65E-03	4.65E-03	7.35E-04	4.43E-04
101	463799.2	3809642	4.54E-03	4.54E-03	7.17E-04	4.32E-04
102	463819.2	3809642	4.42E-03	4.42E-03	6.99E-04	4.22E-04
103	463839.2	3809642	4.31E-03	4.31E-03	6.82E-04	4.11E-04
104	463859.2	3809642	4.20E-03	4.20E-03	6.64E-04	4.01E-04
105	463879.2	3809642	4.10E-03	4.10E-03	6.48E-04	3.91E-04
106	463899.2	3809642	4.00E-03	4.00E-03	6.32E-04	3.81E-04
107	463919.2	3809642	3.89E-03	3.89E-03	6.15E-04	3.71E-04
108	463939.2	3809642	3.79E-03	3.79E-03	5.98E-04	3.61E-04
109	463959.2	3809642	3.68E-03	3.68E-03	5.81E-04	3.50E-04
110	463979.2	3809642	3.57E-03	3.57E-03	5.64E-04	3.40E-04
111	464139.2	3809642	2.88E-03	2.88E-03	4.54E-04	2.74E-04
112	464159.2	3809642	2.80E-03	2.80E-03	4.43E-04	2.67E-04
113	464179.2	3809642	2.73E-03	2.73E-03	4.32E-04	2.60E-04
114	464199.2	3809642	2.67E-03	2.67E-03	4.21E-04	2.54E-04
115	464219.2	3809642	2.60E-03	2.60E-03	4.11E-04	2.48E-04
116	464239.2	3809642	2.54E-03	2.54E-03	4.02E-04	2.42E-04
117	464259.2	3809642	2.48E-03	2.48E-03	3.92E-04	2.36E-04
118	464279.2	3809642	2.42E-03	2.42E-03	3.83E-04	2.31E-04
119	464299.2	3809642	2.37E-03	2.37E-03	3.74E-04	2.26E-04
120	464319.2	3809642	2.31E-03	2.31E-03	3.65E-04	2.20E-04
121	464339.2	3809642	2.26E-03	2.26E-03	3.57E-04	2.16E-04
122	464359.2	3809642	2.21E-03	2.21E-03	3.49E-04	2.11E-04
123	464379.2	3809642	2.16E-03	2.16E-03	3.42E-04	2.06E-04
124	464399.2	3809642	2.12E-03	2.12E-03	3.34E-04	2.02E-04
125	464419.2	3809642	2.07E-03	2.07E-03	3.27E-04	1.97E-04
126	464439.2	3809642	2.03E-03	2.03E-03	3.20E-04	1.93E-04
127	464459.2	3809642	1.98E-03	1.98E-03	3.14E-04	1.89E-04
128	464479.2	3809642	1.94E-03	1.94E-03	3.07E-04	1.85E-04
129	464499.2	3809642	1.90E-03	1.90E-03	3.01E-04	1.81E-04
130	464519.2	3809642	1.86E-03	1.86E-03	2.94E-04	1.78E-04
131	463779.2	3809662	4.77E-03	4.77E-03	7.54E-04	4.55E-04
132	463799.2	3809662	4.65E-03	4.65E-03	7.35E-04	4.43E-04
133	463819.2	3809662	4.54E-03	4.54E-03	7.17E-04	4.33E-04
134	463839.2	3809662	4.43E-03	4.43E-03	7.00E-04	4.22E-04
135	463859.2	3809662	4.31E-03	4.31E-03	6.81E-04	4.11E-04
136	463879.2	3809662	4.20E-03	4.20E-03	6.64E-04	4.00E-04
137	463899.2	3809662	4.10E-03	4.10E-03	6.48E-04	3.91E-04
138	463919.2	3809662	4.00E-03	4.00E-03	6.32E-04	3.81E-04

139	463939.2	3809662	3.89E-03	3.89E-03	6.15E-04	3.71E-04
140	463959.2	3809662	3.78E-03	3.78E-03	5.97E-04	3.60E-04
141	463979.2	3809662	3.67E-03	3.67E-03	5.79E-04	3.49E-04
142	464059.2	3809662	3.28E-03	3.28E-03	5.19E-04	3.13E-04
143	464079.2	3809662	3.19E-03	3.19E-03	5.04E-04	3.04E-04
144	464099.2	3809662	3.11E-03	3.11E-03	4.91E-04	2.96E-04
145	464119.2	3809662	3.03E-03	3.03E-03	4.78E-04	2.88E-04
146	464139.2	3809662	2.95E-03	2.95E-03	4.66E-04	2.81E-04
147	464159.2	3809662	2.87E-03	2.87E-03	4.54E-04	2.74E-04
148	464179.2	3809662	2.80E-03	2.80E-03	4.42E-04	2.67E-04
149	464199.2	3809662	2.73E-03	2.73E-03	4.31E-04	2.60E-04
150	464219.2	3809662	2.66E-03	2.66E-03	4.21E-04	2.54E-04
151	464239.2	3809662	2.60E-03	2.60E-03	4.10E-04	2.48E-04
152	464259.2	3809662	2.53E-03	2.53E-03	4.00E-04	2.41E-04
153	464279.2	3809662	2.47E-03	2.47E-03	3.91E-04	2.36E-04
154	464299.2	3809662	2.41E-03	2.41E-03	3.81E-04	2.30E-04
155	464319.2	3809662	2.35E-03	2.35E-03	3.72E-04	2.24E-04
156	464339.2	3809662	2.30E-03	2.30E-03	3.64E-04	2.19E-04
157	464359.2	3809662	2.25E-03	2.25E-03	3.56E-04	2.15E-04
158	464379.2	3809662	2.20E-03	2.20E-03	3.48E-04	2.10E-04
159	464399.2	3809662	2.15E-03	2.15E-03	3.40E-04	2.05E-04
160	464419.2	3809662	2.11E-03	2.11E-03	3.33E-04	2.01E-04
161	464439.2	3809662	2.06E-03	2.06E-03	3.25E-04	1.96E-04
162	464459.2	3809662	2.01E-03	2.01E-03	3.18E-04	1.92E-04
163	464479.2	3809662	1.97E-03	1.97E-03	3.12E-04	1.88E-04
164	464499.2	3809662	1.93E-03	1.93E-03	3.05E-04	1.84E-04
165	464519.2	3809662	1.89E-03	1.89E-03	2.98E-04	1.80E-04
166	463779.2	3809682	4.85E-03	4.85E-03	7.67E-04	4.62E-04
167	463799.2	3809682	4.77E-03	4.77E-03	7.54E-04	4.54E-04
168	463819.2	3809682	4.66E-03	4.66E-03	7.37E-04	4.44E-04
169	463839.2	3809682	4.54E-03	4.54E-03	7.17E-04	4.32E-04
170	463859.2	3809682	4.41E-03	4.41E-03	6.97E-04	4.20E-04
171	463879.2	3809682	4.30E-03	4.30E-03	6.80E-04	4.10E-04
172	463899.2	3809682	4.20E-03	4.20E-03	6.64E-04	4.00E-04
173	463919.2	3809682	4.10E-03	4.10E-03	6.48E-04	3.91E-04
174	463939.2	3809682	4.00E-03	4.00E-03	6.31E-04	3.81E-04
175	463959.2	3809682	3.88E-03	3.88E-03	6.14E-04	3.70E-04
176	463979.2	3809682	3.77E-03	3.77E-03	5.95E-04	3.59E-04
177	463999.2	3809682	3.66E-03	3.66E-03	5.78E-04	3.49E-04
178	464019.2	3809682	3.56E-03	3.56E-03	5.62E-04	3.39E-04
179	464039.2	3809682	3.46E-03	3.46E-03	5.47E-04	3.30E-04
180	464059.2	3809682	3.37E-03	3.37E-03	5.32E-04	3.21E-04
181	464079.2	3809682	3.28E-03	3.28E-03	5.18E-04	3.12E-04
182	464099.2	3809682	3.19E-03	3.19E-03	5.04E-04	3.04E-04
183	464119.2	3809682	3.10E-03	3.10E-03	4.90E-04	2.96E-04
184	464139.2	3809682	3.02E-03	3.02E-03	4.76E-04	2.87E-04
185	464159.2	3809682	2.94E-03	2.94E-03	4.64E-04	2.80E-04

186	464179.2	3809682	2.86E-03	2.86E-03	4.52E-04	2.73E-04
187	464199.2	3809682	2.79E-03	2.79E-03	4.41E-04	2.66E-04
188	464219.2	3809682	2.72E-03	2.72E-03	4.29E-04	2.59E-04
189	464239.2	3809682	2.65E-03	2.65E-03	4.19E-04	2.52E-04
190	464259.2	3809682	2.58E-03	2.58E-03	4.08E-04	2.46E-04
191	464279.2	3809682	2.52E-03	2.52E-03	3.98E-04	2.40E-04
192	464299.2	3809682	2.46E-03	2.46E-03	3.88E-04	2.34E-04
193	464319.2	3809682	2.40E-03	2.40E-03	3.79E-04	2.29E-04
194	464339.2	3809682	2.34E-03	2.34E-03	3.70E-04	2.23E-04
195	464359.2	3809682	2.29E-03	2.29E-03	3.62E-04	2.18E-04
196	464379.2	3809682	2.24E-03	2.24E-03	3.54E-04	2.14E-04
197	464399.2	3809682	2.19E-03	2.19E-03	3.46E-04	2.08E-04
198	464419.2	3809682	2.14E-03	2.14E-03	3.38E-04	2.04E-04
199	464439.2	3809682	2.09E-03	2.09E-03	3.30E-04	1.99E-04
200	464459.2	3809682	2.05E-03	2.05E-03	3.23E-04	1.95E-04
201	464479.2	3809682	2.00E-03	2.00E-03	3.16E-04	1.91E-04
202	464499.2	3809682	1.95E-03	1.95E-03	3.09E-04	1.86E-04
203	464519.2	3809682	1.91E-03	1.91E-03	3.02E-04	1.82E-04
204	463779.2	3809702	4.96E-03	4.96E-03	7.84E-04	4.73E-04
205	463799.2	3809702	4.86E-03	4.86E-03	7.68E-04	4.63E-04
206	463819.2	3809702	4.76E-03	4.76E-03	7.51E-04	4.53E-04
207	463839.2	3809702	4.64E-03	4.64E-03	7.33E-04	4.42E-04
208	463859.2	3809702	4.52E-03	4.52E-03	7.15E-04	4.31E-04
209	463879.2	3809702	4.41E-03	4.41E-03	6.97E-04	4.20E-04
210	463899.2	3809702	4.30E-03	4.30E-03	6.79E-04	4.10E-04
211	463919.2	3809702	4.20E-03	4.20E-03	6.63E-04	4.00E-04
212	463939.2	3809702	4.09E-03	4.09E-03	6.46E-04	3.90E-04
213	463959.2	3809702	3.98E-03	3.98E-03	6.29E-04	3.79E-04
214	463979.2	3809702	3.86E-03	3.86E-03	6.11E-04	3.68E-04
215	463999.2	3809702	3.75E-03	3.75E-03	5.93E-04	3.58E-04
216	464019.2	3809702	3.64E-03	3.64E-03	5.76E-04	3.47E-04
217	464039.2	3809702	3.55E-03	3.55E-03	5.60E-04	3.38E-04
218	464059.2	3809702	3.45E-03	3.45E-03	5.45E-04	3.29E-04
219	464079.2	3809702	3.35E-03	3.35E-03	5.30E-04	3.20E-04
220	464099.2	3809702	3.26E-03	3.26E-03	5.15E-04	3.11E-04
221	464119.2	3809702	3.17E-03	3.17E-03	5.01E-04	3.02E-04
222	464139.2	3809702	3.08E-03	3.08E-03	4.87E-04	2.94E-04
223	464159.2	3809702	3.00E-03	3.00E-03	4.74E-04	2.86E-04
224	464179.2	3809702	2.92E-03	2.92E-03	4.62E-04	2.79E-04
225	464199.2	3809702	2.85E-03	2.85E-03	4.50E-04	2.71E-04
226	464219.2	3809702	2.77E-03	2.77E-03	4.38E-04	2.64E-04
227	464239.2	3809702	2.70E-03	2.70E-03	4.26E-04	2.57E-04
228	464259.2	3809702	2.63E-03	2.63E-03	4.15E-04	2.51E-04
229	464279.2	3809702	2.56E-03	2.56E-03	4.05E-04	2.44E-04
230	464299.2	3809702	2.50E-03	2.50E-03	3.95E-04	2.38E-04
231	464319.2	3809702	2.44E-03	2.44E-03	3.86E-04	2.33E-04
232	464339.2	3809702	2.38E-03	2.38E-03	3.76E-04	2.27E-04

233	464359.2	3809702	2.32E-03	2.32E-03	3.67E-04	2.22E-04
234	464379.2	3809702	2.27E-03	2.27E-03	3.59E-04	2.17E-04
235	464399.2	3809702	2.22E-03	2.22E-03	3.51E-04	2.11E-04
236	464419.2	3809702	2.17E-03	2.17E-03	3.42E-04	2.06E-04
237	464439.2	3809702	2.12E-03	2.12E-03	3.34E-04	2.02E-04
238	464459.2	3809702	2.07E-03	2.07E-03	3.27E-04	1.97E-04
239	464479.2	3809702	2.03E-03	2.03E-03	3.20E-04	1.93E-04
240	464499.2	3809702	1.98E-03	1.98E-03	3.13E-04	1.89E-04
241	464519.2	3809702	1.94E-03	1.94E-03	3.06E-04	1.85E-04
242	463799.2	3809722	4.95E-03	4.95E-03	7.82E-04	4.71E-04
243	463819.2	3809722	4.83E-03	4.83E-03	7.63E-04	4.60E-04
244	463839.2	3809722	4.72E-03	4.72E-03	7.46E-04	4.50E-04
245	463859.2	3809722	4.62E-03	4.62E-03	7.30E-04	4.40E-04
246	463879.2	3809722	4.51E-03	4.51E-03	7.12E-04	4.30E-04
247	463899.2	3809722	4.39E-03	4.39E-03	6.93E-04	4.18E-04
248	463919.2	3809722	4.28E-03	4.28E-03	6.77E-04	4.08E-04
249	463939.2	3809722	4.17E-03	4.17E-03	6.60E-04	3.98E-04
250	463959.2	3809722	4.06E-03	4.06E-03	6.42E-04	3.87E-04
251	463979.2	3809722	3.95E-03	3.95E-03	6.25E-04	3.77E-04
252	463999.2	3809722	3.84E-03	3.84E-03	6.07E-04	3.66E-04
253	464019.2	3809722	3.73E-03	3.73E-03	5.89E-04	3.55E-04
254	464039.2	3809722	3.63E-03	3.63E-03	5.73E-04	3.46E-04
255	464059.2	3809722	3.53E-03	3.53E-03	5.57E-04	3.36E-04
256	464079.2	3809722	3.43E-03	3.43E-03	5.42E-04	3.27E-04
257	464099.2	3809722	3.33E-03	3.33E-03	5.26E-04	3.17E-04
258	464119.2	3809722	3.24E-03	3.24E-03	5.12E-04	3.09E-04
259	464139.2	3809722	3.15E-03	3.15E-03	4.98E-04	3.00E-04
260	464159.2	3809722	3.06E-03	3.06E-03	4.84E-04	2.92E-04
261	464179.2	3809722	2.98E-03	2.98E-03	4.71E-04	2.84E-04
262	464199.2	3809722	2.90E-03	2.90E-03	4.58E-04	2.76E-04
263	464219.2	3809722	2.82E-03	2.82E-03	4.46E-04	2.69E-04
264	464239.2	3809722	2.75E-03	2.75E-03	4.34E-04	2.62E-04
265	464259.2	3809722	2.67E-03	2.67E-03	4.22E-04	2.55E-04
266	464279.2	3809722	2.60E-03	2.60E-03	4.12E-04	2.48E-04
267	464299.2	3809722	2.54E-03	2.54E-03	4.01E-04	2.42E-04
268	464319.2	3809722	2.48E-03	2.48E-03	3.92E-04	2.36E-04
269	464339.2	3809722	2.41E-03	2.41E-03	3.82E-04	2.30E-04
270	464359.2	3809722	2.36E-03	2.36E-03	3.72E-04	2.24E-04
271	464379.2	3809722	2.30E-03	2.30E-03	3.64E-04	2.19E-04
272	464399.2	3809722	2.25E-03	2.25E-03	3.55E-04	2.14E-04
273	464419.2	3809722	2.19E-03	2.19E-03	3.47E-04	2.09E-04
274	464439.2	3809722	2.14E-03	2.14E-03	3.38E-04	2.04E-04
275	464459.2	3809722	2.09E-03	2.09E-03	3.31E-04	2.00E-04
276	464479.2	3809722	2.05E-03	2.05E-03	3.24E-04	1.95E-04
277	464499.2	3809722	2.00E-03	2.00E-03	3.17E-04	1.91E-04
278	464519.2	3809722	1.96E-03	1.96E-03	3.10E-04	1.87E-04
279	463799.2	3809742	5.03E-03	5.03E-03	7.94E-04	4.79E-04

280	463819.2	3809742	4.89E-03	4.89E-03	7.73E-04	4.66E-04
281	463839.2	3809742	4.78E-03	4.78E-03	7.56E-04	4.56E-04
282	463859.2	3809742	4.68E-03	4.68E-03	7.39E-04	4.46E-04
283	463879.2	3809742	4.57E-03	4.57E-03	7.22E-04	4.36E-04
284	463899.2	3809742	4.47E-03	4.47E-03	7.06E-04	4.26E-04
285	463919.2	3809742	4.35E-03	4.35E-03	6.87E-04	4.14E-04
286	463939.2	3809742	4.24E-03	4.24E-03	6.69E-04	4.04E-04
287	463959.2	3809742	4.14E-03	4.14E-03	6.54E-04	3.94E-04
288	463979.2	3809742	4.04E-03	4.04E-03	6.38E-04	3.85E-04
289	463999.2	3809742	3.93E-03	3.93E-03	6.21E-04	3.74E-04
290	464019.2	3809742	3.82E-03	3.82E-03	6.03E-04	3.64E-04
291	464039.2	3809742	3.71E-03	3.71E-03	5.85E-04	3.53E-04
292	464059.2	3809742	3.60E-03	3.60E-03	5.69E-04	3.43E-04
293	464079.2	3809742	3.50E-03	3.50E-03	5.53E-04	3.34E-04
294	464099.2	3809742	3.40E-03	3.40E-03	5.37E-04	3.24E-04
295	464119.2	3809742	3.30E-03	3.30E-03	5.22E-04	3.15E-04
296	464139.2	3809742	3.21E-03	3.21E-03	5.07E-04	3.06E-04
297	464159.2	3809742	3.12E-03	3.12E-03	4.93E-04	2.98E-04
298	464179.2	3809742	3.03E-03	3.03E-03	4.79E-04	2.89E-04
299	464199.2	3809742	2.95E-03	2.95E-03	4.66E-04	2.81E-04
300	464219.2	3809742	2.87E-03	2.87E-03	4.53E-04	2.73E-04
301	464239.2	3809742	2.79E-03	2.79E-03	4.41E-04	2.66E-04
302	464259.2	3809742	2.71E-03	2.71E-03	4.29E-04	2.59E-04
303	464279.2	3809742	2.64E-03	2.64E-03	4.18E-04	2.52E-04
304	464299.2	3809742	2.58E-03	2.58E-03	4.07E-04	2.45E-04
305	464319.2	3809742	2.51E-03	2.51E-03	3.96E-04	2.39E-04
306	464339.2	3809742	2.45E-03	2.45E-03	3.86E-04	2.33E-04
307	464359.2	3809742	2.39E-03	2.39E-03	3.77E-04	2.27E-04
308	464379.2	3809742	2.33E-03	2.33E-03	3.68E-04	2.22E-04
309	464399.2	3809742	2.27E-03	2.27E-03	3.59E-04	2.16E-04
310	464419.2	3809742	2.22E-03	2.22E-03	3.50E-04	2.11E-04
311	464439.2	3809742	2.17E-03	2.17E-03	3.42E-04	2.06E-04
312	464459.2	3809742	2.12E-03	2.12E-03	3.35E-04	2.02E-04
313	464479.2	3809742	2.07E-03	2.07E-03	3.27E-04	1.97E-04
314	464499.2	3809742	2.03E-03	2.03E-03	3.20E-04	1.93E-04
315	464519.2	3809742	1.98E-03	1.98E-03	3.13E-04	1.88E-04
316	463819.2	3809762	4.99E-03	4.99E-03	7.89E-04	4.76E-04
317	463839.2	3809762	4.86E-03	4.86E-03	7.68E-04	4.63E-04
318	463859.2	3809762	4.74E-03	4.74E-03	7.50E-04	4.52E-04
319	463879.2	3809762	4.64E-03	4.64E-03	7.33E-04	4.42E-04
320	463899.2	3809762	4.53E-03	4.53E-03	7.16E-04	4.32E-04
321	463919.2	3809762	4.41E-03	4.41E-03	6.96E-04	4.20E-04
322	463939.2	3809762	4.28E-03	4.28E-03	6.77E-04	4.08E-04
323	463959.2	3809762	4.16E-03	4.16E-03	6.58E-04	3.97E-04
324	463979.2	3809762	4.07E-03	4.07E-03	6.43E-04	3.88E-04
325	463999.2	3809762	3.98E-03	3.98E-03	6.29E-04	3.79E-04
326	464019.2	3809762	3.89E-03	3.89E-03	6.15E-04	3.71E-04

327	464039.2	3809762	0.003777155	3.78E-03	5.97E-04	3.60E-04
328	464059.2	3809762	0.003667275	3.67E-03	5.79E-04	3.49E-04
329	464079.2	3809762	0.003561419	3.56E-03	5.63E-04	3.39E-04
330	464099.2	3809762	0.00346069	3.46E-03	5.47E-04	3.30E-04
331	464119.2	3809762	0.003362216	3.36E-03	5.31E-04	3.20E-04
332	464139.2	3809762	0.003265869	3.27E-03	5.16E-04	3.11E-04
333	464159.2	3809762	0.003173726	3.17E-03	5.01E-04	3.02E-04
334	464179.2	3809762	0.003082556	3.08E-03	4.87E-04	2.94E-04
335	464199.2	3809762	0.002991746	2.99E-03	4.73E-04	2.85E-04
336	464219.2	3809762	0.002910957	2.91E-03	4.60E-04	2.77E-04
337	464239.2	3809762	0.002830809	2.83E-03	4.47E-04	2.70E-04
338	464259.2	3809762	0.002750431	2.75E-03	4.35E-04	2.62E-04
339	464279.2	3809762	0.002679484	2.68E-03	4.23E-04	2.55E-04
340	464299.2	3809762	0.002608666	2.61E-03	4.12E-04	2.49E-04
341	464319.2	3809762	0.002537207	2.54E-03	4.01E-04	2.42E-04
342	464339.2	3809762	0.002474591	2.47E-03	3.91E-04	2.36E-04
343	464359.2	3809762	0.002413076	2.41E-03	3.81E-04	2.30E-04
344	464379.2	3809762	0.002352126	2.35E-03	3.72E-04	2.24E-04
345	464399.2	3809762	0.002293944	2.29E-03	3.62E-04	2.19E-04
346	464419.2	3809762	0.002239273	2.24E-03	3.54E-04	2.13E-04
347	464439.2	3809762	0.00218796	2.19E-03	3.46E-04	2.09E-04
348	464459.2	3809762	0.002138466	2.14E-03	3.38E-04	2.04E-04
349	464479.2	3809762	0.002089357	2.09E-03	3.30E-04	1.99E-04
350	464499.2	3809762	0.002040505	2.04E-03	3.22E-04	1.94E-04
351	464519.2	3809762	0.001993728	1.99E-03	3.15E-04	1.90E-04
352	463839.2	3809782	0.004927446	4.93E-03	7.79E-04	4.70E-04
353	463859.2	3809782	0.004802136	4.80E-03	7.59E-04	4.58E-04
354	463879.2	3809782	0.004687079	4.69E-03	7.41E-04	4.47E-04
355	463899.2	3809782	0.004579455	4.58E-03	7.24E-04	4.36E-04
356	463919.2	3809782	0.004450762	4.45E-03	7.03E-04	4.24E-04
357	463939.2	3809782	0.004317199	4.32E-03	6.82E-04	4.11E-04
358	463959.2	3809782	0.004180407	4.18E-03	6.61E-04	3.98E-04
359	463979.2	3809782	0.004085982	4.09E-03	6.46E-04	3.89E-04
360	463999.2	3809782	0.004007244	4.01E-03	6.33E-04	3.82E-04
361	464019.2	3809782	0.003936938	3.94E-03	6.22E-04	3.75E-04
362	464039.2	3809782	0.00383503	3.84E-03	6.06E-04	3.65E-04
363	464059.2	3809782	0.003726713	3.73E-03	5.89E-04	3.55E-04
364	464079.2	3809782	0.003614706	3.61E-03	5.71E-04	3.44E-04
365	464099.2	3809782	0.003512644	3.51E-03	5.55E-04	3.35E-04
366	464119.2	3809782	0.003411863	3.41E-03	5.39E-04	3.25E-04
367	464139.2	3809782	0.00331221	3.31E-03	5.23E-04	3.16E-04
368	464159.2	3809782	0.003217017	3.22E-03	5.08E-04	3.07E-04
369	464179.2	3809782	0.003123617	3.12E-03	4.94E-04	2.98E-04
370	464199.2	3809782	0.003031346	3.03E-03	4.79E-04	2.89E-04
371	464219.2	3809782	0.002946764	2.95E-03	4.66E-04	2.81E-04
372	464239.2	3809782	0.002864283	2.86E-03	4.53E-04	2.73E-04
373	464259.2	3809782	0.002783008	2.78E-03	4.40E-04	2.65E-04

