

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

**MESA LINDA WAREHOUSE PROJECT
HESPERIA, CALIFORNIA**



May 2023

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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	15
Nitrous Oxide.....	15
Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride	15
Black Carbon.....	15
Effects of Global Climate Change	16
AIR QUALITY REGULATIONS	19
Federal Regulations.....	19
Federal Clean Air Act	19
State Regulations.....	19
California Clean Air Act.....	19
California Air Resources Board	19
Regional Regulations	20
Mojave Desert Air Quality Management District	20
Southern California Association of Governments	21
Local Regulations.....	22
City of Hesperia General Plan Update	22
ENERGY REGULATORY SETTING.....	23
Federal Regulations.....	23
Energy Policy Act of 2005.....	23

Safer Affordable Fuel-Efficient Vehicles Rule	23
State Regulations.....	24
Assembly Bill 1575, Warren-Alquist Act	24
Senate Bill 1389, Energy: Planning and Forecasting.....	24
Renewable Portfolio Standard	25
Title 24, California Building Code	25
California Green Building Standards Code (CALGreen Code)	25
California Energy Efficiency Strategic Plan.	26
Regional Regulations	26
Local Regulations.....	26
City of Hesperia General Plan Update	26
GLOBAL CLIMATE CHANGE REGULATORY SETTING	26
Federal Regulations.....	26
State Regulations.....	27
Assembly Bill 1493 (2002)	27
Executive Order S-3-05 (2005).....	27
Assembly Bill 32 (2006), California Global Warming Solutions Act	28
Senate Bill 97 (2007).....	30
Senate Bill 375 (2008).....	31
Executive Order B-30-15 (2015)	31
Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act	32
Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197.....	32
Senate Bill 100.....	32
Executive Order B-55-18.....	32
Title 24, Part 11, Building Standards Code and CALGreen Code	33
California Building Efficiency Standards (Title 24, Part 6)	33
Cap and Trade.....	33
Executive Order N-79-20	34
California Integrated Waste Management Act.....	34
Low Carbon Fuel Standard	34
Advanced Clean Cars Program	35
Executive Order B-48-18.....	35
Regional Regulations	36
Mojave Desert Air Quality Management District	36
Southern California Association of Governments	36
Local Regulations.....	36
County of San Bernardino Regional Greenhouse Gas Reduction Plan	36
Hesperia Climate Action Plan	37
ATTAINMENT STATUS	38
EXISTING CLIMATE AND AIR QUALITY	38
AIR QUALITY MONITORING RESULTS.....	40
GREENHOUSE GAS EMISSIONS INVENTORY	40
Global Emissions.....	40
United States Emissions	42
State of California Emissions	42
City of Hesperia Emissions	42

CONSTRUCTION EMISSIONS.....	44
OPERATIONAL EMISSIONS	44
CONSTRUCTION HEALTH RISK ASSESSMENT	44
OPERATIONAL HEALTH RISK ASSESSMENT	45
ENERGY USE	46
GREENHOUSE GAS ANALYSIS	46
CRITERIA POLLUTANT THRESHOLDS	47
HEALTH RISK THRESHOLDS.....	48
LOCAL MICROSCALE CONCENTRATION STANDARDS	49
GLOBAL CLIMATE CHANGE.....	49
AIR QUALITY IMPACTS	51
Consistency with Applicable Air Quality Plans	51
Criteria Pollutant Analysis	51
Construction Emissions	52
Operational Air Quality Impacts	54
Long-Term Microscale (CO Hot Spot) Analysis	55
Health Risk on Nearby Sensitive Receptors	56
Construction Health Risk Assessment	57
Operational Health Risk Assessment	57
Odors	58
ENERGY IMPACTS	58
Energy Consumption	58
Construction Energy Use	58
Operational Energy Usage	60
Conflict with Renewable Energy or Energy Efficiency Plans	61
GREENHOUSE GAS IMPACTS	61
Generation of Greenhouse Gas Emissions	62
Short-Term Greenhouse Gas Emissions	62
Long-Term Greenhouse Gas Emissions	62
Consistency with Greenhouse Gas Emissions Reduction Plans	63
San Bernardino County Regional Greenhouse Gas Reduction Plan	63
Scoping Plan	67
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	31
Table F: Attainment Status of Criteria Pollutants in the Mojave Desert Air Basin.....	38
Table G: Ambient Air Quality at Nearby Monitoring Stations	41
Table H: Emission Reductions by Sector for Hesperia	43
Table I: Regional Thresholds for Construction and Operational Emissions	48
Table J: Tentative Project Construction Schedule	52
Table K: Diesel Construction Equipment Utilized by Construction Phase.....	53
Table L: Project Construction Emissions.....	54
Table M: Project Operational Emissions	55
Table N: Health Risks from Project Construction to Off-Site Receptors	57
Table O: Health Risks from Project Operation to Off-Site Receptors.....	58
Table P: Proposed Project Energy Consumption Estimates during Construction	59
Table Q: Proposed Project Energy Consumption Estimates during Operation.....	60
Table R: Long-Term Operational Greenhouse Gas Emissions	63
Table S: Project Consistency with City of Hesperia Greenhouse Gas Reduction Measures	64

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
AQMP	Air Quality Management Plan
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	California 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
City	City of Hesperia
CO	carbon monoxide
CO ₂	carbon dioxide

CO ₂ e	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
FCAA	Federal Clean Air Act
ft	foot/feet
GCC	global climate change
GHG	greenhouse gas
GHGRP	Greenhouse Gas Reduction Plan
GWh	gigawatt-hours
GWP	global warming potential
H ₂ S	hydrogen sulfide
HFCs	hydrofluorocarbons
HI	Hazard Index
HRA	Health Risk Assessment
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
LOS	level of service
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 ₂ e	million metric tons of carbon dioxide equivalent
mpg	miles per gallon

mph	miles per hour
MPO	Metropolitan Planning Organization
MT	metric tons
MT CO ₂ e	metric tons of carbon dioxide equivalent
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
ND	no data available
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	Mesa Linda Street 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
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
sf	square foot/feet
SF ₆	sulfur hexafluoride
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SoCalGas	Southern California Gas Company
TAC	toxic air contaminant
UNFCCC	United Nations Framework Convention on Climate Change
USDOT	United States Department of Transportation
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 Mesa Linda Street Warehouse 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 southwest of the proposed Mesa Linda Street and Sultana Street (future roadway) intersection, in the City of Hesperia, County of San Bernardino, California. The total project site is approximately 18.16 acres of which 408,997 square feet (sf) would be used to construct a single-story warehouse and associated parking space. Access to the project site would be provided via driveways on Lassen Street (future roadway) and Mesa Linda Street. The project applicant is expected to build out the future roadways on Lassen Street and Sultana Street. See Figure 1, Project Location and Vicinity, and Figure 2, Project Site Plan, below.

The project proposes to build a speculative 402,997 sf warehouse and 6,000 sf of mezzanine space for a total 408,997 sf industrial building. The proposed project would designate 52.73 percent of the total project area to the industrial building and would have approximately 117,306 sf of landscaped area. Parking spaces required by City code would be maintained in a 220-space parking lot, including 213 standard vehicle stalls and 7 accessible stalls. In addition, the proposed project would include 54 dock doors and 57 trailer stalls. Once operational, the proposed project would generate approximately 573 average daily trips, including 395 passenger vehicle trips, 39 two-axle truck trips, 31 three-axle truck trips, and 107 four-axle truck trips.² The proposed project would include a 110-horsepower diesel fire pump that would run approximately 27 hours annually. In addition, the proposed project would utilize drought-tolerant plants and irrigation.

Construction is anticipated to begin on the fourth quarter of 2023. Based on the preliminary grading plans, the project site would be balanced, and no import or export of soil would be required.

¹ Mojave Desert Air Quality Management District (MDAQMD). 2016. California Environmental Quality Act (CEQA) and Federal Air Conformity Guidelines. Website: <https://www.mdaqmd.ca.gov/home/showdocument?id=192> (accessed August 2022).

² Newcastle Partners. 2022. *Mesa Linda Street Warehouse Traffic Impact Analysis*. August 19.

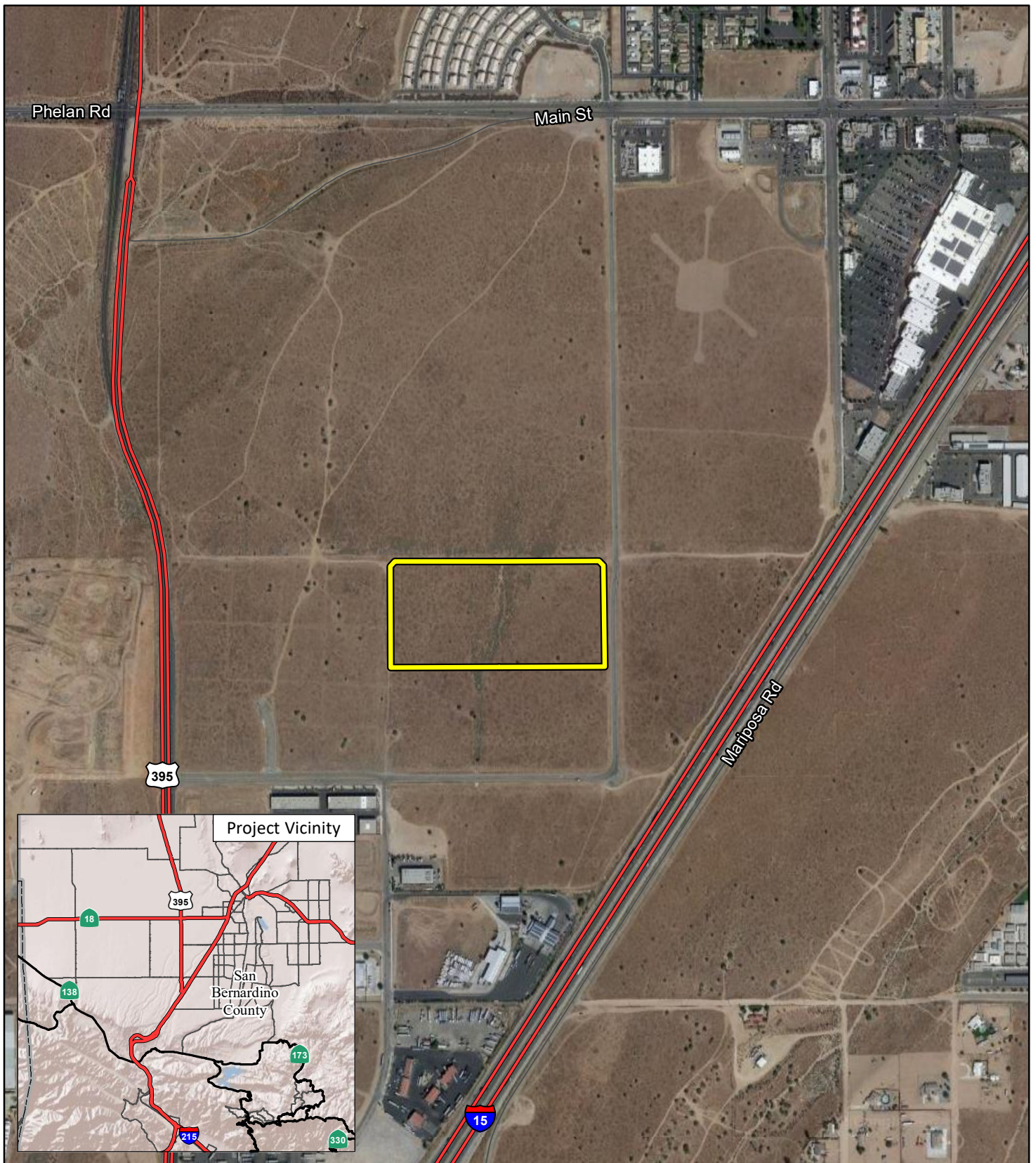
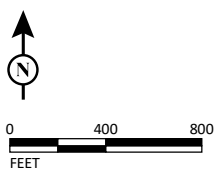


FIGURE 1

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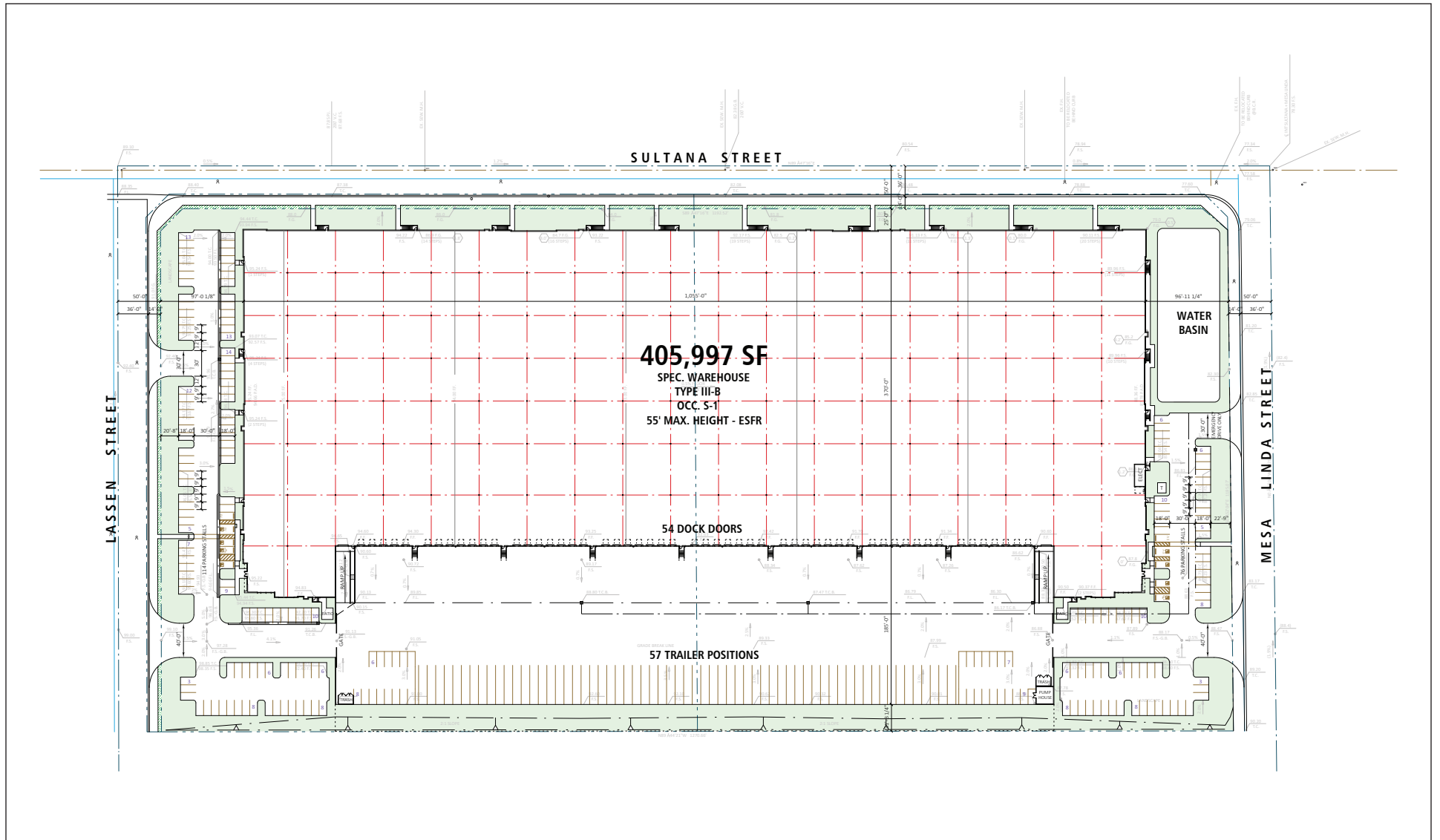
LEGEND



SOURCE: Google (2021)

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Mesa Linda Warehouse Project
Regional Project Location



LSA



NOT TO SCALE

SOURCE: RGA, 4/25/2022

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FIGURE 2

Mesa Linda Street Warehouse Project
Site Plan

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 bound to Mesa Linda Street to the east, and vacant land to the north, west, and south of project site. Existing uses near the project area include commercial uses located south and southwest of project site. The closest sensitive receptors include residential uses located approximately 2,200 feet southeast of the project site along Muscatel Street, residential uses approximately 2,800 ft north of the project site along Main Street, and residential uses located approximately 2,900 ft southeast of the project site along Seal Beach Drive.

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 Handbook³ (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 (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), 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 (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

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 $\text{PM}_{2.5}$, is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $\text{PM}_{2.5}$. 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

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

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 ($\mu\text{g}/\text{m}^3$). 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

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.

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 conduction - 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	–	Gravimetric or Beta Attenuation	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³		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/m ³)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)	–	Ultraviolet Fluorescence; Spectrophotometry (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 ^l	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 August 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 (PM₁₀, 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 PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ 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/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ 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 SO₂ 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 SO₂ 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/m³ 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/m³ = micrograms per cubic meter

CARB = California Air Resources Board

mg/m³ = 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 (33.6percent), large hydroelectric (9.2 percent), nuclear (9.3 percent), coal (3.0 percent), and other unspecified sources. Total electric generation in California in 2020 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 2020 was 83,532.6 GWh (32,475 GWh for the residential sector and 51,057 GWh for the non-residential sector). Total electricity consumption in San Bernardino County in 2020 was 15,968.5 GWh (15,968,515,536 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

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 August 2022).

⁹ Southern California Edison (SCE). 2020. About Us. Website: <https://www.sce.com/about-us/who-we-are> (accessed August 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 August 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 August 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 2020 was 4,508.5 million therms (1,891.3million therms for the residential sector). Total natural gas consumption in San Bernardino County in 2020 was 527 million therms (527,236,428 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 2020¹⁵, applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 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

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

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

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.

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 ($^{\circ}\text{C}$) or 1.1 ± 0.4 degrees Fahrenheit ($^{\circ}\text{F}$) 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.

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.

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 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 CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂e). Table C shows the GWP for each type of GHG. For example, SF₆ is 22,800 times more potent at contributing to global warming than CO₂.

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	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoromethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Source: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC* (IPCC 2007).

IPCC = Intergovernmental Panel on Climate Change.

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, as CO₂. Natural sources of CO₂ 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 CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of CO₂ each year, far outweighing the 7 billion tons of man-made emissions of CO₂ 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 CO₂, and consequently, the gas is building up in the atmosphere.

In 2019, total annual CO₂ accounted for approximately 83 percent of California's overall GHG emissions.¹⁹ Transportation is the single largest source of CO₂ in California, which is primarily

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

comprised of on-road travel. Electricity production, industrial and residential sources also make important contributions to CO₂ 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 CH₄ emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH₄ in California. Total annual emissions of CH₄ accounted for approximately 9 percent of GHG emissions in California.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 N₂O, 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 N₂O emissions in California. Nitrous oxide emissions accounted for approximately 3 percent of GHG emissions in California in 2019.²¹

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.²² PFCs and SF₆ 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 SF₆ accounted for about 5 percent of GHG emissions in California in 2019.²³

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 CO₂.²⁴ Black carbon

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

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, 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

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 August 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 August 2022).

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

²⁸ Ibid.

²⁹ Ibid.

- 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
- Increase in the number of days conducive to O₃ formation by 25–85 percent (depending on the future temperature scenario) in high O₃ 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

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

³¹ CalEPA. 2006. op. cit.

³² CalEPA. 2006. op. cit.

³³ Ibid.

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

Potential Water Resource Impacts	Anticipated Consequences Statewide
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

O₃ = ozone

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 (FCAA) 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, O₃, SO₂, and NO₂ 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 Handbook³⁴ 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 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet 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).

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

Programs include air quality rules and regulations that regulate stationary sources, area sources, 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 PM₁₀ Attainment Demonstration and Attainment Plan and the O₃ 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 PM₁₀ 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 PM₁₀ 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.

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

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 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.

Safer Affordable Fuel-Efficient Vehicles Rule

On March 21, 2020, the USEPA and NHTSA finalized the SAFE Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). The SAFE Vehicles Rule amends certain existing Corporate Average Fuel Economy and tailpipe CO₂ emissions standards for passenger cars and light trucks and establishes new standards, all covering model years 2021 through 2026. More specifically, the NHTSA set new Corporate Average Fuel Economy standards for model years 2022 through 2026 and amended its 2021 model year Corporate Average Fuel Economy standards, and the USEPA amended its CO₂ emissions standards for model years 2021 and later.

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

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.

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 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

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 3 years, and the current 2019 CBC went into effect on January 1, 2020. 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.

California Green Building Standards Code (CALGreen Code)

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 2019 CALGreen Code standards that became effective January 1, 2020. 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 GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

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

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.

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 CO₂ emissions under the FCAA. 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 (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆)

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 CO₂ per mile for the fleet of cars and light-duty trucks by model year 2025 (77 *Federal Register* 62630).

On March 21, 2020, the USEPA and NHTSA finalized the SAFE Vehicles Rule. The SAFE Vehicles Rule amends certain existing CAFE and tailpipe CO₂ emissions standards for passenger cars and light trucks and establish new standards, all covering model years 2021 through 2026. More specifically, NHTSA set new CAFE standards for model years 2022 through 2026 and amended its 2021 model year CAFE standards, and the USEPA amended its CO₂ emissions standards for model years 2021 and later. On May 12, 2021, the NHTSA published a notice of proposed rulemaking in the *Federal Register*, proposing to repeal key portions of the SAFE Vehicles Rule that would have reduced CAFE standards. The final rule repealing portions of the SAFE Vehicles Rule was published on December 29, 2021. The repeal will allow California to set its own GHG standards if it chooses, even if the emissions standards conflict with CAFE standards enacted by the USDOT.

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 CO₂ 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 CO₂e. 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 CO₂e, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT CO₂e under a business-as-usual scenario (this is a reduction of 42 MMT CO₂e, 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 CO₂e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);

- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO₂e).

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 CO₂e 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 CO₂e 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 CH₄ Capture).³⁹ Discrete early action measures are measures that were required to be adopted as regulations and made effective

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

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 SF₆ 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. 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 Draft 2022 Scoping Plan Update⁴² 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

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

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

⁴² CARB. 2021. *Draft 2022 Scoping Plan Update*. May 10. Website: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf> (accessed August 2022).

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.

**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 CO₂e 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 CO₂e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

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

In November 2008, 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 2019 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2020. The next set of standards will be adopted in 2022 and apply to projects seeking building permits on or after January 1, 2023.

California Building Efficiency Standards (Title 24, Part 6)

The 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. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2020, must follow the 2019 standards. The next set of standards is anticipated for release in 2022. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

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 CH₄. 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 tons of CO₂e per year and 548,000 pounds of CO₂e 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

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 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

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 August 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 August 2022).

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 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)⁴⁵ 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.

⁴⁵ 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 August 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 O₃, CO, and NO₂ as either does not meet the primary standards, or cannot be classified, or better than national standards. For SO₂, 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	Nonattainment: Moderate	Revoked June 2005
O ₃ 8 hour	Nonattainment	Nonattainment: Moderate
PM ₁₀	Nonattainment	Nonattainment: Moderate
PM _{2.5}	Nonattainment	Unclassified/attainment
CO	Attainment	Attainment
NO ₂	Attainment/unclassified	Attainment/unclassified
SO ₂	Attainment/unclassified	Attainment/Unclassified
Lead	Attainment	Attainment ¹

Source: California Air Resources Board (2016) (Website: <http://www.arb.ca.gov/desig/desig.htm>; accessed August 2022).

CO = carbon monoxide

N/A = not applicable

NO₂ = nitrogen dioxide

O₃ = ozone

PM₁₀ = particulate matter less than 10 microns in size

PM_{2.5} = particulate matter less than 2.5 microns in size

SO₂ = 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 Geronio 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 (BWbh), to indicate that at least 3 months have maximum average temperatures over 100.4 degrees Fahrenheit (°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.⁴⁶ 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

⁴⁶ Western Regional Climate Center. Recent Climate in the West. Website: <http://www.wrcc.dri.edu>, (accessed August 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 PM₁₀ standard had one exceedance for 2019, 2020, and 2021. The State PM₁₀ 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, SO₂, and NO₂ 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 CO₂e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).⁴⁷

⁴⁷ 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 August 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 (O₃)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 (PM₁₀)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 (NO₂)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 (SO₂)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/m³ = micrograms per cubic meter

µg/m³ = 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 2019, the year for which the most recent data are available, the United States emitted about 6,558 million metric tons of CO₂e (MMT CO₂e). Overall, emissions in 2019 decreased by 1.7 percent since 2018 and were 13 percent 2005 levels. This decrease was driven largely by a decrease in emissions from fossil fuel combustion resulting from a decrease in total energy use in 2019 compared to 2018 and a continued shift from coal to natural gas and renewables in the electric power sector. Of the six major sectors – residential, commercial, agricultural, industry, transportation, and electricity generation – transportation accounted for the highest amount of GHG emissions in 2019 (approximately 29 percent), with electricity generation second at 25 percent and emissions from industry third at 23 percent.⁴⁸

State of California Emissions

The State emitted approximately 418.2 MMT CO₂e emissions in 2019, 7.2 MMT CO₂e lower than 2018 levels and almost 13 MMT CO₂e below the 2020 GHG Limit of 431 MMT CO₂e.⁴⁹ The CARB estimates that transportation was the source of approximately 40 percent of the State's GHG emissions in 2019, followed by industrial sources at approximately 21 percent and electricity generation at 14 percent. The remaining sources of GHG emissions were agriculture at 8 percent, residential activities at 7 percent, commercial activities at 4 percent, high GWP at 5 percent, and waste at 2 percent.⁵⁰

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.

⁴⁸ USEPA. 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Website: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019> (accessed August 2022).

⁴⁹ CARB. 2021. *California Greenhouse Gas Emissions for 2000 to 2019, Trends of Emissions and Other Indicators Report*. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf (accessed August 2022).

⁵⁰ Ibid.

Table H: Emission Reductions by Sector for Hesperia

Sector	2016 Emissions (MT CO ₂ e)	2030 BAU (MT CO ₂ e)	2030 Reductions (MT CO ₂ e)	2030 Emissions w/Reduction Plan (MT CO ₂ e)	Reduction Percent
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*	-	-	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

*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 CO₂e = 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 demolition, 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 2020.4.0 (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 fourth quarter of 2023, 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. The proposed project analysis was conducted using land use codes *Unrefrigerated Warehouse-No Rail*, *City Park*, and *Parking Lot*. Trip generation rates used in CalEEMod for the project were based on the project's Traffic Impact Analysis⁵¹, which identifies that the proposed project would generate approximately 573 average daily trips.

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

⁵¹ Newcastle Partners. 2022. op. cit.

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 573 average daily trips, including 395 passenger vehicle trips, 39 two-axle truck trips, 31 three-axle truck trips, and 107 four-axle truck trips. The trucks would access the site by Mesa Linda Street and Lassen Street (future roadway). The proposed project would provide 54 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 (PM₁₀ 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, the truck travel emissions were modeled as a series of volume sources along the on-site driveway, along Sultana Street going east and west, Lassen Street going north and south, and Mesa Linda 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 2022 were used as a conservative estimate of emissions, as the project is not expected to be fully operational until 2025, 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 (2025) 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	15
Operations	25	25	100	25	15	15
Pounds Per Year						
Construction	137	137	548	137	82	65
Operations	137	137	548	137	82	65

Source: MDAQMD, 2016. (Website: <https://www.mdaqmd.ca.gov/home/showdocument?id=192>; accessed August 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

PM₁₀ = 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* states 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 has adopted 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) CO₂e or 100,000 MT/year CO₂e. 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 CO₂e (or MT CO₂e) per year (or MT CO₂e/year) for all land use types or, under Option 2, the following landuse-specific thresholds: 1,400 MT CO₂e commercial projects; 3,500 MT CO₂e for residential projects; or 3,000 MT CO₂e 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 CO₂e per year per service population for project-level analyses and 6.6 MT CO₂e 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 CO₂e/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.

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 PM₁₀ Attainment Demonstration and Attainment Plan and the O₃ Attainment Plan. The attainment plans are based on regional growth projections developed by SCAG. The proposed project would include 408,997 sf of warehouse uses. The proposed project would not house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 sf of floor area. Thus, the proposed project would not be defined as a regionally significant project under CEQA; therefore, it does not meet SCAG's Intergovernmental Review criteria.

Additionally, as discussed above, 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 O₃ and PM_{2.5} for federal standards and nonattainment for O₃, PM₁₀, 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, ROG_s, directly emitted *er* (PM_{2.5} and PM₁₀), 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.

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	10/13/2023	5	10
2	Grading	10/14/2023	11/24/2023	5	30
3	Building Construction	11/25/2023	1/17/2025	5	300
4	Paving	12/30/2024	1/24/2025	5	20
5	Architectural Coating	6/3/2024	12/27/2024	5	150

Source: Compiled by LSA, assuming construction starts in the fourth quarter of 2023 (August 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	247	0.40
	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	158	0.38
	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.40
	Scrapers	2	8	367	0.48
	Tractors/Loaders/Backhoes	2	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.20
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Paving	Paving Equipment	2	8	132	0.36
	Pavers	2	8	130	0.42
	Rollers	2	8	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

Source: Compiled by LSA, using CalEEMod defaults (August 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	1.3	33.8	23.5	<0.1	9.9	5.5
Grading	1.9	51.3	37.3	0.1	5.6	3.0
Building Construction	2.1	27.9	26.8	0.1	3.7	1.7
Paving	1.6	20.1	17.7	<0.1	0.8	0.7
Architectural Coating	63.9	2.4	3.2	<0.1	0.5	0.2
Maximum (lbs/day)	63.9	51.3	44.5	0.1	9.9	5.5
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	1.3	1.0	<0.1	0.2	0.1
2024	5.0	3.9	3.6	<0.1	0.5	0.2
2025	<0.1	0.4	0.3	<0.1	<0.1	<0.1
Maximum (tons/year)	5.0	3.9	3.6	<0.1	0.5	0.2
MDAQMD Thresholds	25	25	100	25	15	15
Exceeds?	No	No	No	No	No	No

Source: Compiled by LSA (August 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

PM₁₀ = 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 MDAQMD thresholds for VOCs, NO_x, CO, sulfur oxides (SO_x), PM_{2.5}, or PM₁₀ 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 fire pump) related to the proposed project.

PM₁₀ 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 PM₁₀ 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 the fire pump.

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	11.4	<0.1	0.1	0.0	<0.1	<0.1
Energy Sources	<0.1	0.2	0.2	<0.1	<0.1	<0.1
Mobile Sources	2.1	11.0	22.6	0.1	5.5	1.5
Stationary Sources	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Project Emissions	13.6	11.2	22.8	0.1	5.5	1.5
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	2.1	<0.1	<0.1	0.0	<0.1	<0.1
Energy Sources	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile Sources	0.3	2.0	3.9	<0.1	1.0	0.3
Stationary Emissions	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Emissions	2.4	2.1	3.9	<0.1	1.0	0.3
MDAQMD Thresholds	25	25	100	25	15	15
Significant?	No	No	No	No	No	No

Source: Compiled by LSA (August 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

PM₁₀ = 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 VOCs, NO_x, CO, SO_x, PM₁₀, 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 Analysis⁵², the proposed project would generate 32 AM peak hour trips and 41 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 located approximately 2,200 feet southeast of the project site along Muscatel Street, residential uses approximately 2,800 ft north of the project site along Main Street, and residential uses located approximately 2,900 ft southeast of the project site along Seal Beach Drive.

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.

⁵² Newcastle Partners. 2022. op. cit.

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	0.09	0.002	0.000
Sensitive Receptor Risk	2.04	0.002	0.000
MDAQMD Significance Threshold	10.0 in one million	1.0	1.0
Significant?	No	No	No

Source: LSA (August 2022).

MDAQMD = Mojave Desert Air Quality Management District

As shown in Table N, the maximum cancer risk for the sensitive receptor MEI would be 2.04 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 0.09 in one million, but which would also not exceed the threshold. The total chronic hazard index would be 0.002 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	0.13	<0.001	<0.001
Sensitive Receptor Risk	0.46	<0.001	<0.001
MDAQMD Significance Threshold	10.0 in one million	1.0	1.0
Significant?	No	No	No

Source: LSA (May 2022).

MDAQMD = Mojave Desert Air Quality Management District

As shown in Table O, the maximum cancer risk for the sensitive receptor MEI would be 0.46 in one million, less than the threshold of 10 in one million. The worker receptor risk would be lower at 0.13 in one million. The total chronic hazard index would be less than 0.001 for both the sensitive and 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 the fourth quarter of 2023. 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)	109,048.7	<0.01
Gasoline (total gallons)	70,861.1	<0.01

Source: Compiled by LSA (May 2022).

As indicated in Table P, the project would consume approximately 109,048.7 gallons of diesel fuel and approximately 70,861.1 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 and natural gas consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod.

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 Analysis⁵³, which identifies that the proposed project would generate approximately 573 average daily trips, including 395 passenger vehicle trips, 39 two-axle truck trips, 31 three-axle truck trips, and 107 four-axle truck 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.

Electricity, natural gas, 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)	979,673	0.01
Natural Gas Consumption (therms/year)	8,223	<0.01
Automotive Fuel Consumption		
Gasoline (gallons/year)	68,980.6	0.01
Diesel Fuel (gallons/year)	83,332.8	0.03

Source: Compiled by LSA (May 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 979,673 kWh per year. Total electricity consumption in San Bernardino County in 2020 was 15,968.5 GWh (15,968,515,536 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in San Bernardino County by approximately 0.01 percent.

As shown in Table Q, the estimated potential increase in natural gas demand associated with the proposed project is 8,223 therms per year. Total natural gas consumption in San Bernardino County in 2020 was 527 million therms (527,236,428 therms). Therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in San Bernardino County by less than 0.01 percent.

Electrical and natural gas 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

⁵³ Newcastle Partners. 2022. op. cit.

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, 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 68,980.6 gallons of gasoline and 83,332.8 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 0.01 percent for gasoline fuel usage and approximately 0.03 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 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

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

Generation of Greenhouse Gas Emissions

This section describes 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 CO₂, CH₄, and N₂O. Furthermore, CH₄ 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 or 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 SCAQMD's GHG threshold of 3,000 MT/year CO₂e. 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 1,045.1 MT/year CO₂e during construction of the project. When amortized over the 30-year life of the project, annual emissions would be 34.8 MT/year CO₂e.

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 fire pump), 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 fire pump.

Following guidance from the MDAQMD, GHG emissions were estimated for the operational year of 2025 using CalEEMod. Table R shows the calculated GHG emissions for the proposed project.

Table R: Long-Term Operational Greenhouse Gas Emissions

Source	Greenhouse Gas Emissions, CO ₂ e
	Metric Tons per Year
Project Operational Emissions	
Area Sources	<0.1
Energy Sources	218.8
Mobile Sources	1,405.1
Stationary Sources	1.1
Waste Sources	193.5
Water Sources	354.3
Total Project Emissions	2,172.7
Amortized Construction Emissions	34.8
Total Annual Emissions	2,207.5
Threshold	3,000
Significant?	No

Source: Compiled by LSA (August 2022).

CO₂e = carbon dioxide equivalent

MDAQMD = Mojave Desert Air Quality Management District

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 CO₂e. Based on the analysis results, the proposed project would result in annual emissions of 2,207.5 MT/year CO₂e. Therefore, operation of the proposed project would not 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 S, 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 S: 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.	Consistent. The proposed project would include landscaping along the perimeter of the project site consistent with the City's landscaping requirements.