374	464279.2	3809782	0.002708806	2.71E-03	4.28E-04	2.58E-04
375	464299.2	3809782	0.002636142	2.64E-03	4.17E-04	2.51E-04
376	464319.2	3809782	0.002564222	2.56E-03	4.05E-04	2.44E-04
377	464339.2	3809782	0.002498786	2.50E-03	3.95E-04	2.38E-04
378	464359.2	3809782	0.002434478	2.43E-03	3.85E-04	2.32E-04
379	464379.2	3809782	0.002370555	2.37E-03	3.75E-04	2.26E-04
380	464399.2	3809782	0.002313884	2.31E-03	3.66E-04	2.21E-04
381	464419.2	3809782	0.002259521	2.26E-03	3.57E-04	2.15E-04
382	464439.2	3809782	0.002207106	2.21E-03	3.49E-04	2.10E-04
383	464459.2	3809782	0.002155434	2.16E-03	3.41E-04	2.05E-04
384	464479.2	3809782	0.002104275	2.10E-03	3.33E-04	2.01E-04
385	464499.2	3809782	0.002053141	2.05E-03	3.24E-04	1.96E-04
386	464519.2	3809782	0.002007902	2.01E-03	3.17E-04	1.91E-04
387	463859.2	3809802	0.004835508	4.84E-03	7.64E-04	4.61E-04
388	463879.2	3809802	0.004704995	4.70E-03	7.43E-04	4.48E-04
389	463899.2	3809802	0.004593834	4.59E-03	7.26E-04	4.38E-04
390	463919.2	3809802	0.00446268	4.46E-03	7.05E-04	4.25E-04
391	463939.2	3809802	0.004334731	4.33E-03	6.85E-04	4.13E-04
392	463959.2	3809802	0.004210575	4.21E-03	6.65E-04	4.01E-04
393	463979.2	3809802	0.004115714	4.12E-03	6.50E-04	3.92E-04
394	463999.2	3809802	0.004024929	4.02E-03	6.36E-04	3.84E-04
395	464019.2	3809802	0.003936964	3.94E-03	6.22E-04	3.75E-04
396	464039.2	3809802	0.003867402	3.87E-03	6.11E-04	3.69E-04
397	464059.2	3809802	0.003774694	3.77E-03	5.96E-04	3.60E-04
398	464079.2	3809802	0.003666147	3.67E-03	5.79E-04	3.49E-04
399	464099.2	3809802	0.003555089	3.56E-03	5.62E-04	3.39E-04
400	464119.2	3809802	0.003448413	3.45E-03	5.45E-04	3.29E-04
401	464139.2	3809802	0.00334612	3.35E-03	5.29E-04	3.19E-04
402	464159.2	3809802	0.003248542	3.25E-03	5.13E-04	3.10E-04
403	464179.2	3809802	0.003154887	3.15E-03	4.99E-04	3.01E-04
404	464199.2	3809802	0.003064974	3.06E-03	4.84E-04	2.92E-04
405	464219.2	3809802	0.002973933	2.97E-03	4.70E-04	2.83E-04
406	464239.2	3809802	0.002888915	2.89E-03	4.56E-04	2.75E-04
407	464259.2	3809802	0.002810484	2.81E-03	4.44E-04	2.68E-04
408	464279.2	3809802	0.002730413	2.73E-03	4.31E-04	2.60E-04
409	464299.2	3809802	0.002655673	2.66E-03	4.20E-04	2.53E-04
410	464319.2	3809802	0.00258688	2.59E-03	4.09E-04	2.47E-04
411	464339.2	3809802	0.002516036	2.52E-03	3.98E-04	2.40E-04
412	464359.2	3809802	0.002450011	2.45E-03	3.87E-04	2.33E-04
413	464379.2	3809802	0.002389368	2.39E-03	3.78E-04	2.28E-04
414	464399.2	3809802	0.002331801	2.33E-03	3.68E-04	2.22E-04
415	464419.2	3809802	0.002276412	2.28E-03	3.60E-04	2.17E-04
416	464439.2	3809802	0.002223049	2.22E-03	3.51E-04	2.12E-04
417	464459.2	3809802	0.002166942	2.17E-03	3.42E-04	2.07E-04
418	464479.2	3809802	0.002114553	2.11E-03	3.34E-04	2.02E-04
419	464499.2	3809802	0.002066418	2.07E-03	3.27E-04	1.97E-04
420	464519.2	3809802	0.002020641	2.02E-03	3.19E-04	1.93E-04

421	463879.2	3809822	0.00472755	4.73E-03	7.47E-04	4.51E-04
422	463899.2	3809822	0.004596986	4.60E-03	7.26E-04	4.38E-04
423	463919.2	3809822	0.004461988	4.46E-03	7.05E-04	4.25E-04
424	463939.2	3809822	0.004332911	4.33E-03	6.85E-04	4.13E-04
425	463959.2	3809822	0.004210241	4.21E-03	6.65E-04	4.01E-04
426	463979.2	3809822	0.00411474	4.11E-03	6.50E-04	3.92E-04
427	463999.2	3809822	0.004022366	4.02E-03	6.36E-04	3.83E-04
428	464019.2	3809822	0.00393153	3.93E-03	6.21E-04	3.75E-04
429	464039.2	3809822	0.00386571	3.87E-03	6.11E-04	3.68E-04
430	464059.2	3809822	0.003784844	3.78E-03	5.98E-04	3.61E-04
431	464079.2	3809822	0.003691573	3.69E-03	5.83E-04	3.52E-04
432	464099.2	3809822	0.003588691	3.59E-03	5.67E-04	3.42E-04
433	464119.2	3809822	0.003484219	3.48E-03	5.51E-04	3.32E-04
434	464139.2	3809822	0.003379363	3.38E-03	5.34E-04	3.22E-04
435	464159.2	3809822	0.003279402	3.28E-03	5.18E-04	3.13E-04
436	464179.2	3809822	0.003182082	3.18E-03	5.03E-04	3.03E-04
437	464199.2	3809822	0.003087068	3.09E-03	4.88E-04	2.94E-04
438	464219.2	3809822	0.002996872	3.00E-03	4.74E-04	2.86E-04
439	464239.2	3809822	0.002912316	2.91E-03	4.60E-04	2.78E-04
440	464259.2	3809822	0.002833168	2.83E-03	4.48E-04	2.70E-04
441	464279.2	3809822	0.002750713	2.75E-03	4.35E-04	2.62E-04
442	464299.2	3809822	0.002672795	2.67E-03	4.22E-04	2.55E-04
443	464319.2	3809822	0.0025999	2.60E-03	4.11E-04	2.48E-04
444	464339.2	3809822	0.002530517	2.53E-03	4.00E-04	2.41E-04
445	464359.2	3809822	0.002465492	2.47E-03	3.90E-04	2.35E-04
446	464379.2	3809822	0.002404669	2.40E-03	3.80E-04	2.29E-04
447	464399.2	3809822	0.002342847	2.34E-03	3.70E-04	2.23E-04
448	464419.2	3809822	0.00228487	2.28E-03	3.61E-04	2.18E-04
449	464439.2	3809822	0.002230917	2.23E-03	3.53E-04	2.13E-04
450	464459.2	3809822	0.002176451	2.18E-03	3.44E-04	2.07E-04
451	464479.2	3809822	0.002123677	2.12E-03	3.36E-04	2.02E-04
452	464499.2	3809822	0.002072569	2.07E-03	3.27E-04	1.98E-04
453	464519.2	3809822	0.002026203	2.03E-03	3.20E-04	1.93E-04
454	463899.2	3809842	0.004590527	4.59E-03	7.25E-04	4.37E-04
455	463919.2	3809842	0.004451377	4.45E-03	7.03E-04	4.24E-04
456	463939.2	3809842	0.004322248	4.32E-03	6.83E-04	4.12E-04
457	463959.2	3809842	0.0042025	4.20E-03	6.64E-04	4.01E-04
458	463979.2	3809842	0.004100694	4.10E-03	6.48E-04	3.91E-04
459	463999.2	3809842	0.004005834	4.01E-03	6.33E-04	3.82E-04
460	464019.2	3809842	0.003916023	3.92E-03	6.19E-04	3.73E-04
461	464039.2	3809842	0.003846282	3.85E-03	6.08E-04	3.67E-04
462	464059.2	3809842	0.00377249	3.77E-03	5.96E-04	3.60E-04
463	464079.2	3809842	0.003693624	3.69E-03	5.84E-04	3.52E-04
464	464099.2	3809842	0.003602531	3.60E-03	5.69E-04	3.43E-04
465	464119.2	3809842	0.003503468	3.50E-03	5.54E-04	3.34E-04
466	464139.2	3809842	0.003398842	3.40E-03	5.37E-04	3.24E-04
467	464159.2	3809842	0.003297369	3.30E-03	5.21E-04	3.14E-04

468	464179.2	3809842	0.003197486	3.20E-03	5.05E-04	3.05E-04
469	464199.2	3809842	0.003098601	3.10E-03	4.90E-04	2.95E-04
470	464219.2	3809842	0.003010559	3.01E-03	4.76E-04	2.87E-04
471	464239.2	3809842	0.002926618	2.93E-03	4.62E-04	2.79E-04
472	464259.2	3809842	0.002846342	2.85E-03	4.50E-04	2.71E-04
473	464279.2	3809842	0.002764118	2.76E-03	4.37E-04	2.63E-04
474	464299.2	3809842	0.002685149	2.69E-03	4.24E-04	2.56E-04
475	464319.2	3809842	0.002609358	2.61E-03	4.12E-04	2.49E-04
476	464339.2	3809842	0.002540718	2.54E-03	4.01E-04	2.42E-04
477	464359.2	3809842	0.002475847	2.48E-03	3.91E-04	2.36E-04
478	464379.2	3809842	0.002414281	2.41E-03	3.81E-04	2.30E-04
479	464399.2	3809842	0.002350152	2.35E-03	3.71E-04	2.24E-04
480	464419.2	3809842	0.002290791	2.29E-03	3.62E-04	2.18E-04
481	464439.2	3809842	0.002236351	2.24E-03	3.53E-04	2.13E-04
482	464459.2	3809842	0.002182705	2.18E-03	3.45E-04	2.08E-04
483	464479.2	3809842	0.002129598	2.13E-03	3.37E-04	2.03E-04
484	464499.2	3809842	0.002076516	2.08E-03	3.28E-04	1.98E-04
485	464519.2	3809842	0.002029791	2.03E-03	3.21E-04	1.93E-04
486	463919.2	3809862	0.004433487	4.43E-03	7.01E-04	4.23E-04
487	463939.2	3809862	0.004308305	4.31E-03	6.81E-04	4.11E-04
488	463959.2	3809862	0.004201552	4.20E-03	6.64E-04	4.00E-04
489	463979.2	3809862	0.004083624	4.08E-03	6.45E-04	3.89E-04
490	463999.2	3809862	0.003979845	3.98E-03	6.29E-04	3.79E-04
491	464019.2	3809862	0.003890187	3.89E-03	6.15E-04	3.71E-04
492	464039.2	3809862	0.003822394	3.82E-03	6.04E-04	3.64E-04
493	464059.2	3809862	0.003746885	3.75E-03	5.92E-04	3.57E-04
494	464079.2	3809862	0.003662764	3.66E-03	5.79E-04	3.49E-04
495	464099.2	3809862	0.003577387	3.58E-03	5.65E-04	3.41E-04
496	464119.2	3809862	0.003485885	3.49E-03	5.51E-04	3.32E-04
497	464139.2	3809862	0.00338959	3.39E-03	5.36E-04	3.23E-04
498	464159.2	3809862	0.003288322	3.29E-03	5.20E-04	3.13E-04
499	464179.2	3809862	0.003190719	3.19E-03	5.04E-04	3.04E-04
500	464199.2	3809862	0.003097038	3.10E-03	4.89E-04	2.95E-04
501	464219.2	3809862	0.003008816	3.01E-03	4.75E-04	2.87E-04
502	464239.2	3809862	0.00292449	2.92E-03	4.62E-04	2.79E-04
503	464259.2	3809862	0.002843907	2.84E-03	4.49E-04	2.71E-04
504	464279.2	3809862	0.002765835	2.77E-03	4.37E-04	2.64E-04
505	464299.2	3809862	0.002691121	2.69E-03	4.25E-04	2.56E-04
506	464319.2	3809862	0.002619585	2.62E-03	4.14E-04	2.50E-04
507	464339.2	3809862	0.002545793	2.55E-03	4.02E-04	2.43E-04
508	464359.2	3809862	0.002477666	2.48E-03	3.92E-04	2.36E-04
509	464379.2	3809862	0.002415716	2.42E-03	3.82E-04	2.30E-04
510	464399.2	3809862	0.002355407	2.36E-03	3.72E-04	2.24E-04
511	464419.2	3809862	0.002297865	2.30E-03	3.63E-04	2.19E-04
512	464439.2	3809862	0.002242913	2.24E-03	3.54E-04	2.14E-04
513	464459.2	3809862	0.002184935	2.18E-03	3.45E-04	2.08E-04
514	464479.2	3809862	0.002130982	2.13E-03	3.37E-04	2.03E-04

515	464499.2	3809862	0.002081566	2.08E-03	3.29E-04	1.98E-04
516	464519.2	3809862	0.002034636	2.03E-03	3.21E-04	1.94E-04
517	463959.2	3809882	0.004175306	4.18E-03	6.60E-04	3.98E-04
518	463979.2	3809882	0.004065093	4.07E-03	6.42E-04	3.87E-04
519	463999.2	3809882	0.003964568	3.96E-03	6.26E-04	3.78E-04
520	464019.2	3809882	0.003873809	3.87E-03	6.12E-04	3.69E-04
521	464039.2	3809882	0.003795225	3.80E-03	6.00E-04	3.62E-04
522	464059.2	3809882	0.003715	3.72E-03	5.87E-04	3.54E-04
523	464079.2	3809882	0.003631597	3.63E-03	5.74E-04	3.46E-04
524	464099.2	3809882	0.003549706	3.55E-03	5.61E-04	3.38E-04
525	464119.2	3809882	0.003461869	3.46E-03	5.47E-04	3.30E-04
526	464139.2	3809882	0.003369341	3.37E-03	5.32E-04	3.21E-04
527	464159.2	3809882	0.003268535	3.27E-03	5.16E-04	3.11E-04
528	464179.2	3809882	0.003174905	3.17E-03	5.02E-04	3.03E-04
529	464199.2	3809882	0.003088477	3.09E-03	4.88E-04	2.94E-04
530	464219.2	3809882	0.003000461	3.00E-03	4.74E-04	2.86E-04
531	464239.2	3809882	0.002916083	2.92E-03	4.61E-04	2.78E-04
532	464259.2	3809882	0.002835448	2.84E-03	4.48E-04	2.70E-04
533	464279.2	3809882	0.002762887	2.76E-03	4.37E-04	2.63E-04
534	464299.2	3809882	0.002691146	2.69E-03	4.25E-04	2.56E-04
535	464319.2	3809882	0.002620148	2.62E-03	4.14E-04	2.50E-04
536	464339.2	3809882	0.002548843	2.55E-03	4.03E-04	2.43E-04
537	464359.2	3809882	0.002481972	2.48E-03	3.92E-04	2.37E-04
538	464379.2	3809882	0.002419561	2.42E-03	3.82E-04	2.31E-04
539	464399.2	3809882	0.00235961	2.36E-03	3.73E-04	2.25E-04
540	464419.2	3809882	0.002300377	2.30E-03	3.63E-04	2.19E-04
541	464439.2	3809882	0.002241656	2.24E-03	3.54E-04	2.14E-04
542	464459.2	3809882	0.00218573	2.19E-03	3.45E-04	2.08E-04
543	464479.2	3809882	0.002133314	2.13E-03	3.37E-04	2.03E-04
544	464499.2	3809882	0.002084282	2.08E-03	3.29E-04	1.99E-04
545	464519.2	3809882	0.002034072	2.03E-03	3.21E-04	1.94E-04
546	464059.2	3809902	0.003682833	3.68E-03	5.82E-04	3.51E-04
547	464079.2	3809902	0.003601121	3.60E-03	5.69E-04	3.43E-04
548	464099.2	3809902	0.003517539	3.52E-03	5.56E-04	3.35E-04
549	464119.2	3809902	0.003432035	3.43E-03	5.42E-04	3.27E-04
550	464139.2	3809902	0.003344402	3.34E-03	5.28E-04	3.19E-04
551	464159.2	3809902	0.00324703	3.25E-03	5.13E-04	3.09E-04
552	464179.2	3809902	0.003158014	3.16E-03	4.99E-04	3.01E-04
553	464199.2	3809902	0.003077687	3.08E-03	4.86E-04	2.93E-04
554	464219.2	3809902	0.002989849	2.99E-03	4.72E-04	2.85E-04
555	464239.2	3809902	0.002906421	2.91E-03	4.59E-04	2.77E-04
556	464259.2	3809902	0.002827836	2.83E-03	4.47E-04	2.69E-04
557	464279.2	3809902	0.002757607	2.76E-03	4.36E-04	2.63E-04
558	464299.2	3809902	0.002687097	2.69E-03	4.25E-04	2.56E-04
559	464319.2	3809902	0.00261592	2.62E-03	4.13E-04	2.49E-04
560	464339.2	3809902	0.00254769	2.55E-03	4.03E-04	2.43E-04
561	464359.2	3809902	0.00248228	2.48E-03	3.92E-04	2.37E-04

562	464379.2	3809902	0.002419535	2.42E-03	3.82E-04	2.31E-04
563	464399.2	3809902	0.002359303	2.36E-03	3.73E-04	2.25E-04
564	464419.2	3809902	0.002299121	2.30E-03	3.63E-04	2.19E-04
565	464439.2	3809902	0.002238504	2.24E-03	3.54E-04	2.13E-04
566	464459.2	3809902	0.00218514	2.19E-03	3.45E-04	2.08E-04
567	464479.2	3809902	0.00213334	2.13E-03	3.37E-04	2.03E-04
568	464499.2	3809902	0.002082873	2.08E-03	3.29E-04	1.99E-04
569	464519.2	3809902	0.002031098	2.03E-03	3.21E-04	1.94E-04
570	464079.2	3809922	0.003576875	3.58E-03	5.65E-04	3.41E-04
571	464099.2	3809922	0.00348345	3.48E-03	5.50E-04	3.32E-04
572	464119.2	3809922	0.003398637	3.40E-03	5.37E-04	3.24E-04
573	464139.2	3809922	0.003322641	3.32E-03	5.25E-04	3.17E-04
574	464159.2	3809922	0.003234907	3.23E-03	5.11E-04	3.08E-04
575	464179.2	3809922	0.003150837	3.15E-03	4.98E-04	3.00E-04
576	464199.2	3809922	0.003070382	3.07E-03	4.85E-04	2.93E-04
577	464219.2	3809922	0.002982365	2.98E-03	4.71E-04	2.84E-04
578	464239.2	3809922	0.00290214	2.90E-03	4.59E-04	2.77E-04
579	464259.2	3809922	0.002829887	2.83E-03	4.47E-04	2.70E-04
580	464279.2	3809922	0.002753558	2.75E-03	4.35E-04	2.62E-04
581	464299.2	3809922	0.002679664	2.68E-03	4.23E-04	2.55E-04
582	464319.2	3809922	0.00260841	2.61E-03	4.12E-04	2.49E-04
583	464339.2	3809922	0.002540154	2.54E-03	4.01E-04	2.42E-04
584	464359.2	3809922	0.002474744	2.47E-03	3.91E-04	2.36E-04
585	464379.2	3809922	0.002412	2.41E-03	3.81E-04	2.30E-04
586	464399.2	3809922	0.002351793	2.35E-03	3.72E-04	2.24E-04
587	464419.2	3809922	0.002293559	2.29E-03	3.62E-04	2.19E-04
588	464439.2	3809922	0.002237222	2.24E-03	3.54E-04	2.13E-04
589	464459.2	3809922	0.002183833	2.18E-03	3.45E-04	2.08E-04
590	464479.2	3809922	0.002130059	2.13E-03	3.37E-04	2.03E-04
591	464499.2	3809922	0.002075466	2.08E-03	3.28E-04	1.98E-04
592	464519.2	3809922	0.002027254	2.03E-03	3.20E-04	1.93E-04
593	464099.2	3809942	0.003435238	3.44E-03	5.43E-04	3.27E-04
594	464119.2	3809942	0.003356807	3.36E-03	5.30E-04	3.20E-04
595	464139.2	3809942	0.003284426	3.28E-03	5.19E-04	3.13E-04
596	464159.2	3809942	0.003207712	3.21E-03	5.07E-04	3.06E-04
597	464179.2	3809942	0.003132665	3.13E-03	4.95E-04	2.99E-04
598	464199.2	3809942	0.00305954	3.06E-03	4.83E-04	2.92E-04
599	464219.2	3809942	0.002977598	2.98E-03	4.70E-04	2.84E-04
600	464239.2	3809942	0.002898219	2.90E-03	4.58E-04	2.76E-04
601	464259.2	3809942	0.00282148	2.82E-03	4.46E-04	2.69E-04
602	464279.2	3809942	0.002743844	2.74E-03	4.34E-04	2.61E-04
603	464299.2	3809942	0.002671718	2.67E-03	4.22E-04	2.55E-04
604	464319.2	3809942	0.002605052	2.61E-03	4.12E-04	2.48E-04
605	464339.2	3809942	0.00253672	2.54E-03	4.01E-04	2.42E-04
606	464359.2	3809942	0.002471079	2.47E-03	3.90E-04	2.35E-04
607	464379.2	3809942	0.002408181	2.41E-03	3.81E-04	2.30E-04
608	464399.2	3809942	0.002347794	2.35E-03	3.71E-04	2.24E-04

609	464419.2	3809942	0.002289843	2.29E-03	3.62E-04	2.18E-04
610	464439.2	3809942	0.002234147	2.23E-03	3.53E-04	2.13E-04
611	464459.2	3809942	0.002177374	2.18E-03	3.44E-04	2.08E-04
612	464479.2	3809942	0.002122934	2.12E-03	3.35E-04	2.02E-04
613	464499.2	3809942	0.002070955	2.07E-03	3.27E-04	1.97E-04
614	464519.2	3809942	0.002023486	2.02E-03	3.20E-04	1.93E-04
615	464119.2	3809962	0.003317746	3.32E-03	5.24E-04	3.16E-04
616	464139.2	3809962	0.003250029	3.25E-03	5.14E-04	3.10E-04
617	464159.2	3809962	0.003177827	3.18E-03	5.02E-04	3.03E-04
618	464179.2	3809962	0.003108495	3.11E-03	4.91E-04	2.96E-04
619	464199.2	3809962	0.003042188	3.04E-03	4.81E-04	2.90E-04
620	464219.2	3809962	0.002968166	2.97E-03	4.69E-04	2.83E-04
621	464239.2	3809962	0.002891273	2.89E-03	4.57E-04	2.76E-04
622	464259.2	3809962	0.002812022	2.81E-03	4.44E-04	2.68E-04
623	464279.2	3809962	0.002734386	2.73E-03	4.32E-04	2.61E-04
624	464299.2	3809962	0.002663234	2.66E-03	4.21E-04	2.54E-04
625	464319.2	3809962	0.002598465	2.60E-03	4.11E-04	2.48E-04
626	464339.2	3809962	0.002531773	2.53E-03	4.00E-04	2.41E-04
627	464359.2	3809962	0.002466927	2.47E-03	3.90E-04	2.35E-04
628	464379.2	3809962	0.002403849	2.40E-03	3.80E-04	2.29E-04
629	464399.2	3809962	0.002343334	2.34E-03	3.70E-04	2.23E-04
630	464419.2	3809962	0.002284563	2.28E-03	3.61E-04	2.18E-04
631	464439.2	3809962	0.002227483	2.23E-03	3.52E-04	2.12E-04
632	464459.2	3809962	0.002169198	2.17E-03	3.43E-04	2.07E-04
633	464479.2	3809962	0.002115347	2.12E-03	3.34E-04	2.02E-04
634	464499.2	3809962	0.002066085	2.07E-03	3.26E-04	1.97E-04
635	464519.2	3809962	0.002017463	2.02E-03	3.19E-04	1.92E-04
636	464139.2	3809982	0.003233574	3.23E-03	5.11E-04	3.08E-04
637	464159.2	3809982	0.003152811	3.15E-03	4.98E-04	3.00E-04
638	464179.2	3809982	0.003079378	3.08E-03	4.87E-04	2.93E-04
639	464199.2	3809982	0.00301425	3.01E-03	4.76E-04	2.87E-04
640	464219.2	3809982	0.002948968	2.95E-03	4.66E-04	2.81E-04
641	464239.2	3809982	0.002879867	2.88E-03	4.55E-04	2.74E-04
642	464259.2	3809982	0.002807331	2.81E-03	4.44E-04	2.68E-04
643	464279.2	3809982	0.002729593	2.73E-03	4.31E-04	2.60E-04
644	464299.2	3809982	0.002655545	2.66E-03	4.20E-04	2.53E-04
645	464319.2	3809982	0.002585188	2.59E-03	4.08E-04	2.46E-04
646	464339.2	3809982	0.00252352	2.52E-03	3.99E-04	2.40E-04
647	464359.2	3809982	0.002461288	2.46E-03	3.89E-04	2.35E-04
648	464379.2	3809982	0.002398108	2.40E-03	3.79E-04	2.29E-04
649	464399.2	3809982	0.002337516	2.34E-03	3.69E-04	2.23E-04
650	464419.2	3809982	0.002276745	2.28E-03	3.60E-04	2.17E-04
651	464439.2	3809982	0.002215359	2.22E-03	3.50E-04	2.11E-04
652	464459.2	3809982	0.002161098	2.16E-03	3.41E-04	2.06E-04
653	464479.2	3809982	0.002109503	2.11E-03	3.33E-04	2.01E-04
654	464499.2	3809982	0.002060215	2.06E-03	3.26E-04	1.96E-04
655	464519.2	3809982	0.002008005	2.01E-03	3.17E-04	1.91E-04

656	464159.2	3810002	0.003129487	3.13E-03	4.94E-04	2.98E-04
657	464179.2	3810002	0.003060001	3.06E-03	4.84E-04	2.92E-04
658	464199.2	3810002	0.002995283	3.00E-03	4.73E-04	2.85E-04
659	464219.2	3810002	0.002925695	2.93E-03	4.62E-04	2.79E-04
660	464239.2	3810002	0.00285562	2.86E-03	4.51E-04	2.72E-04
661	464259.2	3810002	0.002785289	2.79E-03	4.40E-04	2.65E-04
662	464279.2	3810002	0.002718238	2.72E-03	4.30E-04	2.59E-04
663	464299.2	3810002	0.002648907	2.65E-03	4.19E-04	2.52E-04
664	464319.2	3810002	0.002577473	2.58E-03	4.07E-04	2.46E-04
665	464339.2	3810002	0.002512524	2.51E-03	3.97E-04	2.39E-04
666	464359.2	3810002	0.002448678	2.45E-03	3.87E-04	2.33E-04
667	464379.2	3810002	0.002385702	2.39E-03	3.77E-04	2.27E-04
668	464399.2	3810002	0.002325316	2.33E-03	3.67E-04	2.22E-04
669	464419.2	3810002	0.00226598	2.27E-03	3.58E-04	2.16E-04
670	464439.2	3810002	0.002207516	2.21E-03	3.49E-04	2.10E-04
671	464459.2	3810002	0.002154152	2.15E-03	3.40E-04	2.05E-04
672	464479.2	3810002	0.002101404	2.10E-03	3.32E-04	2.00E-04
673	464499.2	3810002	0.00204904	2.05E-03	3.24E-04	1.95E-04
674	464519.2	3810002	0.001999111	2.00E-03	3.16E-04	1.91E-04
675	464179.2	3810022	0.003037728	3.04E-03	4.80E-04	2.90E-04
676	464199.2	3810022	0.002973779	2.97E-03	4.70E-04	2.83E-04
677	464219.2	3810022	0.00290214	2.90E-03	4.59E-04	2.77E-04
678	464239.2	3810022	0.002831424	2.83E-03	4.47E-04	2.70E-04
679	464259.2	3810022	0.002762042	2.76E-03	4.36E-04	2.63E-04
680	464279.2	3810022	0.00270227	2.70E-03	4.27E-04	2.58E-04
681	464299.2	3810022	0.002637578	2.64E-03	4.17E-04	2.51E-04
682	464319.2	3810022	0.002568015	2.57E-03	4.06E-04	2.45E-04
683	464339.2	3810022	0.002501349	2.50E-03	3.95E-04	2.38E-04
684	464359.2	3810022	0.002436759	2.44E-03	3.85E-04	2.32E-04
685	464379.2	3810022	0.002373963	2.37E-03	3.75E-04	2.26E-04
686	464399.2	3810022	0.002313756	2.31E-03	3.66E-04	2.21E-04
687	464419.2	3810022	0.002255984	2.26E-03	3.56E-04	2.15E-04
688	464439.2	3810022	0.002200519	2.20E-03	3.48E-04	2.10E-04
689	464459.2	3810022	0.002145951	2.15E-03	3.39E-04	2.05E-04
690	464479.2	3810022	0.002092049	2.09E-03	3.31E-04	1.99E-04
691	464499.2	3810022	0.002038301	2.04E-03	3.22E-04	1.94E-04
692	464519.2	3810022	0.001989833	1.99E-03	3.14E-04	1.90E-04
693	464219.2	3810042	0.002880636	2.88E-03	4.55E-04	2.75E-04
694	464239.2	3810042	0.00281479	2.81E-03	4.45E-04	2.68E-04
695	464259.2	3810042	0.002745664	2.75E-03	4.34E-04	2.62E-04
696	464279.2	3810042	0.00268033	2.68E-03	4.24E-04	2.55E-04
697	464299.2	3810042	0.002616048	2.62E-03	4.13E-04	2.49E-04
698	464319.2	3810042	0.002552893	2.55E-03	4.03E-04	2.43E-04
699	464339.2	3810042	0.002491815	2.49E-03	3.94E-04	2.37E-04
700	464359.2	3810042	0.002429993	2.43E-03	3.84E-04	2.32E-04
701	464379.2	3810042	0.002367171	2.37E-03	3.74E-04	2.26E-04
702	464399.2	3810042	0.002306939	2.31E-03	3.65E-04	2.20E-04

703	464419.2	3810042	0.002249166	2.25E-03	3.55E-04	2.14E-04
704	464439.2	3810042	0.002193701	2.19E-03	3.47E-04	2.09E-04
705	464459.2	3810042	0.002135339	2.14E-03	3.37E-04	2.04E-04
706	464479.2	3810042	0.002081104	2.08E-03	3.29E-04	1.98E-04
707	464499.2	3810042	0.002031483	2.03E-03	3.21E-04	1.94E-04
708	464519.2	3810042	0.001979657	1.98E-03	3.13E-04	1.89E-04
709	464239.2	3810062	0.00278921	2.79E-03	4.41E-04	2.66E-04
710	464259.2	3810062	0.002721237	2.72E-03	4.30E-04	2.59E-04
711	464279.2	3810062	0.002660774	2.66E-03	4.20E-04	2.54E-04
712	464299.2	3810062	0.002599951	2.60E-03	4.11E-04	2.48E-04
713	464319.2	3810062	0.00253836	2.54E-03	4.01E-04	2.42E-04
714	464339.2	3810062	0.002478666	2.48E-03	3.92E-04	2.36E-04
715	464359.2	3810062	0.00241951	2.42E-03	3.82E-04	2.31E-04
716	464379.2	3810062	0.002360738	2.36E-03	3.73E-04	2.25E-04
717	464399.2	3810062	0.002300608	2.30E-03	3.64E-04	2.19E-04
718	464419.2	3810062	0.002241195	2.24E-03	3.54E-04	2.14E-04
719	464439.2	3810062	0.002182449	2.18E-03	3.45E-04	2.08E-04
720	464459.2	3810062	0.002126548	2.13E-03	3.36E-04	2.03E-04
721	464479.2	3810062	0.002072697	2.07E-03	3.28E-04	1.98E-04
722	464499.2	3810062	0.002020743	2.02E-03	3.19E-04	1.93E-04
723	464519.2	3810062	0.001971224	1.97E-03	3.11E-04	1.88E-04
724	464259.2	3810082	0.002698938	2.70E-03	4.26E-04	2.57E-04
725	464279.2	3810082	0.002641961	2.64E-03	4.17E-04	2.52E-04
726	464299.2	3810082	0.002582984	2.58E-03	4.08E-04	2.46E-04
727	464319.2	3810082	0.00252188	2.52E-03	3.98E-04	2.40E-04
728	464339.2	3810082	0.002462954	2.46E-03	3.89E-04	2.35E-04
729	464359.2	3810082	0.002405156	2.41E-03	3.80E-04	2.29E-04
730	464379.2	3810082	0.002348538	2.35E-03	3.71E-04	2.24E-04
731	464399.2	3810082	0.002290099	2.29E-03	3.62E-04	2.18E-04
732	464419.2	3810082	0.002230968	2.23E-03	3.53E-04	2.13E-04
733	464439.2	3810082	0.002170813	2.17E-03	3.43E-04	2.07E-04
734	464459.2	3810082	0.002116501	2.12E-03	3.34E-04	2.02E-04
735	464479.2	3810082	0.002062881	2.06E-03	3.26E-04	1.97E-04
736	464499.2	3810082	0.00200962	2.01E-03	3.18E-04	1.92E-04
737	464519.2	3810082	0.001962792	1.96E-03	3.10E-04	1.87E-04
738	464279.2	3810102	0.002622327	2.62E-03	4.14E-04	2.50E-04
739	464299.2	3810102	0.002560634	2.56E-03	4.05E-04	2.44E-04
740	464319.2	3810102	0.002500632	2.50E-03	3.95E-04	2.38E-04
741	464339.2	3810102	0.002442654	2.44E-03	3.86E-04	2.33E-04
742	464359.2	3810102	0.002383268	2.38E-03	3.77E-04	2.27E-04
743	464379.2	3810102	0.002322573	2.32E-03	3.67E-04	2.21E-04
744	464399.2	3810102	0.00226962	2.27E-03	3.59E-04	2.16E-04
745	464419.2	3810102	0.002215513	2.22E-03	3.50E-04	2.11E-04
746	464439.2	3810102	0.002159945	2.16E-03	3.41E-04	2.06E-04
747	464459.2	3810102	0.002101994	2.10E-03	3.32E-04	2.00E-04
748	464479.2	3810102	0.002048271	2.05E-03	3.24E-04	1.95E-04
749	464499.2	3810102	0.001999239	2.00E-03	3.16E-04	1.91E-04

750	464519.2	3810102	0.001952796	1.95E-03	3.09E-04	1.86E-04
751	464299.2	3810122	0.002545075	2.55E-03	4.02E-04	2.43E-04
752	464319.2	3810122	0.002480563	2.48E-03	3.92E-04	2.36E-04
753	464339.2	3810122	0.002418638	2.42E-03	3.82E-04	2.31E-04
754	464359.2	3810122	0.00235961	2.36E-03	3.73E-04	2.25E-04
755	464379.2	3810122	0.002303094	2.30E-03	3.64E-04	2.19E-04
756	464399.2	3810122	0.002247962	2.25E-03	3.55E-04	2.14E-04
757	464419.2	3810122	0.002195342	2.20E-03	3.47E-04	2.09E-04
758	464439.2	3810122	0.002144848	2.14E-03	3.39E-04	2.04E-04
759	464459.2	3810122	0.002089998	2.09E-03	3.30E-04	1.99E-04
760	464479.2	3810122	0.002038301	2.04E-03	3.22E-04	1.94E-04
761	464499.2	3810122	0.001990191	1.99E-03	3.14E-04	1.90E-04
762	464519.2	3810122	0.001946978	1.95E-03	3.08E-04	1.86E-04
763	464319.2	3810142	0.002464492	2.46E-03	3.89E-04	2.35E-04
764	464339.2	3810142	0.002399389	2.40E-03	3.79E-04	2.29E-04
765	464359.2	3810142	0.002340618	2.34E-03	3.70E-04	2.23E-04
766	464379.2	3810142	0.002288561	2.29E-03	3.62E-04	2.18E-04
767	464399.2	3810142	0.00223084	2.23E-03	3.52E-04	2.13E-04
768	464419.2	3810142	0.002177759	2.18E-03	3.44E-04	2.08E-04
769	464439.2	3810142	0.002129598	2.13E-03	3.37E-04	2.03E-04
770	464459.2	3810142	0.002079464	2.08E-03	3.29E-04	1.98E-04
771	464479.2	3810142	0.002030406	2.03E-03	3.21E-04	1.94E-04
772	464499.2	3810142	0.001982451	1.98E-03	3.13E-04	1.89E-04
773	464519.2	3810142	0.001941954	1.94E-03	3.07E-04	1.85E-04
774	463261.3	3810382	0.02510569	2.51E-02	3.97E-03	2.39E-03
775	463243.8	3810394	0.02435511	2.44E-02	3.85E-03	2.32E-03
776	463243.8	3810399	0.02394807	2.39E-02	3.78E-03	2.28E-03
777	463126.9	3810941	0.005325315	5.33E-03	8.41E-04	5.08E-04
778	463126.7	3810933	0.005399773	5.40E-03	8.53E-04	5.15E-04
779	463126.9	3810927	0.005460185	5.46E-03	8.63E-04	5.20E-04
780	463130.8	3810919	0.005569911	5.57E-03	8.80E-04	5.31E-04
781	463257.7	3810733	0.009449949	9.45E-03	1.49E-03	9.01E-04
782	463257.2	3810725	0.009632185	9.63E-03	1.52E-03	9.18E-04
783	463256.4	3810717	0.009826647	9.83E-03	1.55E-03	9.37E-04
784	463187.1	3810723	0.009064434	9.06E-03	1.43E-03	8.64E-04
785	463232.8	3810889	0.006700594	6.70E-03	1.06E-03	6.39E-04
786	463232.6	3810881	0.006799633	6.80E-03	1.07E-03	6.48E-04
787	463225.6	3810881	0.006751369	6.75E-03	1.07E-03	6.43E-04
788	463224	3810889	0.006639003	6.64E-03	1.05E-03	6.33E-04
789	462054.2	3810685	0.000988662	9.89E-04	1.56E-04	9.42E-05
790	462055.5	3810680	0.000994301	9.94E-04	1.57E-04	9.48E-05
791	462016.9	3810544	0.00100704	1.01E-03	1.59E-04	9.60E-05
792	462016.4	3810534	0.00101009	1.01E-03	1.60E-04	9.63E-05
793	462016.4	3810524	0.001013755	1.01E-03	1.60E-04	9.66E-05
794	462013.1	3810480	0.001024494	1.02E-03	1.62E-04	9.76E-05
795	461998.8	3810437	0.00101742	1.02E-03	1.61E-04	9.70E-05
796	461997.4	3810425	0.00101842	1.02E-03	1.61E-04	9.71E-05

797	462022.1	3810400	0.001053586	1.05E-03	1.66E-04	1.00E-04
798	462036.3	3810396	0.001074321	1.07E-03	1.70E-04	1.02E-04
799	461988.4	3810383	0.00100481	1.00E-03	1.59E-04	9.58E-05
800	461983.1	3810394	0.000997736	9.98E-04	1.58E-04	9.51E-05
801	462655.7	3809186	0.000907258	9.07E-04	1.43E-04	8.65E-05
802	462642	3809187	0.000896981	8.97E-04	1.42E-04	8.55E-05
803	462636.5	3809188	0.000893469	8.93E-04	1.41E-04	8.51E-05
804	462630.2	3809188	0.000888676	8.89E-04	1.40E-04	8.47E-05
805	462563.1	3809182	0.000814885	8.15E-04	1.29E-04	7.77E-05
806	462563.1	3809186	0.000819575	8.20E-04	1.30E-04	7.81E-05
807	462556	3809186	0.000814756	8.15E-04	1.29E-04	7.76E-05
808	462554.3	3809181	0.000806683	8.07E-04	1.27E-04	7.69E-05
809	462159.8	3809423	0.000697879	6.98E-04	1.10E-04	6.65E-05
810	462154.7	3809417	0.000688601	6.89E-04	1.09E-04	6.56E-05
811	462141.3	3809420	0.000670044	6.70E-04	1.06E-04	6.39E-05
812	462070.3	3809381	0.000579259	5.79E-04	9.15E-05	5.52E-05
813	462046.9	3809382	0.000561036	5.61E-04	8.87E-05	5.35E-05
814	461989.3	3809381	0.000517412	5.17E-04	8.18E-05	4.93E-05