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

Measure	Description	Project Consistency
	• Implementation Policy LU-3.8. Incorporate landscape plantings into commercial developments 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.	Not Applicable. The proposed project would construct a warehouse building and would not include transit fleet vehicles.

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

Measure	Description	Project Consistency
	• Implementation Policy CI-5.1. Provide a wide range of travel alternatives to the use of single occupancy vehicles. • 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.
Water Conveyance		

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

Measure	Description	Project Consistency
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 (August 2022).

CALGreen Code = California Green Building Standards Code

LEED = Leadership in Energy and Environmental Design

Scoping Plan

In addition, the proposed project was analyzed for consistency with the goals of AB 32 and the AB 32 Scoping Plan. The following discussion evaluates the proposed project according to the goals of AB 32, the AB 32 Scoping Plan, EO B-30-15, SB 32, and AB 197.

AB 32 is aimed at reducing GHG emissions to 1990 levels by 2020. 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 AB 32 Scoping Plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

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,⁵⁴ 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.

The Draft 2022 Scoping Plan Update⁵⁵ 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. The proposed project would also implement drought-tolerant landscaping and irrigation. 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.

⁵⁴ CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

⁵⁵ CARB. 2021. *Draft 2022 Scoping Plan Update*. May 10. Website: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf> (accessed August 2022).

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 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 a speculative 402,997 sf warehouse and 6,000 sf of mezzanine space for a total 408,997 sf industrial building. The proposed project would generate approximately 573 average daily trips, including 395 passenger vehicle trips, 39 two-axle truck trips, 31 three-axle truck trips, and 107 four-axle truck 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 be lower than significance thresholds and would not be cumulatively considerable. 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

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mesa Linda Warehouse Project
San Bernardino-Mojave Desert County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	409.00	1000sqft	11.00	408,997.00	0
Parking Lot	220.00	Space	4.46	88,000.00	0
City Park	2.70	Acre	2.70	117,306.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site is 18.16 acres

Construction Phase - Default schedule with overlap of building construction and architectural coating phases

Off-road Equipment - Default equipment

Demolition - Project site is undeveloped, no demolition required.

Grading - Balanced site

Vehicle Trips - Based on a trip generation of 573 ADT

Construction Off-road Equipment Mitigation - Use of Tier 2 construction equipment, water exposed area twice and reduced vehicle speed to 15 mph

Area Mitigation -

Water Mitigation - Project would include drought tolerant landscape and water efficient irrigation systems

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stationary Sources - Emergency Generators and Fire Pumps - Project would include a diesel fire pump

[illegible]

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	150.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	409,000.00	408,997.00
tblLandUse	LandUseSquareFeet	117,612.00	117,306.00
tblLandUse	LotAcreage	9.39	11.00
tblLandUse	LotAcreage	1.98	4.46
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	110.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	27.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	2.19	0.00

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.40

2.0 Emissions Summary

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0948	0.8909	0.8257	1.9400e-003	0.2739	0.0370	0.3108	0.1155	0.0342	0.1497	0.0000	173.5696	173.5696	0.0401	4.0900e-003	175.7907
2024	5.0947	2.4418	3.3567	8.7400e-003	0.3922	0.0905	0.4827	0.1062	0.0854	0.1916	0.0000	798.1206	798.1206	0.0864	0.0419	812.7512
2025	0.0277	0.1864	0.2853	6.2000e-004	0.0190	7.4500e-003	0.0264	5.1400e-003	6.9300e-003	0.0121	0.0000	55.7000	55.7000	9.9600e-003	2.0100e-003	56.5478
Maximum	5.0947	2.4418	3.3567	8.7400e-003	0.3922	0.0905	0.4827	0.1155	0.0854	0.1916	0.0000	798.1206	798.1206	0.0864	0.0419	812.7512

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0587	1.2873	0.9997	1.9400e-003	0.1439	0.0365	0.1804	0.0576	0.0365	0.0941	0.0000	173.5694	173.5694	0.0401	4.0900e-003	175.7905
2024	5.0384	3.8619	3.5846	8.7400e-003	0.3922	0.1313	0.5235	0.1062	0.1310	0.2372	0.0000	798.1202	798.1202	0.0864	0.0419	812.7508
2025	0.0260	0.3623	0.3213	6.2000e-004	0.0190	0.0121	0.0311	5.1400e-003	0.0121	0.0173	0.0000	55.6999	55.6999	9.9600e-003	2.0100e-003	56.5478
Maximum	5.0384	3.8619	3.5846	8.7400e-003	0.3922	0.1313	0.5235	0.1062	0.1310	0.2372	0.0000	798.1202	798.1202	0.0864	0.0419	812.7508

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.80	-56.62	-9.81	0.00	18.97	-33.38	10.36	25.54	-41.94	1.37	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-2-2023	1-1-2024	0.9870	1.3536
2	1-2-2024	4-1-2024	0.6544	0.9703
3	4-2-2024	7-1-2024	1.3246	1.6515
4	7-2-2024	10-1-2024	2.7997	3.1542
5	10-2-2024	1-1-2025	2.6999	3.0645
6	1-2-2025	4-1-2025	0.1915	0.3481
		Highest	2.7997	3.1542

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0817	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Energy	4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	217.6102	217.6102	0.0155	2.5800e-003	218.7672
Mobile	0.3453	2.0162	3.8523	0.0142	0.9573	0.0183	0.9756	0.2586	0.0174	0.2760	0.0000	1,361.3891	1,361.3891	0.0625	0.1413	1,405.0678
Stationary	2.4400e-003	6.8100e-003	8.8400e-003	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	1.1310	1.1310	1.6000e-004	0.0000	1.1349
Waste						0.0000	0.0000		0.0000	0.0000	78.0886	0.0000	78.0886	4.6149	0.0000	193.4612
Water						0.0000	0.0000		0.0000	0.0000	30.0063	224.7471	254.7533	3.1009	0.0751	354.6468
Total	2.4339	2.0634	3.9008	0.0144	0.9573	0.0219	0.9793	0.2586	0.0210	0.2796	108.0949	1,804.8886	1,912.9834	7.7940	0.2190	2,173.0899

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0817	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Energy	4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	217.6102	217.6102	0.0155	2.5800e-003	218.7672
Mobile	0.3453	2.0162	3.8523	0.0142	0.9573	0.0183	0.9756	0.2586	0.0174	0.2760	0.0000	1,361.3891	1,361.3891	0.0625	0.1413	1,405.0678
Stationary	2.4400e-003	6.8100e-003	8.8400e-003	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	1.1310	1.1310	1.6000e-004	0.0000	1.1349
Waste						0.0000	0.0000		0.0000	0.0000	78.0886	0.0000	78.0886	4.6149	0.0000	193.4612
Water						0.0000	0.0000		0.0000	0.0000	30.0063	224.3604	254.3667	3.1009	0.0751	354.2582
Total	2.4339	2.0634	3.9008	0.0144	0.9573	0.0219	0.9793	0.2586	0.0210	0.2796	108.0949	1,804.5019	1,912.5968	7.7940	0.2190	2,172.7013

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/2/2023	10/13/2023	5	10	
2	Grading	Grading	10/14/2023	11/24/2023	5	30	

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3	Building Construction	Building Construction	11/25/2023	1/17/2025	5	300
4	Architectural Coating	Architectural Coating	6/3/2024	12/27/2024	5	150
5	Paving	Paving	12/30/2024	1/24/2025	5	20

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 90****Acres of Paving: 4.46****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 613,496; Non-Residential Outdoor: 204,499; Striped Parking Area: 5,280 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	258.00	101.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0983	6.3300e-003	0.1046	0.0505	5.8200e-003	0.0563	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.2800e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5705	0.5705	2.0000e-005	2.0000e-005	0.5759
Total	2.6000e-004	1.8000e-004	2.2800e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5705	0.5705	2.0000e-005	2.0000e-005	0.5759

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0500e-003	0.1686	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	6.0500e-003	0.1686	0.1148	1.9000e-004	0.0442	4.7300e-003	0.0490	0.0227	4.7300e-003	0.0275	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.8000e-004	2.2800e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5705	0.5705	2.0000e-005	2.0000e-005	0.5759
Total	2.6000e-004	1.8000e-004	2.2800e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5705	0.5705	2.0000e-005	2.0000e-005	0.5759

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.1381	0.0214	0.1594	0.0548	0.0197	0.0745	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.1000e-004	7.5900e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9015	1.9015	6.0000e-005	6.0000e-005	1.9196
Total	8.7000e-004	6.1000e-004	7.5900e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9015	1.9015	6.0000e-005	6.0000e-005	1.9196

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0621	0.0000	0.0621	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0272	0.7686	0.5508	9.3000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0272	0.7686	0.5508	9.3000e-004	0.0621	0.0200	0.0821	0.0247	0.0200	0.0447	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.1000e-004	7.5900e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9015	1.9015	6.0000e-005	6.0000e-005	1.9196
Total	8.7000e-004	6.1000e-004	7.5900e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9015	1.9015	6.0000e-005	6.0000e-005	1.9196

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0197	0.1798	0.2031	3.4000e-004		8.7500e-003	8.7500e-003		8.2300e-003	8.2300e-003	0.0000	28.9756	28.9756	6.8900e-003	0.0000	29.1479
Total	0.0197	0.1798	0.2031	3.4000e-004		8.7500e-003	8.7500e-003		8.2300e-003	8.2300e-003	0.0000	28.9756	28.9756	6.8900e-003	0.0000	29.1479

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4500e-003	0.0483	0.0191	2.4000e-004	8.4200e-003	3.5000e-004	8.7700e-003	2.4300e-003	3.4000e-004	2.7700e-003	0.0000	23.1524	23.1524	6.0000e-004	3.4200e-003	24.1867
Worker	9.3900e-003	6.6000e-003	0.0816	2.2000e-004	0.0260	1.3000e-004	0.0261	6.9000e-003	1.2000e-004	7.0300e-003	0.0000	20.4414	20.4414	6.4000e-004	6.0000e-004	20.6358
Total	0.0108	0.0549	0.1007	4.6000e-004	0.0344	4.8000e-004	0.0349	9.3300e-003	4.6000e-004	9.8000e-003	0.0000	43.5938	43.5938	1.2400e-003	4.0200e-003	44.8225

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.2944	0.2234	3.4000e-004		0.0113	0.0113		0.0113	0.0113	0.0000	28.9756	28.9756	6.8900e-003	0.0000	29.1479
Total	0.0135	0.2944	0.2234	3.4000e-004		0.0113	0.0113		0.0113	0.0113	0.0000	28.9756	28.9756	6.8900e-003	0.0000	29.1479

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4500e-003	0.0483	0.0191	2.4000e-004	8.4200e-003	3.5000e-004	8.7700e-003	2.4300e-003	3.4000e-004	2.7700e-003	0.0000	23.1524	23.1524	6.0000e-004	3.4200e-003	24.1867
Worker	9.3900e-003	6.6000e-003	0.0816	2.2000e-004	0.0260	1.3000e-004	0.0261	6.9000e-003	1.2000e-004	7.0300e-003	0.0000	20.4414	20.4414	6.4000e-004	6.0000e-004	20.6358
Total	0.0108	0.0549	0.1007	4.6000e-004	0.0344	4.8000e-004	0.0349	9.3300e-003	4.6000e-004	9.8000e-003	0.0000	43.5938	43.5938	1.2400e-003	4.0200e-003	44.8225

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.5111	0.1973	2.4600e-003	0.0883	3.6300e-003	0.0919	0.0255	3.4800e-003	0.0290	0.0000	239.2995	239.2995	6.1200e-003	0.0353	249.9848
Worker	0.0915	0.0616	0.7987	2.2400e-003	0.2724	1.3600e-003	0.2737	0.0724	1.2500e-003	0.0736	0.0000	209.6606	209.6606	6.0500e-003	5.8300e-003	211.5486
Total	0.1063	0.5726	0.9959	4.7000e-003	0.3606	4.9900e-003	0.3656	0.0978	4.7300e-003	0.1026	0.0000	448.9601	448.9601	0.0122	0.0412	461.5333

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1416	3.0856	2.3415	3.5300e-003		0.1184	0.1184		0.1184	0.1184	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	0.1416	3.0856	2.3415	3.5300e-003		0.1184	0.1184		0.1184	0.1184	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.5111	0.1973	2.4600e-003	0.0883	3.6300e-003	0.0919	0.0255	3.4800e-003	0.0290	0.0000	239.2995	239.2995	6.1200e-003	0.0353	249.9848
Worker	0.0915	0.0616	0.7987	2.2400e-003	0.2724	1.3600e-003	0.2737	0.0724	1.2500e-003	0.0736	0.0000	209.6606	209.6606	6.0500e-003	5.8300e-003	211.5486
Total	0.1063	0.5726	0.9959	4.7000e-003	0.3606	4.9900e-003	0.3656	0.0978	4.7300e-003	0.1026	0.0000	448.9601	448.9601	0.0122	0.0412	461.5333

3.4 Building Construction - 2025**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8900e-003	0.0811	0.1046	1.8000e-004		3.4300e-003	3.4300e-003		3.2300e-003	3.2300e-003	0.0000	15.0748	15.0748	3.5400e-003	0.0000	15.1634
Total	8.8900e-003	0.0811	0.1046	1.8000e-004		3.4300e-003	3.4300e-003		3.2300e-003	3.2300e-003	0.0000	15.0748	15.0748	3.5400e-003	0.0000	15.1634

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2000e-004	0.0252	9.6300e-003	1.2000e-004	4.3800e-003	1.8000e-004	4.5600e-003	1.2600e-003	1.7000e-004	1.4400e-003	0.0000	11.6429	11.6429	2.9000e-004	1.7200e-003	12.1624
Worker	4.2200e-003	2.7300e-003	0.0369	1.1000e-004	0.0135	6.0000e-005	0.0136	3.5900e-003	6.0000e-005	3.6500e-003	0.0000	10.1481	10.1481	2.7000e-004	2.7000e-004	10.2352
Total	4.9400e-003	0.0279	0.0465	2.3000e-004	0.0179	2.4000e-004	0.0181	4.8500e-003	2.3000e-004	5.0900e-003	0.0000	21.7909	21.7909	5.6000e-004	1.9900e-003	22.3975

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.0300e-003	0.1531	0.1162	1.8000e-004		5.8700e-003	5.8700e-003		5.8700e-003	5.8700e-003	0.0000	15.0748	15.0748	3.5400e-003	0.0000	15.1633
Total	7.0300e-003	0.1531	0.1162	1.8000e-004		5.8700e-003	5.8700e-003		5.8700e-003	5.8700e-003	0.0000	15.0748	15.0748	3.5400e-003	0.0000	15.1633

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2000e-004	0.0252	9.6300e-003	1.2000e-004	4.3800e-003	1.8000e-004	4.5600e-003	1.2600e-003	1.7000e-004	1.4400e-003	0.0000	11.6429	11.6429	2.9000e-004	1.7200e-003	12.1624
Worker	4.2200e-003	2.7300e-003	0.0369	1.1000e-004	0.0135	6.0000e-005	0.0136	3.5900e-003	6.0000e-005	3.6500e-003	0.0000	10.1481	10.1481	2.7000e-004	2.7000e-004	10.2352
Total	4.9400e-003	0.0279	0.0465	2.3000e-004	0.0179	2.4000e-004	0.0181	4.8500e-003	2.3000e-004	5.0900e-003	0.0000	21.7909	21.7909	5.6000e-004	1.9900e-003	22.3975

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.7699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.0914	0.1358	2.2000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	19.1494	19.1494	1.0800e-003	0.0000	19.1764
Total	4.7834	0.0914	0.1358	2.2000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	19.1494	19.1494	1.0800e-003	0.0000	19.1764

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0106	7.1000e-003	0.0922	2.6000e-004	0.0314	1.6000e-004	0.0316	8.3500e-003	1.4000e-004	8.4900e-003	0.0000	24.1930	24.1930	7.0000e-004	6.7000e-004	24.4109
Total	0.0106	7.1000e-003	0.0922	2.6000e-004	0.0314	1.6000e-004	0.0316	8.3500e-003	1.4000e-004	8.4900e-003	0.0000	24.1930	24.1930	7.0000e-004	6.7000e-004	24.4109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.7699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5400e-003	0.1764	0.1374	2.2000e-004		7.1300e-003	7.1300e-003		7.1300e-003	7.1300e-003	0.0000	19.1494	19.1494	1.0800e-003	0.0000	19.1763
Total	4.7784	0.1764	0.1374	2.2000e-004		7.1300e-003	7.1300e-003		7.1300e-003	7.1300e-003	0.0000	19.1494	19.1494	1.0800e-003	0.0000	19.1763

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0106	7.1000e-003	0.0922	2.6000e-004	0.0314	1.6000e-004	0.0316	8.3500e-003	1.4000e-004	8.4900e-003	0.0000	24.1930	24.1930	7.0000e-004	6.7000e-004	24.4109
Total	0.0106	7.1000e-003	0.0922	2.6000e-004	0.0314	1.6000e-004	0.0316	8.3500e-003	1.4000e-004	8.4900e-003	0.0000	24.1930	24.1930	7.0000e-004	6.7000e-004	24.4109

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9000e-004	9.5200e-003	0.0146	2.0000e-005		4.7000e-004	4.7000e-004		4.3000e-004	4.3000e-004	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0189
Paving	5.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5700e-003	9.5200e-003	0.0146	2.0000e-005		4.7000e-004	4.7000e-004		4.3000e-004	4.3000e-004	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0189

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0931	0.0931	0.0000	0.0000	0.0939
Total	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0931	0.0931	0.0000	0.0000	0.0939

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.3000e-004	0.0201	0.0173	2.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0188
Paving	5.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5100e-003	0.0201	0.0173	2.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	2.0027	2.0027	6.5000e-004	0.0000	2.0188

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0931	0.0931	0.0000	0.0000	0.0939
Total	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0931	0.0931	0.0000	0.0000	0.0939

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2400e-003	0.0772	0.1312	2.1000e-004		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630
Paving	5.2600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.0772	0.1312	2.1000e-004		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.2000e-004	2.9700e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.0900e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.8169	0.8169	2.0000e-005	2.0000e-005	0.8239
Total	3.4000e-004	2.2000e-004	2.9700e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.0900e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.8169	0.8169	2.0000e-005	2.0000e-005	0.8239

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.3800e-003	0.1810	0.1557	2.1000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630
Paving	5.2600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.1810	0.1557	2.1000e-004		6.0000e-003	6.0000e-003		6.0000e-003	6.0000e-003	0.0000	18.0173	18.0173	5.8300e-003	0.0000	18.1630

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.2000e-004	2.9700e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.0900e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.8169	0.8169	2.0000e-005	2.0000e-005	0.8239
Total	3.4000e-004	2.2000e-004	2.9700e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.0900e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.8169	0.8169	2.0000e-005	2.0000e-005	0.8239

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3453	2.0162	3.8523	0.0142	0.9573	0.0183	0.9756	0.2586	0.0174	0.2760	0.0000	1,361.389 1	1,361.389 1	0.0625	0.1413	1,405,067 8
Unmitigated	0.3453	2.0162	3.8523	0.0142	0.9573	0.0183	0.9756	0.2586	0.0174	0.2760	0.0000	1,361.389 1	1,361.389 1	0.0625	0.1413	1,405,067 8

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	572.60	572.60	572.60	2,454,001	2,454,001
Total	572.60	572.60	572.60	2,454,001	2,454,001

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unrefrigerated Warehouse-No Rail	0.334283	0.056059	0.172680	0.136494	0.026304	0.007104	0.055000	0.187000	0.000000	0.000000	0.025076	0.000000	0.000000
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	173.7407	173.7407	0.0147	1.7800e-003	174.6370
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	173.7407	173.7407	0.0147	1.7800e-003	174.6370
NaturalGas Mitigated	4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8695	43.8695	8.4000e-004	8.0000e-004	44.1302
NaturalGas Unmitigated	4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8695	43.8695	8.4000e-004	8.0000e-004	44.1302

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	822084	4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8695	43.8695	8.4000e-004	8.0000e-004	44.1302
Total		4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8695	43.8695	8.4000e-004	8.0000e-004	44.1302

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	822084	4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8695	43.8695	8.4000e-004	8.0000e-004	44.1302
Total		4.4300e-003	0.0403	0.0339	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8695	43.8695	8.4000e-004	8.0000e-004	44.1302

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	30800	5.4622	4.6000e-004	6.0000e-005	5.4904
Unrefrigerated Warehouse-No Rail	948873	168.2784	0.0142	1.7200e-003	169.1465
Total		173.7407	0.0147	1.7800e-003	174.6370

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	30800	5.4622	4.6000e-004	6.0000e-005	5.4904
Unrefrigerated Warehouse-No Rail	948873	168.2784	0.0142	1.7200e-003	169.1465
Total		173.7407	0.0147	1.7800e-003	174.6370

6.0 Area Detail**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.0817	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Unmitigated	2.0817	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4770					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Total	2.0817	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4770					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Total	2.0817	5.0000e-005	5.8000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	254.3667	3.1009	0.0751	354.2582
Unmitigated	254.7533	3.1009	0.0751	354.6468

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.217	6.3385	5.3000e-004	6.0000e-005	6.3712
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	94.5812 / 0	248.4148	3.1004	0.0750	348.2756
Total		254.7533	3.1009	0.0751	354.6468

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.02076	5.9518	5.0000e-004	6.0000e-005	5.9825
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	94.5812 / 0	248.4148	3.1004	0.0750	348.2756
Total		254.3667	3.1009	0.0751	354.2582

8.0 Waste Detail

8.1 Mitigation Measures Waste

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	78.0886	4.6149	0.0000	193.4612
Unmitigated	78.0886	4.6149	0.0000	193.4612

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.23	0.0467	2.7600e-003	0.0000	0.1157
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	384.46	78.0419	4.6121	0.0000	193.3455
Total		78.0886	4.6149	0.0000	193.4612

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.23	0.0467	2.7600e-003	0.0000	0.1157
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	384.46	78.0419	4.6121	0.0000	193.3455
Total		78.0886	4.6149	0.0000	193.4612

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0	27	110	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type

Number

10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Fire Pump - Diesel (100 - 175 HP)	2.4400e-003	6.8100e-003	8.8400e-003	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	1.1310	1.1310	1.6000e-004	0.0000	1.1349
Total	2.4400e-003	6.8100e-003	8.8400e-003	1.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	1.1310	1.1310	1.6000e-004	0.0000	1.1349

11.0 Vegetation

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mesa Linda Warehouse Project
San Bernardino-Mojave Desert County, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	409.00	1000sqft	11.00	408,997.00	0
Parking Lot	220.00	Space	4.46	88,000.00	0
City Park	2.70	Acre	2.70	117,306.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site is 18.16 acres

Construction Phase - Default schedule with overlap of building construction and architectural coating phases

Off-road Equipment - Default equipment

Demolition - Project site is undeveloped, no demolition required.

Grading - Balanced site

Vehicle Trips - Based on a trip generation of 573 ADT

Construction Off-road Equipment Mitigation - Use of Tier 2 construction equipment, water exposed area twice and reduced vehicle speed to 15 mph

Area Mitigation -

Water Mitigation - Project would include drought tolerant landscape and water efficient irrigation systems

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stationary Sources - Emergency Generators and Fire Pumps - Project would include a diesel fire pump

[illegible]

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	150.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	409,000.00	408,997.00
tblLandUse	LandUseSquareFeet	117,612.00	117,306.00
tblLandUse	LotAcreage	9.39	11.00
tblLandUse	LotAcreage	1.98	4.46
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	110.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	27.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	2.19	0.00

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.40

2.0 Emissions Summary

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.3882	34.5528	28.6289	0.0650	19.8049	1.4253	21.0717	10.1417	1.3113	11.3071	0.0000	6,545.062 3	6,545.062 3	1.9484	0.3507	6,667.450 6
2024	66.3244	27.1278	39.6306	0.0881	3.2310	1.1205	4.0476	0.8725	1.0445	1.8365	0.0000	8,794.099 2	8,794.099 2	1.4218	0.3523	8,932.656 4
2025	3.7657	25.1409	38.9594	0.0871	2.9271	0.9842	3.9112	0.7919	0.9174	1.7093	0.0000	8,705.100 9	8,705.100 9	1.4116	0.3365	8,840.653 0
Maximum	66.3244	34.5528	39.6306	0.0881	19.8049	1.4253	21.0717	10.1417	1.3113	11.3071	0.0000	8,794.099 2	8,794.099 2	1.9484	0.3523	8,932.656 4

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.0589	51.2759	37.3003	0.0650	8.9935	1.3342	9.9404	4.5853	1.3341	5.5322	0.0000	6,545.062 3	6,545.062 3	1.9484	0.3507	6,667.450 6
2024	65.8669	47.8285	44.0075	0.0881	3.2310	1.6092	4.5362	0.8725	1.6071	2.3990	0.0000	8,794.099 2	8,794.099 2	1.4218	0.3523	8,932.656 4
2025	3.4951	47.7587	43.4662	0.0871	2.9271	1.6086	4.5357	0.7919	1.6066	2.3985	0.0000	8,705.100 9	8,705.100 9	1.4116	0.3365	8,840.653 0
Maximum	65.8669	51.2759	44.0075	0.0881	8.9935	1.6092	9.9404	4.5853	1.6071	5.5322	0.0000	8,794.099 2	8,794.099 2	1.9484	0.3523	8,932.656 4

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.80	-69.16	-16.37	0.00	41.64	-28.95	34.51	47.06	-38.94	30.45	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Energy	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Mobile	2.1249	10.4323	22.5749	0.0802	5.3576	0.1008	5.4584	1.4446	0.0958	1.5403		8,493.4589	8,493.4589	0.3733	0.8482	8,755.5640
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.5585	10.6537	22.8248	0.0815	5.3576	0.1178	5.4754	1.4446	0.1128	1.5573		8,758.5719	8,758.5719	0.3787	0.8531	9,022.2606

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Energy	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Mobile	2.1249	10.4323	22.5749	0.0802	5.3576	0.1008	5.4584	1.4446	0.0958	1.5403		8,493.4589	8,493.4589	0.3733	0.8482	8,755.5640
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.5585	10.6537	22.8248	0.0815	5.3576	0.1178	5.4754	1.4446	0.1128	1.5573		8,758.5719	8,758.5719	0.3787	0.8531	9,022.2606

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/2/2023	10/13/2023	5	10	
2	Grading	Grading	10/14/2023	11/24/2023	5	30	
3	Building Construction	Building Construction	11/25/2023	1/17/2025	5	300	
4	Architectural Coating	Architectural Coating	6/3/2024	12/27/2024	5	150	

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Paving	Paving	12/30/2024	1/24/2025	5	20
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Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 4.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 613,496; Non-Residential Outdoor: 204,499; Striped Parking Area: 5,280 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	258.00	101.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	19.6570	1.2660	20.9230	10.1025	1.1647	11.2672		3,687.308 1	3,687.308 1	1.1926		3,717.121 9

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0598	0.0335	0.5199	1.3300e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		136.0560	136.0560	3.7700e-003	3.4600e-003	137.1817
Total	0.0598	0.0335	0.5199	1.3300e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		136.0560	136.0560	3.7700e-003	3.4600e-003	137.1817

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	1.2097	33.7214	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	1.2097	33.7214	22.9600	0.0381	8.8457	0.9462	9.7918	4.5461	0.9462	5.4923	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0598	0.0335	0.5199	1.3300e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		136.0560	136.0560	3.7700e-003	3.4600e-003	137.1817
Total	0.0598	0.0335	0.5199	1.3300e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		136.0560	136.0560	3.7700e-003	3.4600e-003	137.1817

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.4777	6,011.4777	1.9442		6,060.0836

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0665	0.0372	0.5777	1.4800e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		151.1733	151.1733	4.1900e-003	3.8500e-003	152.4241
Total	0.0665	0.0372	0.5777	1.4800e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		151.1733	151.1733	4.1900e-003	3.8500e-003	152.4241

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	1.8106	51.2386	36.7226	0.0621		1.3333	1.3333		1.3333	1.3333	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	1.8106	51.2386	36.7226	0.0621	4.1416	1.3333	5.4749	1.6442	1.3333	2.9775	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0665	0.0372	0.5777	1.4800e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		151.1733	151.1733	4.1900e-003	3.8500e-003	152.4241
Total	0.0665	0.0372	0.5777	1.4800e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		151.1733	151.1733	4.1900e-003	3.8500e-003	152.4241

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1205	3.6737	1.5096	0.0190	0.6844	0.0281	0.7126	0.1971	0.0269	0.2240		2,039.717 1	2,039.717 1	0.0533	0.3011	2,130.773 8
Worker	0.8575	0.4800	7.4524	0.0191	2.1194	0.0108	2.1302	0.5622	9.9400e-003	0.5721		1,950.135 3	1,950.135 3	0.0540	0.0496	1,966.270 7
Total	0.9781	4.1537	8.9620	0.0381	2.8039	0.0389	2.8428	0.7592	0.0368	0.7961		3,989.852 4	3,989.852 4	0.1073	0.3507	4,097.044 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1205	3.6737	1.5096	0.0190	0.6844	0.0281	0.7126	0.1971	0.0269	0.2240		2,039.717 1	2,039.717 1	0.0533	0.3011	2,130.773 8
Worker	0.8575	0.4800	7.4524	0.0191	2.1194	0.0108	2.1302	0.5622	9.9400e-003	0.5721		1,950.135 3	1,950.135 3	0.0540	0.0496	1,966.270 7
Total	0.9781	4.1537	8.9620	0.0381	2.8039	0.0389	2.8428	0.7592	0.0368	0.7961		3,989.852 4	3,989.852 4	0.1073	0.3507	4,097.044 5

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1177	3.7073	1.4840	0.0188	0.6844	0.0277	0.7121	0.1971	0.0265	0.2236		2,011.640 4	2,011.640 4	0.0517	0.2969	2,101.410 0
Worker	0.7960	0.4273	6.9499	0.0185	2.1194	0.0104	2.1298	0.5622	9.5400e-003	0.5717		1,908.266 9	1,908.266 9	0.0490	0.0461	1,923.226 9
Total	0.9137	4.1346	8.4340	0.0373	2.8038	0.0381	2.8419	0.7592	0.0360	0.7953		3,919.907 3	3,919.907 3	0.1006	0.3430	4,024.636 9

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1177	3.7073	1.4840	0.0188	0.6844	0.0277	0.7121	0.1971	0.0265	0.2236		2,011.640 4	2,011.640 4	0.0517	0.2969	2,101.410 0
Worker	0.7960	0.4273	6.9499	0.0185	2.1194	0.0104	2.1298	0.5622	9.5400e-003	0.5717		1,908.266 9	1,908.266 9	0.0490	0.0461	1,923.226 9
Total	0.9137	4.1346	8.4340	0.0373	2.8038	0.0381	2.8419	0.7592	0.0360	0.7953		3,919.907 3	3,919.907 3	0.1006	0.3430	4,024.636 9

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1154	3.6849	1.4602	0.0184	0.6844	0.0277	0.7121	0.1971	0.0265	0.2235		1,972.522 3	1,972.522 3	0.0502	0.2910	2,060.485 3
Worker	0.7405	0.3825	6.4609	0.0179	2.1194	9.8700e-003	2.1293	0.5622	9.0800e-003	0.5713		1,861.152 6	1,861.152 6	0.0442	0.0430	1,875.066 3
Total	0.8558	4.0674	7.9211	0.0363	2.8038	0.0375	2.8414	0.7592	0.0355	0.7948		3,833.674 8	3,833.674 8	0.0943	0.3340	3,935.551 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1154	3.6849	1.4602	0.0184	0.6844	0.0277	0.7121	0.1971	0.0265	0.2235		1,972.522 3	1,972.522 3	0.0502	0.2910	2,060.485 3
Worker	0.7405	0.3825	6.4609	0.0179	2.1194	9.8700e-003	2.1293	0.5622	9.0800e-003	0.5713		1,861.152 6	1,861.152 6	0.0442	0.0430	1,875.066 3
Total	0.8558	4.0674	7.9211	0.0363	2.8038	0.0375	2.8414	0.7592	0.0355	0.7948		3,833.674 8	3,833.674 8	0.0943	0.3340	3,935.551 7

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.5980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	63.7788	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1604	0.0861	1.4008	3.7300e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		384.6119	384.6119	9.8700e-003	9.2900e-003	387.6271
Total	0.1604	0.0861	1.4008	3.7300e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		384.6119	384.6119	9.8700e-003	9.2900e-003	387.6271

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.5980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	63.7119	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1604	0.0861	1.4008	3.7300e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		384.6119	384.6119	9.8700e-003	9.2900e-003	387.6271
Total	0.1604	0.0861	1.4008	3.7300e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		384.6119	384.6119	9.8700e-003	9.2900e-003	387.6271

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5724	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0463	0.0248	0.4041	1.0800e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.9458	110.9458	2.8500e-003	2.6800e-003	111.8155
Total	0.0463	0.0248	0.4041	1.0800e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.9458	110.9458	2.8500e-003	2.6800e-003	111.8155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5153	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0463	0.0248	0.4041	1.0800e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.9458	110.9458	2.8500e-003	2.6800e-003	111.8155
Total	0.0463	0.0248	0.4041	1.0800e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.9458	110.9458	2.8500e-003	2.6800e-003	111.8155

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4994	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0431	0.0222	0.3756	1.0400e-003	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		108.2065	108.2065	2.5700e-003	2.5000e-003	109.0155
Total	0.0431	0.0222	0.3756	1.0400e-003	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		108.2065	108.2065	2.5700e-003	2.5000e-003	109.0155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5153	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0431	0.0222	0.3756	1.0400e-003	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		108.2065	108.2065	2.5700e-003	2.5000e-003	109.0155
Total	0.0431	0.0222	0.3756	1.0400e-003	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		108.2065	108.2065	2.5700e-003	2.5000e-003	109.0155

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1249	10.4323	22.5749	0.0802	5.3576	0.1008	5.4584	1.4446	0.0958	1.5403		8,493.4589	8,493.4589	0.3733	0.8482	8,755.5640
Unmitigated	2.1249	10.4323	22.5749	0.0802	5.3576	0.1008	5.4584	1.4446	0.0958	1.5403		8,493.4589	8,493.4589	0.3733	0.8482	8,755.5640

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	572.60	572.60	572.60	2,454,001	2,454,001
Total	572.60	572.60	572.60	2,454,001	2,454,001

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unrefrigerated Warehouse-No Rail	0.334283	0.056059	0.172680	0.136494	0.026304	0.007104	0.055000	0.187000	0.000000	0.000000	0.025076	0.000000	0.000000
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
NaturalGas Unmitigated	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2252.28	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Total		0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.25228	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Total		0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Unmitigated	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6136					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9500e-003	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Total	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6136					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9500e-003	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Total	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0	27	110	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (100 - 175 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

11.0 Vegetation

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mesa Linda Warehouse Project
San Bernardino-Mojave Desert County, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	409.00	1000sqft	11.00	408,997.00	0
Parking Lot	220.00	Space	4.46	88,000.00	0
City Park	2.70	Acre	2.70	117,306.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site is 18.16 acres

Construction Phase - Default schedule with overlap of building construction and architectural coating phases

Off-road Equipment - Default equipment

Demolition - Project site is undeveloped, no demolition required.

Grading - Balanced site

Vehicle Trips - Based on a trip generation of 573 ADT

Construction Off-road Equipment Mitigation - Use of Tier 2 construction equipment, water exposed area twice and reduced vehicle speed to 15 mph

Area Mitigation -

Water Mitigation - Project would include drought tolerant landscape and water efficient irrigation systems

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fleet Mix - Based on 573 ADT with 31 medium trucks and 107 heavy trucks

Stationary Sources - Emergency Generators and Fire Pumps - Project would include a diesel fire pump

[illegible]

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	150.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	409,000.00	408,997.00
tblLandUse	LandUseSquareFeet	117,612.00	117,306.00
tblLandUse	LotAcreage	9.39	11.00
tblLandUse	LotAcreage	1.98	4.46
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	110.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	27.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CC_TL	7.30	8.40
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CNW_TL	7.30	6.90
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	CW_TL	9.50	16.60
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.40
tblVehicleTrips	SU_TR	2.19	0.00

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	1.74	1.40
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.40

2.0 Emissions Summary

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.3843	34.5547	28.5347	0.0634	19.8049	1.4253	21.0717	10.1417	1.3113	11.3071	0.0000	6,367.337 5	6,367.337 5	1.9485	0.3532	6,490.505 8
2024	66.2613	27.3579	38.4871	0.0863	3.2310	1.1206	4.0477	0.8725	1.0446	1.8366	0.0000	8,610.275 3	8,610.275 3	1.4228	0.3550	8,749.595 0
2025	3.7138	25.3675	37.9092	0.0853	2.9271	0.9843	3.9113	0.7919	0.9175	1.7094	0.0000	8,526.309 6	8,526.309 6	1.4126	0.3388	8,662.583 0
Maximum	66.2613	34.5547	38.4871	0.0863	19.8049	1.4253	21.0717	10.1417	1.3113	11.3071	0.0000	8,610.275 3	8,610.275 3	1.9485	0.3550	8,749.595 0

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.0000	51.2778	37.2061	0.0634	8.9935	1.3342	9.9404	4.5853	1.3341	5.5322	0.0000	6,367.337 5	6,367.337 5	1.9485	0.3532	6,490.505 8
2024	65.8038	48.0586	42.8640	0.0863	3.2310	1.6093	4.5364	0.8725	1.6072	2.3991	0.0000	8,610.275 3	8,610.275 3	1.4228	0.3550	8,749.595 0
2025	3.4431	47.9852	42.4160	0.0853	2.9271	1.6087	4.5358	0.7919	1.6067	2.3986	0.0000	8,526.309 6	8,526.309 6	1.4126	0.3388	8,662.583 0
Maximum	65.8038	51.2778	42.8640	0.0863	8.9935	1.6093	9.9404	4.5853	1.6072	5.5322	0.0000	8,610.275 3	8,610.275 3	1.9485	0.3550	8,749.595 0

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.88	-68.79	-16.73	0.00	41.64	-28.95	34.51	47.06	-38.94	30.45	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Energy	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Mobile	1.8938	11.0390	20.4516	0.0774	5.3576	0.1010	5.4586	1.4446	0.0960	1.5405		8,203.0483	8,203.0483	0.3756	0.8547	8,467.1398
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.3274	11.2604	20.7015	0.0787	5.3576	0.1180	5.4756	1.4446	0.1130	1.5575		8,468.1613	8,468.1613	0.3811	0.8596	8,733.8363

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Energy	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Mobile	1.8938	11.0390	20.4516	0.0774	5.3576	0.1010	5.4586	1.4446	0.0960	1.5405		8,203.0483	8,203.0483	0.3756	0.8547	8,467.1398
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.3274	11.2604	20.7015	0.0787	5.3576	0.1180	5.4756	1.4446	0.1130	1.5575		8,468.1613	8,468.1613	0.3811	0.8596	8,733.8363

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/2/2023	10/13/2023	5	10	
2	Grading	Grading	10/14/2023	11/24/2023	5	30	
3	Building Construction	Building Construction	11/25/2023	1/17/2025	5	300	
4	Architectural Coating	Architectural Coating	6/3/2024	12/27/2024	5	150	

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Paving	Paving	12/30/2024	1/24/2025	5	20
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Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 90****Acres of Paving: 4.46****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 613,496; Non-Residential Outdoor: 204,499; Striped Parking Area: 5,280 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	258.00	101.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	19.6570	1.2660	20.9230	10.1025	1.1647	11.2672		3,687.308 1	3,687.308 1	1.1926		3,717.121 9

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0563	0.0352	0.4352	1.2100e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		123.3286	123.3286	3.8600e-003	3.5800e-003	124.4908
Total	0.0563	0.0352	0.4352	1.2100e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		123.3286	123.3286	3.8600e-003	3.5800e-003	124.4908

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	1.2097	33.7214	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	1.2097	33.7214	22.9600	0.0381	8.8457	0.9462	9.7918	4.5461	0.9462	5.4923	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0563	0.0352	0.4352	1.2100e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		123.3286	123.3286	3.8600e-003	3.5800e-003	124.4908
Total	0.0563	0.0352	0.4352	1.2100e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		123.3286	123.3286	3.8600e-003	3.5800e-003	124.4908

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.4777	6,011.4777	1.9442		6,060.0836

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0625	0.0391	0.4835	1.3400e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		137.0318	137.0318	4.2900e-003	3.9700e-003	138.3231
Total	0.0625	0.0391	0.4835	1.3400e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		137.0318	137.0318	4.2900e-003	3.9700e-003	138.3231

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	1.8106	51.2386	36.7226	0.0621		1.3333	1.3333		1.3333	1.3333	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	1.8106	51.2386	36.7226	0.0621	4.1416	1.3333	5.4749	1.6442	1.3333	2.9775	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0625	0.0391	0.4835	1.3400e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		137.0318	137.0318	4.2900e-003	3.9700e-003	138.3231
Total	0.0625	0.0391	0.4835	1.3400e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		137.0318	137.0318	4.2900e-003	3.9700e-003	138.3231

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1123	3.8792	1.5553	0.0191	0.6844	0.0282	0.7127	0.1971	0.0270	0.2241		2,044.417 6	2,044.417 6	0.0529	0.3020	2,135.731 4
Worker	0.8068	0.5049	6.2377	0.0173	2.1194	0.0108	2.1302	0.5622	9.9400e-003	0.5721		1,767.710 0	1,767.710 0	0.0554	0.0513	1,784.368 4
Total	0.9191	4.3841	7.7930	0.0363	2.8039	0.0390	2.8429	0.7592	0.0370	0.7962		3,812.127 6	3,812.127 6	0.1083	0.3532	3,920.099 8

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1123	3.8792	1.5553	0.0191	0.6844	0.0282	0.7127	0.1971	0.0270	0.2241		2,044.4176	2,044.4176	0.0529	0.3020	2,135.7314
Worker	0.8068	0.5049	6.2377	0.0173	2.1194	0.0108	2.1302	0.5622	9.9400e-003	0.5721		1,767.7100	1,767.7100	0.0554	0.0513	1,784.3684
Total	0.9191	4.3841	7.7930	0.0363	2.8039	0.0390	2.8429	0.7592	0.0370	0.7962		3,812.1276	3,812.1276	0.1083	0.3532	3,920.0998

3.4 Building Construction - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	3.9141	1.5294	0.0188	0.6844	0.0278	0.7122	0.1971	0.0266	0.2237		2,016.312 4	2,016.312 4	0.0512	0.2978	2,106.332 9
Worker	0.7503	0.4494	5.8264	0.0168	2.1194	0.0104	2.1298	0.5622	9.5400e-003	0.5717		1,730.127 9	1,730.127 9	0.0503	0.0476	1,745.571 4
Total	0.8598	4.3634	7.3558	0.0356	2.8038	0.0382	2.8420	0.7592	0.0361	0.7954		3,746.440 4	3,746.440 4	0.1016	0.3454	3,851.904 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1095	3.9141	1.5294	0.0188	0.6844	0.0278	0.7122	0.1971	0.0266	0.2237		2,016.312 4	2,016.312 4	0.0512	0.2978	2,106.332 9
Worker	0.7503	0.4494	5.8264	0.0168	2.1194	0.0104	2.1298	0.5622	9.5400e-003	0.5717		1,730.127 9	1,730.127 9	0.0503	0.0476	1,745.571 4
Total	0.8598	4.3634	7.3558	0.0356	2.8038	0.0382	2.8420	0.7592	0.0361	0.7954		3,746.440 4	3,746.440 4	0.1016	0.3454	3,851.904 3

3.4 Building Construction - 2025**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1072	3.8907	1.5052	0.0184	0.6844	0.0278	0.7122	0.1971	0.0266	0.2236		1,977.147 4	1,977.147 4	0.0498	0.2918	2,065.355 5
Worker	0.6991	0.4021	5.4259	0.0162	2.1194	9.8700e-003	2.1293	0.5622	9.0800e-003	0.5713		1,687.814 0	1,687.814 0	0.0455	0.0444	1,702.177 8
Total	0.8063	4.2928	6.9311	0.0346	2.8038	0.0376	2.8415	0.7592	0.0356	0.7949		3,664.961 3	3,664.961 3	0.0953	0.3362	3,767.533 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.0809	23.5544	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1072	3.8907	1.5052	0.0184	0.6844	0.0278	0.7122	0.1971	0.0266	0.2236		1,977.147 4	1,977.147 4	0.0498	0.2918	2,065.355 5
Worker	0.6991	0.4021	5.4259	0.0162	2.1194	9.8700e-003	2.1293	0.5622	9.0800e-003	0.5713		1,687.814 0	1,687.814 0	0.0455	0.0444	1,702.177 8
Total	0.8063	4.2928	6.9311	0.0346	2.8038	0.0376	2.8415	0.7592	0.0356	0.7949		3,664.961 3	3,664.961 3	0.0953	0.3362	3,767.533 3

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.5980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	63.7788	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Architectural Coating - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1512	0.0906	1.1743	3.3800e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		348.7080	348.7080	0.0101	9.5900e-003	351.8206
Total	0.1512	0.0906	1.1743	3.3800e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		348.7080	348.7080	0.0101	9.5900e-003	351.8206

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.5980					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	63.7119	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1512	0.0906	1.1743	3.3800e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		348.7080	348.7080	0.0101	9.5900e-003	351.8206
Total	0.1512	0.0906	1.1743	3.3800e-003	0.4272	2.0900e-003	0.4293	0.1133	1.9200e-003	0.1152		348.7080	348.7080	0.0101	9.5900e-003	351.8206

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5724	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0436	0.0261	0.3387	9.8000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		100.5888	100.5888	2.9300e-003	2.7700e-003	101.4867
Total	0.0436	0.0261	0.3387	9.8000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		100.5888	100.5888	2.9300e-003	2.7700e-003	101.4867

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5153	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0436	0.0261	0.3387	9.8000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		100.5888	100.5888	2.9300e-003	2.7700e-003	101.4867
Total	0.0436	0.0261	0.3387	9.8000e-004	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		100.5888	100.5888	2.9300e-003	2.7700e-003	101.4867

3.6 Paving - 2025**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4994	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0407	0.0234	0.3155	9.4000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		98.1287	98.1287	2.6500e-003	2.5800e-003	98.9638
Total	0.0407	0.0234	0.3155	9.4000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		98.1287	98.1287	2.6500e-003	2.5800e-003	98.9638

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.5843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5153	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0407	0.0234	0.3155	9.4000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		98.1287	98.1287	2.6500e-003	2.5800e-003	98.9638
Total	0.0407	0.0234	0.3155	9.4000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		98.1287	98.1287	2.6500e-003	2.5800e-003	98.9638

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8938	11.0390	20.4516	0.0774	5.3576	0.1010	5.4586	1.4446	0.0960	1.5405		8,203.0483	8,203.0483	0.3756	0.8547	8,467.1398
Unmitigated	1.8938	11.0390	20.4516	0.0774	5.3576	0.1010	5.4586	1.4446	0.0960	1.5405		8,203.0483	8,203.0483	0.3756	0.8547	8,467.1398

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	572.60	572.60	572.60	2,454,001	2,454,001
Total	572.60	572.60	572.60	2,454,001	2,454,001

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unrefrigerated Warehouse-No Rail	0.334283	0.056059	0.172680	0.136494	0.026304	0.007104	0.055000	0.187000	0.000000	0.000000	0.025076	0.000000	0.000000
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
NaturalGas Unmitigated	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2252.28	0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493
Total		0.0243	0.2208	0.1855	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e-003	4.8600e-003	266.5493

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.25228	0.0243	0.2208	0.1855	1.3200e- 003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e- 003	4.8600e- 003	266.5493
Total		0.0243	0.2208	0.1855	1.3200e- 003		0.0168	0.0168		0.0168	0.0168		264.9747	264.9747	5.0800e- 003	4.8600e- 003	266.5493

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Unmitigated	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6136					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9500e-003	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Total	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6136					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7898					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9500e-003	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473
Total	11.4093	5.8000e-004	0.0644	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1383	0.1383	3.6000e-004		0.1473

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Mesa Linda Warehouse Project - San Bernardino-Mojave Desert County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0	27	110	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (100 - 175 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

11.0 Vegetation

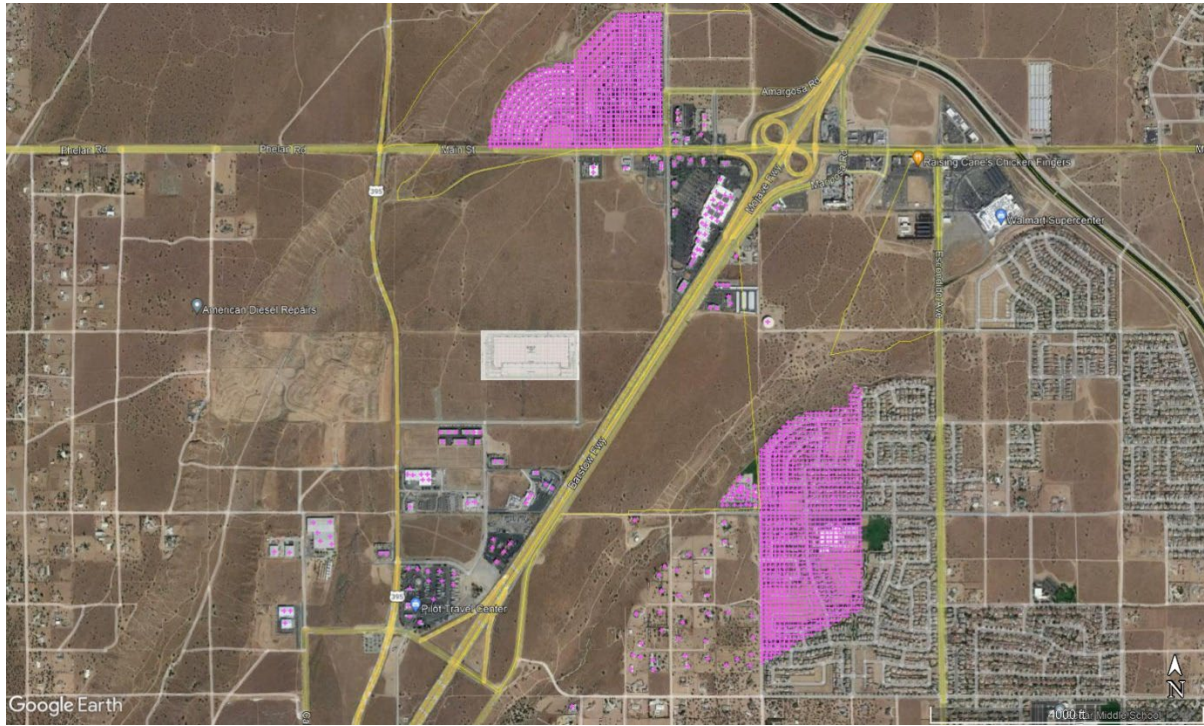
APPENDIX B

HRA MODEL OUTPUT

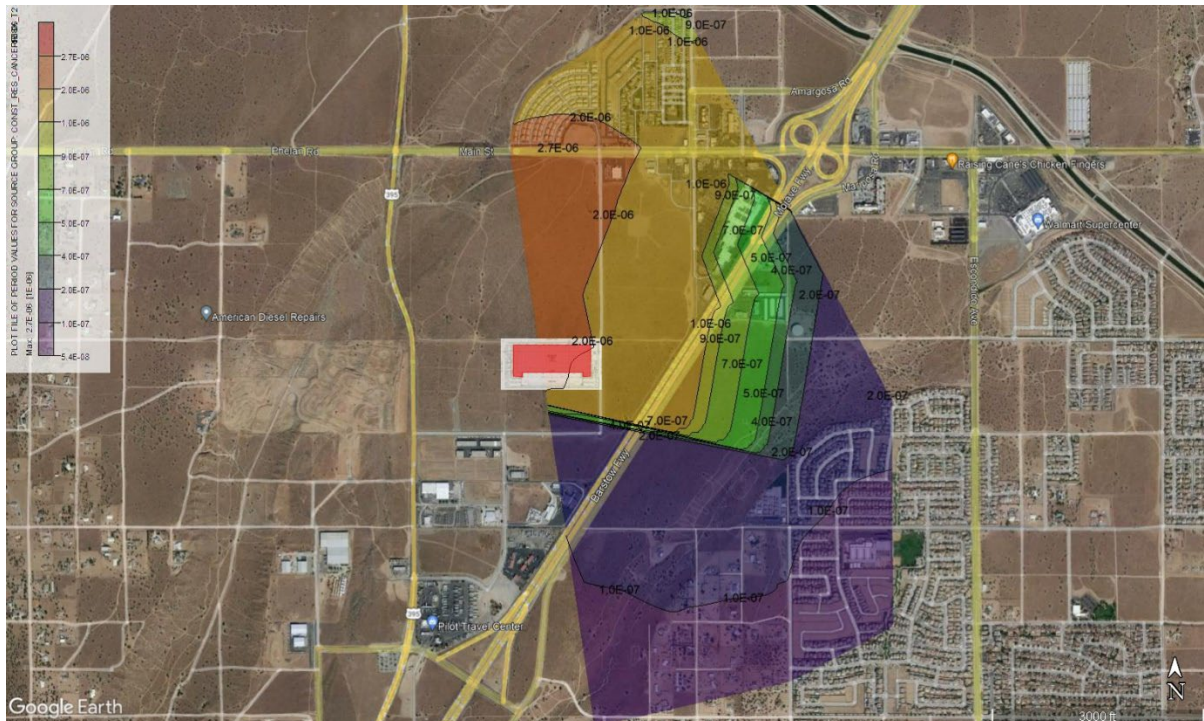
Project Location



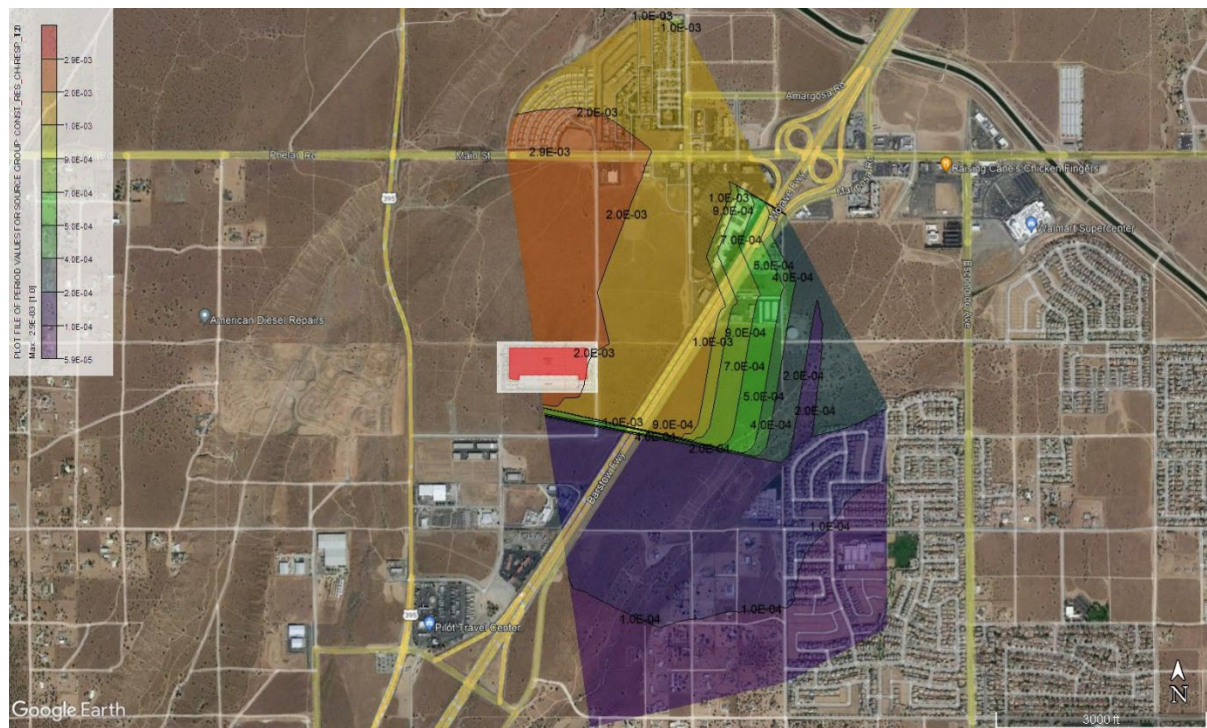
Sensitive Receptor Grid



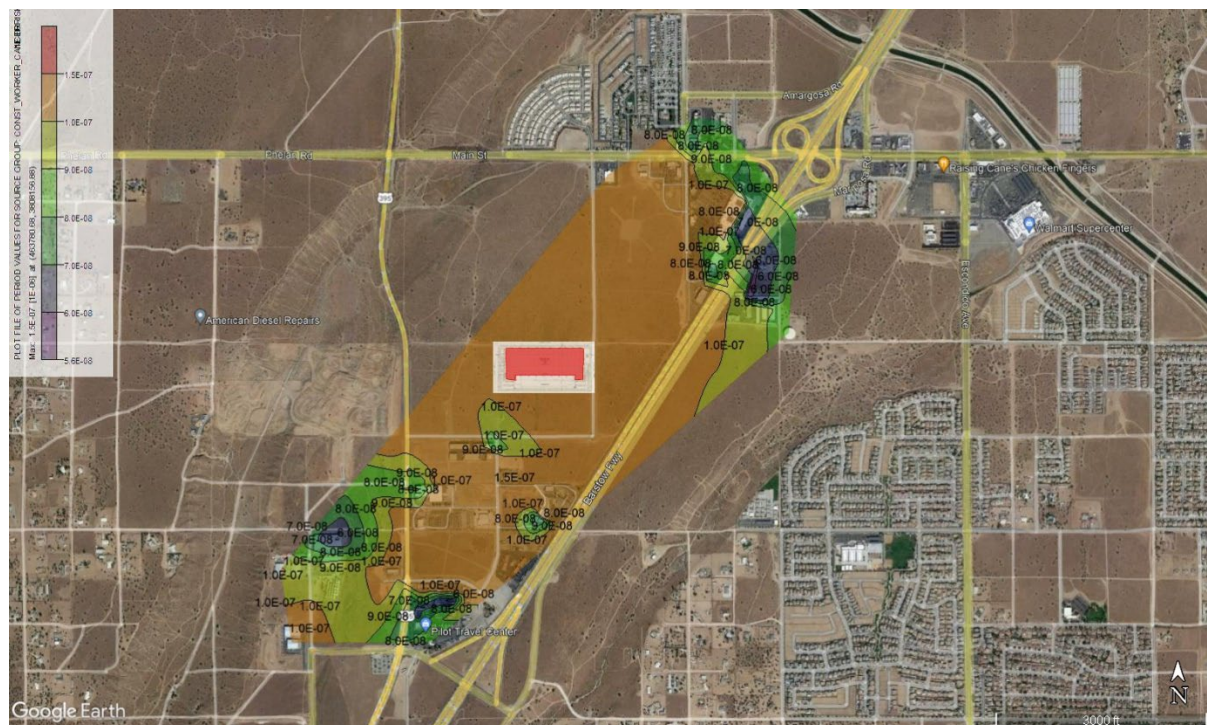
Construction Cancer Risk – Sensitive Receptor



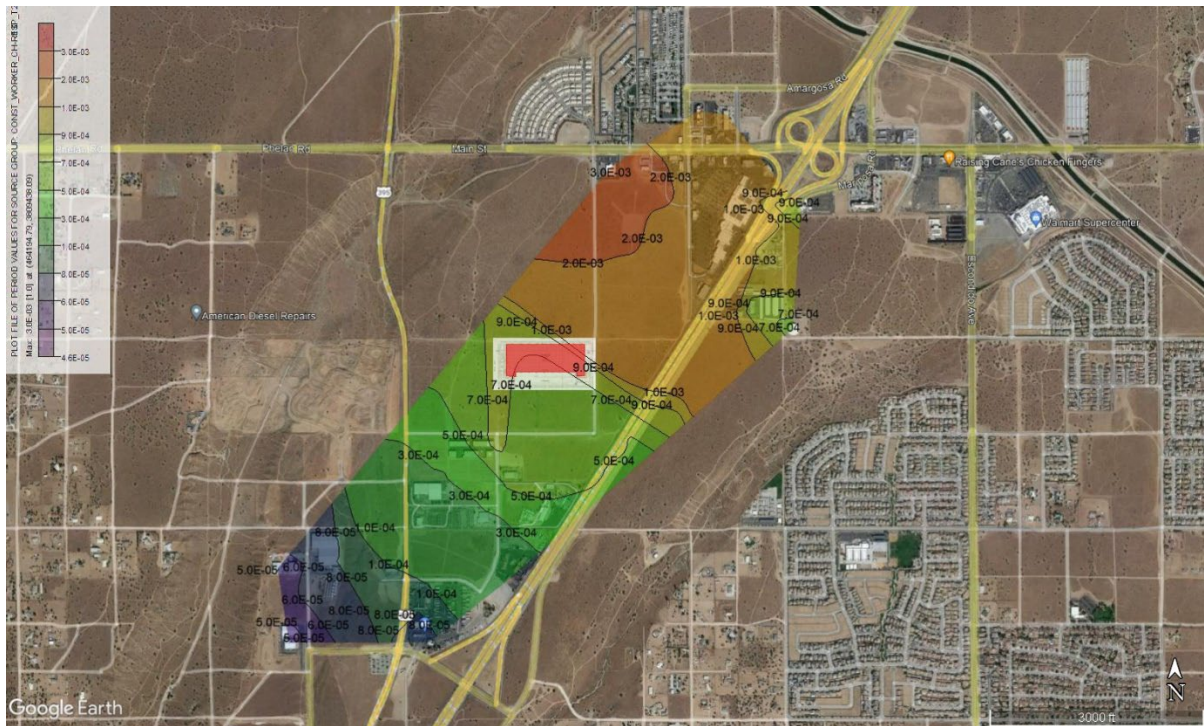
Construction Chronic Hazard Index – Sensitive Receptor



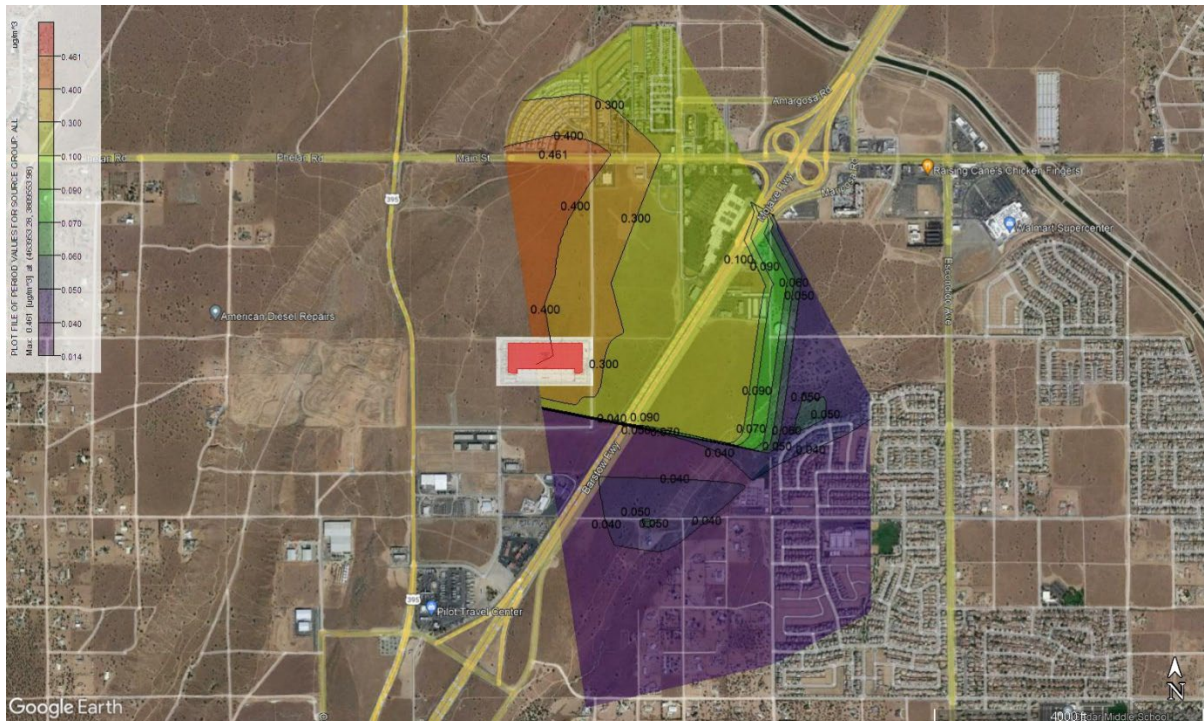
Construction Cancer Risk – Worker Receptor



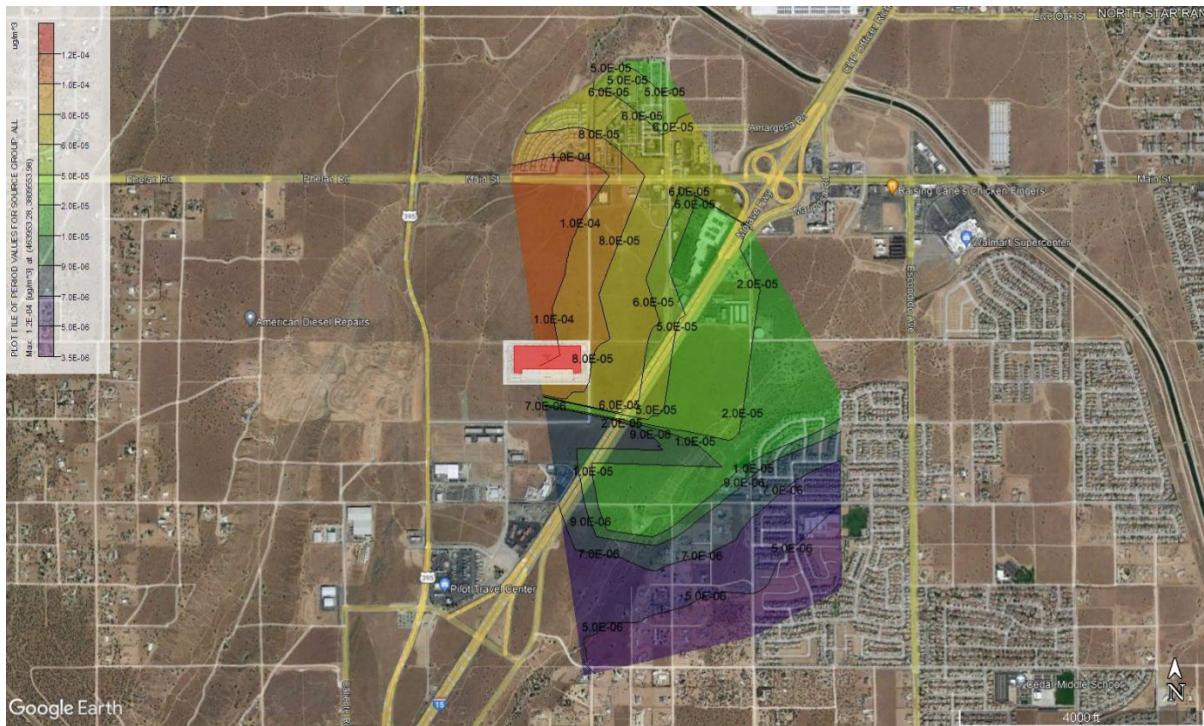
Construction Chronic Hazard Index – Worker Receptor



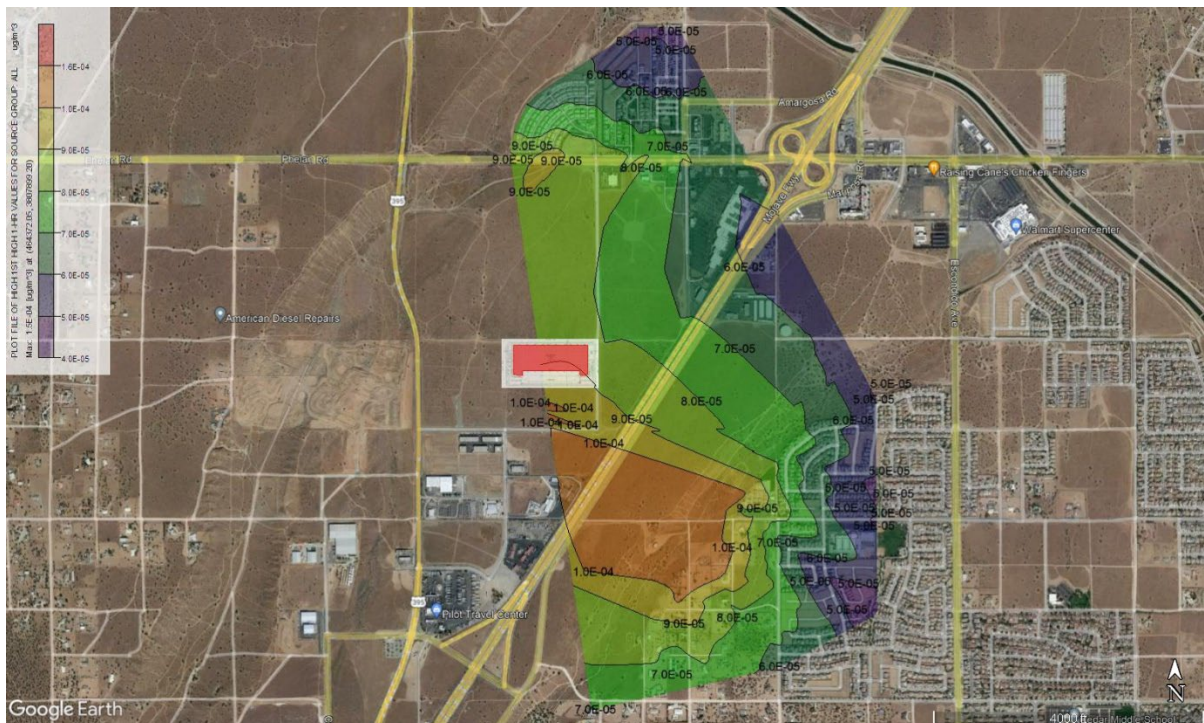
Operational Cancer Risk – Sensitive Receptor