			UnMitigated				T2				T2L3				T4			
						8.28E-08				8.28E-08				1.58E-08				9.24E-09
			Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total
1	464183.1	3809460	1.61E-09	5.58E-09	0.00E+00	7.18E-09	1.61E-09	5.58E-09	0.00E+00	7.18E-09	2.54E-10	1.12E-09	0.00E+00	1.37E-09	1.53E-10	6.49E-10	0.00E+00	8.02E-10
2	464199.3	3809460	1.58E-09	5.48E-09	0.00E+00	7.06E-09	1.58E-09	5.48E-09	0.00E+00	7.06E-09	2.49E-10	1.10E-09	0.00E+00	1.35E-09	1.50E-10	6.37E-10	0.00E+00	7.88E-10
3	464208	3809460	1.56E-09	5.43E-09	0.00E+00	6.99E-09	1.56E-09	5.43E-09	0.00E+00	6.99E-09	2.47E-10	1.09E-09	0.00E+00	1.33E-09	1.49E-10	6.31E-10	0.00E+00	7.80E-10
4	464210.3	3809448	1.54E-09	5.34E-09	0.00E+00	6.88E-09	1.54E-09	5.34E-09	0.00E+00	6.88E-09	2.43E-10	1.07E-09	0.00E+00	1.31E-09	1.46E-10	6.21E-10	0.00E+00	7.67E-10
5	464196.4	3809447	1.56E-09	5.41E-09	0.00E+00	6.97E-09	1.56E-09	5.41E-09	0.00E+00	6.97E-09	2.46E-10	1.08E-09	0.00E+00	1.33E-09	1.49E-10	6.29E-10	0.00E+00	7.78E-10
6	464181.6	3809446	1.58E-09	5.50E-09	0.00E+00	7.08E-09	1.58E-09	5.50E-09	0.00E+00	7.08E-09	2.50E-10	1.10E-09	0.00E+00	1.35E-09	1.51E-10	6.39E-10	0.00E+00	7.90E-10
7	464181.6	3809437	1.57E-09	5.44E-09	0.00E+00	7.00E-09	1.57E-09	5.44E-09	0.00E+00	7.00E-09	2.47E-10	1.09E-09	0.00E+00	1.34E-09	1.49E-10	6.32E-10	0.00E+00	7.81E-10
8	464190.9	3809436	1.55E-09	5.38E-09	0.00E+00	6.93E-09	1.55E-09	5.38E-09	0.00E+00	6.93E-09	2.45E-10	1.08E-09	0.00E+00	1.32E-09	1.48E-10	6.25E-10	0.00E+00	7.73E-10
9	464207.4	3809436	1.52E-09	5.28E-09	0.00E+00	6.80E-09	1.52E-09	5.28E-09	0.00E+00	6.80E-09	2.40E-10	1.06E-09	0.00E+00	1.30E-09	1.45E-10	6.14E-10	0.00E+00	7.59E-10
10	464208.4	3809428	1.51E-09	5.23E-09	0.00E+00	6.73E-09	1.51E-09	5.23E-09	0.00E+00	6.73E-09	2.38E-10	1.05E-09	0.00E+00	1.29E-09	1.43E-10	6.08E-10	0.00E+00	7.51E-10
11	464197.2	3809429	1.52E-09	5.30E-09	0.00E+00	6.82E-09	1.52E-09	5.30E-09	0.00E+00	6.82E-09	2.41E-10	1.06E-09	0.00E+00	1.30E-09	1.45E-10	6.16E-10	0.00E+00	7.61E-10
12	464183.3	3809428	1.55E-09	5.38E-09	0.00E+00	6.92E-09	1.55E-09	5.38E-09	0.00E+00	6.92E-09	2.45E-10	1.08E-09	0.00E+00	1.32E-09	1.47E-10	6.25E-10	0.00E+00	7.73E-10
13	464189.9	3809452	1.58E-09	5.48E-09	0.00E+00	7.06E-09	1.58E-09	5.48E-09	0.00E+00	7.06E-09	2.49E-10	1.10E-09	0.00E+00	1.35E-09	1.50E-10	6.37E-10	0.00E+00	7.88E-10
14	464334.9	3809454	1.37E-09	4.75E-09	0.00E+00	6.11E-09	1.37E-09	4.75E-09	0.00E+00	6.11E-09	2.16E-10	9.51E-10	0.00E+00	1.17E-09	1.30E-10	5.52E-10	0.00E+00	6.82E-10
15	464356.4	3809451	1.34E-09	4.64E-09	0.00E+00	5.98E-09	1.34E-09	4.64E-09	0.00E+00	5.98E-09	2.11E-10	9.30E-10	0.00E+00	1.14E-09	1.27E-10	5.40E-10	0.00E+00	6.67E-10
16	464457.1	3809494	1.28E-09	4.45E-09	0.00E+00	5.73E-09	1.28E-09	4.45E-09	0.00E+00	5.73E-09	2.02E-10	8.92E-10	0.00E+00	1.09E-09	1.22E-10	5.18E-10	0.00E+00	6.40E-10
17	464479.8	3809492	1.25E-09	4.35E-09	0.00E+00	5.61E-09	1.25E-09	4.35E-09	0.00E+00	5.61E-09	1.98E-10	8.72E-10	0.00E+00	1.07E-09	1.19E-10	5.06E-10	0.00E+00	6.26E-10
18	464502.5	3809475	1.21E-09	4.19E-09	0.00E+00	5.40E-09	1.21E-09	4.19E-09	0.00E+00	5.40E-09	1.91E-10	8.40E-10	0.00E+00	1.03E-09	1.15E-10	4.87E-10	0.00E+00	6.02E-10
19	464501.2	3809454	1.18E-09	4.10E-09	0.00E+00	5.28E-09	1.18E-09	4.10E-09	0.00E+00	5.28E-09	1.87E-10	8.22E-10	0.00E+00	1.01E-09	1.13E-10	4.77E-10	0.00E+00	5.90E-10
20	464762	3809391	9.10E-10	3.16E-09	0.00E+00	4.07E-09	9.10E-10	3.16E-09	0.00E+00	4.07E-09	1.44E-10	6.33E-10	0.00E+00	7.77E-10	8.67E-11	3.67E-10	0.00E+00	4.54E-10
21	464741.8	3809348	8.86E-10	3.08E-09	0.00E+00	3.96E-09	8.86E-10	3.08E-09	0.00E+00	3.96E-09	1.40E-10	6.17E-10	0.00E+00	7.57E-10	8.45E-11	3.58E-10	0.00E+00	4.42E-10
22	464726.7	3809315	8.67E-10	3.01E-09	0.00E+00	3.88E-09	8.67E-10	3.01E-09	0.00E+00	3.88E-09	1.37E-10	6.03E-10	0.00E+00	7.40E-10	8.26E-11	3.50E-10	0.00E+00	4.33E-10
23	464701.5	3809276	8.48E-10	2.95E-09	0.00E+00	3.80E-09	8.48E-10	2.95E-09	0.00E+00	3.80E-09	1.34E-10	5.91E-10	0.00E+00	7.25E-10	8.09E-11	3.43E-10	0.00E+00	4.24E-10
24	464688.9	3809256	8.40E-10	2.92E-09	0.00E+00	3.76E-09	8.40E-10	2.92E-09	0.00E+00	3.76E-09	1.33E-10	5.85E-10	0.00E+00	7.17E-10	8.00E-11	3.39E-10	0.00E+00	4.19E-10
25	464688.9	3809212	8.09E-10	2.81E-09	0.00E+00	3.62E-09	8.09E-10	2.81E-09	0.00E+00	3.62E-09	1.28E-10	5.63E-10	0.00E+00	6.91E-10	7.71E-11	3.27E-10	0.00E+00	4.04E-10
26	464680.1	3809172	7.90E-10	2.74E-09	0.00E+00	3.53E-09	7.90E-10	2.74E-09	0.00E+00	3.53E-09	1.25E-10	5.50E-10	0.00E+00	6.75E-10	7.53E-11	3.19E-10	0.00E+00	3.94E-10
27	464677.6	3809144	7.78E-10	2.70E-09	0.00E+00	3.48E-09	7.78E-10	2.70E-09	0.00E+00	3.48E-09	1.23E-10	5.41E-10	0.00E+00	6.64E-10	7.41E-11	3.14E-10	0.00E+00	3.88E-10
28	464666.2	3809129	7.78E-10	2.70E-09	0.00E+00	3.48E-09	7.78E-10	2.70E-09	0.00E+00	3.48E-09	1.23E-10	5.42E-10	0.00E+00	6.65E-10	7.42E-11	3.14E-10	0.00E+00	3.88E-10
29	464659.9	3809104	7.72E-10	2.68E-09	0.00E+00	3.46E-09	7.72E-10	2.68E-09	0.00E+00	3.46E-09	1.22E-10	5.38E-10	0.00E+00	6.60E-10	7.36E-11	3.12E-10	0.00E+00	3.86E-10
30	464653.7	3809089	7.71E-10	2.68E-09	0.00E+00	3.45E-09	7.71E-10	2.68E-09	0.00E+00	3.45E-09	1.22E-10	5.37E-10	0.00E+00	6.59E-10	7.35E-11	3.12E-10	0.00E+00	3.85E-10
31	464651.1	3809066	7.66E-10	2.66E-09	0.00E+00	3.43E-09	7.66E-10	2.66E-09	0.00E+00	3.43E-09	1.21E-10	5.33E-10	0.00E+00	6.54E-10	7.30E-11	3.09E-10	0.00E+00	3.82E-10
32	464638.5	3809043	7.69E-10	2.67E-09	0.00E+00	3.44E-09	7.69E-10	2.67E-09	0.00E+00	3.44E-09	1.21E-10	5.35E-10	0.00E+00	6.57E-10	7.33E-11	3.11E-10	0.00E+00	3.84E-10
33	464623.4	3809026	7.75E-10	2.69E-09	0.00E+00	3.47E-09	7.75E-10	2.69E-09	0.00E+00	3.47E-09	1.22E-10	5.39E-10	0.00E+00	6.62E-10	7.39E-11	3.13E-10	0.00E+00	3.87E-10
34	464734.3	3809236	8.00E-10	2.78E-09	0.00E+00	3.58E-09	8.00E-10	2.78E-09	0.00E+00	3.58E-09	1.26E-10	5.57E-10	0.00E+00	6.83E-10	7.62E-11	3.23E-10	0.00E+00	3.99E-10
35	464754.4	3809298	8.37E-10	2.91E-09	0.00E+00	3.74E-09	8.37E-10	2.91E-09	0.00E+00	3.74E-09	1.32E-10	5.82E-10	0.00E+00	7.15E-10	7.97E-11	3.38E-10	0.00E+00	4.18E-10
36	464774.6	3809338	8.58E-10	2.98E-09	0.00E+00	3.84E-09	8.58E-10	2.98E-09	0.00E+00	3.84E-09	1.36E-10	5.98E-10	0.00E+00	7.33E-10	8.18E-11	3.47E-10	0.00E+00	4.29E-10
37	464807.3	3809325	8.31E-10	2.89E-09	0.00E+00	3.72E-09	8.31E-10	2.89E-09	0.00E+00	3.72E-09	1.31E-10	5.78E-10	0.00E+00	7.10E-10	7.92E-11	3.36E-10	0.00E+00	4.15E-10
38	464792.2	3809288	8.09E-10	2.81E-09	0.00E+00	3.62E-09	8.09E-10	2.81E-09	0.00E+00	3.62E-09	1.28E-10	5.63E-10	0.00E+00	6.91E-10	7.71E-11	3.27E-10	0.00E+00	4.04E-10
39	464762	3809242	7.90E-10	2.75E-09	0.00E+00	3.54E-09	7.90E-10	2.75E-09	0.00E+00	3.54E-09	1.25E-10	5.50E-10	0.00E+00	6.75E-10	7.53E-11	3.19E-10	0.00E+00	3.94E-10
40	464779.6	3809482	9.71E-10	3.37E-09	0.00E+00	4.34E-09	9.71E-10	3.37E-09	0.00E+00	4.34E-09	1.53E-10	6.76E-10	0.00E+00	8.29E-10	9.25E-11	3.92E-10	0.00E+00	4.85E-10
41	464797.3	3809477	9.53E-10	3.31E-09	0.00E+00	4.26E-09	9.53E-10	3.31E-09	0.00E+00	4.26E-09	1.51E-10	6.63E-10	0.00E+00	8.14E-10	9.08E-11	3.85E-10	0.00E+00	4.76E-10
42	464687.7	3809497	1.06E-09	3.67E-09	0.00E+00	4.73E-09	1.06E-09	3.67E-09	0.00E+00	4.73E-09	1.67E-10	7.36E-10	0.00E+00	9.03E-10	1.01E-10	4.27E-10	0.00E+00	5.27E-10
43	464628.5	3809496	1.11E-09	3.85E-09	0.00E+00	4.96E-09	1.11E-09	3.85E-09	0.00E+00	4.96E-09	1.75E-10	7.72E-10	0.00E+00	9.47E-10	1.06E-10	4.48E-10	0.00E+00	5.54E-10
44	464574.3	3809504	1.17E-09	4.06E-09	0.00E+00	5.23E-09	1.17E-09	4.06E-09	0.00E+00	5.23E-09	1.85E-10	8.14E-10	0.00E+00	9.99E-10	1.11E-10	4.72E-10	0.00E+00	5.84E-10
45	464556.7	3809480	1.16E-09	4.02E-09	0.00E+00	5.18E-09	1.16E-09	4.02E-09	0.00E+00	5.18E-09	1.83E-10	8.06E-10	0.00E+00	9.89E-10	1.10E-10	4.68E-10	0.00E+00	5.78E-10
46	464571.8	3809702	1.36E-09	4.73E-09	0.00E+00	6.09E-09	1.36E-09	4.73E-09	0.00E+00	6.09E-09	2.15E-10	9.48E-10	0.00E+00	1.16E-09	1.30E-10	5.50E-10	0.00E+00	6.80E-10
47	464569.2	3809674	1.34E-09	4.67E-09	0.00E+00	6.02E-09	1.34E-09	4.67E-09	0.00E+00	6.02E-09	2.12E-10	9.36E-10	0.00E+00	1.15E-09	1.28E-10	5.43E-10	0.00E+00	6.71E-10
48	464573	3809656	1.32E-09	4.60E-09	0.00E+00	5.92E-09	1.32E-09	4.60E-09	0.00E+00	5.92E-09	2.09E-10	9.21E-10	0.00E+00	1.13E-09	1.26E-10	5.35E-10	0.00E+00	6.61E-10
49	464564.2	3809604	1.29E-09	4.47E-09	0.00E+00	5.76E-09	1.29E-09	4.47E-09	0.00E+00	5.76E-09	2.03E-10	8.96E-10	0.00E+00	1.10E-09	1.23E-10	5.20E-10	0.00E+00	6.42E-10
50	464560.4	3809572	1.26E-09	4.37E-09	0.00E+00	5.63E-09	1.26E-09	4.37E-09	0.00E+00	5.63E-09	1.99E-10	8.76E-10	0.00E+00	1.07E-09	1.20E-10	5.08E-10	0.00E+00	6.28E-10
51	464615.9	3809585	1.21E-09	4.19E-09	0.00E+00	5.40E-09	1.21E-09	4.19E-09	0.00E+00	5.40E-09	1.91E-10	8.40E-10	0.00E+00	1.03E-09	1.15E-10	4.88E-10	0.00E+00	6.03E-10
52	464671.3	3809601	1.16E-09	4.03E-09	0.00E+00	5.20E-09	1.16E-09	4.03E-09	0.00E+00	5.20E-09	1.84E-10	8.08E-10	0.00E+00	9.92E-10	1.11E-10	4.69E-10	0.00E+00	5.80E-10
53	464690.2	3809684	1.20E-09	4.15E-09	0.00E+00	5.35E-09	1.20E-09	4.15E-09	0.00E+00	5.35E-09	1.89E-10	8.32E-10	0.00E+00	1.02E-09	1.14E-10	4.83E-10	0.00E+00	5.97E-10
54	464683.9	3809662	1.19E-09	4.13E-09	0.00E+00	5.32E-09	1.19E-09	4.13E-09	0.00E+00	5.32E-09	1.88E-10	8.28E-10	0.00E+00	1.02E-09	1.13E-10	4.81E-10	0.00E+00	5.94E-10
55	464687.7	3809633	1.17E-09	4.05E-09	0.00E+00	5.22E-09	1.17E-09	4.05E-09	0.00E+00	5.22E-09	1.84E-10	8.11E-10	0.00E+00	9.96E-10	1.11E-10	4.71E-10	0.00E+00	5.82E-10
56	464700.3	3809576	1.11E-09	3.86E-09	0.00E+00	4.98E-09	1.11E-09	3.86E-09	0.00E+00	4.98E-09	1.76E-10	7.74E-10	0.00E+00	9.50E-10	1.06E-10	4.49E-10	0.00E+00	5.55E-10
57	464762	3809586	1.06E-09	3.68E-09	0.00E+00	4.74E-09	1.06E-09	3.68E-09	0.00E+00	4.74E-09	1.67E-10	7.38E-10	0.00E+00	9.05E-10	1.01E-10	4.28E-10	0.00E+00	5.29E-10
58	463181.2	3810388	1.85E-08	6.43E-08	0.00E+00	8.28E-08	1.85E-08	6.43E-08	0.00E+00	8.28E-08	2.93E-09	1.29E-08	0.00E+00	1.58E-08	1.76E-09	7.48E-09	0.00E+00	9.24E-09
59	463136.4	3810389	1.76E-08	6.10E-08	0.00E+00	7.86E-08	1.76E-08	6.10E-08	0.00E+00	7.86E-08	2.78E-09	1.22E-08	0.00E+00	1.50E-08	1.67E-09	7.10E-09	0.00E+00	8.77E-09
60	463133.1	3810423	1.53E-08	5.31E-08	0.00E+00	6.84E-08	1.53E-08	5.31E-08	0.00E+00	6.84E-08	2.41E-09	1.06E-08	0.00E+00	1.31E-08	1.46E-09	6.17E-09	0.00E+00	7.63E-09
61	463161.5	3810419	1.61E-08	5.60E-08	0.00E+00	7.22E-08	1.61E-08	5.60E-08	0.00E+00	7.22E-08	2.55E-09	1.12E-08	0.00E+00	1.38E-08	1.54E-09	6.52E-09	0.00E+00	8.05E-09
62	463189.9	3810422	1.64E-08	5.69E-08	0.00E+00	7.32E-08	1.64E-08	5.69E-08	0.00E+00	7.32E-08	2.59E-09	1.14E-08	0.00E+00	1.40E-08	1.56E-09	6.61E-09	0.00E+00	8.17E-09
63	463183.4	3810447	1.49E-08	5.17E-08	0.00E+00	6.66E-08	1.49E-08	5.17E-08	0.00E+00	6.66E-08	2.35E-09	1.04E-08	0.00E+00	1.27E-08	1.42E-09	6.01E-09	0.00E+00	7.43E-09
64	463135.3	3810447	1.40E-08	4.87E-08	0.00E+00	6.28E-08	1.40E-08	4.87E-08	0.00E+00	6.28E-08	2.22E-09	9.77E-09	0.00E+00	1.20E-08	1.34E-09	5.67E-09	0.00E+00	7.00E-09
65	462879.5	3810504	5.08E-09	1.77E-08	0.00E+00	2.27E-08	5.08E-09	1.77E-08	0.00E+00	2.27E-08	8.03E-10	3.54E-09	0.00E+00	4.34E-09	4.85E-10	2.05E-09	0.00E+00	2.54E-09
66	463015.1	3810591	6.60E-09	2.29E-08	0.00E+00	2.95E-08	6.60E-09	2.29E-08	0.00E+00	2.95E-08	1.04E-09	4.60E-09	0.00E+00	5.64E-09	6.29E-10	2.67E-09	0.00E+00	3.30E-09
67	463045.7	3810588	7.24E-09	2.52E-08	0.00E+00	3.24E-08	7.24E-09	2.52E-08	0.00E+00	3.24E-08	1.14E-09	5.04E-09	0.00E+00	6.19E-09	6.90E-10	2.93E-09	0.00E+00	3.62E-09
68	463080.6	3810585	7.99E-09	2.77E-08	0.00E+00	3.57E-08	7.99E-09	2.77E-08	0.00E+00	3.57E-08	1.26E-09	5.56E-09	0.00E+00	6.82E-09	7.61E-10	3.23E-09	0.00E+00	3.99E-09
69	463051.1	3810614	6.86E-09	2.38E-08	0.00E+00	3.07E-08	6.86E-09	2.38E-08	0.00E+00	3.07E-08	1.08E-09	4.77E-09	0.00E+00	5.86E-09	6.53E-10	2.77E-09	0.00E+00	3.42E-09
70	463044.6	3810632	6.46E-09	2.24E-08	0.00E+00	2.89E-08	6.46E-09	2.24E-08	0.00E+00	2.89E-08	1.02E-09	4.49E-09	0.00E+00	5.52E-09	6.15E-10	2.61E-09	0.00E+00	3.22E-09
71	463026	3810723	4.99E-09	1.73E-08	0.00E+00	2.23E-08	4.99E-09	1.73E-08	0.00E+00	2.23E-08	7.88E-10	3.47E-09	0.00E+00	4.26E-09	4.75E-10	2.02E-09	0.00E+00	2.49E-09
72	463055.5	3810728	5.31E-09	1.84E-08	0.00E+00	2.38E-08	5.31E-09	1.84E-08	0.00E+00	2.38E-08	8.39E-10	3.70E-09	0.00E+00	4.53E-09	5.06E-10	2.14E-09	0.00E+00	2.65E-09
73	463085	3810728	5.64E-09	1.96E-08	0.00E+00	2.52E-08	5.64E-09	1.96E-08	0.00E+00	2.52E-08	8.91E-10	3.93E-09	0.00E+00	4.82E-09	5.38E-10	2.28E-09	0.00E+00	2.82E-09
74	463085	3810706	5.95E-09	2.07E-08	0.00E+00	2.66E-08	5.95E-09	2.07E-08	0.00E+00	2.66E-08	9.41E-10	4.14E-09	0.00E+00	5.08E-09	5.67E-10	2.40E-09	0.00E+00	2.97E-09
75	463050	3810700	5.55E-09	1.93E-08	0.00E+00	2.48E-08	5.55E-09	1.93E-08	0.00E+00	2.48E-08	8.78E-10	3.87E-09	0.00E+00	4.74E-09	5.29E-10	2.24E-09	0.00E+00	2.77E-09
76	463015.1	3810696	5.16E-09	1.79E-08	0.00E+00	2.31E-08	5.16E-09	1.79E-08	0.00E+00	2.31E-08	8.15E-10	3.59E-09	0.00E+00	4.41E-09	4.92E-10	2.08E-09	0.00E+00	2.58E-09
77	463015.1	3810674	5.42E-09	1.88E-08	0.00E+00	2.42E-08	5.42E-09	1.88E-08	0.00E+00	2.42E-08	8.56E-10	3.77E-09	0.00E+00	4.63E-09	5.16E-10	2.19E-09	0.00E+00	2.71E-09
78	463045.7	3810674	5.84E-09	2.03E-08	0.00E+00	2.61E-08	5.84E-09	2.03E-08	0.00E+00	2.61E-08	9.23E-10	4.07E-09	0.00E+00	4.99E-09	5.57E-10	2.36E-09	0.00E+00	2.92E-09
79	463082.8	3810673	6.38E-09	2.22E-08	0.00E+00	2.85E-08	6.38E-09	2.22E-08	0.00E+00	2.85E-08	1.01E-09	4.44E-09	0.00E+00	5.45E-09	6.08E-10	2.58E-09	0.00E+00	3.19E-09
80	463132	3810682	6.89E-09	2.39E-08	0.00E+00	3.08E-08	6.89E-09	2.39E-08	0.00E+00	3.08E-08	1.09E-09	4.80E-09	0.00E+00	5.89E-09	6.57E-10	2.78E-09	0.00E+00	3.44E-09
81	463171.4	3810677	7.40E-09	2.57E-08	0.00E+00	3.31E-08	7.40E-09	2.57E-08	0.00E+00	3.31E-08	1.17E-09	5.15E-09	0.00E+00	6.32E-09	7.05E-10	2.99E-09	0.00E+00	3.69E-09
82	463210.7	3810676	7.80E-09	2.71E-08	0.00E+00	3.49E-08	7.80E-09	2.71E-08	0.00E+00	3.49E-08	1.23E-09	5.43E-09	0.00E+00	6.67E-09	7.44E-10	3.15E-09	0.00E+00	3.90E-09
83	463251.2	3810676	8.00E-09	2.78E-08	0.00E+00	3.58E-08	8.00E-09	2.78E-08	0.00E+00	3.58E-08	1.26E-09	5.57E-09	0.00E+00	6.84E-09	7.63E-10	3.23E-09	0.00E+00	4.00E-09
84	463261	3810706	7.54E-09	2.62E-08	0.00E+00	3.37E-08	7.54E-09	2.62E-08	0.00E+00	3.37E-08	1.19E-09	5.25E-09	0.00E+00	6.44E-09	7.18E-10	3.04E-09	0.00E+00	3.76E-09
85	463211.8	3810704	7.27E-09	2.52E-08	0.00E+00	3.25E-08	7.27E-09	2.52E-08	0.00E+00	3.25E-08	1.15E-09	5.06E-09	0.00E+00	6.21E-09	6.92E-10	2.93E-09	0.00E+00	3.63E-09
86	463157.2	3810701	6.83E-09	2.37E-08	0.00E+00	3.05E-08	6.83E-09	2.37E-08	0.00E+00	3.05E-08	1.08E-09	4.75E-09	0.00E+00	5.83E-09	6.51E-10	2.76E-09	0.00E+00	3.41E-09
87	463123.3	3810703	6.43E-09	2.23E-08	0.00E+00	2.88E-08	6.43E-09	2.23E-08	0.00E+00	2.88E-08	1.02E-09	4.48E-09	0.00E+00	5.49E-09	6.13E-10	2.60E-09	0.00E+00	3.21E-09
88	463128.7	3810727	6.14E-09	2.13E-08	0.00E+00	2.75E-08	6.14E-09	2.13E-08	0.00E+00	2.75E-08	9.70E-10	4.27E-09	0.00E+00	5.24E-09	5.85E-10	2.48E-09	0.00E+00	3.06E-09
89	463156.1	3810727	6.40E-09	2.22E-08	0.00E+00	2.86E-08	6.40E-09	2.22E-08	0.00E+00	2.86E-08	1.01E-09	4.46E-09	0.00E+00	5.47E-09	6.10E-10	2.59E-09	0.00E+00	3.20E-09
90	463211.8	3810722	6.96E-09	2.42E-08	0.00E+00	3.11E-08	6.96E-09	2.42E-08	0.00E+00	3.11E-08	1.10E-09	4.85E-09	0.00E+00	5.94E-09	6.63E-10	2.81E-09	0.00E+00	3.47E-09
91	463233.7	3810722	7.09E-09	2.46E-08	0.00E+00	3.17E-08	7.09E-09	2.46E-08	0.00E+00	3.17E-08	1.12E-09	4.93E-09	0.00E+00	6.05E-09	6.76E-10	2.86E-09	0.00E+00	3.54E-09
92	462372.4	3810511	1.30E-09	4.51E-09	0.00E+00	5.81E-09	1.30E-09	4.51E-09	0.00E+00	5.81E-09	2.05E-10	9.05E-10	0.00E+00	1.11E-09	1.24E-10	5.25E-10	0.00E+00	6.49E-10
93	462370.2	3810481	1.33E-09	4.62E-09	0.00E+00	5.95E-09	1.33E-09	4.62E-09	0.00E+00	5.95E-09	2.10E-10	9.26E-10	0.00E+00	1.14E-09	1.27E-10	5.37E-10	0.00E+00	6.64E-10
94	462348.3	3810474	1.29E-09	4.47E-09	0.00E+00	5.76E-09	1.29E-09	4.47E-09	0.00E+00	5.76E-09	2.04E-10	8.97E-10	0.00E+00	1.10E-09	1.23E-10	5.20E-10	0.00E+00	6.43E-10
95	462340.7	3810495	1.25E-09	4.34E-09	0.00E+00	5.59E-09	1.25E-09	4.34E-09	0.00E+00	5.59E-09	1.97E-10	8.70E-10	0.00E+00	1.07E-09	1.19E-10	5.05E-10	0.00E+00	6.24E-10
96	462343.9	3810520	1.23E-09	4.28E-09	0.00E+00	5.51E-09	1.23E-09	4.28E-09	0.00E+00	5.51E-09	1.94E-10	8.57E-10	0.00E+00	1.05E-09	1.17E-10	4.97E-10	0.00E+00	6.14E-10
97	462310.1	3810525	1.16E-09	4.04E-09	0.00E+00	5.20E-09	1.16E-09	4.04E-09	0.00E+00	5.20E-09	1.84E-10	8.09E-10	0.00E+00	9.92E-10	1.11E-10	4.69E-10

110	462575.6	3809220	6.57E-10	2.28E-09	0.00E+00	2.94E-09	6.57E-10	2.28E-09	0.00E+00	2.94E-09	1.04E-10	4.58E-10	0.00E+00	5.61E-10	6.26E-11	2.65E-10	0.00E+00	3.28E-10
111	462061.1	3808890	2.46E-10	8.54E-10	0.00E+00	1.10E-09	2.46E-10	8.54E-10	0.00E+00	1.10E-09	3.88E-11	1.71E-10	0.00E+00	2.10E-10	2.34E-11	9.93E-11	0.00E+00	1.23E-10
112	462057.2	3808924	2.55E-10	8.86E-10	0.00E+00	1.14E-09	2.55E-10	8.86E-10	0.00E+00	1.14E-09	4.03E-11	1.78E-10	0.00E+00	2.18E-10	2.43E-11	1.03E-10	0.00E+00	1.27E-10
113	462027.8	3808930	2.51E-10	8.72E-10	0.00E+00	1.12E-09	2.51E-10	8.72E-10	0.00E+00	1.12E-09	3.97E-11	1.75E-10	0.00E+00	2.14E-10	2.39E-11	1.01E-10	0.00E+00	1.25E-10
114	462003	3808925	2.47E-10	8.60E-10	0.00E+00	1.11E-09	2.47E-10	8.60E-10	0.00E+00	1.11E-09	3.91E-11	1.72E-10	0.00E+00	2.11E-10	2.36E-11	1.00E-10	0.00E+00	1.24E-10
115	461999.2	3808898	2.39E-10	8.32E-10	0.00E+00	1.07E-09	2.39E-10	8.32E-10	0.00E+00	1.07E-09	3.78E-11	1.67E-10	0.00E+00	2.05E-10	2.28E-11	9.67E-11	0.00E+00	1.20E-10
116	462027.8	3808902	2.44E-10	8.49E-10	0.00E+00	1.09E-09	2.44E-10	8.49E-10	0.00E+00	1.09E-09	3.86E-11	1.70E-10	0.00E+00	2.09E-10	2.33E-11	9.87E-11	0.00E+00	1.22E-10
117	461996.9	3808863	2.274E-10	7.90E-10	0.00E+00	1.02E-09	2.27E-10	7.90E-10	0.00E+00	1.02E-09	3.59E-11	1.58E-10	0.00E+00	1.94E-10	2.17E-11	9.18E-11	0.00E+00	1.14E-10
118	462025.5	3808859	2.308E-10	8.02E-10	0.00E+00	1.03E-09	2.31E-10	8.02E-10	0.00E+00	1.03E-09	3.65E-11	1.61E-10	0.00E+00	1.97E-10	2.20E-11	9.32E-11	0.00E+00	1.15E-10
119	462059.5	3808857	2.35E-10	8.16E-10	0.00E+00	1.05E-09	2.35E-10	8.16E-10	0.00E+00	1.05E-09	3.71E-11	1.64E-10	0.00E+00	2.01E-10	2.24E-11	9.49E-11	0.00E+00	1.17E-10
120	462024.7	3809027	2.906E-10	1.01E-09	0.00E+00	1.30E-09	2.91E-10	1.01E-09	0.00E+00	1.30E-09	4.59E-11	2.02E-10	0.00E+00	2.48E-10	2.77E-11	1.17E-10	0.00E+00	1.45E-10
121	462010.8	3809029	2.892E-10	1.00E-09	0.00E+00	1.29E-09	2.89E-10	1.00E-09	0.00E+00	1.29E-09	4.57E-11	2.01E-10	0.00E+00	2.47E-10	2.76E-11	1.17E-10	0.00E+00	1.44E-10

			UnMitigated			T2			T2L3			T4		
			1.43E-03	4.98E-03	0.00E+00	1.43E-03	4.98E-03	0.00E+00	2.27E-04	9.98E-04	0.00E+00	1.37E-04	5.79E-04	0.00E+00
			Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3
1	464183.1	3809460	1.24E-04	4.32E-04	0.00E+00	1.24E-04	4.32E-04	0.00E+00	1.96E-05	8.65E-05	0.00E+00	1.18E-05	5.02E-05	0.00E+00
2	464199.3	3809460	1.22E-04	4.24E-04	0.00E+00	1.22E-04	4.24E-04	0.00E+00	1.93E-05	8.50E-05	0.00E+00	1.16E-05	4.93E-05	0.00E+00
3	464208	3809460	1.21E-04	4.20E-04	0.00E+00	1.21E-04	4.20E-04	0.00E+00	1.91E-05	8.42E-05	0.00E+00	1.15E-05	4.88E-05	0.00E+00
4	464210.3	3809448	1.19E-04	4.13E-04	0.00E+00	1.19E-04	4.13E-04	0.00E+00	1.88E-05	8.28E-05	0.00E+00	1.13E-05	4.81E-05	0.00E+00
5	464196.4	3809447	1.21E-04	4.19E-04	0.00E+00	1.21E-04	4.19E-04	0.00E+00	1.91E-05	8.40E-05	0.00E+00	1.15E-05	4.87E-05	0.00E+00
6	464181.6	3809446	1.23E-04	4.26E-04	0.00E+00	1.23E-04	4.26E-04	0.00E+00	1.94E-05	8.53E-05	0.00E+00	1.17E-05	4.95E-05	0.00E+00
7	464181.6	3809437	1.21E-04	4.21E-04	0.00E+00	1.21E-04	4.21E-04	0.00E+00	1.92E-05	8.44E-05	0.00E+00	1.16E-05	4.90E-05	0.00E+00
8	464190.9	3809436	1.20E-04	4.16E-04	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.35E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
9	464207.4	3809436	1.18E-04	4.09E-04	0.00E+00	1.18E-04	4.09E-04	0.00E+00	1.86E-05	8.19E-05	0.00E+00	1.12E-05	4.75E-05	0.00E+00
10	464208.4	3809428	1.17E-04	4.05E-04	0.00E+00	1.17E-04	4.05E-04	0.00E+00	1.84E-05	8.11E-05	0.00E+00	1.11E-05	4.71E-05	0.00E+00
11	464197.2	3809429	1.18E-04	4.10E-04	0.00E+00	1.18E-04	4.10E-04	0.00E+00	1.87E-05	8.22E-05	0.00E+00	1.13E-05	4.77E-05	0.00E+00
12	464183.3	3809428	1.20E-04	4.16E-04	0.00E+00	1.20E-04	4.16E-04	0.00E+00	1.89E-05	8.34E-05	0.00E+00	1.14E-05	4.84E-05	0.00E+00
13	464189.9	3809452	1.22E-04	4.24E-04	0.00E+00	1.22E-04	4.24E-04	0.00E+00	1.93E-05	8.50E-05	0.00E+00	1.16E-05	4.93E-05	0.00E+00
14	464334.9	3809454	1.06E-04	3.68E-04	0.00E+00	1.06E-04	3.68E-04	0.00E+00	1.67E-05	7.37E-05	0.00E+00	1.01E-05	4.27E-05	0.00E+00
15	464356.4	3809451	1.03E-04	3.59E-04	0.00E+00	1.03E-04	3.59E-04	0.00E+00	1.63E-05	7.20E-05	0.00E+00	9.86E-06	4.18E-05	0.00E+00
16	464457.1	3809494	9.92E-05	3.45E-04	0.00E+00	9.92E-05	3.45E-04	0.00E+00	1.57E-05	6.91E-05	0.00E+00	9.45E-06	4.01E-05	0.00E+00
17	464479.8	3809492	9.70E-05	3.37E-04	0.00E+00	9.70E-05	3.37E-04	0.00E+00	1.53E-05	6.75E-05	0.00E+00	9.25E-06	3.92E-05	0.00E+00
18	464502.5	3809475	9.34E-05	3.25E-04	0.00E+00	9.34E-05	3.25E-04	0.00E+00	1.48E-05	6.50E-05	0.00E+00	8.90E-06	3.77E-05	0.00E+00
19	464501.2	3809454	9.15E-05	3.18E-04	0.00E+00	9.15E-05	3.18E-04	0.00E+00	1.45E-05	6.37E-05	0.00E+00	8.72E-06	3.69E-05	0.00E+00
20	464762	3809391	7.04E-05	2.45E-04	0.00E+00	7.04E-05	2.45E-04	0.00E+00	1.11E-05	4.90E-05	0.00E+00	6.71E-06	2.84E-05	0.00E+00
21	464741.8	3809348	6.86E-05	2.38E-04	0.00E+00	6.86E-05	2.38E-04	0.00E+00	1.08E-05	4.78E-05	0.00E+00	6.54E-06	2.77E-05	0.00E+00
22	464726.7	3809315	6.71E-05	2.33E-04	0.00E+00	6.71E-05	2.33E-04	0.00E+00	1.06E-05	4.67E-05	0.00E+00	6.40E-06	2.71E-05	0.00E+00
23	464701.5	3809276	6.57E-05	2.28E-04	0.00E+00	6.57E-05	2.28E-04	0.00E+00	1.04E-05	4.57E-05	0.00E+00	6.26E-06	2.65E-05	0.00E+00
24	464688.9	3809256	6.50E-05	2.26E-04	0.00E+00	6.50E-05	2.26E-04	0.00E+00	1.03E-05	4.53E-05	0.00E+00	6.20E-06	2.63E-05	0.00E+00
25	464688.9	3809212	6.26E-05	2.18E-04	0.00E+00	6.26E-05	2.18E-04	0.00E+00	9.90E-06	4.36E-05	0.00E+00	5.97E-06	2.53E-05	0.00E+00
26	464680.1	3809172	6.12E-05	2.12E-04	0.00E+00	6.12E-05	2.12E-04	0.00E+00	9.67E-06	4.26E-05	0.00E+00	5.83E-06	2.47E-05	0.00E+00
27	464677.6	3809144	6.02E-05	2.09E-04	0.00E+00	6.02E-05	2.09E-04	0.00E+00	9.52E-06	4.19E-05	0.00E+00	5.74E-06	2.43E-05	0.00E+00
28	464666.2	3809129	6.02E-05	2.09E-04	0.00E+00	6.02E-05	2.09E-04	0.00E+00	9.52E-06	4.19E-05	0.00E+00	5.74E-06	2.43E-05	0.00E+00
29	464659.9	3809104	5.98E-05	2.08E-04	0.00E+00	5.98E-05	2.08E-04	0.00E+00	9.45E-06	4.16E-05	0.00E+00	5.70E-06	2.42E-05	0.00E+00
30	464653.7	3809089	5.97E-05	2.07E-04	0.00E+00	5.97E-05	2.07E-04	0.00E+00	9.44E-06	4.16E-05	0.00E+00	5.69E-06	2.41E-05	0.00E+00
31	464651.1	3809066	5.93E-05	2.06E-04	0.00E+00	5.93E-05	2.06E-04	0.00E+00	9.37E-06	4.13E-05	0.00E+00	5.65E-06	2.40E-05	0.00E+00
32	464638.5	3809043	5.95E-05	2.07E-04	0.00E+00	5.95E-05	2.07E-04	0.00E+00	9.41E-06	4.14E-05	0.00E+00	5.67E-06	2.40E-05	0.00E+00
33	464623.4	3809026	6.00E-05	2.08E-04	0.00E+00	6.00E-05	2.08E-04	0.00E+00	9.48E-06	4.18E-05	0.00E+00	5.72E-06	2.42E-05	0.00E+00
34	464734.3	3809236	6.19E-05	2.15E-04	0.00E+00	6.19E-05	2.15E-04	0.00E+00	9.79E-06	4.31E-05	0.00E+00	5.90E-06	2.50E-05	0.00E+00
35	464754.4	3809298	6.48E-05	2.25E-04	0.00E+00	6.48E-05	2.25E-04	0.00E+00	1.02E-05	4.51E-05	0.00E+00	6.17E-06	2.62E-05	0.00E+00
36	464774.6	3809338	6.65E-05	2.31E-04	0.00E+00	6.65E-05	2.31E-04	0.00E+00	1.05E-05	4.63E-05	0.00E+00	6.33E-06	2.68E-05	0.00E+00
37	464807.3	3809325	6.43E-05	2.23E-04	0.00E+00	6.43E-05	2.23E-04	0.00E+00	1.02E-05	4.48E-05	0.00E+00	6.13E-06	2.60E-05	0.00E+00
38	464792.2	3809288	6.27E-05	2.18E-04	0.00E+00	6.27E-05	2.18E-04	0.00E+00	9.90E-06	4.36E-05	0.00E+00	5.97E-06	2.53E-05	0.00E+00
39	464762	3809242	6.12E-05	2.13E-04	0.00E+00	6.12E-05	2.13E-04	0.00E+00	9.67E-06	4.26E-05	0.00E+00	5.83E-06	2.47E-05	0.00E+00
40	464779.6	3809482	7.52E-05	2.61E-04	0.00E+00	7.52E-05	2.61E-04	0.00E+00	1.19E-05	5.23E-05	0.00E+00	7.16E-06	3.04E-05	0.00E+00
41	464797.3	3809477	7.38E-05	2.56E-04	0.00E+00	7.38E-05	2.56E-04	0.00E+00	1.17E-05	5.14E-05	0.00E+00	7.03E-06	2.98E-05	0.00E+00
42	464687.7	3809497	8.18E-05	2.84E-04	0.00E+00	8.18E-05	2.84E-04	0.00E+00	1.29E-05	5.69E-05	0.00E+00	7.80E-06	3.30E-05	0.00E+00
43	464628.5	3809496	8.59E-05	2.98E-04	0.00E+00	8.59E-05	2.98E-04	0.00E+00	1.36E-05	5.98E-05	0.00E+00	8.18E-06	3.47E-05	0.00E+00
44	464574.3	3809504	9.05E-05	3.15E-04	0.00E+00	9.05E-05	3.15E-04	0.00E+00	1.43E-05	6.30E-05	0.00E+00	8.63E-06	3.66E-05	0.00E+00
45	464556.7	3809480	8.97E-05	3.11E-04	0.00E+00	8.97E-05	3.11E-04	0.00E+00	1.42E-05	6.24E-05	0.00E+00	8.54E-06	3.62E-05	0.00E+00
46	464571.8	3809702	1.05E-04	3.66E-04	0.00E+00	1.05E-04	3.66E-04	0.00E+00	1.67E-05	7.34E-05	0.00E+00	1.00E-05	4.26E-05	0.00E+00
47	464569.2	3809674	1.04E-04	3.62E-04	0.00E+00	1.04E-04	3.62E-04	0.00E+00	1.65E-05	7.25E-05	0.00E+00	9.92E-06	4.20E-05	0.00E+00
48	464573	3809656	1.02E-04	3.56E-04	0.00E+00	1.02E-04	3.56E-04	0.00E+00	1.62E-05	7.13E-05	0.00E+00	9.77E-06	4.14E-05	0.00E+00
49	464564.2	3809604	9.96E-05	3.46E-04	0.00E+00	9.96E-05	3.46E-04	0.00E+00	1.57E-05	6.93E-05	0.00E+00	9.49E-06	4.02E-05	0.00E+00
50	464560.4	3809572	9.74E-05	3.38E-04	0.00E+00	9.74E-05	3.38E-04	0.00E+00	1.54E-05	6.78E-05	0.00E+00	9.28E-06	3.93E-05	0.00E+00
51	464615.9	3809585	9.35E-05	3.25E-04	0.00E+00	9.35E-05	3.25E-04	0.00E+00	1.48E-05	6.51E-05	0.00E+00	8.91E-06	3.78E-05	0.00E+00
52	464671.3	3809601	8.99E-05	3.12E-04	0.00E+00	8.99E-05	3.12E-04	0.00E+00	1.42E-05	6.26E-05	0.00E+00	8.57E-06	3.63E-05	0.00E+00
53	464690.2	3809684	9.25E-05	3.21E-04	0.00E+00	9.25E-05	3.21E-04	0.00E+00	1.46E-05	6.44E-05	0.00E+00	8.82E-06	3.74E-05	0.00E+00
54	464683.9	3809662	9.21E-05	3.20E-04	0.00E+00	9.21E-05	3.20E-04	0.00E+00	1.46E-05	6.41E-05	0.00E+00	8.78E-06	3.72E-05	0.00E+00
55	464687.7	3809633	9.03E-05	3.14E-04	0.00E+00	9.03E-05	3.14E-04	0.00E+00	1.43E-05	6.28E-05	0.00E+00	8.60E-06	3.65E-05	0.00E+00
56	464700.3	3809576	8.61E-05	2.99E-04	0.00E+00	8.61E-05	2.99E-04	0.00E+00	1.36E-05	5.99E-05	0.00E+00	8.21E-06	3.48E-05	0.00E+00
57	464762	3809586	8.20E-05	2.85E-04	0.00E+00	8.20E-05	2.85E-04	0.00E+00	1.30E-05	5.71E-05	0.00E+00	7.82E-06	3.31E-05	0.00E+00
58	463181.2	3810388	1.43E-03	4.98E-03	0.00E+00	1.43E-03	4.98E-03	0.00E+00	2.27E-04	9.98E-04	0.00E+00	1.37E-04	5.79E-04	0.00E+00
59	463136.4	3810389	1.36E-03	4.73E-03	0.00E+00	1.36E-03	4.73E-03	0.00E+00	2.15E-04	9.47E-04	0.00E+00	1.30E-04	5.49E-04	0.00E+00
60	463133.1	3810423	1.18E-03	4.11E-03	0.00E+00	1.18E-03	4.11E-03	0.00E+00	1.87E-04	8.24E-04	0.00E+00	1.13E-04	4.78E-04	0.00E+00
61	463161.5	3810419	1.25E-03	4.34E-03	0.00E+00	1.25E-03	4.34E-03	0.00E+00	1.97E-04	8.69E-04	0.00E+00	1.19E-04	5.05E-04	0.00E+00
62	463189.9	3810422	1.27E-03	4.40E-03	0.00E+00	1.27E-03	4.40E-03	0.00E+00	2.00E-04	8.82E-04	0.00E+00	1.21E-04	5.12E-04	0.00E+00
63	463183.4	3810447	1.15E-03	4.00E-03	0.00E+00	1.15E-03	4.00E-03	0.00E+00	1.82E-04	8.03E-04	0.00E+00	1.10E-04	4.66E-04	0.00E+00
64	463135.3	3810447	1.09E-03	3.77E-03	0.00E+00	1.09E-03	3.77E-03	0.00E+00	1.72E-04	7.56E-04	0.00E+00	1.04E-04	4.39E-04	0.00E+00
65	462879.5	3810504	3.94E-04	1.37E-03	0.00E+00	3.94E-04	1.37E-03	0.00E+00	6.22E-05	2.74E-04	0.00E+00	3.75E-05	1.59E-04	0.00E+00
66	463015.1	3810591	5.11E-04	1.78E-03	0.00E+00	5.11E-04	1.78E-03	0.00E+00	8.08E-05	3.56E-04	0.00E+00	4.87E-05	2.06E-04	0.00E+00
67	463045.7	3810588	5.61E-04	1.95E-03	0.00E+00	5.61E-04	1.95E-03	0.00E+00	8.86E-05	3.90E-04	0.00E+00	5.34E-05	2.27E-04	0.00E+00
68	463080.6	3810585	6.18E-04	2.15E-03	0.00E+00	6.18E-04	2.15E-03	0.00E+00	9.77E-05	4.30E-04	0.00E+00	5.89E-05	2.50E-04	0.00E+00
69	463051.1	3810614	5.31E-04	1.84E-03	0.00E+00	5.31E-04	1.84E-03	0.00E+00	8.39E-05	3.69E-04	0.00E+00	5.06E-05	2.14E-04	0.00E+00
70	463044.6	3810632	5.00E-04	1.74E-03	0.00E+00	5.00E-04	1.74E-03	0.00E+00	7.90E-05	3.48E-04	0.00E+00	4.76E-05	2.02E-04	0.00E+00
71	463026	3810723	3.86E-04	1.34E-03	0.00E+00	3.86E-04	1.34E-03	0.00E+00	6.10E-05	2.69E-04	0.00E+00	3.68E-05	1.56E-04	0.00E+00
72	463055.5	3810728	4.11E-04	1.43E-03	0.00E+00	4.11E-04	1.43E-03	0.00E+00	6.50E-05	2.86E-04	0.00E+00	3.92E-05	1.66E-04	0.00E+00
73	463085	3810728	4.37E-04	1.52E-03	0.00E+00	4.37E-04	1.52E-03	0.00E+00	6.90E-05	3.04E-04	0.00E+00	4.16E-05	1.76E-04	0.00E+00
74	463085	3810706	4.61E-04	1.60E-03	0.00E+00	4.61E-04	1.60E-03	0.00E+00	7.28E-05	3.21E-04	0.00E+00	4.39E-05	1.86E-04	0.00E+00
75	463050	3810700	4.30E-04	1.49E-03	0.00E+00	4.30E-04	1.49E-03	0.00E+00	6.79E-05	2.99E-04	0.00E+00	4.10E-05	1.74E-04	0.00E+00
76	463015.1	3810696	3.99E-04	1.39E-03	0.00E+00	3.99E-04	1.39E-03	0.00E+00	6.31E-05	2.78E-04	0.00E+00	3.81E-05	1.61E-04	0.00E+00
77	463015.1	3810674	4.20E-04	1.46E-03	0.00E+00	4.20E-04	1.46E-03	0.00E+00	6.63E-05	2.92E-04	0.00E+00	4.00E-05	1.69E-04	0.00E+00
78	463045.7	3810674	4.52E-04	1.57E-03	0.00E+00	4.52E-04	1.57E-03	0.00E+00	7.15E-05	3.15E-04	0.00E+00	4.31E-05	1.83E-04	0.00E+00
79	463082.8	3810673	4.94E-04	1.72E-03	0.00E+00	4.94E-04	1.72E-03	0.00E+00	7.81E-05	3.44E-04	0.00E+00	4.71E-05	2.00E-04	0.00E+00
80	463132	3810682	5.34E-04	1.85E-03	0.00E+00	5.34E-04	1.85E-03	0.00E+00	8.43E-05	3.71E-04	0.00E+00	5.08E-05	2.16E-04	0.00E+00
81	463171.4	3810677	5.73E-04	1.99E-03	0.00E+00	5.73E-04	1.99E-03	0.00E+00	9.05E-05	3.99E-04	0.00E+00	5.46E-05	2.31E-04	0.00E+00
82	463210.7	3810676	6.04E-04	2.10E-03	0.00E+00	6.04E-04	2.10E-03	0.00E+00	9.55E-05	4.21E-04	0.00E+00	5.76E-05	2.44E-04	0.00E+00
83	463251.2	3810676	6.20E-04	2.15E-03	0.00E+00	6.20E-04	2.15E-03	0.00E+00	9.79E-05	4.31E-04	0.00E+00	5.91E-05	2.50E-04	0.00E+00
84	463261	3810706	5.84E-04	2.03E-03	0.00E+00	5.84E-04	2.03E-03	0.00E+00	9.22E-05	4.06E-04	0.00E+00	5.56E-05	2.36E-04	0.00E+00
85	463211.8	3810704	5.63E-04	1.95E-03	0.00E+00	5.63E-04	1.95E-03	0.00E+00	8.89E-05	3.92E-04	0.00E+00	5.36E-05	2.27E-04	0.00E+00
86	463157.2	3810701	5.29E-04	1.84E-03	0.00E+00	5.29E-04	1.84E-03	0.00E+00	8.35E-05	3.68E-04	0.00E+00	5.04E-05	2.14E-04	0.00E+00
87	463123.3	3810703	4.98E-04	1.73E-03	0.00E+00	4.98E-04	1.73E-03	0.00E+00	7.87E-05	3.47E-04	0.00E+00	4.75E-05	2.01E-04	0.00E+00
88	463128.7	3810727	4.75E-04	1.65E-03	0.00E+00	4.75E-04	1.65E-03	0.00E+00	7.51E-05	3.31E-04	0.00E+00	4.53E-05	1.92E-04	0.00E+00

89	463156.1	3810727	4.96E-04	1.72E-03	0.00E+00	4.96E-04	1.72E-03	0.00E+00	7.83E-05	3.45E-04	0.00E+00	4.72E-05	2.00E-04	0.00E+00
90	463211.8	3810722	5.39E-04	1.87E-03	0.00E+00	5.39E-04	1.87E-03	0.00E+00	8.52E-05	3.75E-04	0.00E+00	5.14E-05	2.18E-04	0.00E+00
91	463233.7	3810722	5.49E-04	1.91E-03	0.00E+00	5.49E-04	1.91E-03	0.00E+00	8.67E-05	3.82E-04	0.00E+00	5.23E-05	2.22E-04	0.00E+00
92	462372.4	3810511	1.01E-04	3.50E-04	0.00E+00	1.01E-04	3.50E-04	0.00E+00	1.59E-05	7.00E-05	0.00E+00	9.59E-06	4.06E-05	0.00E+00
93	462370.2	3810481	1.03E-04	3.58E-04	0.00E+00	1.03E-04	3.58E-04	0.00E+00	1.63E-05	7.17E-05	0.00E+00	9.82E-06	4.16E-05	0.00E+00
94	462348.3	3810474	9.97E-05	3.46E-04	0.00E+00	9.97E-05	3.46E-04	0.00E+00	1.58E-05	6.94E-05	0.00E+00	9.50E-06	4.03E-05	0.00E+00
95	462340.7	3810495	9.67E-05	3.36E-04	0.00E+00	9.67E-05	3.36E-04	0.00E+00	1.53E-05	6.73E-05	0.00E+00	9.22E-06	3.91E-05	0.00E+00
96	462343.9	3810520	9.53E-05	3.31E-04	0.00E+00	9.53E-05	3.31E-04	0.00E+00	1.51E-05	6.63E-05	0.00E+00	9.08E-06	3.85E-05	0.00E+00
97	462310.1	3810525	8.99E-05	3.12E-04	0.00E+00	8.99E-05	3.12E-04	0.00E+00	1.42E-05	6.26E-05	0.00E+00	8.57E-06	3.63E-05	0.00E+00
98	462309	3810505	9.12E-05	3.17E-04	0.00E+00	9.12E-05	3.17E-04	0.00E+00	1.44E-05	6.35E-05	0.00E+00	8.69E-06	3.68E-05	0.00E+00
99	462311.2	3810481	9.32E-05	3.24E-04	0.00E+00	9.32E-05	3.24E-04	0.00E+00	1.47E-05	6.49E-05	0.00E+00	8.88E-06	3.76E-05	0.00E+00
100	461982.9	3809273	2.80E-05	9.72E-05	0.00E+00	2.80E-05	9.72E-05	0.00E+00	4.42E-06	1.95E-05	0.00E+00	2.67E-06	1.13E-05	0.00E+00
101	462009.2	3809272	2.88E-05	1.00E-04	0.00E+00	2.88E-05	1.00E-04	0.00E+00	4.55E-06	2.00E-05	0.00E+00	2.74E-06	1.16E-05	0.00E+00
102	462034.8	3809272	3.01E-05	1.05E-04	0.00E+00	3.01E-05	1.05E-04	0.00E+00	4.76E-06	2.10E-05	0.00E+00	2.87E-06	1.22E-05	0.00E+00
103	462075	3809267	3.15E-05	1.10E-04	0.00E+00	3.15E-05	1.10E-04	0.00E+00	4.98E-06	2.20E-05	0.00E+00	3.01E-06	1.27E-05	0.00E+00
104	462054.1	3809299	3.12E-05	1.09E-04	0.00E+00	3.12E-05	1.09E-04	0.00E+00	4.94E-06	2.18E-05	0.00E+00	2.98E-06	1.26E-05	0.00E+00
105	462013.1	3809299	2.97E-05	1.03E-04	0.00E+00	2.97E-05	1.03E-04	0.00E+00	4.70E-06	2.07E-05	0.00E+00	2.83E-06	1.20E-05	0.00E+00
106	462588.7	3809426	8.27E-05	2.87E-04	0.00E+00	8.27E-05	2.87E-04	0.00E+00	1.31E-05	5.76E-05	0.00E+00	7.89E-06	3.34E-05	0.00E+00
107	462568.6	3809208	4.91E-05	1.70E-04	0.00E+00	4.91E-05	1.70E-04	0.00E+00	7.75E-06	3.41E-05	0.00E+00	4.67E-06	1.98E-05	0.00E+00
108	462546.9	3809210	4.83E-05	1.68E-04	0.00E+00	4.83E-05	1.68E-04	0.00E+00	7.63E-06	3.36E-05	0.00E+00	4.60E-06	1.95E-05	0.00E+00
109	462539.2	3809228	5.01E-05	1.74E-04	0.00E+00	5.01E-05	1.74E-04	0.00E+00	7.91E-06	3.48E-05	0.00E+00	4.77E-06	2.02E-05	0.00E+00
110	462575.6	3809220	5.09E-05	1.77E-04	0.00E+00	5.09E-05	1.77E-04	0.00E+00	8.04E-06	3.54E-05	0.00E+00	4.85E-06	2.06E-05	0.00E+00
111	462061.1	3808890	1.90E-05	6.61E-05	0.00E+00	1.90E-05	6.61E-05	0.00E+00	3.01E-06	1.33E-05	0.00E+00	1.81E-06	7.69E-06	0.00E+00
112	462057.2	3808924	1.98E-05	6.86E-05	0.00E+00	1.98E-05	6.86E-05	0.00E+00	3.12E-06	1.38E-05	0.00E+00	1.88E-06	7.98E-06	0.00E+00
113	462027.8	3808930	1.94E-05	6.75E-05	0.00E+00	1.94E-05	6.75E-05	0.00E+00	3.07E-06	1.35E-05	0.00E+00	1.85E-06	7.85E-06	0.00E+00
114	462003	3808925	1.92E-05	6.66E-05	0.00E+00	1.92E-05	6.66E-05	0.00E+00	3.03E-06	1.33E-05	0.00E+00	1.83E-06	7.74E-06	0.00E+00
115	461999.2	3808898	1.85E-05	6.44E-05	0.00E+00	1.85E-05	6.44E-05	0.00E+00	2.93E-06	1.29E-05	0.00E+00	1.77E-06	7.49E-06	0.00E+00
116	462027.8	3808902	1.89E-05	6.57E-05	0.00E+00	1.89E-05	6.57E-05	0.00E+00	2.99E-06	1.32E-05	0.00E+00	1.80E-06	7.64E-06	0.00E+00
117	461996.9	3808863	1.76E-05	6.12E-05	0.00E+00	1.76E-05	6.12E-05	0.00E+00	2.78E-06	1.23E-05	0.00E+00	1.68E-06	7.11E-06	0.00E+00
118	462025.5	3808859	1.79E-05	6.21E-05	0.00E+00	1.79E-05	6.21E-05	0.00E+00	2.82E-06	1.24E-05	0.00E+00	1.70E-06	7.22E-06	0.00E+00
119	462059.5	3808857	1.82E-05	6.32E-05	0.00E+00	1.82E-05	6.32E-05	0.00E+00	2.88E-06	1.27E-05	0.00E+00	1.73E-06	7.35E-06	0.00E+00
120	462024.7	3809027	2.25E-05	7.82E-05	0.00E+00	2.25E-05	7.82E-05	0.00E+00	3.56E-06	1.57E-05	0.00E+00	2.14E-06	9.09E-06	0.00E+00
121	462010.8	3809029	2.24E-05	7.78E-05	0.00E+00	2.24E-05	7.78E-05	0.00E+00	3.54E-06	1.56E-05	0.00E+00	2.13E-06	9.04E-06	0.00E+00

			UnMitigated	T2	T2L3	T4
			2.49E-02	2.49E-02	3.93E-03	2.37E-03
			Yr 1	Yr 1	Yr 1	Yr 1
1	464183.1	3809460	2.16E-03	2.16E-03	3.41E-04	2.06E-04
2	464199.3	3809460	2.12E-03	2.12E-03	3.35E-04	2.02E-04
3	464208	3809460	2.10E-03	2.10E-03	3.32E-04	2.00E-04
4	464210.3	3809448	2.07E-03	2.07E-03	3.27E-04	1.97E-04
5	464196.4	3809447	2.10E-03	2.10E-03	3.31E-04	2.00E-04
6	464181.6	3809446	2.13E-03	2.13E-03	3.36E-04	2.03E-04
7	464181.6	3809437	2.11E-03	2.11E-03	3.33E-04	2.01E-04
8	464190.9	3809436	2.08E-03	2.08E-03	3.29E-04	1.98E-04
9	464207.4	3809436	2.04E-03	2.04E-03	3.23E-04	1.95E-04
10	464208.4	3809428	2.02E-03	2.02E-03	3.20E-04	1.93E-04
11	464197.2	3809429	2.05E-03	2.05E-03	3.24E-04	1.95E-04
12	464183.3	3809428	2.08E-03	2.08E-03	3.29E-04	1.98E-04
13	464189.9	3809452	2.12E-03	2.12E-03	3.35E-04	2.02E-04
14	464334.9	3809454	1.84E-03	1.84E-03	2.90E-04	1.75E-04
15	464356.4	3809451	1.80E-03	1.80E-03	2.84E-04	1.71E-04
16	464457.1	3809494	1.72E-03	1.72E-03	2.72E-04	1.64E-04
17	464479.8	3809492	1.69E-03	1.69E-03	2.66E-04	1.61E-04
18	464502.5	3809475	1.62E-03	1.62E-03	2.56E-04	1.55E-04
19	464501.2	3809454	1.59E-03	1.59E-03	2.51E-04	1.51E-04
20	464762	3809391	1.22E-03	1.22E-03	1.93E-04	1.17E-04
21	464741.8	3809348	1.19E-03	1.19E-03	1.88E-04	1.14E-04
22	464726.7	3809315	1.17E-03	1.17E-03	1.84E-04	1.11E-04
23	464701.5	3809276	1.14E-03	1.14E-03	1.80E-04	1.09E-04
24	464688.9	3809256	1.13E-03	1.13E-03	1.78E-04	1.08E-04
25	464688.9	3809212	1.09E-03	1.09E-03	1.72E-04	1.04E-04
26	464680.1	3809172	1.06E-03	1.06E-03	1.68E-04	1.01E-04
27	464677.6	3809144	1.05E-03	1.05E-03	1.65E-04	9.97E-05
28	464666.2	3809129	1.05E-03	1.05E-03	1.65E-04	9.97E-05
29	464659.9	3809104	1.04E-03	1.04E-03	1.64E-04	9.90E-05
30	464653.7	3809089	1.04E-03	1.04E-03	1.64E-04	9.89E-05
31	464651.1	3809066	1.03E-03	1.03E-03	1.63E-04	9.82E-05
32	464638.5	3809043	1.03E-03	1.03E-03	1.63E-04	9.85E-05
33	464623.4	3809026	1.04E-03	1.04E-03	1.65E-04	9.93E-05
34	464734.3	3809236	1.08E-03	1.08E-03	1.70E-04	1.03E-04
35	464754.4	3809298	1.13E-03	1.13E-03	1.78E-04	1.07E-04
36	464774.6	3809338	1.15E-03	1.15E-03	1.82E-04	1.10E-04
37	464807.3	3809325	1.12E-03	1.12E-03	1.77E-04	1.06E-04
38	464792.2	3809288	1.09E-03	1.09E-03	1.72E-04	1.04E-04
39	464762	3809242	1.06E-03	1.06E-03	1.68E-04	1.01E-04
40	464779.6	3809482	1.31E-03	1.31E-03	2.06E-04	1.24E-04
41	464797.3	3809477	1.28E-03	1.28E-03	2.02E-04	1.22E-04
42	464687.7	3809497	1.42E-03	1.42E-03	2.25E-04	1.35E-04
43	464628.5	3809496	1.49E-03	1.49E-03	2.36E-04	1.42E-04
44	464574.3	3809504	1.57E-03	1.57E-03	2.48E-04	1.50E-04