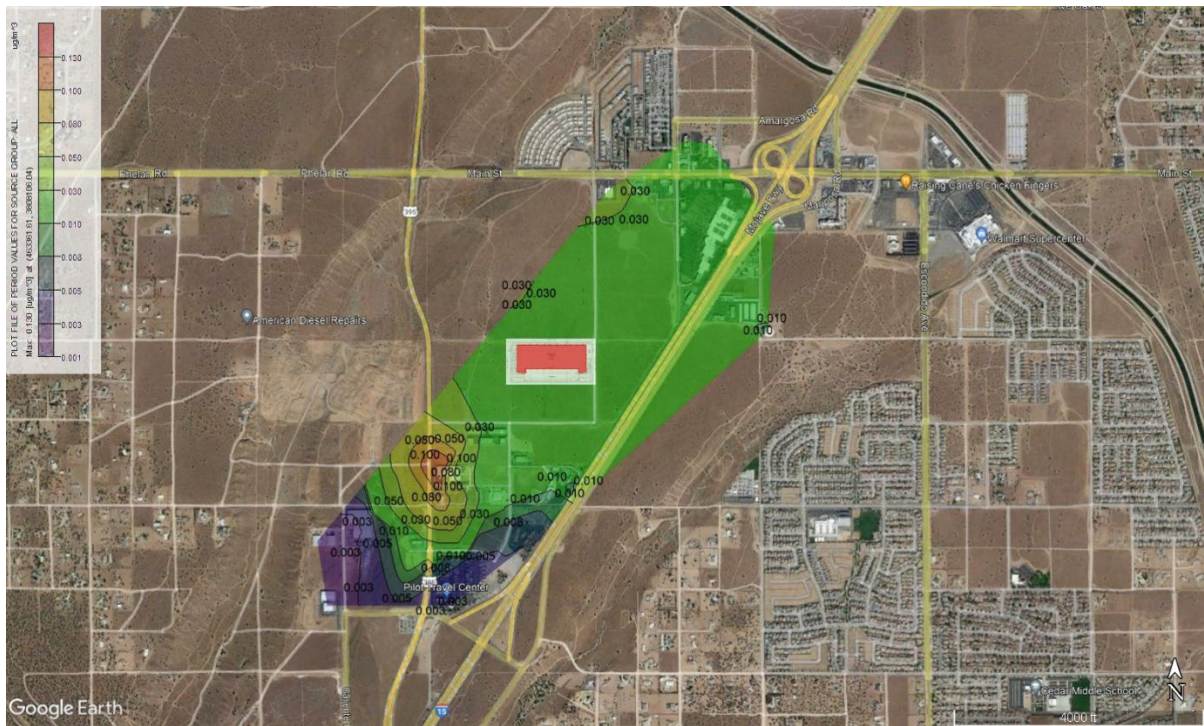
Operational Chronic Hazard Index – Sensitive Receptor



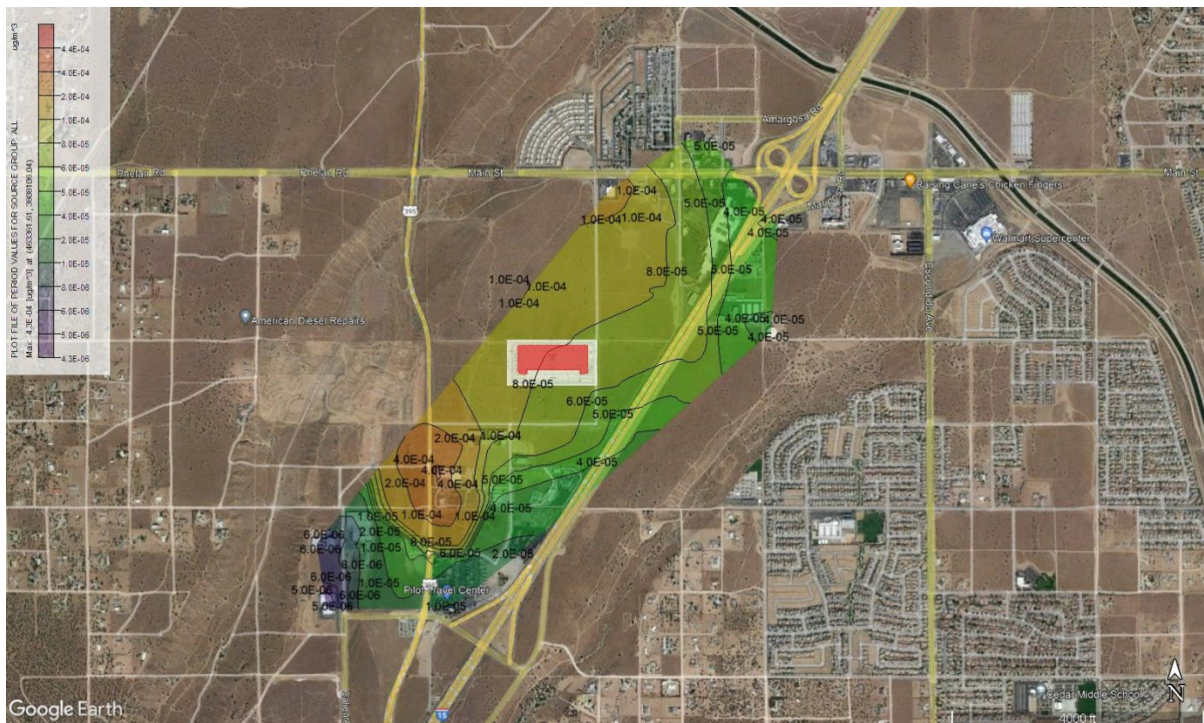
Operational Acute Hazard Index – Sensitive Receptor



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)	0.09	2.04
Chronic HI	2.06E-03	2.01E-03
Acute HI	0.0	0.0
PM 2.5	0.010	0.009

Construction (T2)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.15	2.68
Chronic HI	2.98E-03	2.91E-03
Acute HI	0.0	0.0
PM 2.5	0.015	0.015

Construction (T2L3)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.03	0.48
Chronic HI	5.53E-04	5.39E-04
Acute HI	0.0	0.0
PM 2.5	0.003	0.003

Construction (T4)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.01	0.22
Chronic HI	2.52E-04	2.45E-04
Acute HI	0.0	0.0
PM 2.5	0.001	0.001

Operational	Worker Receptor	Sensitive Receptor
30Yr Cancer Risk (in a Million)	---	0.39
70Yr Cancer Risk (in a Million)	---	0.46
25Yr Cancer Risk (in a Million)	0.13	---
Chronic HI	4.33E-04	1.18E-04
Acute HI	3.17E-04	1.51E-04
PM 2.5	0.0021	0.0006

PM 10				
Tons/Yr	UM	T2	T2L3	T4
Year 1	0.037	0.0366	5.94E-03	2.88E-03
Year 2	0.0908	0.1316	0.0244	1.11E-02
Year 3	7.46E-03	0.0121	2.04E-03	8.60E-04

PM 10				
Lbs /Yr	UM	T2	T2L3	T4
Year 1	74	73.2	11.88	5.76
Year 2	181.6	263.2	48.8	22.2
Year 3	14.92	24.2	4.08	1.72

PM 10				
% Chng	UM	M	T2L3	T4
Year 1	100%	99%	16%	8%
Year 2	100%	145%	27%	12%
Year 3	100%	162%	27%	12%

PM 2.5				
Tons/Yr	UM	T2	T2L3	T4
Year 1	0.0342	0.0365	5.91E-03	2.85E-03
Year 2	0.0857	0.1313	0.0241	1.08E-02
Year 3	6.94E-03	0.0121	2.03E-03	8.50E-04

PM 2.5				
Lbs /Yr	UM	T2	T2L3	T4
Year 1	68.4	73	11.82	5.7
Year 2	171.4	262.6	48.2	21.6
Year 3	13.88	24.2	4.06	1.7

PM 2.5				
g/sec	UM	T2	T2L3	T4
Year 1	0.000984	0.00105	0.00017	8.2E-05
Year 2	0.002465	0.003777	0.000693	0.000311
Year 3	0.0002	0.000348	5.84E-05	2.45E-05

UnMitigated					T2				T2L3				T4					
					2.04E-06		2.68E-06		4.82E-07		2.22E-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	463733.3	3809554	5.44E-07	1.23E-06	2.03E-08	1.80E-06	5.39E-07	1.79E-06	3.30E-08	2.36E-06	8.74E-08	3.32E-07	5.56E-09	4.25E-07	4.24E-08	1.51E-07	2.35E-09	1.96E-07
2	463753.3	3809554	5.54E-07	1.26E-06	2.07E-08	1.83E-06	5.48E-07	1.82E-06	3.36E-08	2.40E-06	8.90E-08	3.38E-07	5.67E-09	4.32E-07	4.32E-08	1.54E-07	2.39E-09	1.99E-07
3	463773.3	3809554	5.63E-07	1.28E-06	2.11E-08	1.86E-06	5.57E-07	1.85E-06	3.42E-08	2.44E-06	9.05E-08	3.43E-07	5.76E-09	4.39E-07	4.39E-08	1.56E-07	2.43E-09	2.02E-07
4	463793.3	3809554	5.72E-07	1.30E-06	2.14E-08	1.89E-06	5.65E-07	1.88E-06	3.47E-08	2.48E-06	9.18E-08	3.48E-07	5.84E-09	4.46E-07	4.45E-08	1.58E-07	2.46E-09	2.05E-07
5	463813.3	3809554	5.79E-07	1.31E-06	2.17E-08	1.91E-06	5.73E-07	1.90E-06	3.51E-08	2.51E-06	9.30E-08	3.53E-07	5.92E-09	4.52E-07	4.51E-08	1.61E-07	2.50E-09	2.08E-07
6	463833.3	3809554	5.90E-07	1.34E-06	2.20E-08	1.95E-06	5.83E-07	1.94E-06	3.57E-08	2.56E-06	9.46E-08	3.59E-07	6.03E-09	4.60E-07	4.59E-08	1.63E-07	2.54E-09	2.12E-07
7	463853.3	3809554	6.00E-07	1.36E-06	2.24E-08	1.98E-06	5.94E-07	1.97E-06	3.64E-08	2.60E-06	9.64E-08	3.66E-07	6.14E-09	4.68E-07	4.67E-08	1.66E-07	2.59E-09	2.16E-07
8	463873.3	3809554	6.11E-07	1.38E-06	2.28E-08	2.02E-06	6.04E-07	2.01E-06	3.70E-08	2.65E-06	9.81E-08	3.72E-07	6.24E-09	4.76E-07	4.76E-08	1.69E-07	2.63E-09	2.19E-07
9	463893.3	3809554	6.16E-07	1.40E-06	2.30E-08	2.03E-06	6.09E-07	2.02E-06	3.73E-08	2.67E-06	9.88E-08	3.75E-07	6.29E-09	4.80E-07	4.79E-08	1.71E-07	2.65E-09	2.21E-07
10	463913.3	3809554	6.18E-07	1.40E-06	2.31E-08	2.04E-06	6.11E-07	2.03E-06	3.74E-08	2.68E-06	9.92E-08	3.76E-07	6.31E-09	4.82E-07	4.81E-08	1.71E-07	2.66E-09	2.22E-07
11	463933.3	3809554	6.18E-07	1.40E-06	2.31E-08	2.04E-06	6.11E-07	2.03E-06	3.75E-08	2.68E-06	9.92E-08	3.76E-07	6.32E-09	4.82E-07	4.81E-08	1.71E-07	2.66E-09	2.22E-07
12	463953.3	3809554	6.18E-07	1.40E-06	2.31E-08	2.04E-06	6.11E-07	2.03E-06	3.75E-08	2.68E-06	9.92E-08	3.76E-07	6.32E-09	4.82E-07	4.81E-08	1.71E-07	2.66E-09	2.22E-07
13	463973.3	3809554	6.13E-07	1.39E-06	2.29E-08	2.03E-06	6.07E-07	2.01E-06	3.72E-08	2.66E-06	9.84E-08	3.73E-07	6.27E-09	4.78E-07	4.77E-08	1.70E-07	2.64E-09	2.20E-07
14	463993.3	3809554	6.06E-07	1.37E-06	2.26E-08	2.00E-06	5.99E-07	1.99E-06	3.67E-08	2.63E-06	9.73E-08	3.69E-07	6.19E-09	4.72E-07	4.72E-08	1.68E-07	2.61E-09	2.18E-07
15	464013.3	3809554	5.98E-07	1.35E-06	2.23E-08	1.98E-06	5.91E-07	1.96E-06	3.62E-08	2.59E-06	9.60E-08	3.64E-07	6.11E-09	4.66E-07	4.65E-08	1.66E-07	2.58E-09	2.15E-07
16	464033.3	3809554	5.92E-07	1.34E-06	2.21E-08	1.95E-06	5.85E-07	1.94E-06	3.59E-08	2.56E-06	9.50E-08	3.60E-07	6.05E-09	4.61E-07	4.60E-08	1.64E-07	2.55E-09	2.13E-07
17	464053.3	3809554	5.86E-07	1.33E-06	2.19E-08	1.93E-06	5.79E-07	1.92E-06	3.55E-08	2.54E-06	9.40E-08	3.57E-07	5.98E-09	4.57E-07	4.56E-08	1.62E-07	2.52E-09	2.10E-07
18	464073.3	3809554	5.77E-07	1.31E-06	2.16E-08	1.91E-06	5.71E-07	1.90E-06	3.50E-08	2.50E-06	9.27E-08	3.52E-07	5.90E-09	4.50E-07	4.49E-08	1.60E-07	2.49E-09	2.07E-07
19	464093.3	3809554	5.69E-07	1.29E-06	2.13E-08	1.88E-06	5.63E-07	1.87E-06	3.45E-08	2.47E-06	9.14E-08	3.47E-07	5.82E-09	4.44E-07	4.43E-08	1.58E-07	2.45E-09	2.04E-07
20	464113.3	3809554	5.60E-07	1.27E-06	2.09E-08	1.85E-06	5.54E-07	1.84E-06	3.40E-08	2.43E-06	9.00E-08	3.41E-07	5.73E-09	4.37E-07	4.36E-08	1.55E-07	2.41E-09	2.01E-07
21	464133.3	3809554	5.51E-07	1.25E-06	2.06E-08	1.82E-06	5.45E-07	1.81E-06	3.34E-08	2.39E-06	8.84E-08	3.35E-07	5.63E-09	4.29E-07	4.29E-08	1.53E-07	2.37E-09	1.98E-07
22	464153.3	3809554	5.41E-07	1.23E-06	2.02E-08	1.79E-06	5.35E-07	1.78E-06	3.28E-08	2.34E-06	8.68E-08	3.29E-07	5.53E-09	4.22E-07	4.21E-08	1.50E-07	2.33E-09	1.94E-07
23	464173.3	3809554	5.31E-07	1.20E-06	1.98E-08	1.75E-06	5.25E-07	1.74E-06	3.22E-08	2.30E-06	8.52E-08	3.23E-07	5.43E-09	4.14E-07	4.13E-08	1.47E-07	2.29E-09	1.91E-07
24	464193.3	3809554	5.22E-07	1.18E-06	1.95E-08	1.72E-06	5.16E-07	1.71E-06	3.16E-08	2.26E-06	8.38E-08	3.18E-07	5.33E-09	4.07E-07	4.06E-08	1.45E-07	2.25E-09	1.87E-07
25	464213.3	3809554	5.11E-07	1.16E-06	1.91E-08	1.69E-06	5.05E-07	1.68E-06	3.10E-08	2.21E-06	8.20E-08	3.11E-07	5.22E-09	3.98E-07	3.98E-08	1.42E-07	2.20E-09	1.84E-07
26	464233.3	3809554	5.00E-07	1.13E-06	1.87E-08	1.65E-06	4.94E-07	1.64E-06	3.03E-08	2.17E-06	8.02E-08	3.04E-07	5.11E-09	3.90E-07	3.89E-08	1.38E-07	2.15E-09	1.79E-07
27	464253.3	3809554	4.89E-07	1.11E-06	1.83E-08	1.61E-06	4.83E-07	1.60E-06	2.96E-08	2.12E-06	7.84E-08	2.98E-07	4.99E-09	3.81E-07	3.80E-08	1.35E-07	2.10E-09	1.75E-07
28	464273.3	3809554	4.77E-07	1.08E-06	1.78E-08	1.58E-06	4.72E-07	1.57E-06	2.89E-08	2.07E-06	7.66E-08	2.91E-07	4.88E-09	3.72E-07	3.71E-08	1.32E-07	2.06E-09	1.71E-07
29	464293.3	3809554	4.65E-07	1.05E-06	1.74E-08	1.54E-06	4.60E-07	1.53E-06	2.82E-08	2.02E-06	7.47E-08	2.83E-07	4.76E-09	3.63E-07	3.62E-08	1.29E-07	2.01E-09	1.67E-07
30	464313.3	3809554	4.54E-07	1.03E-06	1.70E-08	1.50E-06	4.49E-07	1.49E-06	2.75E-08	1.97E-06	7.29E-08	2.77E-07	4.64E-09	3.54E-07	3.54E-08	1.26E-07	1.96E-09	1.63E-07
31	464333.3	3809554	4.44E-07	1.01E-06	1.66E-08	1.47E-06	4.39E-07	1.46E-06	2.69E-08	1.92E-06	7.13E-08	2.70E-07	4.54E-09	3.46E-07	3.45E-08	1.23E-07	1.91E-09	1.59E-07
32	464353.3	3809554	4.33E-07	9.82E-07	1.62E-08	1.43E-06	4.29E-07	1.42E-06	2.63E-08	1.88E-06	6.96E-08	2.64E-07	4.43E-09	3.38E-07	3.37E-08	1.20E-07	1.87E-09	1.56E-07
33	464373.3	3809554	4.22E-07	9.56E-07	1.58E-08	1.39E-06	4.17E-07	1.39E-06	2.56E-08	1.83E-06	6.77E-08	2.57E-07	4.31E-09	3.29E-07	3.28E-08	1.17E-07	1.82E-09	1.52E-07
34	464393.3	3809554	4.11E-07	9.32E-07	1.54E-08	1.36E-06	4.07E-07	1.35E-06	2.49E-08	1.78E-06	6.60E-08	2.50E-07	4.20E-09	3.21E-07	3.20E-08	1.14E-07	1.77E-09	1.48E-07
35	464413.3	3809554	4.01E-07	9.08E-07	1.50E-08	1.32E-06	3.96E-07	1.32E-06	2.43E-08	1.74E-06	6.43E-08	2.44E-07	4.09E-09	3.12E-07	3.12E-08	1.11E-07	1.73E-09	1.44E-07
36	464433.3	3809554	3.89E-07	8.82E-07	1.46E-08	1.29E-06	3.85E-07	1.28E-06	2.36E-08	1.69E-06	6.25E-08	2.37E-07	3.98E-09	3.04E-07	3.03E-08	1.08E-07	1.68E-09	1.40E-07
37	464453.3	3809554	3.78E-07	8.56E-07	1.41E-08	1.25E-06	3.74E-07	1.24E-06	2.29E-08	1.64E-06	6.07E-08	2.30E-07	3.86E-09	2.95E-07	2.94E-08	1.05E-07	1.63E-09	1.36E-07
38	464473.3	3809554	3.66E-07	8.30E-07	1.37E-08	1.21E-06	3.62E-07	1.20E-06	2.22E-08	1.59E-06	5.88E-08	2.23E-07	3.74E-09	2.86E-07	2.85E-08	1.01E-07	1.58E-09	1.32E-07
39	464493.3	3809554	3.55E-07	8.04E-07	1.33E-08	1.17E-06	3.51E-07	1.17E-06	2.15E-08	1.54E-06	5.70E-08	2.16E-07	3.63E-09	2.77E-07	2.76E-08	9.83E-08	1.53E-09	1.27E-07
40	463733.3	3809574	5.26E-07	1.19E-06	1.97E-08	1.74E-06	5.21E-07	1.73E-06	3.19E-08	2.28E-06	8.45E-08	3.21E-07	5.38E-09	4.10E-07	4.10E-08	1.46E-07	2.27E-09	1.89E-07
41	463753.3	3809574	5.35E-07	1.21E-06	2.00E-08	1.77E-06	5.30E-07	1.76E-06	3.25E-08	2.32E-06	8.60E-08	3.26E-07	5.47E-09	4.18E-07	4.17E-08	1.48E-07	2.31E-09	1.92E-07
42	463773.3	3809574	5.44E-07	1.23E-06	2.03E-08	1.80E-06	5.38E-07	1.79E-06	3.30E-08	2.36E-06	8.73E-08	3.31E-07	5.56E-09	4.24E-07	4.23E-08	1.51E-07	2.34E-09	1.95E-07
43	463793.3	3809574	5.51E-07	1.25E-06	2.06E-08	1.82E-06	5.45E-07	1.81E-06	3.34E-08	2.39E-06	8.85E-08	3.36E-07	5.63E-09	4.30E-07	4.29E-08	1.53E-07	2.37E-09	1.98E-07
44	463813.3	3809574	5.58E-07	1.26E-06	2.09E-08	1.84E-06	5.52E-07	1.83E-06	3.38E-08	2.42E-06	8.96E-08	3.40E-07	5.70E-09	4.35E-07	4.34E-08	1.55E-07	2.40E-09	2.00E-07
45	463833.3	3809574	5.65E-07	1.28E-06	2.11E-08	1.87E-06	5.59E-07	1.86E-06	3.43E-08	2.45E-06	9.08E-08	3.44E-07	5.78E-09	4.41E-07	4.40E-08	1.57E-07	2.44E-09	2.03E-07
46	463853.3	3809574	5.75E-07	1.30E-06	2.15E-08	1.90E-06	5.68E-07	1.89E-06	3.48E-08	2.49E-06	9.22E-08	3.50E-07	5.87E-09	4.48E-07	4.47E-08	1.59E-07	2.48E-09	2.06E-07
47	463873.3	3809574	5.84E-07	1.32E-06	2.18E-08	1.93E-06	5.78E-07	1.92E-06	3.54E-08	2.53E-06	9.38E-08	3.56E-07	5.97E-09	4.56E-07	4.55E-08	1.62E-07	2.52E-09	2.10E-07
48	463893.3	3809574	5.91E-07	1.34E-06	2.21E-08	1.95E-06	5.85E-07	1.94E-06	3.58E-08	2.56E-06	9.49E-08	3.60E-07	6.04E-09	4.61E-07	4.60E-08	1.64E-07	2.55E-09	2.12E-07
49	463913.3	3809574	5.94E-07	1.35E-06	2.22E-08	1.96E-06	5.88E-07	1.95E-06	3.60E-08</									

119	463773.3	3809614	5.06E-07	1.15E-06	1.89E-08	1.67E-06	5.00E-07	1.66E-06	3.06E-08	2.19E-06	8.12E-08	3.08E-07	5.17E-09	3.94E-07	3.93E-08	1.40E-07	2.18E-09	1.82E-07
120	463793.3	3809614	5.12E-07	1.16E-06	1.91E-08	1.69E-06	5.07E-07	1.68E-06	3.11E-08	2.22E-06	8.22E-08	3.12E-07	5.24E-09	3.99E-07	3.99E-08	1.42E-07	2.21E-09	1.84E-07
121	463813.3	3809614	5.19E-07	1.18E-06	1.94E-08	1.71E-06	5.13E-07	1.70E-06	3.14E-08	2.25E-06	8.32E-08	3.16E-07	5.30E-09	4.04E-07	4.04E-08	1.44E-07	2.23E-09	1.86E-07
122	463833.3	3809614	5.23E-07	1.19E-06	1.96E-08	1.73E-06	5.17E-07	1.72E-06	3.17E-08	2.27E-06	8.40E-08	3.19E-07	5.35E-09	4.08E-07	4.07E-08	1.45E-07	2.25E-09	1.88E-07
123	463853.3	3809614	5.29E-07	1.20E-06	1.98E-08	1.75E-06	5.23E-07	1.74E-06	3.21E-08	2.29E-06	8.49E-08	3.22E-07	5.41E-09	4.13E-07	4.12E-08	1.47E-07	2.28E-09	1.90E-07
124	463873.3	3809614	5.36E-07	1.21E-06	2.00E-08	1.77E-06	5.30E-07	1.76E-06	3.25E-08	2.32E-06	8.60E-08	3.26E-07	5.48E-09	4.18E-07	4.17E-08	1.48E-07	2.31E-09	1.92E-07
125	463893.3	3809614	5.41E-07	1.23E-06	2.02E-08	1.79E-06	5.35E-07	1.78E-06	3.28E-08	2.35E-06	8.69E-08	3.30E-07	5.53E-09	4.22E-07	4.21E-08	1.50E-07	2.33E-09	1.94E-07
126	463913.3	3809614	5.46E-07	1.24E-06	2.04E-08	1.80E-06	5.40E-07	1.79E-06	3.31E-08	2.37E-06	8.77E-08	3.33E-07	5.58E-09	4.26E-07	4.25E-08	1.51E-07	2.35E-09	1.96E-07
127	463933.3	3809614	5.50E-07	1.25E-06	2.06E-08	1.82E-06	5.44E-07	1.81E-06	3.34E-08	2.39E-06	8.84E-08	3.35E-07	5.63E-09	4.29E-07	4.28E-08	1.52E-07	2.37E-09	1.98E-07
128	463953.3	3809614	5.50E-07	1.25E-06	2.06E-08	1.82E-06	5.44E-07	1.81E-06	3.34E-08	2.39E-06	8.84E-08	3.35E-07	5.63E-09	4.29E-07	4.28E-08	1.53E-07	2.37E-09	1.98E-07
129	463973.3	3809614	5.49E-07	1.24E-06	2.05E-08	1.81E-06	5.43E-07	1.80E-06	3.33E-08	2.38E-06	8.81E-08	3.34E-07	5.61E-09	4.28E-07	4.27E-08	1.52E-07	2.36E-09	1.97E-07
130	463993.3	3809614	5.46E-07	1.24E-06	2.04E-08	1.80E-06	5.40E-07	1.79E-06	3.31E-08	2.37E-06	8.76E-08	3.32E-07	5.58E-09	4.25E-07	4.25E-08	1.51E-07	2.35E-09	1.96E-07
131	464013.3	3809614	5.41E-07	1.23E-06	2.02E-08	1.79E-06	5.35E-07	1.78E-06	3.28E-08	2.35E-06	8.69E-08	3.30E-07	5.53E-09	4.22E-07	4.21E-08	1.50E-07	2.33E-09	1.94E-07
132	464033.3	3809614	5.36E-07	1.21E-06	2.00E-08	1.77E-06	5.30E-07	1.76E-06	3.25E-08	2.32E-06	8.60E-08	3.26E-07	5.47E-09	4.18E-07	4.17E-08	1.48E-07	2.31E-09	1.92E-07
133	464053.3	3809614	5.29E-07	1.20E-06	1.98E-08	1.75E-06	5.23E-07	1.74E-06	3.21E-08	2.29E-06	8.50E-08	3.22E-07	5.41E-09	4.13E-07	4.12E-08	1.47E-07	2.28E-09	1.90E-07
134	464073.3	3809614	5.21E-07	1.18E-06	1.95E-08	1.72E-06	5.16E-07	1.71E-06	3.16E-08	2.26E-06	8.37E-08	3.18E-07	5.33E-09	4.07E-07	4.06E-08	1.44E-07	2.25E-09	1.87E-07
135	464093.3	3809614	5.14E-07	1.17E-06	1.92E-08	1.70E-06	5.09E-07	1.69E-06	3.12E-08	2.23E-06	8.26E-08	3.13E-07	5.26E-09	4.01E-07	4.00E-08	1.42E-07	2.22E-09	1.85E-07
136	464113.3	3809614	5.07E-07	1.15E-06	1.90E-08	1.68E-06	5.02E-07	1.67E-06	3.07E-08	2.20E-06	8.14E-08	3.09E-07	5.18E-09	3.95E-07	3.95E-08	1.41E-07	2.19E-09	1.82E-07
137	464133.3	3809614	4.99E-07	1.13E-06	1.87E-08	1.65E-06	4.94E-07	1.64E-06	3.03E-08	2.16E-06	8.01E-08	3.04E-07	5.10E-09	3.89E-07	3.88E-08	1.38E-07	2.15E-09	1.79E-07
138	464153.3	3809614	4.91E-07	1.11E-06	1.83E-08	1.62E-06	4.86E-07	1.61E-06	2.98E-08	2.13E-06	7.88E-08	2.99E-07	5.02E-09	3.83E-07	3.82E-08	1.36E-07	2.12E-09	1.76E-07
139	464173.3	3809614	4.82E-07	1.09E-06	1.80E-08	1.59E-06	4.77E-07	1.58E-06	2.92E-08	2.09E-06	7.75E-08	2.94E-07	4.93E-09	3.76E-07	3.76E-08	1.34E-07	2.08E-09	1.73E-07
140	464193.3	3809614	4.73E-07	1.07E-06	1.77E-08	1.56E-06	4.68E-07	1.55E-06	2.87E-08	2.05E-06	7.60E-08	2.88E-07	4.84E-09	3.69E-07	3.68E-08	1.31E-07	2.04E-09	1.70E-07
141	464213.3	3809614	4.65E-07	1.05E-06	1.74E-08	1.54E-06	4.60E-07	1.53E-06	2.82E-08	2.01E-06	7.46E-08	2.83E-07	4.75E-09	3.62E-07	3.62E-08	1.29E-07	2.00E-09	1.67E-07
142	464233.3	3809614	4.56E-07	1.03E-06	1.71E-08	1.51E-06	4.51E-07	1.50E-06	2.77E-08	1.98E-06	7.32E-08	2.78E-07	4.66E-09	3.56E-07	3.55E-08	1.26E-07	1.97E-09	1.64E-07
143	464253.3	3809614	4.47E-07	1.01E-06	1.67E-08	1.48E-06	4.42E-07	1.47E-06	2.71E-08	1.94E-06	7.18E-08	2.72E-07	4.57E-09	3.49E-07	3.48E-08	1.24E-07	1.93E-09	1.61E-07
144	464273.3	3809614	4.37E-07	9.91E-07	1.63E-08	1.44E-06	4.33E-07	1.44E-06	2.65E-08	1.90E-06	7.02E-08	2.66E-07	4.47E-09	3.41E-07	3.40E-08	1.21E-07	1.88E-09	1.57E-07
145	464293.3	3809614	4.28E-07	9.70E-07	1.60E-08	1.41E-06	4.23E-07	1.41E-06	2.59E-08	1.85E-06	6.87E-08	2.61E-07	4.37E-09	3.34E-07	3.33E-08	1.19E-07	1.84E-09	1.54E-07
146	464313.3	3809614	4.19E-07	9.50E-07	1.57E-08	1.39E-06	4.15E-07	1.38E-06	2.54E-08	1.82E-06	6.73E-08	2.55E-07	4.29E-09	3.27E-07	3.26E-08	1.16E-07	1.81E-09	1.51E-07
147	464333.3	3809614	4.10E-07	9.30E-07	1.53E-08	1.36E-06	4.06E-07	1.35E-06	2.49E-08	1.78E-06	6.59E-08	2.50E-07	4.19E-09	3.20E-07	3.19E-08	1.14E-07	1.77E-09	1.47E-07
148	464353.3	3809614	4.01E-07	9.09E-07	1.50E-08	1.33E-06	3.97E-07	1.32E-06	2.43E-08	1.74E-06	6.44E-08	2.44E-07	4.10E-09	3.13E-07	3.12E-08	1.11E-07	1.73E-09	1.44E-07
149	464373.3	3809614	3.92E-07	8.87E-07	1.46E-08	1.29E-06	3.87E-07	1.29E-06	2.37E-08	1.70E-06	6.29E-08	2.38E-07	4.00E-09	3.05E-07	3.05E-08	1.08E-07	1.69E-09	1.41E-07
150	464393.3	3809614	3.83E-07	8.68E-07	1.43E-08	1.26E-06	3.79E-07	1.26E-06	2.32E-08	1.66E-06	6.15E-08	2.33E-07	3.91E-09	2.99E-07	2.98E-08	1.06E-07	1.65E-09	1.38E-07
151	464413.3	3809614	3.74E-07	8.48E-07	1.40E-08	1.24E-06	3.70E-07	1.23E-06	2.27E-08	1.62E-06	6.01E-08	2.28E-07	3.82E-09	2.92E-07	2.91E-08	1.04E-07	1.61E-09	1.34E-07
152	464433.3	3809614	3.65E-07	8.27E-07	1.36E-08	1.21E-06	3.61E-07	1.20E-06	2.21E-08	1.58E-06	5.86E-08	2.22E-07	3.73E-09	2.85E-07	2.84E-08	1.01E-07	1.57E-09	1.31E-07
153	464453.3	3809614	3.56E-07	8.07E-07	1.33E-08	1.18E-06	3.52E-07	1.17E-06	2.16E-08	1.54E-06	5.72E-08	2.17E-07	3.64E-09	2.78E-07	2.77E-08	9.87E-08	1.53E-09	1.28E-07
154	464473.3	3809614	3.47E-07	7.87E-07	1.30E-08	1.15E-06	3.43E-07	1.14E-06	2.11E-08	1.51E-06	5.57E-08	2.11E-07	3.55E-09	2.71E-07	2.70E-08	9.62E-08	1.50E-09	1.25E-07
155	464493.3	3809614	3.37E-07	7.65E-07	1.26E-08	1.11E-06	3.34E-07	1.11E-06	2.05E-08	1.46E-06	5.42E-08	2.06E-07	3.45E-09	2.63E-07	2.63E-08	9.35E-08	1.45E-09	1.21E-07
156	463753.3	3809634	4.81E-07	1.09E-06	1.80E-08	1.59E-06	4.76E-07	1.58E-06	2.92E-08	2.09E-06	7.72E-08	2.93E-07	4.92E-09	3.75E-07	3.74E-08	1.33E-07	2.07E-09	1.73E-07
157	463773.3	3809634	4.88E-07	1.11E-06	1.82E-08	1.61E-06	4.82E-07	1.60E-06	2.96E-08	2.11E-06	7.83E-08	2.97E-07	4.98E-09	3.80E-07	3.80E-08	1.35E-07	2.10E-09	1.75E-07
158	463793.3	3809634	4.94E-07	1.12E-06	1.85E-08	1.63E-06	4.89E-07	1.62E-06	2.99E-08	2.14E-06	7.93E-08	3.01E-07	5.05E-09	3.85E-07	3.84E-08	1.37E-07	2.13E-09	1.77E-07
159	463813.3	3809634	5.00E-07	1.13E-06	1.87E-08	1.65E-06	4.94E-07	1.64E-06	3.03E-08	2.17E-06	8.03E-08	3.04E-07	5.11E-09	3.90E-07	3.89E-08	1.38E-07	2.15E-09	1.80E-07
160	463833.3	3809634	5.05E-07	1.14E-06	1.89E-08	1.67E-06	4.99E-07	1.66E-06	3.06E-08	2.19E-06	8.10E-08	3.07E-07	5.16E-09	3.93E-07	3.93E-08	1.40E-07	2.17E-09	1.81E-07
161	463853.3	3809634	5.09E-07	1.15E-06	1.90E-08	1.68E-06	5.04E-07	1.67E-06	3.09E-08	2.21E-06	8.17E-08	3.10E-07	5.20E-09	3.97E-07	3.96E-08	1.41E-07	2.19E-09	1.83E-07
162	463873.3	3809634	5.14E-07	1.16E-06	1.92E-08	1.70E-06	5.08E-07	1.69E-06	3.12E-08	2.23E-06	8.25E-08	3.13E-07	5.25E-09	4.01E-07	4.00E-08	1.42E-07	2.21E-09	1.85E-07
163	463893.3	3809634	5.19E-07	1.18E-06	1.94E-08	1.71E-06	5.13E-07	1.70E-06	3.14E-08	2.25E-06	8.33E-08	3.16E-07	5.30E-09	4.05E-07	4.04E-08	1.44E-07	2.24E-09	1.86E-07
164	463913.3	3809634	5.23E-07	1.19E-06	1.96E-08	1.73E-06	5.18E-07	1.72E-06	3.17E-08	2.27E-06	8.40E-08	3.19E-07	5.35E-09	4.08E-07	4.07E-08	1.45E-07	2.25E-09	1.88E-07
165	463933.3	3809634	5.27E-07	1.19E-06	1.97E-08	1.74E-06	5.21E-07	1.73E-06	3.20E-08	2.28E-06	8.46E-08	3.21E-07	5.39E-09	4.11E-07	4.10E-08	1.46E-07	2.27E-09	1.89E-07
166	463953.3	3809634	5.27E-07	1.20E-06	1.97E-08	1.74E-06	5.22E-07	1.73E-06	3.20E-08	2.29E-06	8.47E-08	3.21E-07	5.39E-09	4.11E-07	4.11E-08	1.46E-07	2.27E-09	1.89E-07
167	463973.3	3809634	5.26E-07	1.19E-06	1.97E-08	1.74E-06	5.20E-07	1.73E-06	3.19E-08	2.28E-06	8.45E-08	3.20E-07	5.38E-09	4.10E-07	4.09E-08	1.46E-07	2.27E-09	1.89E-07
168	463993.3	3809634	5.24E-07	1.19E-06	1.96E-08	1.73E-06	5.18E-07	1.72E-06	3.17E-08	2.27E-06	8.41E-08	3.19E-07	5.35E-09	4.08E-07	4.08E-08	1.45E-07	2.26E-09	1.88E-07
169	464013.3	3809634	5.21E-07	1.18E-06	1.95E-08	1.72E-06	5.16E-07	1.71E										

240	463913.3	3809674	4.82E-07	1.09E-06	1.80E-08	1.59E-06	4.77E-07	1.58E-06	2.92E-08	2.09E-06	7.74E-08	2.93E-07	4.92E-09	3.76E-07	3.75E-08	1.34E-07	2.08E-09	1.73E-07
241	463933.3	3809674	4.85E-07	1.10E-06	1.81E-08	1.60E-06	4.80E-07	1.59E-06	2.94E-08	2.10E-06	7.78E-08	2.95E-07	4.96E-09	3.78E-07	3.77E-08	1.34E-07	2.09E-09	1.74E-07
242	463953.3	3809674	4.85E-07	1.10E-06	1.81E-08	1.60E-06	4.80E-07	1.59E-06	2.94E-08	2.10E-06	7.78E-08	2.95E-07	4.96E-09	3.78E-07	3.77E-08	1.34E-07	2.09E-09	1.74E-07
243	463973.3	3809674	4.84E-07	1.10E-06	1.81E-08	1.60E-06	4.78E-07	1.59E-06	2.93E-08	2.10E-06	7.76E-08	2.95E-07	4.94E-09	3.77E-07	3.76E-08	1.34E-07	2.08E-09	1.74E-07
244	463993.3	3809674	4.82E-07	1.09E-06	1.80E-08	1.59E-06	4.76E-07	1.58E-06	2.92E-08	2.09E-06	7.73E-08	2.93E-07	4.92E-09	3.76E-07	3.75E-08	1.33E-07	2.07E-09	1.73E-07
245	464013.3	3809674	4.80E-07	1.09E-06	1.79E-08	1.59E-06	4.75E-07	1.58E-06	2.91E-08	2.08E-06	7.71E-08	2.92E-07	4.91E-09	3.74E-07	3.74E-08	1.33E-07	2.07E-09	1.72E-07
246	464033.3	3809674	4.78E-07	1.08E-06	1.79E-08	1.58E-06	4.73E-07	1.57E-06	2.90E-08	2.07E-06	7.68E-08	2.91E-07	4.89E-09	3.73E-07	3.72E-08	1.33E-07	2.06E-09	1.72E-07
247	464053.3	3809674	4.76E-07	1.08E-06	1.78E-08	1.57E-06	4.71E-07	1.56E-06	2.89E-08	2.06E-06	7.64E-08	2.90E-07	4.86E-09	3.71E-07	3.70E-08	1.32E-07	2.05E-09	1.71E-07
248	464073.3	3809674	4.71E-07	1.07E-06	1.76E-08	1.56E-06	4.66E-07	1.55E-06	2.86E-08	2.04E-06	7.56E-08	2.87E-07	4.82E-09	3.67E-07	3.67E-08	1.31E-07	2.03E-09	1.69E-07
249	464093.3	3809674	4.66E-07	1.06E-06	1.74E-08	1.54E-06	4.61E-07	1.53E-06	2.83E-08	2.02E-06	7.49E-08	2.84E-07	4.77E-09	3.64E-07	3.63E-08	1.29E-07	2.01E-09	1.68E-07
250	464113.3	3809674	4.61E-07	1.05E-06	1.72E-08	1.52E-06	4.56E-07	1.52E-06	2.80E-08	2.00E-06	7.41E-08	2.81E-07	4.72E-09	3.60E-07	3.59E-08	1.28E-07	1.99E-09	1.66E-07
251	464133.3	3809674	4.55E-07	1.03E-06	1.70E-08	1.50E-06	4.50E-07	1.49E-06	2.76E-08	1.97E-06	7.30E-08	2.77E-07	4.65E-09	3.55E-07	3.54E-08	1.26E-07	1.96E-09	1.63E-07
252	464153.3	3809674	4.48E-07	1.02E-06	1.67E-08	1.48E-06	4.43E-07	1.47E-06	2.72E-08	1.94E-06	7.19E-08	2.73E-07	4.58E-09	3.49E-07	3.49E-08	1.24E-07	1.93E-09	1.61E-07
253	464173.3	3809674	4.41E-07	1.00E-06	1.65E-08	1.46E-06	4.36E-07	1.45E-06	2.67E-08	1.91E-06	7.08E-08	2.69E-07	4.51E-09	3.44E-07	3.43E-08	1.22E-07	1.90E-09	1.58E-07
254	464193.3	3809674	4.34E-07	9.85E-07	1.62E-08	1.44E-06	4.30E-07	1.43E-06	2.63E-08	1.88E-06	6.97E-08	2.65E-07	4.44E-09	3.39E-07	3.38E-08	1.20E-07	1.87E-09	1.56E-07
255	464213.3	3809674	4.27E-07	9.67E-07	1.59E-08	1.41E-06	4.22E-07	1.40E-06	2.59E-08	1.85E-06	6.85E-08	2.60E-07	4.36E-09	3.33E-07	3.32E-08	1.18E-07	1.84E-09	1.53E-07
256	464233.3	3809674	4.18E-07	9.48E-07	1.56E-08	1.38E-06	4.14E-07	1.37E-06	2.54E-08	1.81E-06	6.72E-08	2.55E-07	4.28E-09	3.26E-07	3.26E-08	1.16E-07	1.80E-09	1.50E-07
257	464253.3	3809674	4.11E-07	9.30E-07	1.53E-08	1.36E-06	4.06E-07	1.35E-06	2.49E-08	1.78E-06	6.59E-08	2.50E-07	4.20E-09	3.20E-07	3.20E-08	1.14E-07	1.77E-09	1.47E-07
258	464273.3	3809674	4.02E-07	9.12E-07	1.50E-08	1.33E-06	3.98E-07	1.32E-06	2.44E-08	1.74E-06	6.46E-08	2.45E-07	4.11E-09	3.14E-07	3.13E-08	1.11E-07	1.73E-09	1.44E-07
259	464293.3	3809674	3.94E-07	8.93E-07	1.47E-08	1.30E-06	3.90E-07	1.29E-06	2.39E-08	1.71E-06	6.32E-08	2.40E-07	4.03E-09	3.07E-07	3.07E-08	1.09E-07	1.70E-09	1.42E-07
260	464313.3	3809674	3.86E-07	8.75E-07	1.44E-08	1.28E-06	3.82E-07	1.27E-06	2.34E-08	1.67E-06	6.20E-08	2.35E-07	3.95E-09	3.01E-07	3.01E-08	1.07E-07	1.66E-09	1.39E-07
261	464333.3	3809674	3.79E-07	8.58E-07	1.42E-08	1.25E-06	3.75E-07	1.24E-06	2.30E-08	1.64E-06	6.08E-08	2.31E-07	3.87E-09	2.95E-07	2.95E-08	1.05E-07	1.63E-09	1.36E-07
262	464353.3	3809674	3.72E-07	8.42E-07	1.39E-08	1.23E-06	3.68E-07	1.22E-06	2.25E-08	1.61E-06	5.97E-08	2.26E-07	3.80E-09	2.90E-07	2.89E-08	1.03E-07	1.60E-09	1.34E-07
263	464373.3	3809674	3.65E-07	8.27E-07	1.36E-08	1.21E-06	3.61E-07	1.20E-06	2.21E-08	1.58E-06	5.86E-08	2.22E-07	3.73E-09	2.84E-07	2.84E-08	1.01E-07	1.57E-09	1.31E-07
264	464393.3	3809674	3.57E-07	8.09E-07	1.33E-08	1.18E-06	3.53E-07	1.17E-06	2.16E-08	1.55E-06	5.73E-08	2.17E-07	3.65E-09	2.78E-07	2.78E-08	9.89E-08	1.54E-09	1.28E-07
265	464413.3	3809674	3.49E-07	7.91E-07	1.31E-08	1.15E-06	3.45E-07	1.15E-06	2.12E-08	1.51E-06	5.61E-08	2.13E-07	3.57E-09	2.72E-07	2.72E-08	9.68E-08	1.50E-09	1.25E-07
266	464433.3	3809674	3.42E-07	7.74E-07	1.28E-08	1.13E-06	3.38E-07	1.12E-06	2.07E-08	1.48E-06	5.48E-08	2.08E-07	3.49E-09	2.66E-07	2.66E-08	9.46E-08	1.47E-09	1.23E-07
267	464453.3	3809674	3.34E-07	7.58E-07	1.25E-08	1.10E-06	3.31E-07	1.10E-06	2.03E-08	1.45E-06	5.37E-08	2.04E-07	3.42E-09	2.61E-07	2.60E-08	9.26E-08	1.44E-09	1.20E-07
268	464473.3	3809674	3.27E-07	7.41E-07	1.22E-08	1.08E-06	3.24E-07	1.07E-06	1.98E-08	1.42E-06	5.25E-08	1.99E-07	3.34E-09	2.55E-07	2.55E-08	9.06E-08	1.41E-09	1.17E-07
269	464493.3	3809674	3.19E-07	7.23E-07	1.19E-08	1.05E-06	3.15E-07	1.05E-06	1.93E-08	1.38E-06	5.12E-08	1.94E-07	3.26E-09	2.49E-07	2.48E-08	8.84E-08	1.37E-09	1.15E-07
270	463773.3	3809694	4.37E-07	9.91E-07	1.64E-08	1.45E-06	4.33E-07	1.44E-06	2.65E-08	1.90E-06	7.02E-08	2.66E-07	4.47E-09	3.41E-07	3.41E-08	1.21E-07	1.88E-09	1.57E-07
271	463793.3	3809694	4.43E-07	1.00E-06	1.66E-08	1.46E-06	4.38E-07	1.46E-06	2.69E-08	1.92E-06	7.11E-08	2.70E-07	4.53E-09	3.46E-07	3.45E-08	1.23E-07	1.91E-09	1.59E-07
272	463813.3	3809694	4.49E-07	1.02E-06	1.68E-08	1.48E-06	4.44E-07	1.47E-06	2.72E-08	1.94E-06	7.20E-08	2.73E-07	4.58E-09	3.50E-07	3.49E-08	1.24E-07	1.93E-09	1.61E-07
273	463833.3	3809694	4.52E-07	1.02E-06	1.69E-08	1.49E-06	4.47E-07	1.48E-06	2.74E-08	1.96E-06	7.25E-08	2.75E-07	4.62E-09	3.52E-07	3.52E-08	1.25E-07	1.95E-09	1.62E-07
274	463853.3	3809694	4.55E-07	1.03E-06	1.70E-08	1.50E-06	4.50E-07	1.49E-06	2.76E-08	1.97E-06	7.30E-08	2.77E-07	4.65E-09	3.54E-07	3.54E-08	1.26E-07	1.96E-09	1.63E-07
275	463873.3	3809694	4.57E-07	1.04E-06	1.71E-08	1.51E-06	4.52E-07	1.50E-06	2.77E-08	1.98E-06	7.34E-08	2.78E-07	4.67E-09	3.56E-07	3.56E-08	1.27E-07	1.97E-09	1.64E-07
276	463893.3	3809694	4.60E-07	1.04E-06	1.72E-08	1.52E-06	4.55E-07	1.51E-06	2.79E-08	1.99E-06	7.39E-08	2.80E-07	4.70E-09	3.59E-07	3.58E-08	1.27E-07	1.98E-09	1.65E-07
277	463913.3	3809694	4.63E-07	1.05E-06	1.73E-08	1.53E-06	4.58E-07	1.52E-06	2.81E-08	2.01E-06	7.44E-08	2.82E-07	4.73E-09	3.61E-07	3.60E-08	1.28E-07	2.00E-09	1.66E-07
278	463933.3	3809694	4.66E-07	1.06E-06	1.74E-08	1.54E-06	4.61E-07	1.53E-06	2.82E-08	2.02E-06	7.48E-08	2.84E-07	4.76E-09	3.63E-07	3.63E-08	1.29E-07	2.01E-09	1.67E-07
279	463953.3	3809694	4.67E-07	1.06E-06	1.74E-08	1.54E-06	4.62E-07	1.53E-06	2.83E-08	2.02E-06	7.49E-08	2.84E-07	4.77E-09	3.64E-07	3.63E-08	1.29E-07	2.01E-09	1.68E-07
280	463973.3	3809694	4.66E-07	1.06E-06	1.74E-08	1.54E-06	4.61E-07	1.53E-06	2.83E-08	2.02E-06	7.49E-08	2.84E-07	4.77E-09	3.64E-07	3.63E-08	1.29E-07	2.01E-09	1.67E-07
281	463993.3	3809694	4.65E-07	1.05E-06	1.74E-08	1.54E-06	4.60E-07	1.53E-06	2.82E-08	2.01E-06	7.46E-08	2.83E-07	4.75E-09	3.62E-07	3.62E-08	1.29E-07	2.00E-09	1.67E-07
282	464013.3	3809694	4.63E-07	1.05E-06	1.73E-08	1.53E-06	4.58E-07	1.52E-06	2.80E-08	2.00E-06	7.43E-08	2.82E-07	4.73E-09	3.61E-07	3.60E-08	1.28E-07	1.99E-09	1.66E-07
283	464033.3	3809694	4.61E-07	1.05E-06	1.72E-08	1.52E-06	4.56E-07	1.52E-06	2.80E-08	2.00E-06	7.41E-08	2.81E-07	4.71E-09	3.60E-07	3.59E-08	1.28E-07	1.99E-09	1.66E-07
284	464053.3	3809694	4.60E-07	1.04E-06	1.72E-08	1.52E-06	4.55E-07	1.51E-06	2.79E-08	1.99E-06	7.39E-08	2.80E-07	4.70E-09	3.59E-07	3.58E-08	1.27E-07	1.98E-09	1.65E-07
285	464073.3	3809694	4.57E-07	1.03E-06	1.71E-08	1.51E-06	4.52E-07	1.50E-06	2.77E-08	1.98E-06	7.33E-08	2.78E-07	4.67E-09	3.56E-07	3.55E-08	1.26E-07	1.97E-09	1.64E-07
286	464093.3	3809694	4.53E-07	1.03E-06	1.69E-08	1.50E-06	4.48E-07	1.49E-06	2.74E-08	1.96E-06	7.27E-08	2.76E-07	4.63E-09	3.53E-07	3.52E-08	1.25E-07	1.95E-09	1.63E-07
287	464113.3	3809694	4.48E-07	1.01E-06	1.67E-08	1.48E-06	4.43E-07	1.47E-06	2.71E-08	1.94E-06	7.19E-08	2.73E-07	4.58E-09	3.49E-07	3.49E-08	1.24E-07	1.93E-09	1.61E-07
288	464133.3	3809694	4.41E-07	1.00E-06	1.65E-08	1.46E-06	4.36E-07	1.45E-06	2.67E-08	1.91E-06	7.08E-08	2.69E-07	4.51E-09	3.44E-07	3.43E-08	1.22E-07	1.90E-09	1.58E-07
289	464153.3	3809694	4.35E-07	9.87E-07	1.63E-08	1.44E-06	4.31E-07	1.43E-06	2.64E-08	1.89E-06	6.99E-08	2.65E-07	4.45E-09	3.39E-07	3.39E-08	1.21E-07	1.88E-09	1.56E-07
290	464173.3	3809694	4.29E-07	9.73E-07	1.60E-08	1.42E-06	4.25E-07	1.41E										

361	464133.3	3809734	4.18E-07	9.4673E-07	1.5613E-08	1.38E-06	4.13E-07	1.37E-06	2.53E-08	1.81E-06	6.71E-08	2.54E-07	4.27E-09	3.26E-07	3.25E-08	1.16E-07	1.80E-09	1.50E-07
362	464153.3	3809734	4.13E-07	9.3586E-07	1.5434E-08	1.36E-06	4.08E-07	1.36E-06	2.50E-08	1.79E-06	6.63E-08	2.51E-07	4.22E-09	3.22E-07	3.21E-08	1.14E-07	1.78E-09	1.48E-07
363	464173.3	3809734	4.07E-07	9.2327E-07	1.5226E-08	1.35E-06	4.03E-07	1.34E-06	2.47E-08	1.77E-06	6.54E-08	2.48E-07	4.16E-09	3.18E-07	3.17E-08	1.13E-07	1.76E-09	1.46E-07
364	464193.3	3809734	4E-07	9.0615E-07	1.4944E-08	1.32E-06	3.95E-07	1.31E-06	2.42E-08	1.73E-06	6.42E-08	2.44E-07	4.09E-09	3.12E-07	3.11E-08	1.11E-07	1.72E-09	1.44E-07
365	464213.3	3809734	3.93E-07	8.9139E-07	1.47E-08	1.30E-06	3.89E-07	1.29E-06	2.38E-08	1.70E-06	6.31E-08	2.40E-07	4.02E-09	3.07E-07	3.06E-08	1.09E-07	1.69E-09	1.41E-07
366	464233.3	3809734	3.87E-07	8.7683E-07	1.446E-08	1.28E-06	3.83E-07	1.27E-06	2.35E-08	1.68E-06	6.21E-08	2.36E-07	3.95E-09	3.02E-07	3.01E-08	1.07E-07	1.67E-09	1.39E-07
367	464253.3	3809734	3.79E-07	8.5859E-07	1.416E-08	1.25E-06	3.75E-07	1.24E-06	2.30E-08	1.64E-06	6.08E-08	2.31E-07	3.87E-09	2.95E-07	2.95E-08	1.05E-07	1.63E-09	1.36E-07
368	464273.3	3809734	3.72E-07	8.4302E-07	1.3903E-08	1.23E-06	3.68E-07	1.22E-06	2.26E-08	1.61E-06	5.97E-08	2.27E-07	3.80E-09	2.90E-07	2.90E-08	1.03E-07	1.60E-09	1.34E-07
369	464293.3	3809734	3.66E-07	8.2838E-07	1.3661E-08	1.21E-06	3.62E-07	1.20E-06	2.22E-08	1.58E-06	5.87E-08	2.23E-07	3.74E-09	2.85E-07	2.84E-08	1.01E-07	1.57E-09	1.31E-07
370	464313.3	3809734	3.58E-07	8.1202E-07	1.3392E-08	1.18E-06	3.54E-07	1.18E-06	2.17E-08	1.55E-06	5.75E-08	2.18E-07	3.66E-09	2.79E-07	2.79E-08	9.93E-08	1.54E-09	1.29E-07
371	464333.3	3809734	3.51E-07	7.9645E-07	1.3135E-08	1.16E-06	3.48E-07	1.15E-06	2.13E-08	1.52E-06	5.64E-08	2.14E-07	3.59E-09	2.74E-07	2.74E-08	9.74E-08	1.51E-09	1.26E-07
372	464353.3	3809734	3.45E-07	7.8161E-07	1.289E-08	1.14E-06	3.41E-07	1.13E-06	2.09E-08	1.49E-06	5.54E-08	2.10E-07	3.52E-09	2.69E-07	2.68E-08	9.55E-08	1.49E-09	1.24E-07
373	464373.3	3809734	3.39E-07	7.6811E-07	1.2667E-08	1.12E-06	3.35E-07	1.11E-06	2.05E-08	1.47E-06	5.44E-08	2.06E-07	3.46E-09	2.64E-07	2.64E-08	9.39E-08	1.46E-09	1.22E-07
374	464393.3	3809734	3.32E-07	7.5345E-07	1.2426E-08	1.10E-06	3.29E-07	1.09E-06	2.02E-08	1.44E-06	5.34E-08	2.02E-07	3.40E-09	2.59E-07	2.59E-08	9.21E-08	1.43E-09	1.19E-07
375	464413.3	3809734	3.26E-07	7.384E-07	1.2177E-08	1.08E-06	3.22E-07	1.07E-06	1.98E-08	1.41E-06	5.23E-08	1.98E-07	3.33E-09	2.54E-07	2.54E-08	9.03E-08	1.40E-09	1.17E-07
376	464433.3	3809734	3.19E-07	7.2399E-07	1.194E-08	1.06E-06	3.16E-07	1.05E-06	1.94E-08	1.38E-06	5.13E-08	1.95E-07	3.27E-09	2.49E-07	2.49E-08	8.85E-08	1.38E-09	1.15E-07
377	464453.3	3809734	3.13E-07	7.1036E-07	1.1715E-08	1.04E-06	3.10E-07	1.03E-06	1.90E-08	1.36E-06	5.03E-08	1.91E-07	3.20E-09	2.44E-07	2.44E-08	8.68E-08	1.35E-09	1.13E-07
378	464473.3	3809734	3.08E-07	0.000000697	1.1495E-08	1.02E-06	3.04E-07	1.01E-06	1.86E-08	1.33E-06	4.94E-08	1.87E-07	3.14E-09	2.40E-07	2.39E-08	8.52E-08	1.33E-09	1.10E-07
379	464493.3	3809734	3.02E-07	6.8343E-07	1.1271E-08	9.96E-07	2.98E-07	9.91E-07	1.83E-08	1.31E-06	4.84E-08	1.84E-07	3.08E-09	2.35E-07	2.35E-08	8.35E-08	1.30E-09	1.08E-07
380	463793.3	3809754	3.99E-07	9.0502E-07	1.4925E-08	1.32E-06	3.95E-07	1.31E-06	2.42E-08	1.73E-06	6.41E-08	2.43E-07	4.08E-09	3.11E-07	3.11E-08	1.11E-07	1.72E-09	1.43E-07
381	463813.3	3809754	4.02E-07	9.1025E-07	1.5011E-08	1.33E-06	3.97E-07	1.32E-06	2.43E-08	1.74E-06	6.45E-08	2.45E-07	4.10E-09	3.13E-07	3.13E-08	1.11E-07	1.73E-09	1.44E-07
382	463833.3	3809754	4.04E-07	9.1607E-07	1.5108E-08	1.34E-06	4.00E-07	1.33E-06	2.45E-08	1.75E-06	6.49E-08	2.46E-07	4.13E-09	3.15E-07	3.15E-08	1.12E-07	1.74E-09	1.45E-07
383	463853.3	3809754	4.07E-07	9.2171E-07	1.5201E-08	1.34E-06	4.02E-07	1.34E-06	2.47E-08	1.76E-06	6.53E-08	2.48E-07	4.16E-09	3.17E-07	3.17E-08	1.13E-07	1.75E-09	1.46E-07
384	463873.3	3809754	4.09E-07	9.2722E-07	1.5291E-08	1.35E-06	4.05E-07	1.34E-06	2.48E-08	1.77E-06	6.57E-08	2.49E-07	4.18E-09	3.19E-07	3.18E-08	1.13E-07	1.76E-09	1.47E-07
385	463893.3	3809754	4.11E-07	9.3253E-07	1.5379E-08	1.36E-06	4.07E-07	1.35E-06	2.49E-08	1.78E-06	6.61E-08	2.51E-07	4.21E-09	3.21E-07	3.20E-08	1.14E-07	1.77E-09	1.48E-07
386	463913.3	3809754	4.13E-07	9.3552E-07	1.5428E-08	1.36E-06	4.08E-07	1.36E-06	2.50E-08	1.79E-06	6.63E-08	2.51E-07	4.22E-09	3.22E-07	3.21E-08	1.14E-07	1.78E-09	1.48E-07
387	463933.3	3809754	4.14E-07	9.3731E-07	1.5458E-08	1.37E-06	4.09E-07	1.36E-06	2.51E-08	1.79E-06	6.64E-08	2.52E-07	4.23E-09	3.22E-07	3.22E-08	1.15E-07	1.78E-09	1.49E-07
388	463953.3	3809754	4.15E-07	9.4016E-07	1.5505E-08	1.37E-06	4.10E-07	1.36E-06	2.51E-08	1.80E-06	6.66E-08	2.53E-07	4.24E-09	3.23E-07	3.23E-08	1.15E-07	1.79E-09	1.49E-07
389	463973.3	3809754	4.17E-07	9.4406E-07	1.5569E-08	1.38E-06	4.12E-07	1.37E-06	2.53E-08	1.81E-06	6.69E-08	2.54E-07	4.26E-09	3.25E-07	3.24E-08	1.15E-07	1.79E-09	1.50E-07
390	463993.3	3809754	4.19E-07	9.4851E-07	1.5642E-08	1.38E-06	4.14E-07	1.37E-06	2.54E-08	1.81E-06	6.72E-08	2.55E-07	4.28E-09	3.26E-07	3.26E-08	1.16E-07	1.80E-09	1.50E-07
391	464013.3	3809754	4.2E-07	9.5208E-07	1.5701E-08	1.39E-06	4.16E-07	1.38E-06	2.55E-08	1.82E-06	6.74E-08	2.56E-07	4.29E-09	3.28E-07	3.27E-08	1.16E-07	1.81E-09	1.51E-07
392	464033.3	3809754	4.2E-07	9.5083E-07	1.5681E-08	1.39E-06	4.15E-07	1.38E-06	2.54E-08	1.82E-06	6.74E-08	2.56E-07	4.29E-09	3.27E-07	3.27E-08	1.16E-07	1.81E-09	1.51E-07
393	464053.3	3809754	4.18E-07	9.4695E-07	1.5617E-08	1.38E-06	4.13E-07	1.37E-06	2.53E-08	1.81E-06	6.71E-08	2.54E-07	4.27E-09	3.26E-07	3.25E-08	1.16E-07	1.80E-09	1.50E-07
394	464073.3	3809754	4.17E-07	9.4397E-07	1.5568E-08	1.38E-06	4.12E-07	1.37E-06	2.53E-08	1.81E-06	6.69E-08	2.54E-07	4.26E-09	3.25E-07	3.24E-08	1.15E-07	1.79E-09	1.50E-07
395	464093.3	3809754	4.14E-07	9.3867E-07	1.548E-08	1.37E-06	4.10E-07	1.36E-06	2.51E-08	1.80E-06	6.65E-08	2.52E-07	4.23E-09	3.23E-07	3.22E-08	1.15E-07	1.78E-09	1.49E-07
396	464113.3	3809754	4.11E-07	9.3151E-07	1.5362E-08	1.36E-06	4.07E-07	1.35E-06	2.49E-08	1.78E-06	6.60E-08	2.50E-07	4.20E-09	3.21E-07	3.20E-08	1.14E-07	1.77E-09	1.48E-07
397	464133.3	3809754	4.07E-07	9.223E-07	1.521E-08	1.34E-06	4.03E-07	1.34E-06	2.47E-08	1.76E-06	6.53E-08	2.48E-07	4.16E-09	3.17E-07	3.17E-08	1.13E-07	1.75E-09	1.46E-07
398	464153.3	3809754	4.02E-07	9.1208E-07	1.5042E-08	1.33E-06	3.98E-07	1.32E-06	2.44E-08	1.74E-06	6.46E-08	2.45E-07	4.11E-09	3.14E-07	3.13E-08	1.11E-07	1.73E-09	1.45E-07
399	464173.3	3809754	3.97E-07	9.0017E-07	1.4845E-08	1.31E-06	3.93E-07	1.30E-06	2.41E-08	1.72E-06	6.38E-08	2.42E-07	4.06E-09	3.10E-07	3.09E-08	1.10E-07	1.71E-09	1.43E-07
400	464193.3	3809754	3.9E-07	8.8382E-07	1.4576E-08	1.29E-06	3.86E-07	1.28E-06	2.36E-08	1.69E-06	6.26E-08	2.38E-07	3.99E-09	3.04E-07	3.04E-08	1.08E-07	1.68E-09	1.40E-07
401	464213.3	3809754	3.84E-07	8.6972E-07	1.4343E-08	1.27E-06	3.80E-07	1.26E-06	2.33E-08	1.66E-06	6.16E-08	2.34E-07	3.92E-09	2.99E-07	2.99E-08	1.06E-07	1.65E-09	1.38E-07
402	464233.3	3809754	3.78E-07	8.5581E-07	1.4114E-08	1.25E-06	3.74E-07	1.24E-06	2.29E-08	1.64E-06	6.06E-08	2.30E-07	3.86E-09	2.94E-07	2.94E-08	1.05E-07	1.63E-09	1.36E-07
403	464253.3	3809754	3.7E-07	8.3828E-07	1.3825E-08	1.22E-06	3.66E-07	1.21E-06	2.24E-08	1.60E-06	5.94E-08	2.25E-07	3.78E-09	2.88E-07	2.88E-08	1.02E-07	1.59E-09	1.33E-07
404	464273.3	3809754	3.63E-07	8.2333E-07	1.3578E-08	1.20E-06	3.59E-07	1.19E-06	2.20E-08	1.57E-06	5.83E-08	2.21E-07	3.71E-09	2.83E-07	2.83E-08	1.01E-07	1.57E-09	1.30E-07
405	464293.3	3809754	3.57E-07	8.0902E-07	1.3342E-08	1.18E-06	3.53E-07	1.17E-06	2.16E-08	1.55E-06	5.73E-08	2.17E-07	3.65E-09	2.78E-07	2.78E-08	9.89E-08	1.54E-09	1.28E-07
406	464313.3	3809754	3.49E-07	7.9188E-07	1.3059E-08	1.15E-06	3.46E-07	1.15E-06	2.12E-08	1.51E-06	5.61E-08	2.13E-07	3.57E-09	2.72E-07	2.72E-08	9.68E-08	1.51E-09	1.26E-07
407	464333.3	3809754	3.43E-07	7.7741E-07	1.2821E-08	1.13E-06	3.39E-07	1.13E-06	2.08E-08	1.49E-06	5.51E-08	2.09E-07	3.51E-09	2.67E-07	2.67E-08	9.50E-08	1.48E-09	1.23E-07
408	464353.3	3809754	3.37E-07	7.6417E-07	1.2602E-08	1.11E-06	3.34E-07	1.11E-06	2.04E-08	1.46E-06	5.41E-08	2.05E-07	3.45E-09	2.63E-07	2.62E-08	9.34E-08	1.45E-09	1.21E-07
409	464373.3	3809754	3.31E-07	7.504E-07	1.2375E-08	1.09E-06	3.28E-07	1.09E-06	2.01E-08	1.44E-06	5.32E-08	2.02E-07	3.38E-09	2.58E-07	2.58E-08	9.17E-08	1.43E-09	1.19E-07
410	464393.3	3809754	3.25E-07	7.3591E-07	1.2136E-08	1.07E-06	3.21E-07	1.07E-06	1.97E-08	1.41E-06	5.21E-08	1.98E-07	3.					