45	464556.7	3809480	1.56E-03	1.56E-03	2.46E-04	1.48E-04
46	464571.8	3809702	1.83E-03	1.83E-03	2.89E-04	1.74E-04
47	464569.2	3809674	1.81E-03	1.81E-03	2.86E-04	1.72E-04
48	464573	3809656	1.78E-03	1.78E-03	2.81E-04	1.70E-04
49	464564.2	3809604	1.73E-03	1.73E-03	2.73E-04	1.65E-04
50	464560.4	3809572	1.69E-03	1.69E-03	2.67E-04	1.61E-04
51	464615.9	3809585	1.62E-03	1.62E-03	2.57E-04	1.55E-04
52	464671.3	3809601	1.56E-03	1.56E-03	2.47E-04	1.49E-04
53	464690.2	3809684	1.61E-03	1.61E-03	2.54E-04	1.53E-04
54	464683.9	3809662	1.60E-03	1.60E-03	2.53E-04	1.53E-04
55	464687.7	3809633	1.57E-03	1.57E-03	2.48E-04	1.49E-04
56	464700.3	3809576	1.50E-03	1.50E-03	2.36E-04	1.43E-04
57	464762	3809586	1.42E-03	1.42E-03	2.25E-04	1.36E-04
58	463181.2	3810388	2.49E-02	2.49E-02	3.93E-03	2.37E-03
59	463136.4	3810389	2.36E-02	2.36E-02	3.73E-03	2.25E-03
60	463133.1	3810423	2.05E-02	2.05E-02	3.25E-03	1.96E-03
61	463161.5	3810419	2.17E-02	2.17E-02	3.43E-03	2.07E-03
62	463189.9	3810422	2.20E-02	2.20E-02	3.48E-03	2.10E-03
63	463183.4	3810447	2.00E-02	2.00E-02	3.16E-03	1.91E-03
64	463135.3	3810447	1.89E-02	1.89E-02	2.98E-03	1.80E-03
65	462879.5	3810504	6.84E-03	6.84E-03	1.08E-03	6.52E-04
66	463015.1	3810591	8.88E-03	8.88E-03	1.40E-03	8.46E-04
67	463045.7	3810588	9.74E-03	9.74E-03	1.54E-03	9.28E-04
68	463080.6	3810585	1.07E-02	1.07E-02	1.70E-03	1.02E-03
69	463051.1	3810614	9.22E-03	9.22E-03	1.46E-03	8.79E-04
70	463044.6	3810632	8.68E-03	8.68E-03	1.37E-03	8.28E-04
71	463026	3810723	6.71E-03	6.71E-03	1.06E-03	6.39E-04
72	463055.5	3810728	7.14E-03	7.14E-03	1.13E-03	6.80E-04
73	463085	3810728	7.59E-03	7.59E-03	1.20E-03	7.23E-04
74	463085	3810706	8.01E-03	8.01E-03	1.26E-03	7.63E-04
75	463050	3810700	7.47E-03	7.47E-03	1.18E-03	7.12E-04
76	463015.1	3810696	6.94E-03	6.94E-03	1.10E-03	6.61E-04
77	463015.1	3810674	7.29E-03	7.29E-03	1.15E-03	6.95E-04
78	463045.7	3810674	7.86E-03	7.86E-03	1.24E-03	7.49E-04
79	463082.8	3810673	8.58E-03	8.58E-03	1.36E-03	8.18E-04
80	463132	3810682	9.27E-03	9.27E-03	1.46E-03	8.83E-04
81	463171.4	3810677	9.95E-03	9.95E-03	1.57E-03	9.48E-04
82	463210.7	3810676	1.05E-02	1.05E-02	1.66E-03	1.00E-03
83	463251.2	3810676	1.08E-02	1.08E-02	1.70E-03	1.03E-03
84	463261	3810706	1.01E-02	1.01E-02	1.60E-03	9.66E-04
85	463211.8	3810704	9.77E-03	9.77E-03	1.54E-03	9.31E-04
86	463157.2	3810701	9.18E-03	9.18E-03	1.45E-03	8.75E-04
87	463123.3	3810703	8.65E-03	8.65E-03	1.37E-03	8.24E-04
88	463128.7	3810727	8.26E-03	8.26E-03	1.30E-03	7.87E-04
89	463156.1	3810727	8.61E-03	8.61E-03	1.36E-03	8.20E-04
90	463211.8	3810722	9.36E-03	9.36E-03	1.48E-03	8.92E-04
91	463233.7	3810722	9.53E-03	9.53E-03	1.51E-03	9.08E-04

92	462372.4	3810511	1.75E-03	1.75E-03	2.76E-04	1.67E-04
93	462370.2	3810481	1.79E-03	1.79E-03	2.83E-04	1.70E-04
94	462348.3	3810474	1.73E-03	1.73E-03	2.74E-04	1.65E-04
95	462340.7	3810495	1.68E-03	1.68E-03	2.65E-04	1.60E-04
96	462343.9	3810520	1.66E-03	1.66E-03	2.62E-04	1.58E-04
97	462310.1	3810525	1.56E-03	1.56E-03	2.47E-04	1.49E-04
98	462309	3810505	1.58E-03	1.58E-03	2.50E-04	1.51E-04
99	462311.2	3810481	1.62E-03	1.62E-03	2.56E-04	1.54E-04
100	461982.9	3809273	4.86E-04	4.86E-04	7.68E-05	4.63E-05
101	462009.2	3809272	5.00E-04	5.00E-04	7.90E-05	4.77E-05
102	462034.8	3809272	5.23E-04	5.23E-04	8.27E-05	4.99E-05
103	462075	3809267	5.48E-04	5.48E-04	8.65E-05	5.22E-05
104	462054.1	3809299	5.43E-04	5.43E-04	8.58E-05	5.17E-05
105	462013.1	3809299	5.16E-04	5.16E-04	8.16E-05	4.92E-05
106	462588.7	3809426	1.44E-03	1.44E-03	2.27E-04	1.37E-04
107	462568.6	3809208	8.52E-04	8.52E-04	1.35E-04	8.12E-05
108	462546.9	3809210	8.39E-04	8.39E-04	1.33E-04	8.00E-05
109	462539.2	3809228	8.69E-04	8.69E-04	1.37E-04	8.29E-05
110	462575.6	3809220	8.84E-04	8.84E-04	1.40E-04	8.42E-05
111	462061.1	3808890	3.31E-04	3.31E-04	5.22E-05	3.15E-05
112	462057.2	3808924	3.43E-04	3.43E-04	5.42E-05	3.27E-05
113	462027.8	3808930	3.38E-04	3.38E-04	5.34E-05	3.22E-05
114	462003	3808925	3.33E-04	3.33E-04	5.26E-05	3.17E-05
115	461999.2	3808898	3.22E-04	3.22E-04	5.09E-05	3.07E-05
116	462027.8	3808902	3.29E-04	3.29E-04	5.19E-05	3.13E-05
117	461996.9	3808863	0.0003058	3.06E-04	4.83E-05	2.91E-05
118	462025.5	3808859	0.0003103	3.10E-04	4.90E-05	2.96E-05
119	462059.5	3808857	0.000316	3.16E-04	4.99E-05	3.01E-05
120	462024.7	3809027	0.0003908	3.91E-04	6.18E-05	3.72E-05
121	462010.8	3809029	0.0003889	3.89E-04	6.15E-05	3.71E-05

	Daily Trips				
	1311				
	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Percentage	72.5%	4.6%	5.7%	17.2%	100%
# Daily Vehicles	950.48	60.31	74.73	225.49	1311
# Annual Vehicles	346,923	22,012	27,275	82,305	478,515

Truck Travel

Onsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	22,012	16.7%	1.11E+01
3-Axle Trks	27,275	20.7%	2.99E-01
4-Axle Trks	82,305	62.5%	2.22E+00
Total	131,592	100%	---

DPM Lbs/ Yr	ONSITE1	ONSITE2					Total
Distance (m)	978.7	372.2					1350.9
%	100%	0%	0%	0%	0%	0%	100%
2-Axle Trks	6.74E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E+00
3-Axle Trks	1.82E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-01
4-Axle Trks	1.35E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E+00
Total	8.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E+00

Offsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	22,012	16.7%	9.50E-01
3-Axle Trks	27,275	20.7%	5.16E-01
4-Axle Trks	82,305	62.5%	4.75E+00
Total	131,592	100%	---

DPM Lbs/ Yr	MAIN_IN	MAIN_OUT					Total
Gas Only	N	N	N	N	N	N	
Distance (m)	2485	2494.8	0	0	0	0	4979.8
%	100%	100%	0%	0%	0%	0%	200%
2-Axle Trks	1.47E+00	1.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E+00
3-Axle Trks	7.97E-01	8.00E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E+00
4-Axle Trks	7.34E+00	7.37E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E+01
Total	9.61E+00	9.65E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E+01

Truck Idle

# of Idling Pts	38												
Truck Idling						Idle							Total
Category	# of Trucks / Yr	Idle EF (lbs / Event)	Time (Hr)	Lbs/ Yr	Lbs / Yr /Unit	38	0	0	0	0	0		38
2-Axle Trks	22,012	6.06E-05	0.25	3.34E-01	8.78E-03	3.34E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		3.34E-01
3-Axle Trks	27,275	9.32E-06	0.25	6.36E-02	1.67E-03	6.36E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		6.36E-02
4-Axle Trks	82,305	7.59E-05	0.25	1.56E+00	4.11E-02	1.56E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.56E+00
Total	131,592	--	--	1.96E+00	5.16E-02	5.16E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.96E+00

TRUs

Percent of Trucks	0		# of Units	1	
Onsite TRU Emissions					
Category	Percentage	# of TRUs / Yr	Time (Hr)	*DPM EF (lbs/Event)	Emissions (lb/Yr)
2-Axle Trks	15.5	0	0.50	4.19E-03	0.00
3-Axle Trks	4.9	0			0.00
4-Axle Trks	24.3	0			0.00
Total	45	0	Emission/Unit		0.00

* TRU EF * BHP * Load factor * Time in hours

Vehicle Emissions

Vehicle Travel Percentage / Count			
Category	# of Vehicles / Yr	% LDA	% LDT
Passenger Vehicles	346,923	72%	27.73%
# Vehicles		250,716	96,208

Category	TOG Exhaust EF (lb/Mile)	TOG Runloss EF (lb/Mile)
LDA	2.62E-05	4.68E-04
LDT	5.44E-05	1.10E-03

CARB TOG Speciation Profile Run Exhaust			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
75070	Acetaldehyde	2.80E-03	1.84E-02	1.46E-02
107028	Acrolein	1.30E-03	8.53E-03	6.80E-03
71432	Benzene	2.47E-02	1.62E-01	1.29E-01
106990	1,3-Butadiene	5.50E-03	3.61E-02	2.88E-02
100414	Ethylbenzene	1.05E-02	6.89E-02	5.49E-02
50000	Formaldehyde	1.58E-02	1.04E-01	8.26E-02
110543	Hexane	1.60E-02	1.05E-01	8.37E-02
67561	Methanol	1.20E-03	7.87E-03	6.28E-03
78933	Methyl Ethyl Ketone	2.00E-04	1.31E-03	1.05E-03
91203	Naphthalene	5.00E-04	3.28E-03	2.61E-03
115071	Propylene	3.06E-02	2.01E-01	1.60E-01
100425	Styrene	1.20E-03	7.87E-03	6.28E-03
108883	Toluene	5.76E-02	3.78E-01	3.01E-01
1330207	Xylenes	4.80E-02	3.15E-01	2.51E-01
9901	Diesel	6.00E-03	3.32E+00	1.27E+00

CARB TOG Speciation Profile Evaporative Losses			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
71432	Benzene	3.600E-03	2.36E-02	1.88E-02
100414	Ethylbenzene	1.180E-03	7.74E-03	6.17E-03
110543	Hexane	1.540E-02	1.01E-01	8.05E-02
108883	Toluene	1.700E-02	1.11E-01	8.89E-02
1330207	Xylenes	5.780E-03	3.79E-02	3.02E-02

Vehicle Emissions Travel Summary

Emissions Summary				Source Col	1		2		3		4		5		6		7		8		9		10		11		12			
				Vehicles	ONSITE1		ONSITE2		0		0		0		0		MAIN_IN		MAIN_OUT		0		0		0		0		Total Percentage	Total Distance
				Cars	0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
					15.46%		5.88%		0.00%		0.00%		0.00%		0.00%		39.25%		39.41%		0.00%		0.00%		0.00%		0.00%		100.00%	6330.7
				Trucks	0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
					0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.01%		0.01%		0.00%		0.00%		0.00%		0.00%			
CAS#	Chemical Name	Lbs/mi/Hr	Lbs/mi/ Yr		Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr
75070	Acetaldehyde	1.10E-05	3.30E-02		1.70086E-06	0.00510259	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-06	1.30E-02	4.34E-06	1.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-05	3.11E-02
107028	Acrolein	5.11E-06	1.53E-02		7.89687E-07	0.00236906	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-06	6.02E-03	2.01E-06	6.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-06	1.44E-02
71432	Benzene	1.11E-04	3.34E-01		1.71909E-05	0.05157263	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-05	1.31E-01	4.38E-05	1.31E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	3.14E-01
106990	1,3-Butadiene	2.16E-05	6.48E-02		3.34098E-06	0.01002295	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-06	2.54E-02	8.52E-06	2.55E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-05	6.10E-02
100414	Ethylbenzene	4.59E-05	1.38E-01		7.09503E-06	0.0212851	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-05	5.40E-02	1.81E-05	5.43E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.32E-05	1.30E-01
50000	Formaldehyde	6.21E-05	1.86E-01		9.59773E-06	0.0287932	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-05	7.31E-02	2.45E-05	7.34E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.84E-05	1.75E-01
110543	Hexane	1.23E-04	3.70E-01		1.9074E-05	0.05722193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-05	1.45E-01	4.86E-05	1.46E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-04	3.48E-01
67561	Methanol	4.72E-06	1.41E-02		7.28942E-07	0.00218683	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	5.55E-03	1.86E-06	5.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-06	1.33E-02
78933	Methyl Ethyl Ketone	7.86E-07	2.36E-03		1.2149E-07	0.00036447	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-07	9.25E-04	3.10E-07	9.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.40E-07	2.22E-03
91203	Naphthalene	1.96E-06	5.89E-03		3.03726E-07	0.00091118	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-07	2.31E-03	7.74E-07	2.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	5.55E-03
115071	Propylene	1.20E-04	3.61E-01		1.8588E-05	0.05576405	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-05	1.42E-01	4.74E-05	1.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-04	3.40E-01
100425	Styrene	4.72E-06	1.41E-02		7.28942E-07	0.00218683	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	5.55E-03	1.86E-06	5.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-06	1.33E-02
108883	Toluene	2.93E-04	8.79E-01		4.53159E-05	0.13594765	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-04	3.45E-01	1.16E-04	3.47E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04	8.28E-01
1330207	Xylenes	2.11E-04	6.34E-01		3.26687E-05	0.09800623	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.29E-05	2.49E-01	8.33E-05	2.50E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-04	5.97E-01
9901	Diesel	1.53E-03	4.59E+00		2.37E-04	8.98E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-04	1.14E+01	6.03E-04	1.15E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	3.18E+01

	Model Source		Source Col	Dat Col		Col	Row	CAS#	Chemical Name	Pol Count	Source Count
1	ONSITE1		1	8	1	8	98	75070	Acetaldehyde	15	19
2	ONSITE2		2	10	2	10	99	107028	Acrolein		
3		0	3	12	3	12	100	71432	Benzene		
4		0	4	14	4	14	101	106990	1-3,Butadiene		
5		0	5	16	5	16	102	100414	Ethylbenzene		
6		0	6	18	6	18	103	50000	Formaldehyde		
7	MAIN_IN		7	20	7	20	104	110543	Hexane		
8	MAIN_OUT		8	22	8	22	105	67561	Methanol		
9		0	9	24	9	24	106	78933	Methyl Ethyl Ketone		
10		0	10	26	10	26	107	91203	Naphthalene		
11		0	11	28	11	28	108	115071	Propylene		
12		0	12	30	12	30	109	100425	Styrene		
13	Idle		Idle1	8		8	110	108883	Toluene		
14		0	Idle1	9		8	111	1330207	Xylenes		
15		0	Idle1	10		8	112	9901	Diesel		
16		0	Idle1	11		8					
17		0	Idle1	12		8	37		Idle		
18		0	Idle1	13		7	47		TRU		
19	TRU		TRU	7							
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1	8	98	1	1	ONSITE1	0	0	75070	Acetaldehyde	1	5.10E-03	1.70E-06	1
1	8	99	1	2	ONSITE1	0	0	107028	Acrolein	1	2.37E-03	7.90E-07	1
1	8	100	1	3	ONSITE1	0	0	71432	Benzene	1	5.16E-02	1.72E-05	1
1	8	101	1	4	ONSITE1	0	0	106990	1-3,Butadiene	1	1.00E-02	3.34E-06	1
1	8	102	1	5	ONSITE1	0	0	100414	Ethylbenzene	1	2.13E-02	7.10E-06	1
1	8	103	1	6	ONSITE1	0	0	50000	Formaldehyde	1	2.88E-02	9.60E-06	1
1	8	104	1	7	ONSITE1	0	0	110543	Hexane	1	5.72E-02	1.91E-05	1
1	8	105	1	8	ONSITE1	0	0	67561	Methanol	1	2.19E-03	7.29E-07	1
1	8	106	1	9	ONSITE1	0	0	78933	Methyl Ethyl Ketone	1	3.64E-04	1.21E-07	1
1	8	107	1	10	ONSITE1	0	0	91203	Naphthalene	1	9.11E-04	3.04E-07	1
1	8	108	1	11	ONSITE1	0	0	115071	Propylene	1	5.58E-02	1.86E-05	1
1	8	109	1	12	ONSITE1	0	0	100425	Styrene	1	2.19E-03	7.29E-07	1
1	8	110	1	13	ONSITE1	0	0	108883	Toluene	1	1.36E-01	4.53E-05	1
1	8	111	1	14	ONSITE1	0	0	1330207	Xylenes	1	9.80E-02	3.27E-05	1
1	8	112	1	15	ONSITE1	0	0	9901	Diesel	1	8.98E+00	2.37E-04	1
2	10	98	2	1	ONSITE2	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
2	10	99	2	2	ONSITE2	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
2	10	100	2	3	ONSITE2	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
2	10	101	2	4	ONSITE2	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
2	10	102	2	5	ONSITE2	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
2	10	103	2	6	ONSITE2	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
2	10	104	2	7	ONSITE2	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
2	10	105	2	8	ONSITE2	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
2	10	106	2	9	ONSITE2	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
2	10	107	2	10	ONSITE2	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
2	10	108	2	11	ONSITE2	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
2	10	109	2	12	ONSITE2	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
2	10	110	2	13	ONSITE2	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
2	10	111	2	14	ONSITE2	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
2	10	112	2	15	ONSITE2	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
3	12	98	3	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
3	12	99	3	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
3	12	100	3	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
3	12	101	3	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
3	12	102	3	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
3	12	103	3	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
3	12	104	3	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
3	12	105	3	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
3	12	106	3	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
3	12	107	3	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
3	12	108	3	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
3	12	109	3	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
3	12	110	3	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
3	12	111	3	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
3	12	112	3	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
4	14	98	4	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
4	14	99	4	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
4	14	100	4	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
4	14	101	4	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
4	14	102	4	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
4	14	103	4	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
4	14	104	4	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
4	14	105	4	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
4	14	106	4	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
4	14	107	4	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
4	14	108	4	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
4	14	109	4	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
4	14	110	4	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
4	14	111	4	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
4	14	112	4	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
5	16	98	5	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
5	16	99	5	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
5	16	100	5	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
5	16	101	5	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
5	16	102	5	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
5	16	103	5	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
5	16	104	5	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
5	16	105	5	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
5	16	106	5	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
5	16	107	5	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
5	16	108	5	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
5	16	109	5	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
5	16	110	5	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
5	16	111	5	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
5	16	112	5	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
6	18	98	6	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
6	18	99	6	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
6	18	100	6	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
6	18	101	6	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
6	18	102	6	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
6	18	103	6	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
6	18	104	6	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
6	18	105	6	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
6	18	106	6	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
6	18	107	6	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
6	18	108	6	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
6	18	109	6	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
6	18	110	6	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
6	18	111	6	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
6	18	112	6	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
7	20	98	7	1	MAIN_IN	0	0	75070	Acetaldehyde	1	1.30E-02	4.32E-06	1
7	20	99	7	2	MAIN_IN	0	0	107028	Acrolein	1	6.02E-03	2.01E-06	1
7	20	100	7	3	MAIN_IN	0	0	71432	Benzene	1	1.31E-01	4.36E-05	1
7	20	101	7	4	MAIN_IN	0	0	106990	1-3,Butadiene	1	2.54E-02	8.48E-06	1
7	20	102	7	5	MAIN_IN	0	0	100414	Ethylbenzene	1	5.40E-02	1.80E-05	1
7	20	103	7	6	MAIN_IN	0	0	50000	Formaldehyde	1	7.31E-02	2.44E-05	1
7	20	104	7	7	MAIN_IN	0	0	110543	Hexane	1	1.45E-01	4.84E-05	1
7	20	105	7	8	MAIN_IN	0	0	67561	Methanol	1	5.55E-03	1.85E-06	1
7	20	106	7	9	MAIN_IN	0	0	78933	Methyl Ethyl Ketone	1	9.25E-04	3.08E-07	1
7	20	107	7	10	MAIN_IN	0	0	91203	Naphthalene	1	2.31E-03	7.71E-07	1
7	20	108	7	11	MAIN_IN	0	0	115071	Propylene	1	1.42E-01	4.72E-05	1
7	20	109	7	12	MAIN_IN	0	0	100425	Styrene	1	5.55E-03	1.85E-06	1
7	20	110	7	13	MAIN_IN	0	0	108883	Toluene	1	3.45E-01	1.15E-04	1
7	20	111	7	14	MAIN_IN	0	0	1330207	Xylenes	1	2.49E-01	8.29E-05	1
7	20	112	7	15	MAIN_IN	0	0	9901	Diesel	1	1.14E+01	6.01E-04	1
8	22	98	8	1	MAIN_OUT	0	0	75070	Acetaldehyde	1	1.30E-02	4.34E-06	1
8	22	99	8	2	MAIN_OUT	0	0	107028	Acrolein	1	6.04E-03	2.01E-06	1
8	22	100	8	3	MAIN_OUT	0	0	71432	Benzene	1	1.31E-01	4.38E-05	1
8	22	101	8	4	MAIN_OUT	0	0	106990	1-3,Butadiene	1	2.55E-02	8.52E-06	1
8	22	102	8	5	MAIN_OUT	0	0	100414	Ethylbenzene	1	5.43E-02	1.81E-05	1
8	22	103	8	6	MAIN_OUT	0	0	50000	Formaldehyde	1	7.34E-02	2.45E-05	1
8	22	104	8	7	MAIN_OUT	0	0	110543	Hexane	1	1.46E-01	4.86E-05	1
8	22	105	8	8	MAIN_OUT	0	0	67561	Methanol	1	5.57E-03	1.86E-06	1
8	22	106	8	9	MAIN_OUT	0	0	78933	Methyl Ethyl Ketone	1	9.29E-04	3.10E-07	1
8	22	107	8	10	MAIN_OUT	0	0	91203	Naphthalene	1	2.32E-03	7.74E-07	1
8	22	108	8	11	MAIN_OUT	0	0	115071	Propylene	1	1.42E-01	4.74E-05	1
8	22	109	8	12	MAIN_OUT	0	0	100425	Styrene	1	5.57E-03	1.86E-06	1
8	22	110	8	13	MAIN_OUT	0	0	108883	Toluene	1	3.47E-01	1.16E-04	1
8	22	111	8	14	MAIN_OUT	0	0	1330207	Xylenes	1	2.50E-01	8.33E-05	1
8	22	112	8	15	MAIN_OUT	0	0	9901	Diesel	1	1.15E+01	6.03E-04	1
9	24	98	9	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
9	24	99	9	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
9	24	100	9	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
9	24	101	9	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
9	24	102	9	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
9	24	103	9	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
9	24	104	9	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
9	24	105	9	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
9	24	106	9	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
9	24	107	9	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
9	24	108	9	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
9	24	109	9	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
9	24	110	9	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
9	24	111	9	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
9	24	112	9	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
10	26	98	10	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
10	26	99	10	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
10	26	100	10	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
10	26	101	10	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
10	26	102	10	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
10	26	103	10	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
10	26	104	10	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
10	26	105	10	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
10	26	106	10	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
10	26	107	10	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
10	26	108	10	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1

10	26	109	10	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
10	26	110	10	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
10	26	111	10	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
10	26	112	10	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
11	28	98	11	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
11	28	99	11	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
11	28	100	11	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
11	28	101	11	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
11	28	102	11	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
11	28	103	11	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
11	28	104	11	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
11	28	105	11	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
11	28	106	11	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
11	28	107	11	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
11	28	108	11	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
11	28	109	11	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
11	28	110	11	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
11	28	111	11	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
11	28	112	11	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
12	30	98	12	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
12	30	99	12	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
12	30	100	12	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
12	30	101	12	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
12	30	102	12	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
12	30	103	12	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
12	30	104	12	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
12	30	105	12	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
12	30	106	12	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
12	30	107	12	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
12	30	108	12	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
12	30	109	12	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
12	30	110	12	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
12	30	111	12	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
12	30	112	12	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	8	98	13	1	Idle	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	99	13	2	Idle	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	100	13	3	Idle	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	101	13	4	Idle	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	102	13	5	Idle	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	103	13	6	Idle	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	104	13	7	Idle	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	105	13	8	Idle	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	106	13	9	Idle	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	107	13	10	Idle	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	108	13	11	Idle	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	109	13	12	Idle	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	110	13	13	Idle	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	111	13	14	Idle	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	37	13	15	Idle	0	0	9901	Diesel	1	5.16E-02	5.16E-02	1
Idle	9	98	14	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	9	99	14	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	9	100	14	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	9	101	14	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	9	102	14	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	9	103	14	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	9	104	14	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	9	105	14	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	9	106	14	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	9	107	14	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	9	108	14	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	9	109	14	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	9	110	14	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	9	111	14	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	9	37	14	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	10	98	15	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	10	99	15	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	10	100	15	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	10	101	15	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	10	102	15	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	10	103	15	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	10	104	15	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	10	105	15	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	10	106	15	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	10	107	15	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	10	108	15	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	10	109	15	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	10	110	15	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	10	111	15	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	10	37	15	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	11	98	16	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	11	99	16	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	11	100	16	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	11	101	16	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	11	102	16	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	11	103	16	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	11	104	16	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	11	105	16	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	11	106	16	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	11	107	16	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	11	108	16	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	11	109	16	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	11	110	16	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	11	111	16	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	11	37	16	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	12	98	17	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	12	99	17	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	12	100	17	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	12	101	17	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	12	102	17	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	12	103	17	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	12	104	17	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	12	105	17	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	12	106	17	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	12	107	17	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	12	108	17	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	12	109	17	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	12	110	17	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	12	111	17	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	12	37	17	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	13	98	18	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	13	99	18	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	13	100	18	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	13	101	18	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	13	102	18	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	13	103	18	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	13	104	18	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	13	105	18	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	13	106	18	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	13	107	18	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	13	108	18	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	13	109	18	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	13	110	18	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	13	111	18	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	13	37	18	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
TRU	7	98	19	1	TRU	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
TRU	7	99	19	2	TRU	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
TRU	7	100	19	3	TRU	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
TRU	7	101	19	4	TRU	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
TRU	7	102	19	5	TRU	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
TRU	7	103	19	6	TRU	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
TRU	7	104	19	7	TRU	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
TRU	7	105	19	8	TRU	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
TRU	7	106	19	9	TRU	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
TRU	7	107	19	10	TRU	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
TRU	7	108	19	11	TRU	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
TRU	7	109	19	12	TRU	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
TRU	7	110	19	13	TRU	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
TRU	7	111	19	14	TRU	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
TRU	7	47	19	15	TRU	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1

	Daily Trips				
	46				
	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Percentage	55.3%	15.5%	4.9%	24.3%	100%
# Daily Vehicles	25.44	7.13	2.25	11.18	46
# Annual Vehicles	9,285	2,602	823	4,080	16,790

Truck Travel

Onsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	2,602	34.7%	7.01E-02
3-Axle Trks	823	11.0%	4.14E-01
4-Axle Trks	4,080	54.4%	4.47E-02
Total	7,505	100%	---

DPM Lbs/ Yr	ONSITE1	ONSITE2					Total
Distance (m)	978.7	372.2					1350.9
5	0%	100%	0%	0%	0%	0%	100%
2-Axle Trks	0.00E+00	1.62E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-02
3-Axle Trks	0.00E+00	9.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-02
4-Axle Trks	0.00E+00	1.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02
Total	0.00E+00	1.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-01

Offsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	2,602	34.7%	1.12E-01
3-Axle Trks	823	11.0%	1.56E-02
4-Axle Trks	4,080	54.4%	2.36E-01
Total	7,505	100%	---

DPM Lbs/ Yr	MAIN_IN	MAIN_OUT					Total
Gas Only	N	N	N	N	N	N	
Distance (m)	2485	2494.8					4979.8
%	100%	100%	0%	0%	0%	0%	200%
2-Axle Trks	1.73E-01	1.74E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-01
3-Axle Trks	2.40E-02	2.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-02
4-Axle Trks	3.64E-01	3.65E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-01
Total	5.62E-01	5.64E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E+00

Truck Idle

# of Idling Pts	38												
Truck Idling						Idle						Total
Category	# of Trucks / Yr	Idle EF (lbs / Event)	Time (Hr)	Lbs/ Yr	Lbs / Yr /Unit	38	0	0	0	0	0	38
2-Axle Trks	2,602	6.06E-05	0.25	3.95E-02	1.04E-03	3.95E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-02
3-Axle Trks	823	9.32E-06	0.25	1.92E-03	5.05E-05	1.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E-03
4-Axle Trks	4,080	7.59E-05	0.25	7.75E-02	2.04E-03	7.75E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.75E-02
Total	7,505	--	--	1.19E-01	3.13E-03	3.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-01

TRUs

Percent of Trucks	100		# of Units	38	
Onsite TRU Emissions					
Category	Percentage	# of TRUs / Yr	Time (Hr)	*DPM EF (lbs/Event)	Emissions (lb/Yr)
2-Axle Trks	15.5	2,602	0.25	2.09E-03	1.36
3-Axle Trks	4.9	823			0.43
4-Axle Trks	24.3	4,080			2.14
Total	45	7,505	Emission/Unit		0.10

* TRU EF * BHP * Load factor * Time in hours

Vehicle Emissions

Vehicle Travel Percentage / Count			
Category	# of Vehicles / Yr	% LDA	% LDT
Passenger Vehicles	9,285	72%	27.73%
# Vehicles		6,710	2,575

Category	TOG Exhaust EF (lb/Mile)	TOG Runloss EF (lb/Mile)
LDA	2.62E-05	4.68E-04
LDT	5.44E-05	1.10E-03

CARB TOG Speciation Profile Run Exhaust			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
75070	Acetaldehyde	2.80E-03	4.91E-04	3.92E-04
107028	Acrolein	1.30E-03	2.28E-04	1.82E-04
71432	Benzene	2.47E-02	4.34E-03	3.46E-03
106990	1,3-Butadiene	5.50E-03	9.65E-04	7.70E-04
100414	Ethylbenzene	1.05E-02	1.84E-03	1.47E-03
50000	Formaldehyde	1.58E-02	2.77E-03	2.21E-03
110543	Hexane	1.60E-02	2.81E-03	2.24E-03
67561	Methanol	1.20E-03	2.11E-04	1.68E-04
78933	Methyl Ethyl Ketone	2.00E-04	3.51E-05	2.80E-05
91203	Naphthalene	5.00E-04	8.78E-05	7.00E-05
115071	Propylene	3.06E-02	5.37E-03	4.28E-03
100425	Styrene	1.20E-03	2.11E-04	1.68E-04
108883	Toluene	5.76E-02	1.01E-02	8.06E-03
1330207	Xylenes	4.80E-02	8.43E-03	6.72E-03
9901	Diesel	6.00E-03	8.88E-02	3.41E-02

CARB TOG Speciation Profile Evaporative Losses			Lbs/mi/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
71432	Benzene	3.600E-03	6.32E-04	5.04E-04
100414	Ethylbenzene	1.180E-03	2.07E-04	1.65E-04
110543	Hexane	1.540E-02	2.70E-03	2.16E-03
108883	Toluene	1.700E-02	2.98E-03	2.38E-03
1330207	Xylenes	5.780E-03	1.01E-03	8.09E-04

Vehicle Emissions Travel Summary

Emissions Summary																													
			Source Col	1		2		3		4		5		6		7		8		9		10		11		12			
			Vehicles	ONSITE1		ONSITE2		0		0		0		0		MAIN_IN		MAIN_OUT		0		0		0		0		Total Percentage	Total Distance
			Cars	0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
				15.46%		5.88%		0.00%		0.00%		0.00%		0.00%		39.25%		39.41%		0.00%		0.00%		0.00%		0.00%		100.00%	6330.7
			Trucks	0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%			
				0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%			
CAS#	Chemical Name	Lbs/mi/Hr	Lbs/mi/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr
75070	Acetaldehyde	2.94E-07	8.83E-04	0.00E+00	0.00E+00	1.73E-08	5.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-07	3.47E-04	1.16E-07	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-07	7.47E-04
107028	Acrolein	1.37E-07	4.10E-04	0.00E+00	0.00E+00	8.04E-09	2.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.37E-08	1.61E-04	5.39E-08	1.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-07	3.47E-04
71432	Benzene	2.98E-06	8.93E-03	0.00E+00	0.00E+00	1.75E-07	5.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-06	3.50E-03	1.17E-06	3.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-06	7.55E-03
106990	1,3-Butadiene	5.78E-07	1.74E-03	0.00E+00	0.00E+00	3.40E-08	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-07	6.81E-04	2.28E-07	6.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-07	1.47E-03
100414	Ethylbenzene	1.23E-06	3.68E-03	0.00E+00	0.00E+00	7.22E-08	2.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.82E-07	1.45E-03	4.84E-07	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-06	3.12E-03
50000	Formaldehyde	1.66E-06	4.98E-03	0.00E+00	0.00E+00	9.77E-08	2.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.52E-07	1.96E-03	6.55E-07	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-06	4.21E-03
110543	Hexane	3.30E-06	9.91E-03	0.00E+00	0.00E+00	1.94E-07	5.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	3.89E-03	1.30E-06	3.90E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-06	8.37E-03
67561	Methanol	1.26E-07	3.79E-04	0.00E+00	0.00E+00	7.42E-09	2.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-08	1.49E-04	4.97E-08	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-07	3.20E-04
78933	Methyl Ethyl Ketone	2.10E-08	6.31E-05	0.00E+00	0.00E+00	1.24E-09	3.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.26E-09	2.48E-05	8.29E-09	2.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-08	5.33E-05
91203	Naphthalene	5.26E-08	1.58E-04	0.00E+00	0.00E+00	3.09E-09	9.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-08	6.19E-05	2.07E-08	6.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-08	1.33E-04
115071	Propylene	3.22E-06	9.65E-03	0.00E+00	0.00E+00	1.89E-07	5.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-06	3.79E-03	1.27E-06	3.80E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-06	8.16E-03
100425	Styrene	1.26E-07	3.79E-04	0.00E+00	0.00E+00	7.42E-09	2.23E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.95E-08	1.49E-04	4.97E-08	1.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-07	3.20E-04
108883	Toluene	7.85E-06	2.35E-02	0.00E+00	0.00E+00	4.61E-07	1.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-06	9.24E-03	3.09E-06	9.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-06	1.99E-02
1330207	Xylenes	5.66E-06	1.70E-02	0.00E+00	0.00E+00	3.33E-07	9.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-06	6.66E-03	2.23E-06	6.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E-06	1.43E-02
9901	Diesel	4.10E-05	1.23E-01	0.00E+00	0.00E+00	2.41E-06	1.30E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-05	6.10E-01	1.61E-05	6.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05	1.35E+00

	Model Source		Source Col	Dat Col		Col	Row	CAS#	Chemical Name	Pol Count	Source Count
1	ONSITE1		1	8	1	8	98	75070	Acetaldehyde	15	19
2	ONSITE2		2	10	2	10	99	107028	Acrolein		
3		0	3	12	3	12	100	71432	Benzene		
4		0	4	14	4	14	101	106990	1-3,Butadiene		
5		0	5	16	5	16	102	100414	Ethylbenzene		
6		0	6	18	6	18	103	50000	Formaldehyde		
7	MAIN_IN		7	20	7	20	104	110543	Hexane		
8	MAIN_OUT		8	22	8	22	105	67561	Methanol		
9		0	9	24	9	24	106	78933	Methyl Ethyl Ketone		
10		0	10	26	10	26	107	91203	Naphthalene		
11		0	11	28	11	28	108	115071	Propylene		
12		0	12	30	12	30	109	100425	Styrene		
13	Idle		Idle1	8	13	8	110	108883	Toluene		
14		0	Idle1	9	14	8	111	1330207	Xylenes		
15		0	Idle1	10	15	8	112	9901	Diesel		
16		0	Idle1	11	16	8					
17		0	Idle1	12	17	8	37		Idle		
18		0	Idle1	13	18	7	47		TRU		
19	TRU		TRU	7	19						
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1	8	98	1	1	ONSITE1	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
1	8	99	1	2	ONSITE1	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
1	8	100	1	3	ONSITE1	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
1	8	101	1	4	ONSITE1	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
1	8	102	1	5	ONSITE1	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
1	8	103	1	6	ONSITE1	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
1	8	104	1	7	ONSITE1	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
1	8	105	1	8	ONSITE1	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
1	8	106	1	9	ONSITE1	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
1	8	107	1	10	ONSITE1	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
1	8	108	1	11	ONSITE1	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
1	8	109	1	12	ONSITE1	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
1	8	110	1	13	ONSITE1	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
1	8	111	1	14	ONSITE1	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
1	8	112	1	15	ONSITE1	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
2	10	98	2	1	ONSITE2	0	0	75070	Acetaldehyde	1	5.19E-05	1.73E-08	1
2	10	99	2	2	ONSITE2	0	0	107028	Acrolein	1	2.41E-05	8.04E-09	1
2	10	100	2	3	ONSITE2	0	0	71432	Benzene	1	5.25E-04	1.75E-07	1
2	10	101	2	4	ONSITE2	0	0	106990	1-3,Butadiene	1	1.02E-04	3.40E-08	1
2	10	102	2	5	ONSITE2	0	0	100414	Ethylbenzene	1	2.17E-04	7.22E-08	1
2	10	103	2	6	ONSITE2	0	0	50000	Formaldehyde	1	2.93E-04	9.77E-08	1
2	10	104	2	7	ONSITE2	0	0	110543	Hexane	1	5.82E-04	1.94E-07	1
2	10	105	2	8	ONSITE2	0	0	67561	Methanol	1	2.23E-05	7.42E-09	1
2	10	106	2	9	ONSITE2	0	0	78933	Methyl Ethyl Ketone	1	3.71E-06	1.24E-09	1
2	10	107	2	10	ONSITE2	0	0	91203	Naphthalene	1	9.27E-06	3.09E-09	1
2	10	108	2	11	ONSITE2	0	0	115071	Propylene	1	5.68E-04	1.89E-07	1
2	10	109	2	12	ONSITE2	0	0	100425	Styrene	1	2.23E-05	7.42E-09	1
2	10	110	2	13	ONSITE2	0	0	108883	Toluene	1	1.38E-03	4.61E-07	1
2	10	111	2	14	ONSITE2	0	0	1330207	Xylenes	1	9.98E-04	3.33E-07	1
2	10	112	2	15	ONSITE2	0	0	9901	Diesel	1	1.30E-01	2.41E-06	1
3	12	98	3	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
3	12	99	3	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
3	12	100	3	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
3	12	101	3	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
3	12	102	3	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
3	12	103	3	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
3	12	104	3	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
3	12	105	3	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
3	12	106	3	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
3	12	107	3	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
3	12	108	3	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
3	12	109	3	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
3	12	110	3	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
3	12	111	3	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
3	12	112	3	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
4	14	98	4	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
4	14	99	4	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
4	14	100	4	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
4	14	101	4	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
4	14	102	4	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
4	14	103	4	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
4	14	104	4	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
4	14	105	4	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
4	14	106	4	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
4	14	107	4	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
4	14	108	4	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
4	14	109	4	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
4	14	110	4	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
4	14	111	4	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
4	14	112	4	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
5	16	98	5	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
5	16	99	5	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
5	16	100	5	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
5	16	101	5	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
5	16	102	5	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
5	16	103	5	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
5	16	104	5	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
5	16	105	5	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
5	16	106	5	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
5	16	107	5	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
5	16	108	5	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
5	16	109	5	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
5	16	110	5	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
5	16	111	5	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
5	16	112	5	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
6	18	98	6	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
6	18	99	6	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
6	18	100	6	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
6	18	101	6	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
6	18	102	6	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
6	18	103	6	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
6	18	104	6	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
6	18	105	6	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
6	18	106	6	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
6	18	107	6	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
6	18	108	6	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
6	18	109	6	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
6	18	110	6	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
6	18	111	6	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
6	18	112	6	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
7	20	98	7	1	MAIN_IN	0	0	75070	Acetaldehyde	1	3.47E-04	1.16E-07	1
7	20	99	7	2	MAIN_IN	0	0	107028	Acrolein	1	1.61E-04	5.37E-08	1
7	20	100	7	3	MAIN_IN	0	0	71432	Benzene	1	3.50E-03	1.17E-06	1
7	20	101	7	4	MAIN_IN	0	0	106990	1-3,Butadiene	1	6.81E-04	2.27E-07	1
7	20	102	7	5	MAIN_IN	0	0	100414	Ethylbenzene	1	1.45E-03	4.82E-07	1
7	20	103	7	6	MAIN_IN	0	0	50000	Formaldehyde	1	1.96E-03	6.52E-07	1
7	20	104	7	7	MAIN_IN	0	0	110543	Hexane	1	3.89E-03	1.30E-06	1
7	20	105	7	8	MAIN_IN	0	0	67561	Methanol	1	1.49E-04	4.95E-08	1
7	20	106	7	9	MAIN_IN	0	0	78933	Methyl Ethyl Ketone	1	2.48E-05	8.26E-09	1
7	20	107	7	10	MAIN_IN	0	0	91203	Naphthalene	1	6.19E-05	2.06E-08	1
7	20	108	7	11	MAIN_IN	0	0	115071	Propylene	1	3.79E-03	1.26E-06	1
7	20	109	7	12	MAIN_IN	0	0	100425	Styrene	1	1.49E-04	4.95E-08	1
7	20	110	7	13	MAIN_IN	0	0	108883	Toluene	1	9.24E-03	3.08E-06	1
7	20	111	7	14	MAIN_IN	0	0	1330207	Xylenes	1	6.66E-03	2.22E-06	1
7	20	112	7	15	MAIN_IN	0	0	9901	Diesel	1	6.10E-01	1.61E-05	1
8	22	98	8	1	MAIN_OUT	0	0	75070	Acetaldehyde	1	3.48E-04	1.16E-07	1
8	22	99	8	2	MAIN_OUT	0	0	107028	Acrolein	1	1.62E-04	5.39E-08	1
8	22	100	8	3	MAIN_OUT	0	0	71432	Benzene	1	3.52E-03	1.17E-06	1
8	22	101	8	4	MAIN_OUT	0	0	106990	1-3,Butadiene	1	6.84E-04	2.28E-07	1
8	22	102	8	5	MAIN_OUT	0	0	100414	Ethylbenzene	1	1.45E-03	4.84E-07	1
8	22	103	8	6	MAIN_OUT	0	0	50000	Formaldehyde	1	1.96E-03	6.55E-07	1
8	22	104	8	7	MAIN_OUT	0	0	110543	Hexane	1	3.90E-03	1.30E-06	1
8	22	105	8	8	MAIN_OUT	0	0	67561	Methanol	1	1.49E-04	4.97E-08	1
8	22	106	8	9	MAIN_OUT	0	0	78933	Methyl Ethyl Ketone	1	2.49E-05	8.29E-09	1
8	22	107	8	10	MAIN_OUT	0	0	91203	Naphthalene	1	6.22E-05	2.07E-08	1
8	22	108	8	11	MAIN_OUT	0	0	115071	Propylene	1	3.80E-03	1.27E-06	1
8	22	109	8	12	MAIN_OUT	0	0	100425	Styrene	1	1.49E-04	4.97E-08	1
8	22	110	8	13	MAIN_OUT	0	0	108883	Toluene	1	9.27E-03	3.09E-06	1
8	22	111	8	14	MAIN_OUT	0	0	1330207	Xylenes	1	6.69E-03	2.23E-06	1
8	22	112	8	15	MAIN_OUT	0	0	9901	Diesel	1	6.12E-01	1.61E-05	1
9	24	98	9	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
9	24	99	9	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
9	24	100	9	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
9	24	101	9	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
9	24	102	9	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
9	24	103	9	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
9	24	104	9	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
9	24	105	9	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
9	24	106	9	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
9	24	107	9	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
9	24	108	9	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
9	24	109	9	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
9	24	110	9	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
9	24	111	9	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
9	24	112	9	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
10	26	98	10	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
10	26	99	10	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
10	26	100	10	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
10	26	101	10	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
10	26	102	10	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
10	26	103	10	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
10	26	104	10	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
10	26	105	10	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
10	26	106	10	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
10	26	107	10	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
10	26	108	10	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1

10	26	109	10	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
10	26	110	10	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
10	26	111	10	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
10	26	112	10	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
11	28	98	11	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
11	28	99	11	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
11	28	100	11	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
11	28	101	11	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
11	28	102	11	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
11	28	103	11	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
11	28	104	11	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
11	28	105	11	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
11	28	106	11	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
11	28	107	11	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
11	28	108	11	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
11	28	109	11	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
11	28	110	11	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
11	28	111	11	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
11	28	112	11	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
12	30	98	12	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
12	30	99	12	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
12	30	100	12	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
12	30	101	12	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
12	30	102	12	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
12	30	103	12	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
12	30	104	12	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
12	30	105	12	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
12	30	106	12	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
12	30	107	12	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
12	30	108	12	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
12	30	109	12	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
12	30	110	12	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
12	30	111	12	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
12	30	112	12	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	8	98	13	1	Idle	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	99	13	2	Idle	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	100	13	3	Idle	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	101	13	4	Idle	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	102	13	5	Idle	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	103	13	6	Idle	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	104	13	7	Idle	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	105	13	8	Idle	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	106	13	9	Idle	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	107	13	10	Idle	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	108	13	11	Idle	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	109	13	12	Idle	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	110	13	13	Idle	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	111	13	14	Idle	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	37	13	15	Idle	0	0	9901	Diesel	1	3.13E-03	3.13E-03	1
Idle	9	98	14	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	9	99	14	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	9	100	14	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	9	101	14	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	9	102	14	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	9	103	14	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	9	104	14	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	9	105	14	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	9	106	14	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	9	107	14	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	9	108	14	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	9	109	14	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	9	110	14	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	9	111	14	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	9	37	14	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	10	98	15	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	10	99	15	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	10	100	15	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	10	101	15	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	10	102	15	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	10	103	15	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	10	104	15	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	10	105	15	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	10	106	15	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	10	107	15	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	10	108	15	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	10	109	15	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	10	110	15	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	10	111	15	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	10	37	15	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	11	98	16	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	11	99	16	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	11	100	16	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	11	101	16	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	11	102	16	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	11	103	16	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	11	104	16	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	11	105	16	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	11	106	16	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	11	107	16	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	11	108	16	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	11	109	16	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	11	110	16	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	11	111	16	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	11	37	16	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	12	98	17	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	12	99	17	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	12	100	17	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	12	101	17	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	12	102	17	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	12	103	17	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	12	104	17	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	12	105	17	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	12	106	17	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	12	107	17	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	12	108	17	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	12	109	17	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	12	110	17	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	12	111	17	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	12	37	17	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle	13	98	18	1	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	13	99	18	2	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	13	100	18	3	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	13	101	18	4	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	13	102	18	5	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	13	103	18	6	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	13	104	18	7	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	13	105	18	8	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	13	106	18	9	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	13	107	18	10	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	13	108	18	11	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	13	109	18	12	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	13	110	18	13	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	13	111	18	14	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	13	37	18	15	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
TRU	7	98	19	1	TRU	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
TRU	7	99	19	2	TRU	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
TRU	7	100	19	3	TRU	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
TRU	7	101	19	4	TRU	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
TRU	7	102	19	5	TRU	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
TRU	7	103	19	6	TRU	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
TRU	7	104	19	7	TRU	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
TRU	7	105	19	8	TRU	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
TRU	7	106	19	9	TRU	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
TRU	7	107	19	10	TRU	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
TRU	7	108	19	11	TRU	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
TRU	7	109	19	12	TRU	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
TRU	7	110	19	13	TRU	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
TRU	7	111	19	14	TRU	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
TRU	7	47	19	15	TRU	0	0	9901	Diesel	1	1.03E-01	1.03E-01	1

ONSITE1	0	0	75070	Acetaldehyde	1	5.10E-03	1.70E-06	1
ONSITE1	0	0	107028	Acrolein	1	2.37E-03	7.90E-07	1
ONSITE1	0	0	71432	Benzene	1	5.16E-02	1.72E-05	1
ONSITE1	0	0	106990	1-3,Butadiene	1	1.00E-02	3.34E-06	1
ONSITE1	0	0	100414	Ethylbenzene	1	2.13E-02	7.10E-06	1
ONSITE1	0	0	50000	Formaldehyde	1	2.88E-02	9.60E-06	1
ONSITE1	0	0	110543	Hexane	1	5.72E-02	1.91E-05	1
ONSITE1	0	0	67561	Methanol	1	2.19E-03	7.29E-07	1
ONSITE1	0	0	78933	Methyl Ethyl Ketone	1	3.64E-04	1.21E-07	1
ONSITE1	0	0	91203	Naphthalene	1	9.11E-04	3.04E-07	1
ONSITE1	0	0	115071	Propylene	1	5.58E-02	1.86E-05	1
ONSITE1	0	0	100425	Styrene	1	2.19E-03	7.29E-07	1
ONSITE1	0	0	108883	Toluene	1	1.36E-01	4.53E-05	1
ONSITE1	0	0	1330207	Xylenes	1	9.80E-02	3.27E-05	1
ONSITE1	0	0	9901	Diesel	1	8.98E+00	2.37E-04	1
ONSITE2	0	0	75070	Acetaldehyde	1	5.19E-05	1.73E-08	1
ONSITE2	0	0	107028	Acrolein	1	2.41E-05	8.04E-09	1
ONSITE2	0	0	71432	Benzene	1	5.25E-04	1.75E-07	1
ONSITE2	0	0	106990	1-3,Butadiene	1	1.02E-04	3.40E-08	1
ONSITE2	0	0	100414	Ethylbenzene	1	2.17E-04	7.22E-08	1
ONSITE2	0	0	50000	Formaldehyde	1	2.93E-04	9.77E-08	1
ONSITE2	0	0	110543	Hexane	1	5.82E-04	1.94E-07	1
ONSITE2	0	0	67561	Methanol	1	2.23E-05	7.42E-09	1
ONSITE2	0	0	78933	Methyl Ethyl Ketone	1	3.71E-06	1.24E-09	1
ONSITE2	0	0	91203	Naphthalene	1	9.27E-06	3.09E-09	1
ONSITE2	0	0	115071	Propylene	1	5.68E-04	1.89E-07	1
ONSITE2	0	0	100425	Styrene	1	2.23E-05	7.42E-09	1
ONSITE2	0	0	108883	Toluene	1	1.38E-03	4.61E-07	1
ONSITE2	0	0	1330207	Xylenes	1	9.98E-04	3.33E-07	1
ONSITE2	0	0	9901	Diesel	1	1.30E-01	2.41E-06	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1

	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
MAIN_IN	0	0	75070	Acetaldehyde	1	1.33E-02	4.43E-06	1
MAIN_IN	0	0	107028	Acrolein	1	6.18E-03	2.06E-06	1
MAIN_IN	0	0	71432	Benzene	1	1.34E-01	4.48E-05	1

MAIN_IN	0	0	106990	1-3,Butadiene	1	2.61E-02	8.71E-06	1
MAIN_IN	0	0	100414	Ethylbenzene	1	5.55E-02	1.85E-05	1
MAIN_IN	0	0	50000	Formaldehyde	1	7.51E-02	2.50E-05	1
MAIN_IN	0	0	110543	Hexane	1	1.49E-01	4.97E-05	1
MAIN_IN	0	0	67561	Methanol	1	5.70E-03	1.90E-06	1
MAIN_IN	0	0	78933	Methyl Ethyl Ketone	1	9.50E-04	3.17E-07	1
MAIN_IN	0	0	91203	Naphthalene	1	2.38E-03	7.92E-07	1
MAIN_IN	0	0	115071	Propylene	1	1.45E-01	4.85E-05	1
MAIN_IN	0	0	100425	Styrene	1	5.70E-03	1.90E-06	1
MAIN_IN	0	0	108883	Toluene	1	3.54E-01	1.18E-04	1
MAIN_IN	0	0	1330207	Xylenes	1	2.56E-01	8.52E-05	1
MAIN_IN	0	0	9901	Diesel	1	1.20E+01	6.17E-04	1
MAIN_OUT	0	0	75070	Acetaldehyde	1	1.34E-02	4.45E-06	1
MAIN_OUT	0	0	107028	Acrolein	1	6.20E-03	2.07E-06	1
MAIN_OUT	0	0	71432	Benzene	1	1.35E-01	4.50E-05	1
MAIN_OUT	0	0	106990	1-3,Butadiene	1	2.62E-02	8.74E-06	1
MAIN_OUT	0	0	100414	Ethylbenzene	1	5.57E-02	1.86E-05	1
MAIN_OUT	0	0	50000	Formaldehyde	1	7.54E-02	2.51E-05	1
MAIN_OUT	0	0	110543	Hexane	1	1.50E-01	4.99E-05	1
MAIN_OUT	0	0	67561	Methanol	1	5.72E-03	1.91E-06	1
MAIN_OUT	0	0	78933	Methyl Ethyl Ketone	1	9.54E-04	3.18E-07	1
MAIN_OUT	0	0	91203	Naphthalene	1	2.38E-03	7.95E-07	1
MAIN_OUT	0	0	115071	Propylene	1	1.46E-01	4.87E-05	1
MAIN_OUT	0	0	100425	Styrene	1	5.72E-03	1.91E-06	1
MAIN_OUT	0	0	108883	Toluene	1	3.56E-01	1.19E-04	1
MAIN_OUT	0	0	1330207	Xylenes	1	2.57E-01	8.55E-05	1
MAIN_OUT	0	0	9901	Diesel	1	1.21E+01	6.19E-04	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1

	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
Idle		0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle		0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle		0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle		0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle		0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle		0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle		0	0	110543	Hexane	1	0.00E+00	0.00E+00	1

Idle	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	0	0	9901	Diesel	1	1.58E-01	1.58E-01	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1