482	464433.3	3809794	3E-07	6.8089E-07	1.1229E-08	9.93E-07	2.97E-07	9.87E-07	1.82E-08	1.30E-06	4.82E-08	1.83E-07	3.07E-09	2.34E-07	2.34E-08	8.32E-08	1.29E-09	1.08E-07
483	464453.3	3809794	2.95E-07	6.6859E-07	1.1026E-08	9.75E-07	2.92E-07	9.69E-07	1.79E-08	1.28E-06	4.74E-08	1.80E-07	3.02E-09	2.30E-07	2.30E-08	8.17E-08	1.27E-09	1.06E-07
484	464473.3	3809794	2.89E-07	6.5584E-07	1.0816E-08	9.56E-07	2.86E-07	9.51E-07	1.75E-08	1.25E-06	4.65E-08	1.76E-07	2.96E-09	2.26E-07	2.25E-08	8.02E-08	1.25E-09	1.04E-07
485	464493.3	3809794	2.84E-07	6.4356E-07	1.0613E-08	9.38E-07	2.81E-07	9.33E-07	1.72E-08	1.23E-06	4.56E-08	1.73E-07	2.90E-09	2.21E-07	2.21E-08	7.87E-08	1.22E-09	1.02E-07
486	463833.3	3809814	3.66E-07	8.2944E-07	1.3679E-08	1.21E-06	3.62E-07	1.20E-06	2.22E-08	1.59E-06	5.88E-08	2.23E-07	3.74E-09	2.85E-07	2.85E-08	1.01E-07	1.58E-09	1.31E-07
487	463853.3	3809814	3.67E-07	8.3181E-07	1.3718E-08	1.21E-06	3.63E-07	1.21E-06	2.23E-08	1.59E-06	5.89E-08	2.24E-07	3.75E-09	2.86E-07	2.86E-08	1.02E-07	1.58E-09	1.32E-07
488	463873.3	3809814	3.68E-07	8.3406E-07	1.3755E-08	1.22E-06	3.64E-07	1.21E-06	2.23E-08	1.60E-06	5.91E-08	2.24E-07	3.76E-09	2.87E-07	2.86E-08	1.02E-07	1.59E-09	1.32E-07
489	463893.3	3809814	3.69E-07	8.369E-07	1.3802E-08	1.22E-06	3.65E-07	1.21E-06	2.24E-08	1.60E-06	5.93E-08	2.25E-07	3.77E-09	2.88E-07	2.87E-08	1.02E-07	1.59E-09	1.33E-07
490	463913.3	3809814	3.7E-07	8.3852E-07	1.3829E-08	1.22E-06	3.66E-07	1.22E-06	2.24E-08	1.60E-06	5.94E-08	2.25E-07	3.78E-09	2.89E-07	2.88E-08	1.03E-07	1.59E-09	1.33E-07
491	463933.3	3809814	3.7E-07	8.3938E-07	1.3843E-08	1.22E-06	3.66E-07	1.22E-06	2.25E-08	1.61E-06	5.95E-08	2.26E-07	3.79E-09	2.89E-07	2.88E-08	1.03E-07	1.60E-09	1.33E-07
492	463953.3	3809814	3.71E-07	8.4006E-07	1.3854E-08	1.22E-06	3.67E-07	1.22E-06	2.25E-08	1.61E-06	5.95E-08	2.26E-07	3.79E-09	2.89E-07	2.89E-08	1.03E-07	1.60E-09	1.33E-07
493	463973.3	3809814	3.72E-07	8.4218E-07	1.3889E-08	1.23E-06	3.68E-07	1.22E-06	2.25E-08	1.61E-06	5.97E-08	2.26E-07	3.80E-09	2.90E-07	2.89E-08	1.03E-07	1.60E-09	1.33E-07
494	463993.3	3809814	3.73E-07	8.4507E-07	1.3937E-08	1.23E-06	3.69E-07	1.22E-06	2.26E-08	1.62E-06	5.99E-08	2.27E-07	3.81E-09	2.91E-07	2.90E-08	1.03E-07	1.61E-09	1.34E-07
495	464013.3	3809814	3.74E-07	8.4795E-07	1.3984E-08	1.24E-06	3.70E-07	1.23E-06	2.27E-08	1.62E-06	6.01E-08	2.28E-07	3.82E-09	2.92E-07	2.91E-08	1.04E-07	1.61E-09	1.34E-07
496	464033.3	3809814	3.77E-07	8.5444E-07	1.4091E-08	1.25E-06	3.73E-07	1.24E-06	2.29E-08	1.63E-06	6.05E-08	2.30E-07	3.85E-09	2.94E-07	2.93E-08	1.04E-07	1.62E-09	1.35E-07
497	464053.3	3809814	3.8E-07	8.6223E-07	1.422E-08	1.26E-06	3.76E-07	1.25E-06	2.31E-08	1.65E-06	6.11E-08	2.32E-07	3.89E-09	2.97E-07	2.96E-08	1.05E-07	1.64E-09	1.37E-07
498	464073.3	3809814	3.81E-07	8.6321E-07	1.4236E-08	1.26E-06	3.77E-07	1.25E-06	2.31E-08	1.65E-06	6.11E-08	2.32E-07	3.89E-09	2.97E-07	2.96E-08	1.06E-07	1.64E-09	1.37E-07
499	464093.3	3809814	3.8E-07	8.6095E-07	1.4199E-08	1.26E-06	3.76E-07	1.25E-06	2.30E-08	1.65E-06	6.10E-08	2.31E-07	3.88E-09	2.96E-07	2.96E-08	1.05E-07	1.64E-09	1.36E-07
500	464113.3	3809814	3.78E-07	8.5617E-07	1.412E-08	1.25E-06	3.74E-07	1.24E-06	2.29E-08	1.64E-06	6.06E-08	2.30E-07	3.86E-09	2.95E-07	2.94E-08	1.05E-07	1.63E-09	1.36E-07
501	464133.3	3809814	3.74E-07	8.4867E-07	1.3996E-08	1.24E-06	3.70E-07	1.23E-06	2.27E-08	1.62E-06	6.01E-08	2.28E-07	3.83E-09	2.92E-07	2.91E-08	1.04E-07	1.61E-09	1.35E-07
502	464153.3	3809814	3.71E-07	8.4022E-07	1.3857E-08	1.22E-06	3.67E-07	1.22E-06	2.25E-08	1.61E-06	5.95E-08	2.26E-07	3.79E-09	2.89E-07	2.89E-08	1.03E-07	1.60E-09	1.33E-07
503	464173.3	3809814	3.67E-07	8.3069E-07	1.3699E-08	1.21E-06	3.63E-07	1.20E-06	2.22E-08	1.59E-06	5.88E-08	2.23E-07	3.75E-09	2.86E-07	2.85E-08	1.02E-07	1.58E-09	1.32E-07
504	464193.3	3809814	3.62E-07	8.1943E-07	1.3514E-08	1.19E-06	3.58E-07	1.19E-06	2.19E-08	1.57E-06	5.80E-08	2.20E-07	3.70E-09	2.82E-07	2.81E-08	1.00E-07	1.56E-09	1.30E-07
505	464213.3	3809814	3.56E-07	8.0635E-07	1.3298E-08	1.18E-06	3.52E-07	1.17E-06	2.16E-08	1.54E-06	5.71E-08	2.17E-07	3.64E-09	2.77E-07	2.77E-08	9.86E-08	1.53E-09	1.28E-07
506	464233.3	3809814	3.5E-07	7.9261E-07	1.3071E-08	1.16E-06	3.46E-07	1.15E-06	2.12E-08	1.52E-06	5.61E-08	2.13E-07	3.57E-09	2.73E-07	2.72E-08	9.69E-08	1.51E-09	1.26E-07
507	464253.3	3809814	3.44E-07	7.8072E-07	1.2875E-08	1.14E-06	3.41E-07	1.13E-06	2.09E-08	1.49E-06	5.53E-08	2.10E-07	3.52E-09	2.69E-07	2.68E-08	9.54E-08	1.48E-09	1.24E-07
508	464273.3	3809814	3.38E-07	7.663E-07	1.2638E-08	1.12E-06	3.34E-07	1.11E-06	2.05E-08	1.47E-06	5.43E-08	2.06E-07	3.46E-09	2.64E-07	2.63E-08	9.37E-08	1.46E-09	1.21E-07
509	464293.3	3809814	3.31E-07	7.5119E-07	1.2388E-08	1.10E-06	3.28E-07	1.09E-06	2.01E-08	1.44E-06	5.32E-08	2.02E-07	3.39E-09	2.58E-07	2.58E-08	9.18E-08	1.43E-09	1.19E-07
510	464313.3	3809814	3.26E-07	7.3828E-07	1.2175E-08	1.08E-06	3.22E-07	1.07E-06	1.97E-08	1.41E-06	5.23E-08	1.98E-07	3.33E-09	2.54E-07	2.54E-08	9.03E-08	1.40E-09	1.17E-07
511	464333.3	3809814	3.2E-07	7.2463E-07	1.195E-08	1.06E-06	3.16E-07	1.05E-06	1.94E-08	1.39E-06	5.13E-08	1.95E-07	3.27E-09	2.49E-07	2.49E-08	8.86E-08	1.38E-09	1.15E-07
512	464353.3	3809814	3.14E-07	7.1117E-07	1.1728E-08	1.04E-06	3.10E-07	1.03E-06	1.90E-08	1.36E-06	5.04E-08	1.91E-07	3.21E-09	2.45E-07	2.44E-08	8.69E-08	1.35E-09	1.13E-07
513	464373.3	3809814	3.09E-07	6.9986E-07	1.1542E-08	1.02E-06	3.05E-07	1.01E-06	1.87E-08	1.34E-06	4.96E-08	1.88E-07	3.16E-09	2.41E-07	2.40E-08	8.56E-08	1.33E-09	1.11E-07
514	464393.3	3809814	3.04E-07	6.8828E-07	1.1351E-08	1.00E-06	3.00E-07	9.98E-07	1.84E-08	1.32E-06	4.88E-08	1.85E-07	3.10E-09	2.37E-07	2.36E-08	8.41E-08	1.31E-09	1.09E-07
515	464413.3	3809814	2.99E-07	6.7681E-07	1.1162E-08	9.87E-07	2.95E-07	9.81E-07	1.81E-08	1.29E-06	4.79E-08	1.82E-07	3.05E-09	2.33E-07	2.32E-08	8.27E-08	1.29E-09	1.07E-07
516	464433.3	3809814	2.94E-07	6.6614E-07	1.0986E-08	9.71E-07	2.91E-07	9.65E-07	1.78E-08	1.27E-06	4.72E-08	1.79E-07	3.00E-09	2.29E-07	2.29E-08	8.14E-08	1.27E-09	1.06E-07
517	464453.3	3809814	2.89E-07	6.5425E-07	1.079E-08	9.54E-07	2.86E-07	9.48E-07	1.75E-08	1.25E-06	4.63E-08	1.76E-07	2.95E-09	2.25E-07	2.25E-08	8.00E-08	1.24E-09	1.04E-07
518	464473.3	3809814	2.83E-07	6.4195E-07	1.0587E-08	9.36E-07	2.80E-07	9.30E-07	1.72E-08	1.23E-06	4.55E-08	1.73E-07	2.90E-09	2.21E-07	2.20E-08	7.85E-08	1.22E-09	1.02E-07
519	464493.3	3809814	2.78E-07	6.3067E-07	1.0401E-08	9.19E-07	2.75E-07	9.14E-07	1.69E-08	1.21E-06	4.47E-08	1.69E-07	2.84E-09	2.17E-07	2.17E-08	7.71E-08	1.20E-09	1.00E-07
520	463853.3	3809834	3.55E-07	8.0463E-07	1.327E-08	1.17E-06	3.51E-07	1.17E-06	2.15E-08	1.54E-06	5.70E-08	2.16E-07	3.63E-09	2.77E-07	2.76E-08	9.84E-08	1.53E-09	1.28E-07
521	463873.3	3809834	3.56E-07	8.0736E-07	1.3315E-08	1.18E-06	3.52E-07	1.17E-06	2.16E-08	1.54E-06	5.72E-08	2.17E-07	3.64E-09	2.78E-07	2.77E-08	9.87E-08	1.53E-09	1.28E-07
522	463893.3	3809834	3.57E-07	8.0853E-07	1.3334E-08	1.18E-06	3.53E-07	1.17E-06	2.16E-08	1.55E-06	5.73E-08	2.17E-07	3.65E-09	2.78E-07	2.78E-08	9.88E-08	1.54E-09	1.28E-07
523	463913.3	3809834	3.57E-07	8.0943E-07	1.3349E-08	1.18E-06	3.53E-07	1.17E-06	2.17E-08	1.55E-06	5.73E-08	2.18E-07	3.65E-09	2.78E-07	2.78E-08	9.90E-08	1.54E-09	1.28E-07
524	463933.3	3809834	3.57E-07	8.1012E-07	1.336E-08	1.18E-06	3.54E-07	1.17E-06	2.17E-08	1.55E-06	5.74E-08	2.18E-07	3.65E-09	2.79E-07	2.78E-08	9.90E-08	1.54E-09	1.28E-07
525	463953.3	3809834	3.58E-07	8.1067E-07	1.3369E-08	1.18E-06	3.54E-07	1.17E-06	2.17E-08	1.55E-06	5.74E-08	2.18E-07	3.66E-09	2.79E-07	2.78E-08	9.91E-08	1.54E-09	1.28E-07
526	463973.3	3809834	3.58E-07	8.1248E-07	1.3399E-08	1.18E-06	3.55E-07	1.18E-06	2.17E-08	1.55E-06	5.76E-08	2.18E-07	3.66E-09	2.80E-07	2.79E-08	9.93E-08	1.54E-09	1.29E-07
527	463993.3	3809834	3.6E-07	8.1497E-07	1.344E-08	1.19E-06	3.56E-07	1.18E-06	2.18E-08	1.56E-06	5.77E-08	2.19E-07	3.68E-09	2.80E-07	2.80E-08	9.96E-08	1.55E-09	1.29E-07
528	464013.3	3809834	3.61E-07	8.1742E-07	1.3481E-08	1.19E-06	3.57E-07	1.18E-06	2.19E-08	1.56E-06	5.79E-08	2.20E-07	3.69E-09	2.81E-07	2.81E-08	9.99E-08	1.55E-09	1.30E-07
529	464033.3	3809834	3.63E-07	8.217E-07	1.3551E-08	1.20E-06	3.59E-07	1.19E-06	2.20E-08	1.57E-06	5.82E-08	2.21E-07	3.71E-09	2.83E-07	2.82E-08	1.00E-07	1.56E-09	1.30E-07
530	464053.3	3809834	3.65E-07	8.2723E-07	1.3642E-08	1.21E-06	3.61E-07	1.20E-06	2.21E-08	1.58E-06	5.86E-08	2.22E-07	3.73E-09	2.85E-07	2.84E-08	1.01E-07	1.57E-09	1.31E-07
531	464073.3	3809834	3.67E-07	8.3243E-07	1.3728E-08	1.21E-06	3.63E-07	1.21E-06	2.23E-08	1.59E-06	5.90E-08	2.24E-07	3.75E					

603	464293.3	3809874	3.08E-07	6.9833E-07	1.1517E-08	1.02E-06	3.05E-07	1.01E-06	1.87E-08	1.34E-06	4.95E-08	1.88E-07	3.15E-09	2.40E-07	2.40E-08	8.54E-08	1.33E-09	1.11E-07
604	464313.3	3809874	3.03E-07	6.8757E-07	1.1339E-08	1.00E-06	3.00E-07	9.97E-07	1.84E-08	1.32E-06	4.87E-08	1.85E-07	3.10E-09	2.37E-07	2.36E-08	8.41E-08	1.31E-09	1.09E-07
605	464333.3	3809874	2.98E-07	6.7557E-07	1.1141E-08	9.85E-07	2.95E-07	9.79E-07	1.81E-08	1.29E-06	4.79E-08	1.82E-07	3.05E-09	2.32E-07	2.32E-08	8.26E-08	1.28E-09	1.07E-07
606	464353.3	3809874	2.93E-07	6.6348E-07	1.0942E-08	9.67E-07	2.90E-07	9.62E-07	1.77E-08	1.27E-06	4.70E-08	1.78E-07	2.99E-09	2.28E-07	2.28E-08	8.11E-08	1.26E-09	1.05E-07
607	464373.3	3809874	2.88E-07	6.5336E-07	1.0775E-08	9.52E-07	2.85E-07	9.47E-07	1.75E-08	1.25E-06	4.63E-08	1.76E-07	2.95E-09	2.25E-07	2.24E-08	7.99E-08	1.24E-09	1.04E-07
608	464393.3	3809874	2.84E-07	6.435E-07	1.0612E-08	9.38E-07	2.81E-07	9.33E-07	1.72E-08	1.23E-06	4.56E-08	1.73E-07	2.90E-09	2.21E-07	2.21E-08	7.87E-08	1.22E-09	1.02E-07
609	464413.3	3809874	2.8E-07	6.338E-07	1.0452E-08	9.24E-07	2.77E-07	9.19E-07	1.70E-08	1.21E-06	4.49E-08	1.70E-07	2.86E-09	2.18E-07	2.18E-08	7.75E-08	1.20E-09	1.00E-07
610	464433.3	3809874	2.75E-07	6.2378E-07	1.0287E-08	9.09E-07	2.72E-07	9.04E-07	1.67E-08	1.19E-06	4.42E-08	1.68E-07	2.81E-09	2.15E-07	2.14E-08	7.63E-08	1.19E-09	9.89E-08
611	464453.3	3809874	2.71E-07	6.1321E-07	1.0113E-08	8.94E-07	2.68E-07	8.89E-07	1.64E-08	1.17E-06	4.34E-08	1.65E-07	2.77E-09	2.11E-07	2.11E-08	7.50E-08	1.17E-09	9.72E-08
612	464473.3	3809874	2.66E-07	6.0272E-07	9.9399E-09	8.79E-07	2.63E-07	8.74E-07	1.61E-08	1.15E-06	4.27E-08	1.62E-07	2.72E-09	2.07E-07	2.07E-08	7.37E-08	1.15E-09	9.55E-08
613	464493.3	3809874	2.62E-07	5.9376E-07	9.7921E-09	8.66E-07	2.59E-07	8.61E-07	1.59E-08	1.14E-06	4.21E-08	1.60E-07	2.68E-09	2.04E-07	2.04E-08	7.26E-08	1.13E-09	9.41E-08
614	463953.3	3809894	3.24E-07	7.3493E-07	1.212E-08	1.07E-06	3.21E-07	1.07E-06	1.97E-08	1.41E-06	5.21E-08	1.97E-07	3.31E-09	2.53E-07	2.52E-08	8.98E-08	1.40E-09	1.16E-07
615	463973.3	3809894	3.25E-07	7.367E-07	1.2149E-08	1.07E-06	3.22E-07	1.07E-06	1.97E-08	1.41E-06	5.22E-08	1.98E-07	3.32E-09	2.53E-07	2.53E-08	9.01E-08	1.40E-09	1.17E-07
616	463993.3	3809894	3.26E-07	7.3843E-07	1.2178E-08	1.08E-06	3.22E-07	1.07E-06	1.98E-08	1.41E-06	5.23E-08	1.98E-07	3.33E-09	2.54E-07	2.54E-08	9.03E-08	1.40E-09	1.17E-07
617	464013.3	3809894	3.27E-07	7.4016E-07	1.2206E-08	1.08E-06	3.23E-07	1.07E-06	1.98E-08	1.42E-06	5.24E-08	1.99E-07	3.34E-09	2.55E-07	2.54E-08	9.05E-08	1.41E-09	1.17E-07
618	464033.3	3809894	3.27E-07	7.4186E-07	1.2235E-08	1.08E-06	3.24E-07	1.08E-06	1.98E-08	1.42E-06	5.25E-08	1.99E-07	3.35E-09	2.55E-07	2.55E-08	9.07E-08	1.41E-09	1.18E-07
619	464053.3	3809894	3.28E-07	7.4333E-07	1.2259E-08	1.08E-06	3.24E-07	1.08E-06	1.99E-08	1.42E-06	5.27E-08	2.00E-07	3.35E-09	2.56E-07	2.55E-08	9.09E-08	1.41E-09	1.18E-07
620	464073.3	3809894	3.28E-07	7.4446E-07	1.2277E-08	1.09E-06	3.25E-07	1.08E-06	1.99E-08	1.42E-06	5.27E-08	2.00E-07	3.36E-09	2.56E-07	2.56E-08	9.10E-08	1.42E-09	1.18E-07
621	464093.3	3809894	3.29E-07	7.452E-07	1.229E-08	1.09E-06	3.25E-07	1.08E-06	1.99E-08	1.43E-06	5.28E-08	2.00E-07	3.36E-09	2.56E-07	2.56E-08	9.11E-08	1.42E-09	1.18E-07
622	464113.3	3809894	3.29E-07	7.4515E-07	1.2289E-08	1.09E-06	3.25E-07	1.08E-06	1.99E-08	1.43E-06	5.28E-08	2.00E-07	3.36E-09	2.56E-07	2.56E-08	9.11E-08	1.42E-09	1.18E-07
623	464133.3	3809894	3.28E-07	7.4224E-07	1.2241E-08	1.08E-06	3.24E-07	1.08E-06	1.99E-08	1.42E-06	5.26E-08	1.99E-07	3.35E-09	2.55E-07	2.55E-08	9.07E-08	1.41E-09	1.18E-07
624	464153.3	3809894	3.25E-07	7.368E-07	1.2151E-08	1.07E-06	3.22E-07	1.07E-06	1.97E-08	1.41E-06	5.22E-08	1.98E-07	3.32E-09	2.54E-07	2.53E-08	9.01E-08	1.40E-09	1.17E-07
625	464173.3	3809894	3.22E-07	7.3001E-07	1.2039E-08	1.06E-06	3.19E-07	1.06E-06	1.95E-08	1.40E-06	5.17E-08	1.96E-07	3.29E-09	2.51E-07	2.51E-08	8.92E-08	1.39E-09	1.16E-07
626	464193.3	3809894	3.2E-07	7.2459E-07	1.195E-08	1.06E-06	3.16E-07	1.05E-06	1.94E-08	1.39E-06	5.13E-08	1.95E-07	3.27E-09	2.49E-07	2.49E-08	8.86E-08	1.38E-09	1.15E-07
627	464213.3	3809894	3.16E-07	7.1675E-07	1.182E-08	1.04E-06	3.13E-07	1.04E-06	1.92E-08	1.37E-06	5.08E-08	1.93E-07	3.23E-09	2.47E-07	2.46E-08	8.76E-08	1.36E-09	1.14E-07
628	464233.3	3809894	3.12E-07	7.0743E-07	1.1667E-08	1.03E-06	3.09E-07	1.03E-06	1.89E-08	1.35E-06	5.01E-08	1.90E-07	3.19E-09	2.43E-07	2.43E-08	8.65E-08	1.34E-09	1.12E-07
629	464253.3	3809894	3.08E-07	6.9762E-07	1.1505E-08	1.02E-06	3.04E-07	1.01E-06	1.87E-08	1.33E-06	4.94E-08	1.87E-07	3.15E-09	2.40E-07	2.40E-08	8.53E-08	1.33E-09	1.11E-07
630	464273.3	3809894	3.04E-07	6.8917E-07	1.1366E-08	1.00E-06	3.01E-07	9.99E-07	1.84E-08	1.32E-06	4.88E-08	1.85E-07	3.11E-09	2.37E-07	2.37E-08	8.42E-08	1.31E-09	1.09E-07
631	464293.3	3809894	3E-07	6.8102E-07	1.1231E-08	9.93E-07	2.97E-07	9.87E-07	1.82E-08	1.30E-06	4.82E-08	1.83E-07	3.07E-09	2.34E-07	2.34E-08	8.33E-08	1.29E-09	1.08E-07
632	464313.3	3809894	2.96E-07	6.7064E-07	1.106E-08	9.78E-07	2.93E-07	9.72E-07	1.79E-08	1.28E-06	4.75E-08	1.80E-07	3.02E-09	2.31E-07	2.30E-08	8.20E-08	1.28E-09	1.06E-07
633	464333.3	3809894	2.91E-07	6.6026E-07	1.0889E-08	9.62E-07	2.88E-07	9.57E-07	1.77E-08	1.26E-06	4.68E-08	1.77E-07	2.98E-09	2.27E-07	2.27E-08	8.07E-08	1.26E-09	1.05E-07
634	464353.3	3809894	2.87E-07	6.5002E-07	1.072E-08	9.48E-07	2.84E-07	9.42E-07	1.74E-08	1.24E-06	4.60E-08	1.75E-07	2.93E-09	2.24E-07	2.23E-08	7.95E-08	1.24E-09	1.03E-07
635	464373.3	3809894	2.82E-07	6.4019E-07	1.0558E-08	9.33E-07	2.79E-07	9.28E-07	1.71E-08	1.22E-06	4.53E-08	1.72E-07	2.89E-09	2.20E-07	2.20E-08	7.83E-08	1.22E-09	1.01E-07
636	464393.3	3809894	2.78E-07	6.3066E-07	1.0401E-08	9.19E-07	2.75E-07	9.14E-07	1.69E-08	1.21E-06	4.47E-08	1.69E-07	2.84E-09	2.17E-07	2.17E-08	7.71E-08	1.20E-09	1.00E-07
637	464413.3	3809894	2.74E-07	6.2103E-07	1.0242E-08	9.05E-07	2.71E-07	9.00E-07	1.66E-08	1.19E-06	4.40E-08	1.67E-07	2.80E-09	2.14E-07	2.13E-08	7.59E-08	1.18E-09	9.84E-08
638	464433.3	3809894	2.69E-07	6.0971E-07	1.0055E-08	8.89E-07	2.66E-07	8.84E-07	1.63E-08	1.17E-06	4.32E-08	1.64E-07	2.75E-09	2.10E-07	2.09E-08	7.45E-08	1.16E-09	9.66E-08
639	464453.3	3809894	2.65E-07	6.0013E-07	9.8972E-09	8.75E-07	2.62E-07	8.70E-07	1.61E-08	1.15E-06	4.25E-08	1.61E-07	2.71E-09	2.06E-07	2.06E-08	7.34E-08	1.14E-09	9.51E-08
640	464473.3	3809894	2.61E-07	5.9138E-07	9.7528E-09	8.62E-07	2.58E-07	8.57E-07	1.58E-08	1.13E-06	4.19E-08	1.59E-07	2.67E-09	2.03E-07	2.03E-08	7.23E-08	1.12E-09	9.37E-08
641	464493.3	3809894	2.57E-07	5.8285E-07	9.6122E-09	8.50E-07	2.54E-07	8.45E-07	1.56E-08	1.11E-06	4.13E-08	1.57E-07	2.63E-09	2.01E-07	2.00E-08	7.13E-08	1.11E-09	9.24E-08
642	464033.3	3809914	3.17E-07	7.1882E-07	1.1855E-08	1.05E-06	3.14E-07	1.04E-06	1.92E-08	1.37E-06	5.09E-08	1.93E-07	3.24E-09	2.47E-07	2.47E-08	8.79E-08	1.37E-09	1.14E-07
643	464053.3	3809914	3.18E-07	7.2101E-07	1.1891E-08	1.05E-06	3.15E-07	1.04E-06	1.93E-08	1.38E-06	5.11E-08	1.94E-07	3.25E-09	2.48E-07	2.48E-08	8.81E-08	1.37E-09	1.14E-07
644	464073.3	3809914	3.19E-07	0.000000722	1.1907E-08	1.05E-06	3.15E-07	1.05E-06	1.93E-08	1.38E-06	5.11E-08	1.94E-07	3.26E-09	2.48E-07	2.48E-08	8.83E-08	1.37E-09	1.14E-07
645	464093.3	3809914	3.18E-07	7.2177E-07	1.1903E-08	1.05E-06	3.15E-07	1.05E-06	1.93E-08	1.38E-06	5.11E-08	1.94E-07	3.25E-09	2.48E-07	2.48E-08	8.82E-08	1.37E-09	1.14E-07
646	464113.3	3809914	3.18E-07	7.2062E-07	1.1884E-08	1.05E-06	3.15E-07	1.04E-06	1.93E-08	1.38E-06	5.10E-08	1.94E-07	3.25E-09	2.48E-07	2.47E-08	8.81E-08	1.37E-09	1.14E-07
647	464133.3	3809914	3.17E-07	7.193E-07	1.1862E-08	1.05E-06	3.14E-07	1.04E-06	1.92E-08	1.38E-06	5.10E-08	1.93E-07	3.24E-09	2.47E-07	2.47E-08	8.79E-08	1.37E-09	1.14E-07
648	464153.3	3809914	3.16E-07	7.1566E-07	1.1802E-08	1.04E-06	3.12E-07	1.04E-06	1.91E-08	1.37E-06	5.07E-08	1.92E-07	3.23E-09	2.46E-07	2.46E-08	8.75E-08	1.36E-09	1.13E-07
649	464173.3	3809914	3.14E-07	7.1062E-07	1.1719E-08	1.04E-06	3.10E-07	1.03E-06	1.90E-08	1.36E-06	5.03E-08	1.91E-07	3.20E-09	2.45E-07	2.44E-08	8.69E-08	1.35E-09	1.13E-07
650	464193.3	3809914	3.11E-07	7.0566E-07	1.1638E-08	1.03E-06	3.08E-07	1.02E-06	1.89E-08	1.35E-06	5.00E-08	1.90E-07	3.18E-09	2.43E-07	2.42E-08	8.63E-08	1.34E-09	1.12E-07
651	464213.3	3809914	3.08E-07	6.9831E-07	1.1516E-08	1.02E-06	3.05E-07	1.01E-06	1.87E-08	1.34E-06	4.95E-08	1.88E-07	3.15E-09	2.40E-07	2.40E-08	8.54E-08	1.33E-09	1.11E-07
652	464233.3	3809914	3.04E-07	6.8969E-07	1.1374E-08	1.01E-06	3.01E-07	1.00E-06	1.84E-08	1.32E-06	4.89E-08	1.85E-07	3					

724	464153.3	3809994	2.82E-07	6.3934E-07	1.0544E-08	9.32E-07	2.79E-07	9.27E-07	1.71E-08	1.22E-06	4.53E-08	1.72E-07	2.88E-09	2.20E-07	2.20E-08	7.82E-08	1.22E-09	1.01E-07
725	464173.3	3809994	2.81E-07	6.3665E-07	1.0499E-08	9.28E-07	2.78E-07	9.23E-07	1.70E-08	1.22E-06	4.51E-08	1.71E-07	2.87E-09	2.19E-07	2.19E-08	7.78E-08	1.21E-09	1.01E-07
726	464193.3	3809994	2.8E-07	6.3458E-07	1.0465E-08	9.25E-07	2.77E-07	9.20E-07	1.70E-08	1.21E-06	4.50E-08	1.71E-07	2.86E-09	2.18E-07	2.18E-08	7.76E-08	1.21E-09	1.01E-07
727	464213.3	3809994	2.79E-07	6.3173E-07	1.0418E-08	9.21E-07	2.76E-07	9.16E-07	1.69E-08	1.21E-06	4.47E-08	1.70E-07	2.85E-09	2.17E-07	2.17E-08	7.72E-08	1.20E-09	1.00E-07
728	464233.3	3809994	2.77E-07	6.2797E-07	1.0356E-08	9.15E-07	2.74E-07	9.10E-07	1.68E-08	1.20E-06	4.45E-08	1.69E-07	2.83E-09	2.16E-07	2.16E-08	7.68E-08	1.19E-09	9.95E-08
729	464253.3	3809994	2.75E-07	6.2243E-07	1.0265E-08	9.07E-07	2.72E-07	9.02E-07	1.66E-08	1.19E-06	4.41E-08	1.67E-07	2.81E-09	2.14E-07	2.14E-08	7.61E-08	1.18E-09	9.86E-08
730	464273.3	3809994	2.72E-07	6.1578E-07	1.0155E-08	8.98E-07	2.69E-07	8.92E-07	1.65E-08	1.18E-06	4.36E-08	1.65E-07	2.78E-09	2.12E-07	2.11E-08	7.53E-08	1.17E-09	9.76E-08
731	464293.3	3809994	2.68E-07	6.0831E-07	1.0032E-08	8.87E-07	2.65E-07	8.82E-07	1.63E-08	1.16E-06	4.31E-08	1.63E-07	2.74E-09	2.09E-07	2.09E-08	7.44E-08	1.16E-09	9.64E-08
732	464313.3	3809994	2.65E-07	5.9964E-07	9.889E-09	8.74E-07	2.62E-07	8.69E-07	1.60E-08	1.15E-06	4.25E-08	1.61E-07	2.70E-09	2.06E-07	2.06E-08	7.33E-08	1.14E-09	9.50E-08
733	464333.3	3809994	2.61E-07	5.9201E-07	9.7632E-09	8.63E-07	2.58E-07	8.58E-07	1.58E-08	1.13E-06	4.19E-08	1.59E-07	2.67E-09	2.04E-07	2.03E-08	7.24E-08	1.13E-09	9.38E-08
734	464353.3	3809994	2.58E-07	5.8476E-07	9.6437E-09	8.52E-07	2.55E-07	8.48E-07	1.56E-08	1.12E-06	4.14E-08	1.57E-07	2.64E-09	2.01E-07	2.01E-08	7.15E-08	1.11E-09	9.27E-08
735	464373.3	3809994	2.54E-07	5.7628E-07	9.5038E-09	8.40E-07	2.52E-07	8.35E-07	1.54E-08	1.10E-06	4.08E-08	1.55E-07	2.60E-09	1.98E-07	1.98E-08	7.04E-08	1.10E-09	9.13E-08
736	464393.3	3809994	2.51E-07	5.6803E-07	9.3678E-09	8.28E-07	2.48E-07	8.23E-07	1.52E-08	1.09E-06	4.02E-08	1.53E-07	2.56E-09	1.95E-07	1.95E-08	6.94E-08	1.08E-09	9.00E-08
737	464413.3	3809994	2.47E-07	5.598E-07	9.2321E-09	8.16E-07	2.44E-07	8.11E-07	1.50E-08	1.07E-06	3.97E-08	1.50E-07	2.52E-09	1.93E-07	1.92E-08	6.84E-08	1.06E-09	8.87E-08
738	464433.3	3809994	2.43E-07	5.5058E-07	9.0799E-09	8.03E-07	2.40E-07	7.98E-07	1.47E-08	1.05E-06	3.90E-08	1.48E-07	2.48E-09	1.89E-07	1.89E-08	6.73E-08	1.05E-09	8.73E-08
739	464453.3	3809994	2.39E-07	5.427E-07	8.95E-09	7.91E-07	2.37E-07	7.87E-07	1.45E-08	1.04E-06	3.84E-08	1.46E-07	2.45E-09	1.87E-07	1.86E-08	6.63E-08	1.03E-09	8.60E-08
740	464473.3	3809994	2.36E-07	5.3549E-07	8.8311E-09	7.81E-07	2.34E-07	7.76E-07	1.43E-08	1.02E-06	3.79E-08	1.44E-07	2.41E-09	1.84E-07	1.84E-08	6.55E-08	1.02E-09	8.49E-08
741	464493.3	3809994	2.33E-07	5.2801E-07	8.7078E-09	7.70E-07	2.30E-07	7.65E-07	1.41E-08	1.01E-06	3.74E-08	1.42E-07	2.38E-09	1.82E-07	1.81E-08	6.45E-08	1.00E-09	8.37E-08
742	464173.3	3810014	2.74E-07	6.2143E-07	1.0248E-08	9.06E-07	2.71E-07	9.01E-07	1.66E-08	1.19E-06	4.40E-08	1.67E-07	2.80E-09	2.14E-07	2.13E-08	7.60E-08	1.18E-09	9.85E-08
743	464193.3	3810014	2.73E-07	6.1954E-07	1.0217E-08	9.03E-07	2.70E-07	8.98E-07	1.66E-08	1.18E-06	4.39E-08	1.66E-07	2.79E-09	2.13E-07	2.13E-08	7.57E-08	1.18E-09	9.82E-08
744	464213.3	3810014	2.72E-07	6.1596E-07	1.0158E-08	8.98E-07	2.69E-07	8.93E-07	1.65E-08	1.18E-06	4.36E-08	1.66E-07	2.78E-09	2.12E-07	2.12E-08	7.53E-08	1.17E-09	9.76E-08
745	464233.3	3810014	2.7E-07	6.112E-07	1.008E-08	8.91E-07	2.67E-07	8.86E-07	1.63E-08	1.17E-06	4.33E-08	1.64E-07	2.76E-09	2.10E-07	2.10E-08	7.47E-08	1.16E-09	9.69E-08
746	464253.3	3810014	2.67E-07	6.0588E-07	9.992E-09	8.83E-07	2.64E-07	8.78E-07	1.62E-08	1.16E-06	4.29E-08	1.63E-07	2.73E-09	2.08E-07	2.08E-08	7.41E-08	1.15E-09	9.60E-08
747	464273.3	3810014	2.65E-07	6.0139E-07	9.9179E-09	8.77E-07	2.62E-07	8.72E-07	1.61E-08	1.15E-06	4.26E-08	1.62E-07	2.71E-09	2.07E-07	2.07E-08	7.35E-08	1.14E-09	9.53E-08
748	464293.3	3810014	2.63E-07	5.9665E-07	9.8397E-09	8.70E-07	2.60E-07	8.65E-07	1.60E-08	1.14E-06	4.23E-08	1.60E-07	2.69E-09	2.05E-07	2.05E-08	7.29E-08	1.13E-09	9.46E-08
749	464313.3	3810014	2.6E-07	5.8826E-07	9.7014E-09	8.58E-07	2.57E-07	8.53E-07	1.57E-08	1.13E-06	4.17E-08	1.58E-07	2.65E-09	2.02E-07	2.02E-08	7.19E-08	1.12E-09	9.32E-08
750	464333.3	3810014	2.56E-07	5.7993E-07	9.564E-09	8.45E-07	2.53E-07	8.41E-07	1.55E-08	1.11E-06	4.11E-08	1.56E-07	2.62E-09	2.00E-07	1.99E-08	7.09E-08	1.10E-09	9.19E-08
751	464353.3	3810014	2.52E-07	5.7168E-07	9.428E-09	8.33E-07	2.50E-07	8.29E-07	1.53E-08	1.09E-06	4.05E-08	1.54E-07	2.58E-09	1.97E-07	1.96E-08	6.99E-08	1.09E-09	9.06E-08
752	464373.3	3810014	2.49E-07	5.6345E-07	9.2922E-09	8.21E-07	2.46E-07	8.17E-07	1.51E-08	1.08E-06	3.99E-08	1.51E-07	2.54E-09	1.94E-07	1.94E-08	6.89E-08	1.07E-09	8.93E-08
753	464393.3	3810014	2.45E-07	5.5544E-07	9.1601E-09	8.10E-07	2.42E-07	8.05E-07	1.49E-08	1.06E-06	3.93E-08	1.49E-07	2.50E-09	1.91E-07	1.91E-08	6.79E-08	1.06E-09	8.80E-08
754	464413.3	3810014	2.42E-07	5.4766E-07	9.0319E-09	7.98E-07	2.39E-07	7.94E-07	1.46E-08	1.05E-06	3.88E-08	1.47E-07	2.47E-09	1.88E-07	1.88E-08	6.69E-08	1.04E-09	8.68E-08
755	464433.3	3810014	2.38E-07	5.4005E-07	8.9063E-09	7.87E-07	2.36E-07	7.83E-07	1.44E-08	1.03E-06	3.83E-08	1.45E-07	2.44E-09	1.86E-07	1.85E-08	6.60E-08	1.03E-09	8.56E-08
756	464453.3	3810014	2.35E-07	5.3283E-07	8.7873E-09	7.77E-07	2.33E-07	7.72E-07	1.43E-08	1.02E-06	3.77E-08	1.43E-07	2.40E-09	1.83E-07	1.83E-08	6.51E-08	1.01E-09	8.44E-08
757	464473.3	3810014	2.32E-07	5.2561E-07	8.6682E-09	7.66E-07	2.29E-07	7.62E-07	1.41E-08	1.01E-06	3.72E-08	1.41E-07	2.37E-09	1.81E-07	1.81E-08	6.43E-08	9.99E-10	8.33E-08
758	464493.3	3810014	2.28E-07	5.1707E-07	8.5274E-09	7.54E-07	2.26E-07	7.49E-07	1.38E-08	9.89E-07	3.66E-08	1.39E-07	2.33E-09	1.78E-07	1.78E-08	6.32E-08	9.83E-10	8.20E-08
759	464193.3	3810034	2.66E-07	6.0342E-07	9.9515E-09	8.80E-07	2.63E-07	8.75E-07	1.61E-08	1.15E-06	4.27E-08	1.62E-07	2.72E-09	2.08E-07	2.07E-08	7.38E-08	1.15E-09	9.56E-08
760	464213.3	3810034	2.65E-07	6.0064E-07	9.9056E-09	8.76E-07	2.62E-07	8.71E-07	1.61E-08	1.15E-06	4.25E-08	1.61E-07	2.71E-09	2.07E-07	2.06E-08	7.34E-08	1.14E-09	9.52E-08
761	464233.3	3810034	2.63E-07	5.9697E-07	9.845E-09	8.70E-07	2.61E-07	8.65E-07	1.60E-08	1.14E-06	4.23E-08	1.60E-07	2.69E-09	2.05E-07	2.05E-08	7.30E-08	1.13E-09	9.46E-08
762	464253.3	3810034	2.61E-07	5.9185E-07	9.7606E-09	8.63E-07	2.58E-07	8.58E-07	1.58E-08	1.13E-06	4.19E-08	1.59E-07	2.67E-09	2.04E-07	2.03E-08	7.24E-08	1.13E-09	9.38E-08
763	464273.3	3810034	2.59E-07	5.8692E-07	9.6793E-09	8.56E-07	2.56E-07	8.51E-07	1.57E-08	1.12E-06	4.16E-08	1.58E-07	2.65E-09	2.02E-07	2.02E-08	7.17E-08	1.12E-09	9.30E-08
764	464293.3	3810034	2.57E-07	5.8168E-07	9.5929E-09	8.48E-07	2.54E-07	8.43E-07	1.56E-08	1.11E-06	4.12E-08	1.56E-07	2.62E-09	2.00E-07	2.00E-08	7.11E-08	1.11E-09	9.22E-08
765	464313.3	3810034	2.54E-07	5.7489E-07	9.4808E-09	8.38E-07	2.51E-07	8.33E-07	1.54E-08	1.10E-06	4.07E-08	1.54E-07	2.59E-09	1.98E-07	1.97E-08	7.03E-08	1.09E-09	9.11E-08
766	464333.3	3810034	2.51E-07	5.6803E-07	9.3678E-09	8.28E-07	2.48E-07	8.23E-07	1.52E-08	1.09E-06	4.02E-08	1.53E-07	2.56E-09	1.95E-07	1.95E-08	6.94E-08	1.08E-09	9.00E-08
767	464353.3	3810034	2.48E-07	5.6094E-07	9.2508E-09	8.18E-07	2.45E-07	8.13E-07	1.50E-08	1.07E-06	3.97E-08	1.51E-07	2.53E-09	1.93E-07	1.93E-08	6.86E-08	1.07E-09	8.89E-08
768	464373.3	3810034	2.44E-07	5.5292E-07	9.1186E-09	8.06E-07	2.41E-07	8.01E-07	1.48E-08	1.06E-06	3.92E-08	1.49E-07	2.49E-09	1.90E-07	1.90E-08	6.76E-08	1.05E-09	8.76E-08
769	464393.3	3810034	2.41E-07	5.4511E-07	8.9898E-09	7.95E-07	2.38E-07	7.90E-07	1.46E-08	1.04E-06	3.86E-08	1.46E-07	2.46E-09	1.88E-07	1.87E-08	6.66E-08	1.04E-09	8.64E-08
770	464413.3	3810034	2.37E-07	5.3754E-07	8.865E-09	7.84E-07	2.35E-07	7.79E-07	1.44E-08	1.03E-06	3.81E-08	1.44E-07	2.42E-09	1.85E-07	1.85E-08	6.57E-08	1.02E-09	8.52E-08
771	464433.3	3810034	2.34E-07	5.3026E-07	8.7449E-09	7.73E-07	2.31E-07	7.69E-07	1.42E-08	1.01E-06	3.76E-08	1.42E-07	2.39E-09	1.82E-07	1.82E-08	6.48E-08	1.01E-09	8.40E-08
772	464453.3	3810034	2.31E-07	5.2246E-07	8.6162E-09	7.62E-07	2.28E-07	7.57E-07	1.40E-08	9.99E-07	3.70E-08	1.40E-07	2.36E-09	1.80E-07	1.79E-08	6.39E-08	9.93E-10	8.28E-08
773	464473.3	3810034	2.27E-07	5.1463E-07	8.4871E-09	7.50E-07	2.25E-07	7.46E-07	1.38E-08	9.84E-07	3.65E-08	1.38E-07						

845	464997.9	3807309	1.4E-08	3.1787E-08	5.2423E-10	4.63E-08	1.39E-08	4.61E-08	8.50E-10	6.08E-08	2.25E-09	8.54E-09	1.43E-10	1.09E-08	1.09E-09	3.89E-09	6.04E-11	5.04E-09
846	465017.9	3807309	1.41E-08	3.2028E-08	5.282E-10	4.67E-08	1.40E-08	4.64E-08	8.57E-10	6.13E-08	2.27E-09	8.61E-09	1.44E-10	1.10E-08	1.10E-09	3.92E-09	6.09E-11	5.08E-09
847	464937.9	3807329	1.44E-08	3.271E-08	5.3944E-10	4.77E-08	1.43E-08	4.74E-08	8.75E-10	6.26E-08	2.32E-09	8.79E-09	1.48E-10	1.13E-08	1.12E-09	4.00E-09	6.22E-11	5.18E-09
848	464957.9	3807329	1.44E-08	3.2674E-08	5.3884E-10	4.76E-08	1.43E-08	4.74E-08	8.74E-10	6.25E-08	2.31E-09	8.78E-09	1.47E-10	1.12E-08	1.12E-09	3.99E-09	6.21E-11	5.18E-09
849	464977.9	3807329	1.44E-08	3.2648E-08	5.3842E-10	4.76E-08	1.42E-08	4.73E-08	8.73E-10	6.24E-08	2.31E-09	8.77E-09	1.47E-10	1.12E-08	1.12E-09	3.99E-09	6.21E-11	5.17E-09
850	464997.9	3807329	1.45E-08	3.2874E-08	5.4215E-10	4.79E-08	1.43E-08	4.76E-08	8.79E-10	6.29E-08	2.33E-09	8.83E-09	1.48E-10	1.13E-08	1.13E-09	4.02E-09	6.25E-11	5.21E-09
851	465017.9	3807329	1.46E-08	3.3169E-08	5.4702E-10	4.84E-08	1.45E-08	4.81E-08	8.87E-10	6.34E-08	2.35E-09	8.91E-09	1.50E-10	1.14E-08	1.14E-09	4.05E-09	6.31E-11	5.26E-09
852	465037.9	3807329	1.48E-08	3.3483E-08	5.5219E-10	4.88E-08	1.46E-08	4.85E-08	8.96E-10	6.40E-08	2.37E-09	9.00E-09	1.51E-10	1.15E-08	1.15E-09	4.09E-09	6.37E-11	5.31E-09
853	465057.9	3807329	1.49E-08	3.3727E-08	5.5622E-10	4.92E-08	1.47E-08	4.89E-08	9.02E-10	6.45E-08	2.39E-09	9.06E-09	1.52E-10	1.16E-08	1.16E-09	4.12E-09	6.41E-11	5.35E-09
854	464937.9	3807349	1.49E-08	3.3713E-08	5.5598E-10	4.91E-08	1.47E-08	4.89E-08	9.02E-10	6.45E-08	2.39E-09	9.06E-09	1.52E-10	1.16E-08	1.16E-09	4.12E-09	6.41E-11	5.34E-09
855	464957.9	3807349	1.49E-08	3.3833E-08	5.5796E-10	4.93E-08	1.48E-08	4.90E-08	9.05E-10	6.47E-08	2.40E-09	9.09E-09	1.53E-10	1.16E-08	1.16E-09	4.14E-09	6.43E-11	5.36E-09
856	464977.9	3807349	1.49E-08	3.387E-08	5.5857E-10	4.94E-08	1.48E-08	4.91E-08	9.06E-10	6.48E-08	2.40E-09	9.10E-09	1.53E-10	1.17E-08	1.16E-09	4.14E-09	6.44E-11	5.37E-09
857	464997.9	3807349	1.5E-08	3.4015E-08	5.6097E-10	4.96E-08	1.48E-08	4.93E-08	9.10E-10	6.51E-08	2.41E-09	9.14E-09	1.53E-10	1.17E-08	1.17E-09	4.16E-09	6.47E-11	5.39E-09
858	465017.9	3807349	1.51E-08	3.4311E-08	5.6584E-10	5.00E-08	1.50E-08	4.97E-08	9.18E-10	6.56E-08	2.43E-09	9.22E-09	1.55E-10	1.18E-08	1.18E-09	4.19E-09	6.52E-11	5.44E-09
859	465037.9	3807349	1.53E-08	3.4727E-08	5.727E-10	5.06E-08	1.52E-08	5.03E-08	9.29E-10	6.64E-08	2.46E-09	9.33E-09	1.57E-10	1.19E-08	1.19E-09	4.25E-09	6.60E-11	5.50E-09
860	465057.9	3807349	1.54E-08	3.4956E-08	5.7649E-10	5.10E-08	1.53E-08	5.07E-08	9.35E-10	6.69E-08	2.48E-09	9.39E-09	1.58E-10	1.20E-08	1.20E-09	4.27E-09	6.65E-11	5.54E-09
861	465077.9	3807349	1.55E-08	3.5161E-08	5.7986E-10	5.13E-08	1.53E-08	5.10E-08	9.41E-10	6.72E-08	2.49E-09	9.45E-09	1.59E-10	1.21E-08	1.21E-09	4.30E-09	6.68E-11	5.57E-09
862	464937.9	3807369	1.53E-08	3.4748E-08	5.7306E-10	5.07E-08	1.52E-08	5.04E-08	9.29E-10	6.65E-08	2.46E-09	9.34E-09	1.57E-10	1.20E-08	1.19E-09	4.25E-09	6.61E-11	5.51E-09
863	464957.9	3807369	1.54E-08	3.4803E-08	5.7396E-10	5.07E-08	1.52E-08	5.04E-08	9.31E-10	6.66E-08	2.47E-09	9.35E-09	1.57E-10	1.20E-08	1.20E-09	4.25E-09	6.62E-11	5.52E-09
864	464977.9	3807369	1.54E-08	3.4894E-08	5.7547E-10	5.09E-08	1.52E-08	5.06E-08	9.33E-10	6.67E-08	2.47E-09	9.38E-09	1.57E-10	1.20E-08	1.20E-09	4.27E-09	6.63E-11	5.53E-09
865	464997.9	3807369	1.56E-08	3.5248E-08	5.813E-10	5.14E-08	1.54E-08	5.11E-08	9.43E-10	6.74E-08	2.50E-09	9.47E-09	1.59E-10	1.21E-08	1.21E-09	4.31E-09	6.70E-11	5.59E-09
866	465017.9	3807369	1.57E-08	3.5576E-08	5.8671E-10	5.19E-08	1.55E-08	5.16E-08	9.52E-10	6.80E-08	2.52E-09	9.56E-09	1.60E-10	1.22E-08	1.22E-09	4.35E-09	6.76E-11	5.64E-09
867	465037.9	3807369	1.58E-08	3.5824E-08	5.908E-10	5.22E-08	1.56E-08	5.19E-08	9.58E-10	6.85E-08	2.54E-09	9.63E-09	1.62E-10	1.23E-08	1.23E-09	4.38E-09	6.81E-11	5.68E-09
868	465057.9	3807369	1.59E-08	3.6021E-08	5.9405E-10	5.25E-08	1.57E-08	5.22E-08	9.64E-10	6.89E-08	2.55E-09	9.68E-09	1.62E-10	1.24E-08	1.24E-09	4.40E-09	6.85E-11	5.71E-09
869	465077.9	3807369	1.6E-08	3.6211E-08	5.9718E-10	5.28E-08	1.58E-08	5.25E-08	9.69E-10	6.93E-08	2.56E-09	9.73E-09	1.63E-10	1.25E-08	1.24E-09	4.43E-09	6.88E-11	5.74E-09
870	465097.9	3807369	1.6E-08	3.6349E-08	5.9946E-10	5.30E-08	1.59E-08	5.27E-08	9.72E-10	6.95E-08	2.57E-09	9.77E-09	1.64E-10	1.25E-08	1.25E-09	4.44E-09	6.91E-11	5.76E-09
871	465117.9	3807369	1.6E-08	3.6342E-08	5.9934E-10	5.30E-08	1.59E-08	5.27E-08	9.72E-10	6.95E-08	2.57E-09	9.77E-09	1.64E-10	1.25E-08	1.25E-09	4.44E-09	6.91E-11	5.76E-09
872	464937.9	3807389	1.58E-08	3.5912E-08	5.9224E-10	5.23E-08	1.57E-08	5.20E-08	9.61E-10	6.87E-08	2.54E-09	9.65E-09	1.62E-10	1.24E-08	1.23E-09	4.39E-09	6.83E-11	5.69E-09
873	464957.9	3807389	1.59E-08	3.6047E-08	5.9447E-10	5.25E-08	1.57E-08	5.22E-08	9.64E-10	6.89E-08	2.55E-09	9.69E-09	1.63E-10	1.24E-08	1.24E-09	4.41E-09	6.85E-11	5.71E-09
874	464977.9	3807389	1.6E-08	3.6174E-08	5.9657E-10	5.27E-08	1.58E-08	5.24E-08	9.68E-10	6.92E-08	2.56E-09	9.72E-09	1.63E-10	1.24E-08	1.24E-09	4.42E-09	6.88E-11	5.73E-09
875	464997.9	3807389	1.61E-08	3.6481E-08	6.0163E-10	5.32E-08	1.59E-08	5.29E-08	9.76E-10	6.98E-08	2.58E-09	9.80E-09	1.65E-10	1.26E-08	1.25E-09	4.46E-09	6.94E-11	5.78E-09
876	465017.9	3807389	1.62E-08	3.6743E-08	6.0596E-10	5.36E-08	1.60E-08	5.33E-08	9.83E-10	7.03E-08	2.60E-09	9.87E-09	1.66E-10	1.26E-08	1.26E-09	4.49E-09	6.99E-11	5.82E-09
877	465037.9	3807389	1.63E-08	3.6925E-08	6.0896E-10	5.38E-08	1.61E-08	5.35E-08	9.88E-10	7.06E-08	2.62E-09	9.92E-09	1.67E-10	1.27E-08	1.27E-09	4.51E-09	7.02E-11	5.85E-09
878	465057.9	3807389	1.64E-08	3.7122E-08	6.1221E-10	5.41E-08	1.62E-08	5.38E-08	9.93E-10	7.10E-08	2.63E-09	9.98E-09	1.67E-10	1.28E-08	1.27E-09	4.54E-09	7.06E-11	5.88E-09
879	465077.9	3807389	1.64E-08	3.7243E-08	6.1419E-10	5.43E-08	1.63E-08	5.40E-08	9.96E-10	7.12E-08	2.64E-09	1.00E-08	1.68E-10	1.28E-08	1.28E-09	4.55E-09	7.08E-11	5.90E-09
880	465097.9	3807389	1.64E-08	3.725E-08	6.1431E-10	5.43E-08	1.63E-08	5.40E-08	9.96E-10	7.12E-08	2.64E-09	1.00E-08	1.68E-10	1.28E-08	1.28E-09	4.55E-09	7.08E-11	5.90E-09
881	465117.9	3807389	1.64E-08	3.713E-08	6.1233E-10	5.41E-08	1.62E-08	5.38E-08	9.93E-10	7.10E-08	2.63E-09	9.98E-09	1.67E-10	1.28E-08	1.28E-09	4.54E-09	7.06E-11	5.88E-09
882	465137.9	3807389	1.63E-08	3.6896E-08	6.0848E-10	5.38E-08	1.61E-08	5.35E-08	9.87E-10	7.06E-08	2.61E-09	9.91E-09	1.66E-10	1.27E-08	1.27E-09	4.51E-09	7.01E-11	5.85E-09
883	465157.9	3807389	1.61E-08	3.6535E-08	6.0253E-10	5.33E-08	1.59E-08	5.30E-08	9.77E-10	6.99E-08	2.59E-09	9.82E-09	1.65E-10	1.26E-08	1.25E-09	4.47E-09	6.95E-11	5.79E-09
884	464937.9	3807409	1.64E-08	3.7159E-08	6.1281E-10	5.42E-08	1.62E-08	5.39E-08	9.94E-10	7.11E-08	2.63E-09	9.99E-09	1.68E-10	1.28E-08	1.28E-09	4.54E-09	7.06E-11	5.89E-09
885	464957.9	3807409	1.65E-08	3.74E-08	6.1678E-10	5.45E-08	1.63E-08	5.42E-08	1.00E-09	7.15E-08	2.65E-09	1.01E-08	1.69E-10	1.29E-08	1.28E-09	4.57E-09	7.11E-11	5.93E-09
886	464977.9	3807409	1.66E-08	3.7534E-08	6.1901E-10	5.47E-08	1.64E-08	5.44E-08	1.00E-09	7.18E-08	2.66E-09	1.01E-08	1.69E-10	1.29E-08	1.29E-09	4.59E-09	7.14E-11	5.95E-09
887	464997.9	3807409	1.66E-08	3.7702E-08	6.2177E-10	5.50E-08	1.65E-08	5.46E-08	1.01E-09	7.21E-08	2.67E-09	1.01E-08	1.70E-10	1.30E-08	1.29E-09	4.61E-09	7.17E-11	5.98E-09
888	465017.9	3807409	1.67E-08	3.7877E-08	6.2466E-10	5.52E-08	1.65E-08	5.49E-08	1.01E-09	7.24E-08	2.68E-09	1.02E-08	1.71E-10	1.30E-08	1.30E-09	4.63E-09	7.20E-11	6.00E-09
889	465037.9	3807409	1.68E-08	3.8027E-08	6.2712E-10	5.54E-08	1.66E-08	5.51E-08	1.02E-09	7.27E-08	2.69E-09	1.02E-08	1.71E-10	1.31E-08	1.31E-09	4.65E-09	7.23E-11	6.03E-09
890	465057.9	3807409	1.69E-08	3.8191E-08	6.2983E-10	5.57E-08	1.67E-08	5.54E-08	1.02E-09	7.30E-08	2.71E-09	1.03E-08	1.72E-10	1.31E-08	1.31E-09	4.67E-09	7.26E-11	6.05E-09
891	465077.9	3807409	1.69E-08	3.8191E-08	6.2983E-10	5.57E-08	1.67E-08	5.54E-08	1.02E-09	7.30E-08	2.71E-09	1.03E-08	1.72E-10	1.31E-08	1.31E-09	4.67E-09	7.26E-11	6.05E-09
892	465097.9	3807409	1.68E-08	3.8063E-08	6.2773E-10	5.55E-08	1.66E-08	5.52E-08	1.02E-09	7.28E-08	2.70E-09	1.02E-08	1.72E-10	1.31E-08	1.31E-09	4.65E-09	7.24E-11	6.03E-09
893	465117.9	3807409	1.67E-08	3.7823E-08	6.2376E-10	5.51E-08	1.65E-08	5.48E-08	1.01E-09	7.23E-08	2.68E-09	1.02E-08	1.71E-10	1.30E-08	1.30E-09	4.62E-09	7.19E-11	5.99E-09
894	465137.9	3807409	1.65E-08	3.7458E-08	6.1774E-10	5.46E-08	1.63E-08	5.43E-08	1.00E-09	7.16E-08	2.65E-09	1.01E-08	1					

966	465217.9	3807489	1.52E-08	3.4497E-08	5.6891E-10	5.03E-08	1.51E-08	5.00E-08	9.23E-10	6.60E-08	2.44E-09	9.27E-09	1.56E-10	1.19E-08	1.18E-09	4.22E-09	6.56E-11	5.47E-09
967	465237.9	3807489	1.48E-08	3.3647E-08	5.549E-10	4.90E-08	1.47E-08	4.88E-08	9.00E-10	6.44E-08	2.38E-09	9.04E-09	1.52E-10	1.16E-08	1.16E-09	4.11E-09	6.40E-11	5.33E-09
968	465257.9	3807489	1.45E-08	3.2801E-08	5.4095E-10	4.78E-08	1.43E-08	4.75E-08	8.77E-10	6.27E-08	2.32E-09	8.81E-09	1.48E-10	1.13E-08	1.13E-09	4.01E-09	6.24E-11	5.20E-09
969	465277.9	3807489	1.41E-08	3.197E-08	5.2723E-10	4.66E-08	1.40E-08	4.63E-08	8.55E-10	6.11E-08	2.26E-09	8.59E-09	1.44E-10	1.10E-08	1.10E-09	3.91E-09	6.08E-11	5.07E-09
970	465297.9	3807489	1.38E-08	3.1182E-08	5.1424E-10	4.55E-08	1.36E-08	4.52E-08	8.34E-10	5.96E-08	2.21E-09	8.38E-09	1.41E-10	1.07E-08	1.07E-09	3.81E-09	5.93E-11	4.94E-09
971	465317.9	3807489	1.34E-08	3.042E-08	5.0168E-10	4.43E-08	1.33E-08	4.41E-08	8.14E-10	5.82E-08	2.15E-09	8.17E-09	1.37E-10	1.05E-08	1.04E-09	3.72E-09	5.78E-11	4.82E-09
972	465337.9	3807489	1.31E-08	2.9691E-08	4.8965E-10	4.33E-08	1.30E-08	4.30E-08	7.94E-10	5.68E-08	2.10E-09	7.98E-09	1.34E-10	1.02E-08	1.02E-09	3.63E-09	5.64E-11	4.71E-09
973	465357.9	3807489	1.28E-08	2.9009E-08	4.784E-10	4.23E-08	1.27E-08	4.20E-08	7.76E-10	5.55E-08	2.05E-09	7.80E-09	1.31E-10	9.98E-09	9.96E-10	3.55E-09	5.52E-11	4.60E-09
974	464937.9	3807509	1.92E-08	4.3573E-08	7.1859E-10	6.35E-08	1.90E-08	6.32E-08	1.17E-09	8.33E-08	3.09E-09	1.17E-08	1.97E-10	1.50E-08	1.50E-09	5.33E-09	8.28E-11	6.91E-09
975	464957.9	3807509	1.93E-08	4.365E-08	7.1986E-10	6.36E-08	1.91E-08	6.33E-08	1.17E-09	8.35E-08	3.09E-09	1.17E-08	1.97E-10	1.50E-08	1.50E-09	5.34E-09	8.30E-11	6.92E-09
976	464977.9	3807509	1.92E-08	4.3559E-08	7.1835E-10	6.35E-08	1.90E-08	6.31E-08	1.17E-09	8.33E-08	3.09E-09	1.17E-08	1.96E-10	1.50E-08	1.50E-09	5.32E-09	8.28E-11	6.90E-09
977	464997.9	3807509	1.91E-08	4.3395E-08	7.1565E-10	6.33E-08	1.89E-08	6.29E-08	1.16E-09	8.30E-08	3.07E-09	1.17E-08	1.96E-10	1.49E-08	1.49E-09	5.30E-09	8.25E-11	6.88E-09
978	465017.9	3807509	1.9E-08	4.3092E-08	7.1066E-10	6.28E-08	1.88E-08	6.25E-08	1.15E-09	8.24E-08	3.05E-09	1.16E-08	1.94E-10	1.48E-08	1.48E-09	5.27E-09	8.19E-11	6.83E-09
979	465037.9	3807509	1.88E-08	4.2636E-08	7.0314E-10	6.22E-08	1.86E-08	6.18E-08	1.14E-09	8.15E-08	3.02E-09	1.15E-08	1.92E-10	1.47E-08	1.46E-09	5.21E-09	8.11E-11	6.76E-09
980	465057.9	3807509	1.86E-08	4.2064E-08	6.937E-10	6.13E-08	1.84E-08	6.10E-08	1.13E-09	8.04E-08	2.98E-09	1.13E-08	1.90E-10	1.45E-08	1.44E-09	5.14E-09	8.00E-11	6.67E-09
981	465077.9	3807509	1.82E-08	4.136E-08	6.8209E-10	6.03E-08	1.81E-08	5.99E-08	1.11E-09	7.91E-08	2.93E-09	1.11E-08	1.87E-10	1.42E-08	1.42E-09	5.06E-09	7.86E-11	6.56E-09
982	465097.9	3807509	1.79E-08	4.0528E-08	6.6838E-10	5.91E-08	1.77E-08	5.87E-08	1.08E-09	7.75E-08	2.87E-09	1.09E-08	1.83E-10	1.39E-08	1.39E-09	4.95E-09	7.71E-11	6.42E-09
983	465117.9	3807509	1.71E-08	3.8807E-08	6.3999E-10	5.66E-08	1.69E-08	5.62E-08	1.04E-09	7.42E-08	2.75E-09	1.04E-08	1.75E-10	1.34E-08	1.33E-09	4.74E-09	7.38E-11	6.15E-09
984	465137.9	3807509	1.68E-08	3.8005E-08	6.2676E-10	5.54E-08	1.66E-08	5.51E-08	1.02E-09	7.27E-08	2.69E-09	1.02E-08	1.71E-10	1.31E-08	1.31E-09	4.65E-09	7.23E-11	6.02E-09
985	465157.9	3807509	1.64E-08	3.7152E-08	6.1269E-10	5.42E-08	1.62E-08	5.38E-08	9.94E-10	7.11E-08	2.63E-09	9.98E-09	1.68E-10	1.28E-08	1.28E-09	4.54E-09	7.06E-11	5.89E-09
986	465177.9	3807509	1.6E-08	3.6291E-08	5.985E-10	5.29E-08	1.58E-08	5.26E-08	9.71E-10	6.94E-08	2.57E-09	9.75E-09	1.64E-10	1.25E-08	1.25E-09	4.44E-09	6.90E-11	5.75E-09
987	465197.9	3807509	1.56E-08	3.5423E-08	5.8419E-10	5.16E-08	1.55E-08	5.13E-08	9.48E-10	6.77E-08	2.51E-09	9.52E-09	1.60E-10	1.22E-08	1.22E-09	4.33E-09	6.73E-11	5.61E-09
988	465217.9	3807509	1.52E-08	3.4552E-08	5.6981E-10	5.04E-08	1.51E-08	5.01E-08	9.24E-10	6.61E-08	2.45E-09	9.28E-09	1.56E-10	1.19E-08	1.19E-09	4.22E-09	6.57E-11	5.48E-09
989	465237.9	3807509	1.49E-08	3.3673E-08	5.5532E-10	4.91E-08	1.47E-08	4.88E-08	9.01E-10	6.44E-08	2.39E-09	9.05E-09	1.52E-10	1.16E-08	1.16E-09	4.12E-09	6.40E-11	5.34E-09
990	465257.9	3807509	1.45E-08	3.2819E-08	5.4125E-10	4.78E-08	1.43E-08	4.76E-08	8.78E-10	6.28E-08	2.32E-09	8.82E-09	1.48E-10	1.13E-08	1.13E-09	4.01E-09	6.24E-11	5.20E-09
991	465277.9	3807509	1.41E-08	3.1999E-08	5.2727E-10	4.66E-08	1.40E-08	4.64E-08	8.56E-10	6.12E-08	2.27E-09	8.60E-09	1.44E-10	1.10E-08	1.10E-09	3.91E-09	6.08E-11	5.07E-09
992	465297.9	3807509	1.38E-08	3.1215E-08	5.1479E-10	4.55E-08	1.36E-08	4.52E-08	8.35E-10	5.97E-08	2.21E-09	8.39E-09	1.41E-10	1.07E-08	1.07E-09	3.82E-09	5.93E-11	4.95E-09
993	465317.9	3807509	1.34E-08	3.0471E-08	5.0252E-10	4.44E-08	1.33E-08	4.42E-08	8.15E-10	5.83E-08	2.16E-09	8.19E-09	1.37E-10	1.05E-08	1.05E-09	3.72E-09	5.79E-11	4.83E-09
994	465337.9	3807509	1.31E-08	2.9767E-08	4.9091E-10	4.34E-08	1.30E-08	4.31E-08	7.96E-10	5.69E-08	2.11E-09	8.00E-09	1.34E-10	1.02E-08	1.02E-09	3.64E-09	5.66E-11	4.72E-09
995	465357.9	3807509	1.28E-08	2.9111E-08	4.8009E-10	4.24E-08	1.27E-08	4.22E-08	7.79E-10	5.57E-08	2.06E-09	7.82E-09	1.31E-10	1.00E-08	1.00E-09	3.56E-09	5.53E-11	4.61E-09
996	465377.9	3807509	1.26E-08	2.8502E-08	4.7004E-10	4.15E-08	1.24E-08	4.13E-08	7.62E-10	5.45E-08	2.02E-09	7.66E-09	1.29E-10	9.81E-09	9.79E-10	3.48E-09	5.42E-11	4.52E-09
997	464937.9	3807529	1.98E-08	4.4817E-08	7.391E-10	6.53E-08	1.96E-08	6.50E-08	1.20E-09	8.57E-08	3.17E-09	1.20E-08	2.02E-10	1.54E-08	1.54E-09	5.48E-09	8.52E-11	7.10E-09
998	464957.9	3807529	1.98E-08	4.4795E-08	7.3874E-10	6.53E-08	1.96E-08	6.49E-08	1.20E-09	8.57E-08	3.17E-09	1.20E-08	2.02E-10	1.54E-08	1.54E-09	5.48E-09	8.52E-11	7.10E-09
999	464977.9	3807529	1.97E-08	4.4602E-08	7.3555E-10	6.50E-08	1.95E-08	6.46E-08	1.19E-09	8.53E-08	3.16E-09	1.20E-08	2.01E-10	1.53E-08	1.53E-09	5.45E-09	8.48E-11	7.07E-09
1000	464997.9	3807529	1.95E-08	4.4303E-08	7.3062E-10	6.46E-08	1.93E-08	6.42E-08	1.19E-09	8.47E-08	3.14E-09	1.19E-08	2.00E-10	1.52E-08	1.52E-09	5.42E-09	8.42E-11	7.02E-09
1001	465017.9	3807529	1.93E-08	4.3825E-08	7.2274E-10	6.39E-08	1.91E-08	6.35E-08	1.17E-09	8.38E-08	3.10E-09	1.18E-08	1.98E-10	1.51E-08	1.51E-09	5.36E-09	8.33E-11	6.95E-09
1002	465037.9	3807529	1.91E-08	4.3234E-08	7.13E-10	6.30E-08	1.89E-08	6.27E-08	1.16E-09	8.27E-08	3.06E-09	1.16E-08	1.95E-10	1.49E-08	1.48E-09	5.29E-09	8.22E-11	6.85E-09
1003	465057.9	3807529	1.88E-08	4.2512E-08	7.0109E-10	6.20E-08	1.86E-08	6.16E-08	1.14E-09	8.13E-08	3.01E-09	1.14E-08	1.92E-10	1.46E-08	1.46E-09	5.20E-09	8.08E-11	6.74E-09
1004	465077.9	3807529	1.84E-08	4.1655E-08	6.8696E-10	6.07E-08	1.82E-08	6.04E-08	1.11E-09	7.97E-08	2.95E-09	1.12E-08	1.88E-10	1.43E-08	1.43E-09	5.09E-09	7.92E-11	6.60E-09
1005	465097.9	3807529	1.76E-08	3.9916E-08	6.5828E-10	5.82E-08	1.74E-08	5.79E-08	1.07E-09	7.63E-08	2.83E-09	1.07E-08	1.80E-10	1.37E-08	1.37E-09	4.88E-09	7.59E-11	6.33E-09
1006	465117.9	3807529	1.72E-08	3.9073E-08	6.4438E-10	5.70E-08	1.71E-08	5.66E-08	1.05E-09	7.47E-08	2.77E-09	1.05E-08	1.76E-10	1.34E-08	1.34E-09	4.78E-09	7.43E-11	6.19E-09
1007	465137.9	3807529	1.69E-08	3.8194E-08	6.2989E-10	5.57E-08	1.67E-08	5.54E-08	1.02E-09	7.30E-08	2.71E-09	1.03E-08	1.72E-10	1.31E-08	1.31E-09	4.67E-09	7.26E-11	6.05E-09
1008	465157.9	3807529	1.65E-08	3.7286E-08	6.1492E-10	5.44E-08	1.63E-08	5.40E-08	9.97E-10	7.13E-08	2.64E-09	1.00E-08	1.68E-10	1.28E-08	1.28E-09	4.56E-09	7.09E-11	5.91E-09
1009	465177.9	3807529	1.61E-08	3.64E-08	6.003E-10	5.31E-08	1.59E-08	5.28E-08	9.74E-10	6.96E-08	2.58E-09	9.78E-09	1.64E-10	1.25E-08	1.25E-09	4.45E-09	6.92E-11	5.77E-09
1010	465197.9	3807529	1.57E-08	3.5496E-08	5.8539E-10	5.17E-08	1.55E-08	5.14E-08	9.49E-10	6.79E-08	2.51E-09	9.54E-09	1.60E-10	1.22E-08	1.22E-09	4.34E-09	6.75E-11	5.63E-09
1011	465217.9	3807529	1.53E-08	3.4588E-08	5.7041E-10	5.04E-08	1.51E-08	5.01E-08	9.25E-10	6.62E-08	2.45E-09	9.29E-09	1.56E-10	1.19E-08	1.19E-09	4.23E-09	6.58E-11	5.48E-09
1012	465237.9	3807529	1.49E-08	3.3702E-08	5.558E-10	4.91E-08	1.47E-08	4.88E-08	9.01E-10	6.45E-08	2.39E-09	9.06E-09	1.52E-10	1.16E-08	1.16E-09	4.12E-09	6.41E-11	5.34E-09
1013	465257.9	3807529	1.45E-08	3.2856E-08	5.4185E-10	4.79E-08	1.43E-08	4.76E-08	8.79E-10	6.28E-08	2.33E-09	8.83E-09	1.48E-10	1.13E-08	1.13E-09	4.02E-09	6.25E-11	5.21E-09
1014	465277.9	3807529	1.41E-08	3.2057E-08	5.2868E-10	4.67E-08	1.40E-08	4.65E-08	8.58E-10	6.13E-08	2.27E-09	8.61E-09	1.45E-10	1.10E-08	1.10E-09	3.92E-09	6.09E-11	5.08E-09
1015	465297.9	3807529	1.38E-08	3.1284E-08	5.1593E-10	4.56E-08	1.37E-08	4.53E-08	8.37E-10	5.98E-08	2.22E-09							