	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
	0	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
	0	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
	0	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
	0	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
	0	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
	0	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
	0	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
	0	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
	0	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
	0	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
	0	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
	0	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
	0	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
	0	0	0	9901	Diesel	1	0.00E+00	0.00E+00	1
TRU		0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
TRU		0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
TRU		0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
TRU		0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
TRU		0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
TRU		0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
TRU		0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
TRU		0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
TRU		0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
TRU		0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
TRU		0	0	115071	Propylene	1	0.00E+00	0.00E+00	1

TRU	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
TRU	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
TRU	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
TRU	0	0	9901	Diesel	1	1.03E-01	1.03E-01	1

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM2.5_RUNEX	PM10_RUNEX
SAN BERNARDINO	2023	HHDT	Aggregate	5	Diesel	0.014028874	0.014663197
SAN BERNARDINO	2023	HHDT	Aggregate	10	Diesel	0.012109774	0.012657324
SAN BERNARDINO	2023	HHDT	Aggregate	15	Diesel	0.008910643	0.009313543
					Average	0.011683097	0.012211355
SAN BERNARDINO	2023	LDT1	Aggregate	5	Diesel	0.584913512	0.611360706
SAN BERNARDINO	2023	LDT1	Aggregate	10	Diesel	0.39924752	0.417299722
SAN BERNARDINO	2023	LDT1	Aggregate	15	Diesel	0.293493621	0.3067641
SAN BERNARDINO	2023	LDT2	Aggregate	5	Diesel	0.013055403	0.01364571
SAN BERNARDINO	2023	LDT2	Aggregate	10	Diesel	0.010841208	0.011331399
SAN BERNARDINO	2023	LDT2	Aggregate	15	Diesel	0.008968263	0.009373768
					Average	0.218419921	0.228295901
SAN BERNARDINO	2023	MHDT	Aggregate	5	Diesel	0.005626491	0.005880896
SAN BERNARDINO	2023	MHDT	Aggregate	10	Diesel	0.004887406	0.005108393
SAN BERNARDINO	2023	MHDT	Aggregate	15	Diesel	0.003765885	0.003936162
					Average	0.004759927	0.00497515

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: San Bernardino
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	VMT	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
SAN BERN/	2023	HHDT	Aggregate	5	Diesel	10962.73	15.58319356	0.014028874	0.014663197	3945.48417	0.005869169	0.620175167	0.126361598	0.143853061	2.096749468	0.037274978
SAN BERN/	2023	HHDT	Aggregate	10	Diesel	31907.22	11.63374792	0.012109774	0.012657324	3183.724516	0.003774878	0.500437158	0.081272091	0.092522089	1.266721201	0.030078251
SAN BERN/	2023	HHDT	Aggregate	15	Diesel	38469.85	7.6805032	0.008910643	0.009313543	2349.944075	0.002163737	0.369378484	0.046584664	0.053033093	0.715124318	0.022201106
SAN BERN/	2023	LDA	Aggregate	5	Diesel	213.3955	0.127702505	0.017290385	0.01807218	494.155722	0.00784305	0.077674398	0.168856245	0.192231609	3.180004098	0.004671549
SAN BERN/	2023	LDA	Aggregate	10	Diesel	1538.874	0.107341871	0.012416199	0.012977604	409.853474	0.005736534	0.064423259	0.123504196	0.140601316	2.358163767	0.003874589
SAN BERN/	2023	LDA	Aggregate	15	Diesel	3402.957	0.081190748	0.010111608	0.01056881	337.6854698	0.002936237	0.053079453	0.063215465	0.071966604	1.168884722	0.003192342
SAN BERN/	2023	LDT1	Aggregate	5	Diesel	0.513136	0.801237623	0.584913512	0.611360706	1015.99024	0.039947374	0.159699517	0.860043452	0.979102291	3.977162331	0.009604761
SAN BERN/	2023	LDT1	Aggregate	10	Diesel	3.823277	0.841770466	0.39924752	0.417299722	861.205117	0.027603732	0.135369451	0.594292102	0.676562047	2.844567407	0.008141485
SAN BERN/	2023	LDT1	Aggregate	15	Diesel	8.349142	0.86584722	0.293493621	0.3067641	712.1966112	0.019589134	0.111947389	0.421742519	0.480125819	2.005608411	0.006732819
SAN BERN/	2023	LDT2	Aggregate	5	Diesel	45.77177	0.154873354	0.013055403	0.01364571	656.5415677	0.011975961	0.103199192	0.257835389	0.293528448	2.269980944	0.006206679
SAN BERN/	2023	LDT2	Aggregate	10	Diesel	328.2207	0.130260872	0.010841208	0.011331399	551.2165136	0.008931665	0.08664356	0.192293497	0.218913362	1.690947953	0.005210978
SAN BERN/	2023	LDT2	Aggregate	15	Diesel	727.396	0.090620848	0.008968263	0.009373768	457.5134503	0.004422341	0.071914743	0.095210397	0.108390707	0.832567746	0.004325147
SAN BERN/	2023	LHDT1	Aggregate	5	Diesel	179.1461	1.761944468	0.063811536	0.06669681	1205.241509	0.035279404	0.189447181	0.759544791	0.864691246	3.130412435	0.011393867
SAN BERN/	2023	LHDT1	Aggregate	10	Diesel	2750.433	1.733211292	0.046535303	0.048639423	1011.266069	0.02572693	0.158956943	0.553885656	0.630561995	2.289112739	0.009560101
SAN BERN/	2023	LHDT1	Aggregate	15	Diesel	6174.732	1.726324901	0.035805252	0.037424206	660.6931863	0.014465397	0.103851768	0.311431477	0.354544032	1.317257607	0.006245927
SAN BERN/	2023	LHDT2	Aggregate	5	Diesel	67.9448	1.533230098	0.059751687	0.062453394	1271.752779	0.035057371	0.199901827	0.754764561	0.859249272	3.164544245	0.012022637
SAN BERN/	2023	LHDT2	Aggregate	10	Diesel	1044.005	1.494699417	0.045139213	0.047180208	1128.234264	0.025695046	0.177342715	0.553199206	0.629780517	2.322255022	0.010665871
SAN BERN/	2023	LHDT2	Aggregate	15	Diesel	2343.414	1.457533887	0.035308533	0.036905028	751.2993985	0.014085703	0.118093803	0.303256885	0.345237801	1.296424901	0.007102481
SAN BERN/	2023	MHDT	Aggregate	5	Diesel	465.9241	6.479863068	0.005626491	0.005880896	2326.151237	0.002634636	0.365638581	0.056722993	0.064574809	0.773244038	0.021976323
SAN BERN/	2023	MHDT	Aggregate	10	Diesel	8601.705	4.927934801	0.004887406	0.005108393	1924.833285	0.001693245	0.302556988	0.036455097	0.041501353	0.477271965	0.01818487
SAN BERN/	2023	MHDT	Aggregate	15	Diesel	14538.67	3.47718136	0.003765885	0.003936162	1515.134453	0.000940299	0.238158036	0.020244379	0.023046684	0.259833667	0.014314239

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Diesel %	Trips	PM2.5_RUNEX	PM10_RUNEX	TOG_RUNEX	TOG_RUNLOSS
SAN BERNARDINO	2023	LDA	Aggregate	Aggregate	Gasoline	929038.6075	38321202.19	38321202.19	0%	4374906.394	0.001249918	0.00135939	0.011865323	0.212348769
SAN BERNARDINO	2023	LDA	Aggregate	Aggregate	Diesel	8375.718747	365072.8376	365072.8376	82%	39999.73792	0.005649093	0.00590452	0.013645312	0
							38686275.03	72.3%						
SAN BERNARDINO	2023	LDT1	Aggregate	Aggregate	Gasoline	98412.43484	3525890.088	3525890.088	0%	446995.4746	0.00183063	0.001990917	0.039224273	0.817457327
SAN BERNARDINO	2023	LDT1	Aggregate	Aggregate	Diesel	46.41834701	846.8439543	846.8439543	0.2%	150.9529339	0.14420396	0.150724223	0.221783614	0
SAN BERNARDINO	2023	LDT2	Aggregate	Aggregate	Gasoline	301046.0155	11239619.24	11239619.24	0%	1399637.614	0.001322026	0.001437799	0.022880177	0.473052184
SAN BERNARDINO	2023	LDT2	Aggregate	Aggregate	Diesel	1831.594308	78774.08743	78774.08743	18%	9012.703385	0.004690028	0.00490209	0.016230968	0
							14845130.26	27.7%	444694			Gasoline Avg EF	0.024656591	0.50095276
								Diesel Wt EF	0.006002732					

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Trips	PM2.5_RUNEX	PM2.5_IDLEX	PM10_RUNEX	PM10_IDLEX
SAN BERNARDINO	2023	HHDT	Aggregate	Aggregate	Diesel	29526.78504	4258567.766	4258567.766	345800.8323	0.025071067	0.03295525	0.026204669	0.03444534
SAN BERNARDINO	2023	MHDT	Aggregate	Aggregate	Diesel	17836.69738	1242349.304	1242349.304	176235.4069	0.008211281	0.004045233	0.008582559	0.00422814
SAN BERNARDINO	2023	LHDT1	Aggregate	Aggregate	Diesel	23193.36631	818620.8796	818620.8796	291743.3709	0.019182073	0.026272924	0.020049401	0.027460869
SAN BERNARDINO	2023	LHDT2	Aggregate	Aggregate	Diesel	8744.903608	309655.4536	309655.4536	109999.8863	0.018283411	0.026365952	0.019110106	0.027558104
									Average	0.018732742	0.026319438	0.019579754	0.027509487

Source: EMFAC2017 (v1.0.3) Emission Rates
Region Type: County
Region: San Bernardino
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_RESTLOSS	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSOAK	TOG_RUNLOSS	TOG_RESTLOSS	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
SAN BERNA	2023	HHDT		Aggregate	Aggregate	Gasoline	7.80192	902.9373	156.1008	4.131842628	0	0.645749031	0.001609541	0	0.001152246	0.005000001	0.026460008	0.001750523	0	0.001253172	0.020000006	0.061740018	1951.369134	0	46.71819347	0.114667929	0	0.000349833	0.145242548	0	0.018376046	0.623892127	0	0.00181332	0.197516138	0.996329919	0.072337992	0.1270647	0.910381927	0	0.001985358	0.197516138	0.996329919	0.072337992	0.1270647	38.80748486	0	5.215119408	0.019310379	0	0.000462314
SAN BERNA	2023	HHDT		Aggregate	Aggregate	Diesel	29526.79	4258568	345800.8	2.142049754	83.61940774	2.358047716	0.025071067	0.03295525	0	0.008915594	0.026211848	0.026204669	0.03444534	0	0.035662378	0.061160978	1286.58316	16745.77303	0	0.000915607	0.322356547	0	0.202232956	2.632202321	0	0.019712758	6.940248063	0	0	0	0	0	0.022441475	7.90094412	0	0	0	0	0	0	0.174992017	102.1324749	0	0.012155	0.15820576	0
SAN BERNA	2023	LDA		Aggregate	Aggregate	Gasoline	929038.6	38321202	4374906	0.034585865	0	0.179683693	0.001249918	0	0.0016811	0.002000001	0.015750005	0.00135939	0	0.001828309	0.008000002	0.036750011	259.1216564	0	53.79595416	0.002194977	0	0.049012383	0.004237184	0	0.025565289	0.008133624	0	0.213065745	0.099643924	0.212348769	0.21888054	0.273535036	0.011865323	0	0.2332795	0.099643924	0.212348769	0.21888054	0.273535036	0.615736095	0	2.151494387	0.002564219	0	0.000532355
SAN BERNA	2023	LDA		Aggregate	Aggregate	Diesel	8375.719	365072.8	39999.74	0.058388333	0	0	0.005649093	0	0	0.002000001	0.015750005	0.00590452	0	0.008000002	0.036750011	193.7195637	0	0	0.000556729	0	0	0.030450018	0	0	0	0.011986042	0	0	0	0	0	0	0.013645312	0	0	0	0	0	0	0.186029597	0	0	0.001831347	0	0
SAN BERNA	2023	LDT1		Aggregate	Aggregate	Gasoline	98412.43	3525890	446995.5	0.111393587	0	0.277495558	0.00183063	0	0.002447806	0.002000001	0.015750005	0.001990917	0	0.002662094	0.008000002	0.036750011	303.7222916	0	64.12643577	0.006130738	0	0.077428346	0.008447837	0	0.02964783	0.02688652	0	0.392815711	0.24520671	0.817457327	0.568919552	0.806945255	0.039224273	0	0.430082874	0.24520671	0.817457327	0.568919552	0.806945255	1.283433273	0	2.362940389	0.003005578	0	0.000634583
SAN BERNA	2023	LDT1		Aggregate	Aggregate	Diesel	46.41835	846.844	150.9529	1.09011564	0	0	0.14420396	0	0	0.002000001	0.015750005	0.15072423	0	0	0.008000002	0.036750011	399.1718369	0	0	0.009048772	0	0	0.062744254	0	0	0.194814726	0	0	0	0	0	0	0.221783614	0	0	0	0	0	0	1.192881305	0	0	0.003773609	0	0
SAN BERNA	2023	LDT2		Aggregate	Aggregate	Gasoline	301046	11239619	1399638	0.079565955	0	0.287705058	0.001322026	0	0.001746501	0.002000001	0.015750005	0.001437799	0	0.001899428	0.008000002	0.036750011	322.7360954	0	68.96610291	0.003854772	0	0.069631951	0.006573159	0	0.032220707	0.015682978	0	0.325603894	0.143440196	0.473052184	0.384687388	0.465645179	0.022880177	0	0.356494813	0.143440196	0.473052184	0.384687388	0.465645179	0.899945239	0	2.728729758	0.003193735	0	0.000682475
SAN BERNA	2023	LDT2		Aggregate	Aggregate	Diesel	1831.594	78774.09	9012.701	0.039865435	0	0	0.004690028	0	0	0.002000001	0.015750005	0.00490209	0	0	0.008000002	0.036750011	260.3701083	0	0	0.000662224	0	0	0.040926555	0	0	0.014257282	0	0	0	0	0	0	0.016230968	0	0	0	0	0	0	0.121834273	0	0	0.002461434	0	0
SAN BERNA	2023	LHDT1		Aggregate	Aggregate	Gasoline	24792.49	832047.9	369371.2	2.239616574	0.038204903	0.530551738	0.001164851	0	0.000413505	0.002000001	0.032760009	0.001266881	0	0.000449725	0.008000002	0.076440022	798.6447644	121.0254187	18.95495695	0.007610945	0.121627996	0.026515171	0.013937379	0.003105739	0.041331398	0.037119525	0.437418959	0.132695862	0.150311297	1.022407701	0.039356801	0.080292313	0.054164723	0.638280719	0.145285266	0.150311297	1.022407701	0.039356801	0.080292313	0.988277719	3.746224226	1.7817485	0.007903237	0.001197645	0.000187575
SAN BERNA	2023	LHDT1		Aggregate	Aggregate	Diesel	23193.37	818620.9	291743.4	2.576255734	2.166991884	0	0.019182073	0.026272924	0	0.003000001	0.032760009	0.020049401	0.027460869	0	0.012000003	0.076440022	478.0267538	135.3602238	0	0.004143522	0.005098128	0	0.075139149	0.021276742	0	0.085907599	0.109759705	0	0	0	0	0	0.101556921	0.124954127	0	0	0	0	0	0	0.608304525	0.909745076	0	0.004519072	0.001279641	0
SAN BERNA	2023	LHDT2		Aggregate	Aggregate	Gasoline	4042.309	134715.2	60224.38	0.194342624	0.038440827	0.539859286	0.000951313	0	0.000311899	0.002000001	0.032200011	0.00103464	0	0.000339219	0.008000002	0.089180026	916.371718	139.703394	21.48000631	0.004375102	0.124211067	0.025127593	0.01270516	0.003124937	0.041853965	0.019141498	0.440755899	0.123415575	0.124330554	0.759699536	0.032435171	0.061944667	0.027931228	0.643149974	0.13512452	0.124330554	0.759699536	0.032435171	0.061944667	0.502682185	3.761574068	1.6544264	0.009068241	0.001382478	0.000212562
SAN BERNA	2023	LHDT2		Aggregate	Aggregate	Diesel	8744.904	309655.5	109999.9	2.065838633	2.155182854	0	0.018283411	0.026365952	0	0.003000001	0.032200011	0.019110106	0.027558104	0	0.012000003	0.089180026	519.4338738	217.020889	0	0.003561335	0.005098128	0	0.081647771	0.034112662	0	0.076673451	0.109759705	0	0	0	0	0	0.087287626	0.124954127	0	0	0	0	0	0	0.512323009	0.909745076	0	0.004910518	0.002051628	0
SAN BERNA	2023	MHDT		Aggregate	Aggregate	Gasoline	2406.141	152847.6	48142.06	0.358890708	0.089291935	0.35913949	0.000933102	0	0.000412785	0.003000001	0.055860016	0.001014834	0	0.000448941	0.012000003	0.130340037	1628.197881	537.6709681	38.1258649	0.009729454	0.271401238	0.038844639	0.019328549	0.008080494	0.03001554	0.046097202	1.003254992	0.200716447	0.085128009	0.464405377	0.026199426	0.050819798	0.067264929	1.46394733	0.219759244	0.085128009	0.464405377	0.026199426	0.050819798	1.160603011	14.36278537	4.349347171	0.016112338	0.00532069	0.000177286
SAN BERNA	2023	MHDT		Aggregate	Aggregate	Diesel	17836.7	1242349	176235.4	1.051143665	4.614527699	2.122578025	0.008211281	0.004045238	0	0.003000001	0.055860016	0.008582559	0.00422814	0	0.012000003	0.130340037	882.5002439	755.7859833	0	0.000334422	0.003055583	0	0.138716749	0.118799032	0	0.007630614	0.065785858	0	0	0	0	0	0.008686873	0.074892192	0	0	0	0	0	0	0.064399562	2.379735559	0	0.008337425	0.007140291	0

APPENDIX C

ENERGY CALCULATIONS

Construction Off-Road Equipment										
Phase	**Off-Road Equipment Type**	**Amount**	**Usage Hour/Day**	**Total Usage Days**	**Total Usage Hours/Equipment**	**Horsepower**	**Load Factor**	**Total Usage Hours/ Equipment**	**Horsepower-Hour**	**Fuel Usage (gallons)**
Site Preparation	Rubber Tired Dozers	3	8	15	367	247	0.4	367	36259.6	1856.49152
	Tractors/Loaders/Backhoes	4	8	15	84	97	0.37	84	3014.76	154.355712
Grading	Excavators	2	8	20	36	158	0.38	36	2161.44	110.665728
	Graders	1	8	20	148	187	0.41	148	11347.16	580.974592
	Rubber Tired Dozers	1	8	20	367	247	0.4	367	36259.6	1856.49152
	Scrapers	2	8	20	423	367	0.48	423	74515.68	3815.202816
	Tractors/Loaders/Backhoes	2	8	20	84	97	0.37	84	3014.76	154.355712
Building Construction	Cranes	1	7	230	367	231	0.29	367	24585.33	1258.768896
	Forklifts	3	8	230	82	89	0.2	82	1459.6	74.73152
	Generator Sets	1	8	230	14	84	0.74	14	870.24	44.556288
	Tractors/Loaders/Backhoes	3	7	230	84	97	0.37	84	3014.76	154.355712
	Welders	1	8	230	46	46	0.45	46	952.2	48.75264
Paving	Pavers	2	8	15	81	130	0.42	81	4422.6	226.43712
	Paving Equipment	2	8	15	89	132	0.36	89	4229.28	216.539136
	Rollers	2	8	15	36	80	0.38	36	1094.4	56.03328
Architectural Coating	Air Compressors	1	6	130	37	78	0.48	37	1385.28	70.926336
									Total	**10,679.64** Diesel

Construction Truck and Construction Worker Vehicle Fuel Efficiency				
		EMFAC 2021 Outputs		
Vehicle Type	Vehicle Class	Fuel Consumption (1,000 gallons/day)	VMT (miles/ day)	Fuel Efficency (miles/gallon)
Construction Truck	MHDT	88.8	797273.2	9.0
	HHDT	711.5	4294976.0	6.0
	HHDT/MHDT	-	-	7.5
Construction Worker Vehicle	LDA	1140.9	33073440.0	29.0
	LDT1	104.7	2503906.0	23.9
	LDT2	561.9	13160213.0	23.4
	Worker Mix	-	-	26.3

Notes:

[1] For construction trucks assumes 50 percent HHDT and 50 percent MHDT vehicles, consistent with assumptions in CalEEMod for hauling trucks. For construction worker vehicles assumes 50 percent LDA, 25 percent LDT1, and 25 percent LDT2 vehicles, consistent with assumptions in CalEEMod for worker vehicles.

[2] EMFAC2021 was run for San Bernardino County for the construction year 2023. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

Construction Vehicle Fuel Use - Diesel Vehicles							
Phase	Trip Type	Total Trips	Trip Length (miles)	Total VMT	Diesel Fuel Effiency (miles/gallon)	Fuel Usage (gallons/year)	
Building Construction	Vendor	49220	10.2	502044	9	55782.7	
					Total	**55782.7**	Diesel

[1] Assumes 100 percent HHDT vehicles for haul trucks and 50 percent HHDT/50 percent MHDT vehicles for MHDT, consistent with assumptions in CalEEMod.

[2] EMFAC2021 was run for San Bernardino County for the construction year 2023. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

Construction Worker Vehicle Fuel Use - Gasoline Vehicles								
Phase	Total One-Way Trips/Day	Total Days	Total Trips	Trip Length (miles)	Total VMT	Gasoline Fuel Effiency (miles/gallon)	Fuel Usage (gallons/year)	
Site Preparation	17.5	15	525	18.5	9712.5	26.3	369.3	
Grading	20	20	800	18.5	14800	26.3	562.7	
Building Construction	275	230	126500	18.5	2340250	26.3	88982.9	
Paving	15	15	450	18.5	8325	26.3	316.5	
Architectural Coating	55.1	130	14326	18.5	265031	26.3	10077.2	
						Total	**100308.7**	Gas

Total Construction Gasoline Usage	100308.7
Total Construction Diesel Usage	66462.3

Proposed Project Operational Trips - Unrefrigerated Warehouse			
Vehicle and Light Duty Truck Trips Fleet Mix			
Vehicle Class	CalEEMod	Total Project Trips	Total Trips per Vehicle Class
LDA	0.4509	570	257.0
LDT1	0.0458	570	26.1
LDT2	0.205	570	116.9
MDV	0.1585	570	90.3
LHD1	0.0354	570	20.2
LHD2	0.00946	570	5.4
MHD	0.0684	570	39.0
HHD	0	570	0.0
OBUS	0	570	0.0
UBUS	0	570	0.0
MCY	0.0266	570	15.2
SBUS	0	570	0.0
MH	0	570	0.0

Proposed Project Operational Trips - Refrige		
Vehicle and Light Duty Truck Trips F		
Vehicle Class	CalEEMod	Total Project
LDA	0.4603	34
LDT1	0.0458	34
LDT2	0.205	34
MDV	0.1585	34
LHD1	0.0354	34
LHD2	0.00946	34
MHD	0.0588	34
HHD	0	34
OBUS	0	34
UBUS	0	34
MCY	0.0266	34
SBUS	0	34
MH	0	34

Proposed Project Operational Trips – Fuel Efficiency						
Fuel	Vehicle Class	EMFAC2021 Outputs1				
		Fleet Mix (%)2	Consumption (1,000 gallons/day)	VMT (miles/day)	Fuel Efficiency3 (miles/gallon)	
Gas	LDA	55%	1,118.2	33,024,787.6	29.5	16.1
	LDT1	4%	101.1	2,460,565.1	24.3	1.0
	LDT2	22%	565.3	13,590,073.7	24.0	5.4
	MDV	16%	511.4	9,933,878.3	19.4	3.2
	LHD1	2%	83.8	1,118,103.3	13.4	0.2
	MCY	0%	5.5	228,527.3	41.5	0.2
	MH	0%	11.8	56,940.1	4.8	0.0
	Fleet Mix	–	–	–	26.1	26.1
Diesel	LHD2	7%	21.5	367,558.8	17.1	1.1
	MHDT	15%	90.2	809,994.5	9.0	1.3
	HHDT	79%	716.5	4,383,825.3	6.1	4.8
	Fleet Mix	–	–	–	7.3	7.3

Notes:

[1] EMFAC2021 was run for San Bernardino County for the operational year 2024. Data was aggregated over all vehicle model years and speed bins.

[2] Fleet mix is based on assumptions made in CalEEMod for the proposed project.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

Proposed Project Operational Trips – Fuel Usage						
Land Use	Total Annual VMT2 (miles/year)	Fuel Type	Portion of Fleet3 (%)	VMT by Fuel Type (miles/year)	Fleet Mix Efficiency4 (miles/gallon)	Fuel Usage (gallons/ year)
Unrefrigerated warehouse (Vehicles and Light Duty Trucks)	5,421,659.00	Gas	92%	4999854	26.1	191226.2
		Diesel	8%	422130	7.3	58147.7
Refrigerated Warehouse (Vehicles and Light Duty Trucks)	316,793.00	Gas	93%	295124	26.7	11053.3
		Diesel	7%	21624	7.3	2962.2
Manufacturing (Vehicles and Light Duty Trucks)	4,913,152.00	Gas	92%	4525013	26.7	169476.1
		Diesel	8%	388434	7.3	53210.1
Unrefrigerated warehouse (Heavy Heavyy Duty Trucks)	1,720,464.00	Diesel	100%	1720464	6.1	281189.6
Refrigerated warehouse (Heavy Heavyy Duty Trucks)	168,192.00	Diesel	100%	168192	6.1	27489.0
Manufacturing (Heavy Heavyy Duty Trucks)	1,549,206.00	Diesel	100%	1549206	6.1	253199.5
					Total Gasoline/yea	**371755.7**
					Total Diesel/year	**676198.1**

Notes:

[1] Calculated for operational year 2024 only. Future years will likely use less fuel due to more efficient cars.

[2] Total VMT is based on project's trip generation and trip lengths.

[3] Fleet distribution is based on EMFAC2021 output and CalEEMod assumptions.

[4] Fuel efficiency is based on fuel consumption and VMT data from EMFAC2021 for San Bernardino County and total VMT.

Electricity Usage	
Electricity by Land Use	**kWh/year**
Unrefrigerated Warehouse	2270559
Refrigerated Warehouse	1250338
Manufactiring	717579
Parking Lot	179345
Total	**4,417,821**

Natural Gas Usage			
Natural Gas by Land Use	**kBTU/year**	**BTU/year**	**therms/year**
Unrefrigerated Warehouse	-	-	-
Refrigerated Warehouse	0	0	-
Manufacturing	0	0	-
Total	**-**	**-**	**-**