1087	465357.9	3807589	1.33E-08	3.0081E-08	4.9608E-10	4.38E-08	1.31E-08	4.36E-08	8.05E-10	5.75E-08	2.13E-09	8.08E-09	1.36E-10	1.03E-08	1.03E-09	3.68E-09	5.72E-11	4.77E-09
1088	465377.9	3807589	1.31E-08	2.9607E-08	4.8826E-10	4.32E-08	1.29E-08	4.29E-08	7.92E-10	5.66E-08	2.10E-09	7.96E-09	1.34E-10	1.02E-08	1.02E-09	3.62E-09	5.63E-11	4.69E-09
1089	464937.9	3807609	2.17E-08	4.9207E-08	8.1151E-10	7.17E-08	2.15E-08	7.13E-08	1.32E-09	9.41E-08	3.49E-09	1.32E-08	2.22E-10	1.69E-08	1.69E-09	6.02E-09	9.36E-11	7.80E-09
1090	464957.9	3807609	2.14E-08	4.8522E-08	8.002E-10	7.07E-08	2.12E-08	7.03E-08	1.30E-09	9.28E-08	3.44E-09	1.30E-08	2.19E-10	1.67E-08	1.67E-09	5.93E-09	9.22E-11	7.69E-09
1091	464977.9	3807609	2.1E-08	4.7683E-08	7.8637E-10	6.95E-08	2.08E-08	6.91E-08	1.28E-09	9.12E-08	3.38E-09	1.28E-08	2.15E-10	1.64E-08	1.64E-09	5.83E-09	9.07E-11	7.56E-09
1092	464997.9	3807609	2.06E-08	4.6695E-08	7.7007E-10	6.81E-08	2.04E-08	6.77E-08	1.25E-09	8.93E-08	3.31E-09	1.25E-08	2.11E-10	1.61E-08	1.60E-09	5.71E-09	8.88E-11	7.40E-09
1093	465017.9	3807609	1.98E-08	4.4875E-08	7.4006E-10	6.54E-08	1.96E-08	6.50E-08	1.20E-09	8.58E-08	3.18E-09	1.21E-08	2.02E-10	1.54E-08	1.54E-09	5.49E-09	8.53E-11	7.11E-09
1094	465037.9	3807609	1.94E-08	4.389E-08	7.2383E-10	6.40E-08	1.92E-08	6.36E-08	1.17E-09	8.39E-08	3.11E-09	1.18E-08	1.98E-10	1.51E-08	1.51E-09	5.37E-09	8.34E-11	6.96E-09
1095	465057.9	3807609	1.89E-08	4.2895E-08	7.0741E-10	6.25E-08	1.87E-08	6.22E-08	1.15E-09	8.20E-08	3.04E-09	1.15E-08	1.93E-10	1.48E-08	1.47E-09	5.24E-09	8.16E-11	6.80E-09
1096	465077.9	3807609	1.85E-08	4.1867E-08	6.9045E-10	6.10E-08	1.83E-08	6.07E-08	1.12E-09	8.01E-08	2.97E-09	1.13E-08	1.89E-10	1.44E-08	1.44E-09	5.12E-09	7.96E-11	6.64E-09
1097	465097.9	3807609	1.8E-08	4.0805E-08	6.7295E-10	5.95E-08	1.78E-08	5.91E-08	1.09E-09	7.80E-08	2.89E-09	1.10E-08	1.84E-10	1.40E-08	1.40E-09	4.99E-09	7.76E-11	6.47E-09
1098	465117.9	3807609	1.75E-08	3.9748E-08	6.5551E-10	5.79E-08	1.73E-08	5.76E-08	1.06E-09	7.60E-08	2.82E-09	1.07E-08	1.79E-10	1.37E-08	1.37E-09	4.86E-09	7.56E-11	6.30E-09
1099	465137.9	3807609	1.71E-08	3.8712E-08	6.3843E-10	5.64E-08	1.69E-08	5.61E-08	1.04E-09	7.40E-08	2.74E-09	1.04E-08	1.75E-10	1.33E-08	1.33E-09	4.73E-09	7.36E-11	6.14E-09
1100	465157.9	3807609	1.66E-08	3.772E-08	6.2207E-10	5.50E-08	1.65E-08	5.47E-08	1.01E-09	7.21E-08	2.67E-09	1.01E-08	1.70E-10	1.30E-08	1.30E-09	4.61E-09	7.17E-11	5.98E-09
1101	465177.9	3807609	1.62E-08	3.6743E-08	6.0596E-10	5.36E-08	1.60E-08	5.33E-08	9.83E-10	7.03E-08	2.60E-09	9.87E-09	1.66E-10	1.26E-08	1.26E-09	4.49E-09	6.99E-11	5.82E-09
1102	465197.9	3807609	1.58E-08	3.5817E-08	5.9068E-10	5.22E-08	1.56E-08	5.19E-08	9.58E-10	6.85E-08	2.54E-09	9.62E-09	1.62E-10	1.23E-08	1.23E-09	4.38E-09	6.81E-11	5.68E-09
1103	465217.9	3807609	1.54E-08	3.4945E-08	5.7631E-10	5.09E-08	1.53E-08	5.06E-08	9.35E-10	6.68E-08	2.48E-09	9.39E-09	1.58E-10	1.20E-08	1.20E-09	4.27E-09	6.64E-11	5.54E-09
1104	465237.9	3807609	1.51E-08	3.4143E-08	5.6308E-10	4.98E-08	1.49E-08	4.95E-08	9.13E-10	6.53E-08	2.42E-09	9.17E-09	1.54E-10	1.17E-08	1.17E-09	4.17E-09	6.49E-11	5.41E-09
1105	465257.9	3807609	1.47E-08	3.3392E-08	5.5069E-10	4.87E-08	1.46E-08	4.84E-08	8.93E-10	6.39E-08	2.37E-09	8.97E-09	1.51E-10	1.15E-08	1.15E-09	4.08E-09	6.35E-11	5.29E-09
1106	465277.9	3807609	1.44E-08	3.2699E-08	5.3926E-10	4.77E-08	1.43E-08	4.74E-08	8.75E-10	6.25E-08	2.32E-09	8.79E-09	1.47E-10	1.13E-08	1.12E-09	4.00E-09	6.22E-11	5.18E-09
1107	465297.9	3807609	1.41E-08	3.2068E-08	5.2886E-10	4.67E-08	1.40E-08	4.65E-08	8.58E-10	6.13E-08	2.27E-09	8.62E-09	1.45E-10	1.10E-08	1.10E-09	3.92E-09	6.10E-11	5.08E-09
1108	465317.9	3807609	1.39E-08	3.1492E-08	5.1936E-10	4.59E-08	1.37E-08	4.56E-08	8.42E-10	6.02E-08	2.23E-09	8.46E-09	1.42E-10	1.08E-08	1.08E-09	3.85E-09	5.99E-11	4.99E-09
1109	465337.9	3807609	1.37E-08	3.0956E-08	5.1052E-10	4.51E-08	1.35E-08	4.49E-08	8.28E-10	5.92E-08	2.19E-09	8.32E-09	1.40E-10	1.07E-08	1.06E-09	3.78E-09	5.89E-11	4.91E-09
1110	465357.9	3807609	1.34E-08	3.0467E-08	5.0246E-10	4.44E-08	1.33E-08	4.42E-08	8.15E-10	5.83E-08	2.16E-09	8.19E-09	1.37E-10	1.05E-08	1.05E-09	3.72E-09	5.79E-11	4.83E-09
1111	465377.9	3807609	1.32E-08	3.0022E-08	4.9512E-10	4.38E-08	1.31E-08	4.35E-08	8.03E-10	5.74E-08	2.13E-09	8.07E-09	1.35E-10	1.03E-08	1.03E-09	3.67E-09	5.71E-11	4.76E-09
1112	464937.9	3807629	2.21E-08	5.0009E-08	8.2474E-10	7.29E-08	2.18E-08	7.25E-08	1.34E-09	9.56E-08	3.54E-09	1.34E-08	2.26E-10	1.72E-08	1.72E-09	6.11E-09	9.51E-11	7.93E-09
1113	464957.9	3807629	2.17E-08	4.9134E-08	8.1031E-10	7.16E-08	2.14E-08	7.12E-08	1.31E-09	9.40E-08	3.48E-09	1.32E-08	2.22E-10	1.69E-08	1.69E-09	6.01E-09	9.34E-11	7.79E-09
1114	464977.9	3807629	2.12E-08	4.8124E-08	7.9365E-10	7.02E-08	2.10E-08	6.97E-08	1.29E-09	9.20E-08	3.41E-09	1.29E-08	2.17E-10	1.66E-08	1.65E-09	5.88E-09	9.15E-11	7.63E-09
1115	464997.9	3807629	2.04E-08	4.6275E-08	7.6316E-10	6.75E-08	2.02E-08	6.71E-08	1.24E-09	8.85E-08	3.28E-09	1.24E-08	2.09E-10	1.59E-08	1.59E-09	5.66E-09	8.80E-11	7.33E-09
1116	465017.9	3807629	2E-08	4.5265E-08	7.465E-10	6.60E-08	1.98E-08	6.56E-08	1.21E-09	8.66E-08	3.21E-09	1.22E-08	2.04E-10	1.56E-08	1.55E-09	5.53E-09	8.61E-11	7.17E-09
1117	465037.9	3807629	1.95E-08	4.4211E-08	7.2912E-10	6.44E-08	1.93E-08	6.41E-08	1.18E-09	8.46E-08	3.13E-09	1.19E-08	1.99E-10	1.52E-08	1.52E-09	5.40E-09	8.41E-11	7.01E-09
1118	465057.9	3807629	1.9E-08	4.3143E-08	7.115E-10	6.29E-08	1.88E-08	6.25E-08	1.15E-09	8.25E-08	3.06E-09	1.16E-08	1.95E-10	1.48E-08	1.48E-09	5.27E-09	8.20E-11	6.84E-09
1119	465077.9	3807629	1.86E-08	4.2045E-08	6.934E-10	6.13E-08	1.84E-08	6.09E-08	1.12E-09	8.04E-08	2.98E-09	1.13E-08	1.90E-10	1.45E-08	1.44E-09	5.14E-09	7.99E-11	6.66E-09
1120	465097.9	3807629	1.81E-08	4.0948E-08	6.7529E-10	5.97E-08	1.79E-08	5.93E-08	1.10E-09	7.83E-08	2.90E-09	1.10E-08	1.85E-10	1.41E-08	1.41E-09	5.01E-09	7.78E-11	6.49E-09
1121	465117.9	3807629	1.76E-08	3.9876E-08	6.5761E-10	5.81E-08	1.74E-08	5.78E-08	1.07E-09	7.63E-08	2.75E-09	1.07E-08	1.80E-10	1.37E-08	1.37E-09	4.87E-09	7.58E-11	6.32E-09
1122	465137.9	3807629	1.71E-08	3.884E-08	6.4053E-10	5.66E-08	1.70E-08	5.63E-08	1.04E-09	7.43E-08	2.75E-09	1.04E-08	1.75E-10	1.34E-08	1.33E-09	4.75E-09	7.38E-11	6.16E-09
1123	465157.9	3807629	1.67E-08	3.7844E-08	6.2412E-10	5.52E-08	1.65E-08	5.48E-08	1.01E-09	7.24E-08	2.68E-09	1.02E-08	1.71E-10	1.30E-08	1.30E-09	4.63E-09	7.19E-11	6.00E-09
1124	465177.9	3807629	1.63E-08	3.6896E-08	6.0848E-10	5.38E-08	1.61E-08	5.35E-08	9.87E-10	7.06E-08	2.61E-09	9.91E-09	1.66E-10	1.27E-08	1.27E-09	4.51E-09	7.01E-11	5.85E-09
1125	465197.9	3807629	1.59E-08	3.5996E-08	5.9363E-10	5.25E-08	1.57E-08	5.22E-08	9.63E-10	6.88E-08	2.55E-09	9.67E-09	1.62E-10	1.24E-08	1.24E-09	4.40E-09	6.84E-11	5.71E-09
1126	465217.9	3807629	1.55E-08	3.515E-08	5.7967E-10	5.12E-08	1.53E-08	5.09E-08	9.40E-10	6.72E-08	2.49E-09	9.45E-09	1.59E-10	1.21E-08	1.21E-09	4.30E-09	6.68E-11	5.57E-09
1127	465237.9	3807629	1.52E-08	3.4376E-08	5.6693E-10	5.01E-08	1.50E-08	4.98E-08	9.20E-10	6.57E-08	2.44E-09	9.24E-09	1.55E-10	1.18E-08	1.18E-09	4.20E-09	6.54E-11	5.45E-09
1128	465257.9	3807629	1.49E-08	3.3665E-08	5.552E-10	4.91E-08	1.47E-08	4.88E-08	9.01E-10	6.44E-08	2.38E-09	9.05E-09	1.52E-10	1.16E-08	1.16E-09	4.12E-09	6.40E-11	5.34E-09
1129	465277.9	3807629	1.46E-08	3.3016E-08	5.4449E-10	4.81E-08	1.44E-08	4.79E-08	8.83E-10	6.31E-08	2.34E-09	8.87E-09	1.49E-10	1.14E-08	1.13E-09	4.04E-09	6.28E-11	5.23E-09
1130	465297.9	3807629	1.43E-08	3.2422E-08	5.3469E-10	4.73E-08	1.42E-08	4.70E-08	8.67E-10	6.20E-08	2.30E-09	8.71E-09	1.46E-10	1.12E-08	1.11E-09	3.96E-09	6.16E-11	5.14E-09
1131	465317.9	3807629	1.41E-08	3.1875E-08	5.2567E-10	4.65E-08	1.39E-08	4.62E-08	8.53E-10	6.10E-08	2.26E-09	8.57E-09	1.44E-10	1.10E-08	1.09E-09	3.90E-09	6.06E-11	5.05E-09
1132	465337.9	3807629	1.38E-08	3.1375E-08	5.1743E-10	4.57E-08	1.37E-08	4.55E-08	8.39E-10	6.00E-08	2.22E-09	8.43E-09	1.41E-10	1.08E-08	1.08E-09	3.84E-09	5.97E-11	4.97E-09
1133	465357.9	3807629	1.36E-08	3.0916E-08	5.0985E-10	4.51E-08	1.35E-08	4.48E-08	8.27E-10	5.91E-08	2.19E-09	8.31E-09	1.39E-10	1.06E-08	1.06E-09	3.78E-09	5.88E-11	4.90E-09
1134	465377.9	3807629	1.35E-08	3.0493E-08	5.0288E-10	4.44E-08	1.33E-08	4.42E-08	8.16E-10	5.83E-08	2.16E-09	8.19E-09	1.38E-10	1.05E-08	1.05E-09	3.73E-09	5.80E-11	4.83E-09
1135	464937.9	3807649	2.24E-08	5.0673E-08	8.3568E-10	7.39E-08	2.21E-08	7.34E-08	1.36E-09	9.69E-08	3.59E-09	1.36E-08	2.29E-10	1.74E-08	1.74E-09	6.19E-09	9.63E-11	8.03E-09
1136	464957.9	3807649	2.19E-08	4.9627E-08	8.1842E-10	7.23E-08	2.17E-08	7.19E-08	1.									

1208	465017.9	3807709	2.05E-08	4.6432E-08	7.6574E-10	6.77E-08	2.03E-08	6.73E-08	1.24E-09	8.88E-08	3.29E-09	1.25E-08	2.09E-10	1.60E-08	1.59E-09	5.68E-09	8.83E-11	7.36E-09
1209	465037.9	3807709	1.99E-08	4.5211E-08	7.456E-10	6.59E-08	1.97E-08	6.55E-08	1.21E-09	8.65E-08	3.20E-09	1.21E-08	2.04E-10	1.56E-08	1.55E-09	5.53E-09	8.60E-11	7.17E-09
1210	465057.9	3807709	1.94E-08	4.3993E-08	7.2551E-10	6.41E-08	1.92E-08	6.38E-08	1.18E-09	8.41E-08	3.12E-09	1.18E-08	1.98E-10	1.51E-08	1.51E-09	5.38E-09	8.36E-11	6.97E-09
1211	465077.9	3807709	1.89E-08	4.284E-08	7.0651E-10	6.24E-08	1.87E-08	6.21E-08	1.15E-09	8.19E-08	3.03E-09	1.15E-08	1.93E-10	1.47E-08	1.47E-09	5.24E-09	8.14E-11	6.79E-09
1212	465097.9	3807709	1.84E-08	4.1761E-08	6.8871E-10	6.09E-08	1.82E-08	6.05E-08	1.12E-09	7.99E-08	2.96E-09	1.12E-08	1.88E-10	1.44E-08	1.43E-09	5.11E-09	7.94E-11	6.62E-09
1213	465117.9	3807709	1.8E-08	4.0729E-08	6.7169E-10	5.94E-08	1.78E-08	5.90E-08	1.09E-09	7.79E-08	2.89E-09	1.09E-08	1.84E-10	1.40E-08	1.40E-09	4.98E-09	7.74E-11	6.46E-09
1214	465137.9	3807709	1.75E-08	3.9766E-08	6.5581E-10	5.80E-08	1.74E-08	5.76E-08	1.06E-09	7.61E-08	2.82E-09	1.07E-08	1.79E-10	1.37E-08	1.37E-09	4.86E-09	7.56E-11	6.30E-09
1215	465157.9	3807709	1.72E-08	3.888E-08	6.412E-10	5.67E-08	1.70E-08	5.64E-08	1.04E-09	7.44E-08	2.75E-09	1.04E-08	1.75E-10	1.34E-08	1.34E-09	4.75E-09	7.39E-11	6.16E-09
1216	465177.9	3807709	1.68E-08	3.8067E-08	6.2779E-10	5.55E-08	1.66E-08	5.52E-08	1.02E-09	7.28E-08	2.70E-09	1.02E-08	1.72E-10	1.31E-08	1.31E-09	4.65E-09	7.24E-11	6.03E-09
1217	465197.9	3807709	1.65E-08	3.7327E-08	6.1558E-10	5.44E-08	1.63E-08	5.41E-08	9.98E-10	7.14E-08	2.64E-09	1.00E-08	1.68E-10	1.28E-08	1.28E-09	4.56E-09	7.10E-11	5.92E-09
1218	465217.9	3807709	1.62E-08	3.6667E-08	6.0469E-10	5.34E-08	1.60E-08	5.31E-08	9.81E-10	7.01E-08	2.60E-09	9.85E-09	1.65E-10	1.26E-08	1.26E-09	4.48E-09	6.97E-11	5.81E-09
1219	465237.9	3807709	1.59E-08	3.6036E-08	5.9429E-10	5.25E-08	1.57E-08	5.22E-08	9.64E-10	6.89E-08	2.55E-09	9.68E-09	1.63E-10	1.24E-08	1.24E-09	4.41E-09	6.85E-11	5.71E-09
1220	465257.9	3807709	1.56E-08	3.5467E-08	5.8491E-10	5.17E-08	1.55E-08	5.14E-08	9.49E-10	6.78E-08	2.51E-09	9.53E-09	1.60E-10	1.22E-08	1.22E-09	4.34E-09	6.74E-11	5.62E-09
1221	465277.9	3807709	1.54E-08	3.492E-08	5.7589E-10	5.09E-08	1.52E-08	5.06E-08	9.34E-10	6.68E-08	2.47E-09	9.38E-09	1.57E-10	1.20E-08	1.20E-09	4.27E-09	6.64E-11	5.53E-09
1222	465297.9	3807709	1.52E-08	3.4424E-08	5.6771E-10	5.02E-08	1.50E-08	4.99E-08	9.21E-10	6.58E-08	2.44E-09	9.25E-09	1.55E-10	1.18E-08	1.18E-09	4.21E-09	6.54E-11	5.46E-09
1223	465317.9	3807709	1.5E-08	3.3961E-08	5.6007E-10	4.95E-08	1.48E-08	4.92E-08	9.08E-10	6.50E-08	2.41E-09	9.13E-09	1.53E-10	1.17E-08	1.17E-09	4.15E-09	6.46E-11	5.38E-09
1224	465337.9	3807709	1.48E-08	3.352E-08	5.5279E-10	4.89E-08	1.46E-08	4.86E-08	8.97E-10	6.41E-08	2.37E-09	9.01E-09	1.51E-10	1.15E-08	1.15E-09	4.10E-09	6.37E-11	5.31E-09
1225	465357.9	3807709	1.46E-08	3.3093E-08	5.4576E-10	4.82E-08	1.44E-08	4.80E-08	8.85E-10	6.33E-08	2.34E-09	8.89E-09	1.49E-10	1.14E-08	1.14E-09	4.05E-09	6.29E-11	5.25E-09
1226	465377.9	3807709	1.44E-08	3.2674E-08	5.3884E-10	4.76E-08	1.43E-08	4.74E-08	8.74E-10	6.25E-08	2.31E-09	8.78E-09	1.47E-10	1.12E-08	1.12E-09	3.99E-09	6.21E-11	5.18E-09
1227	464937.9	3807729	2.29E-08	5.1986E-08	8.5733E-10	7.58E-08	2.27E-08	7.53E-08	1.39E-09	9.94E-08	3.68E-09	1.40E-08	2.34E-10	1.79E-08	1.79E-09	6.36E-09	9.88E-11	8.24E-09
1228	464957.9	3807729	2.24E-08	5.0666E-08	8.3556E-10	7.39E-08	2.21E-08	7.34E-08	1.36E-09	9.69E-08	3.59E-09	1.36E-08	2.28E-10	1.74E-08	1.74E-09	6.19E-09	9.63E-11	8.03E-09
1229	464977.9	3807729	2.18E-08	4.932E-08	8.1337E-10	7.19E-08	2.15E-08	7.15E-08	1.32E-09	9.43E-08	3.49E-09	1.33E-08	2.22E-10	1.70E-08	1.69E-09	6.03E-09	9.38E-11	7.82E-09
1230	464997.9	3807729	2.12E-08	4.8007E-08	7.9172E-10	7.00E-08	2.10E-08	6.96E-08	1.28E-09	9.18E-08	3.40E-09	1.29E-08	2.17E-10	1.65E-08	1.65E-09	5.87E-09	9.13E-11	7.61E-09
1231	465017.9	3807729	2.06E-08	4.6713E-08	7.7037E-10	6.81E-08	2.04E-08	6.77E-08	1.25E-09	8.93E-08	3.31E-09	1.26E-08	2.11E-10	1.61E-08	1.60E-09	5.71E-09	8.88E-11	7.40E-09
1232	465037.9	3807729	2.01E-08	4.5451E-08	7.4957E-10	6.63E-08	1.98E-08	6.59E-08	1.22E-09	8.69E-08	3.22E-09	1.22E-08	2.05E-10	1.56E-08	1.56E-09	5.56E-09	8.64E-11	7.20E-09
1233	465057.9	3807729	1.95E-08	4.4262E-08	7.2996E-10	6.45E-08	1.93E-08	6.42E-08	1.18E-09	8.47E-08	3.14E-09	1.19E-08	2.00E-10	1.52E-08	1.52E-09	5.41E-09	8.42E-11	7.02E-09
1234	465077.9	3807729	1.9E-08	4.3139E-08	7.1144E-10	6.29E-08	1.88E-08	6.25E-08	1.15E-09	8.25E-08	3.06E-09	1.16E-08	1.95E-10	1.48E-08	1.48E-09	5.27E-09	8.20E-11	6.84E-09
1235	465097.9	3807729	1.86E-08	4.2071E-08	6.9382E-10	6.13E-08	1.84E-08	6.10E-08	1.13E-09	8.05E-08	2.98E-09	1.13E-08	1.90E-10	1.45E-08	1.44E-09	5.14E-09	8.00E-11	6.67E-09
1236	465117.9	3807729	1.81E-08	4.1072E-08	6.7734E-10	5.99E-08	1.79E-08	5.95E-08	1.10E-09	7.86E-08	2.91E-09	1.10E-08	1.85E-10	1.41E-08	1.41E-09	5.02E-09	7.81E-11	6.51E-09
1237	465137.9	3807729	1.77E-08	4.0164E-08	6.6237E-10	5.85E-08	1.75E-08	5.82E-08	1.07E-09	7.68E-08	2.84E-09	1.08E-08	1.81E-10	1.38E-08	1.38E-09	4.91E-09	7.64E-11	6.37E-09
1238	465157.9	3807729	1.74E-08	3.9393E-08	6.4877E-10	5.73E-08	1.72E-08	5.70E-08	1.05E-09	7.52E-08	2.79E-09	1.06E-08	1.77E-10	1.35E-08	1.35E-09	4.81E-09	7.48E-11	6.23E-09
1239	465177.9	3807729	1.7E-08	3.8566E-08	6.3602E-10	5.62E-08	1.68E-08	5.59E-08	1.03E-09	7.38E-08	2.73E-09	1.04E-08	1.74E-10	1.33E-08	1.32E-09	4.71E-09	7.33E-11	6.11E-09
1240	465197.9	3807729	1.67E-08	3.7859E-08	6.2436E-10	5.52E-08	1.65E-08	5.49E-08	1.01E-09	7.24E-08	2.68E-09	1.02E-08	1.71E-10	1.30E-08	1.30E-09	4.63E-09	7.20E-11	6.00E-09
1241	465217.9	3807729	1.64E-08	3.7217E-08	6.1377E-10	5.43E-08	1.62E-08	5.39E-08	9.96E-10	7.12E-08	2.64E-09	1.00E-08	1.68E-10	1.28E-08	1.28E-09	4.55E-09	7.08E-11	5.90E-09
1242	465237.9	3807729	1.62E-08	3.6619E-08	6.0391E-10	5.34E-08	1.60E-08	5.31E-08	9.80E-10	7.00E-08	2.59E-09	9.84E-09	1.65E-10	1.26E-08	1.26E-09	4.48E-09	6.96E-11	5.80E-09
1243	465257.9	3807729	1.59E-08	3.6058E-08	5.9465E-10	5.26E-08	1.57E-08	5.23E-08	9.65E-10	6.90E-08	2.55E-09	9.69E-09	1.63E-10	1.24E-08	1.24E-09	4.41E-09	6.86E-11	5.71E-09
1244	465277.9	3807729	1.57E-08	3.554E-08	5.8611E-10	5.18E-08	1.55E-08	5.15E-08	9.51E-10	6.80E-08	2.52E-09	9.55E-09	1.60E-10	1.22E-08	1.22E-09	4.34E-09	6.76E-11	5.63E-09
1245	465297.9	3807729	1.55E-08	3.5047E-08	5.7799E-10	5.11E-08	1.53E-08	5.08E-08	9.37E-10	6.70E-08	2.48E-09	9.42E-09	1.58E-10	1.21E-08	1.20E-09	4.28E-09	6.66E-11	5.55E-09
1246	465317.9	3807729	1.53E-08	3.4573E-08	5.7017E-10	5.04E-08	1.51E-08	5.01E-08	9.25E-10	6.61E-08	2.45E-09	9.29E-09	1.56E-10	1.19E-08	1.19E-09	4.23E-09	6.57E-11	5.48E-09
1247	465337.9	3807729	1.5E-08	3.4103E-08	5.6242E-10	4.97E-08	1.49E-08	4.94E-08	9.12E-10	6.52E-08	2.42E-09	9.16E-09	1.54E-10	1.17E-08	1.17E-09	4.17E-09	6.48E-11	5.41E-09
1248	465357.9	3807729	1.49E-08	3.3662E-08	5.5514E-10	4.91E-08	1.47E-08	4.88E-08	9.00E-10	6.44E-08	2.38E-09	9.05E-09	1.52E-10	1.16E-08	1.16E-09	4.12E-09	6.40E-11	5.34E-09
1249	465377.9	3807729	1.47E-08	3.3228E-08	5.4798E-10	4.84E-08	1.45E-08	4.82E-08	8.89E-10	6.35E-08	2.35E-09	8.93E-09	1.50E-10	1.14E-08	1.14E-09	4.06E-09	6.32E-11	5.27E-09
1250	464937.9	3807749	2.31E-08	5.242E-08	8.6449E-10	7.64E-08	2.29E-08	7.60E-08	1.40E-09	1.00E-07	3.71E-09	1.41E-08	2.36E-10	1.80E-08	1.80E-09	6.41E-09	9.97E-11	8.31E-09
1251	464957.9	3807749	2.25E-08	5.1031E-08	8.4158E-10	7.44E-08	2.23E-08	7.40E-08	1.37E-09	9.76E-08	3.61E-09	1.37E-08	2.30E-10	1.76E-08	1.75E-09	6.24E-09	9.70E-11	8.09E-09
1252	464977.9	3807749	2.19E-08	4.9627E-08	8.1842E-10	7.23E-08	2.17E-08	7.19E-08	1.33E-09	9.49E-08	3.52E-09	1.33E-08	2.24E-10	1.71E-08	1.70E-09	6.07E-09	9.43E-11	7.87E-09
1253	464997.9	3807749	2.13E-08	4.8299E-08	7.9653E-10	7.04E-08	2.11E-08	7.00E-08	1.29E-09	9.24E-08	3.42E-09	1.30E-08	2.18E-10	1.66E-08	1.66E-09	5.90E-09	9.18E-11	7.66E-09
1254	465017.9	3807749	2.07E-08	4.7012E-08	7.7531E-10	6.85E-08	2.05E-08	6.81E-08	1.26E-09	8.99E-08	3.33E-09	1.26E-08	2.12E-10	1.62E-08	1.61E-09	5.75E-09	8.94E-11	7.45E-09
1255	465037.9	3807749	2.02E-08	4.5765E-08	7.5474E-10	6.67E-08	2.00E-08	6.63E-08	1.22E-09	8.75E-08	3.24E-09	1.23E-08	2.06E-10	1.57E-08	1.57E-09	5.59E-09	8.70E-11	7.25E-09
1256	465057.9	3807749	1.97E-08	4.4598E-08	7.3549E-10	6.50E-08	1.95E-08	6.46E-08	1.19E-09	8.53E-08	3.16E-09	1.20E-08	2.01E-10	1.53E-08	1.53E-09	5.45E-09	8.48E-11	7.07E-09
1257	465077.9	3807749	1.92E-08	4.3493E-08	7.1727E-10	6.34E-08	1.90E-08	6.30E-08	1									

1329	465137.9	3807809	1.88E-08	4.2592E-08	7.0242E-10	6.21E-08	1.86E-08	6.17E-08	1.14E-09	8.15E-08	3.02E-09	1.14E-08	1.92E-10	1.47E-08	1.46E-09	5.21E-09	8.10E-11	6.75E-09
1330	465157.9	3807809	1.85E-08	4.1863E-08	6.9039E-10	6.10E-08	1.83E-08	6.07E-08	1.12E-09	8.01E-08	2.97E-09	1.12E-08	1.89E-10	1.44E-08	1.44E-09	5.12E-09	7.96E-11	6.63E-09
1331	465177.9	3807809	1.82E-08	4.1192E-08	6.7932E-10	6.00E-08	1.80E-08	5.97E-08	1.10E-09	7.88E-08	2.92E-09	1.11E-08	1.86E-10	1.42E-08	1.41E-09	5.04E-09	7.83E-11	6.53E-09
1332	465197.9	3807809	1.79E-08	4.0554E-08	6.688E-10	5.91E-08	1.77E-08	5.88E-08	1.08E-09	7.76E-08	2.87E-09	1.09E-08	1.83E-10	1.40E-08	1.39E-09	4.96E-09	7.71E-11	6.43E-09
1333	465217.9	3807809	1.76E-08	3.9927E-08	6.5846E-10	5.82E-08	1.74E-08	5.79E-08	1.07E-09	7.64E-08	2.83E-09	1.07E-08	1.80E-10	1.37E-08	1.37E-09	4.88E-09	7.59E-11	6.33E-09
1334	465237.9	3807809	1.73E-08	3.9318E-08	6.4841E-10	5.73E-08	1.72E-08	5.70E-08	1.05E-09	7.52E-08	2.79E-09	1.06E-08	1.77E-10	1.35E-08	1.35E-09	4.81E-09	7.47E-11	6.23E-09
1335	465257.9	3807809	1.71E-08	3.8723E-08	6.3861E-10	5.64E-08	1.69E-08	5.61E-08	1.04E-09	7.41E-08	2.74E-09	1.04E-08	1.75E-10	1.33E-08	1.33E-09	4.73E-09	7.36E-11	6.14E-09
1336	465277.9	3807809	1.68E-08	3.8158E-08	6.2929E-10	5.56E-08	1.67E-08	5.53E-08	1.02E-09	7.30E-08	2.70E-09	1.03E-08	1.72E-10	1.31E-08	1.31E-09	4.66E-09	7.25E-11	6.05E-09
1337	465297.9	3807809	1.66E-08	3.7571E-08	6.1961E-10	5.48E-08	1.64E-08	5.45E-08	1.00E-09	7.19E-08	2.66E-09	1.01E-08	1.69E-10	1.29E-08	1.29E-09	4.59E-09	7.14E-11	5.95E-09
1338	465317.9	3807809	1.63E-08	3.6987E-08	6.0998E-10	5.39E-08	1.61E-08	5.36E-08	9.89E-10	7.07E-08	2.62E-09	9.94E-09	1.67E-10	1.27E-08	1.27E-09	4.52E-09	7.03E-11	5.86E-09
1339	465337.9	3807809	1.61E-08	3.6393E-08	6.0018E-10	5.31E-08	1.59E-08	5.27E-08	9.73E-10	6.96E-08	2.58E-09	9.78E-09	1.64E-10	1.25E-08	1.25E-09	4.45E-09	6.92E-11	5.77E-09
1340	465357.9	3807809	1.58E-08	3.5817E-08	5.9068E-10	5.22E-08	1.56E-08	5.19E-08	9.58E-10	6.85E-08	2.54E-09	9.62E-09	1.62E-10	1.23E-08	1.23E-09	4.38E-09	6.81E-11	5.68E-09
1341	465377.9	3807809	1.55E-08	3.5237E-08	5.8112E-10	5.14E-08	1.54E-08	5.11E-08	9.43E-10	6.74E-08	2.50E-09	9.47E-09	1.59E-10	1.21E-08	1.21E-09	4.31E-09	6.70E-11	5.58E-09
1342	464937.9	3807829	2.39E-08	5.4163E-08	8.9324E-10	7.90E-08	2.36E-08	7.85E-08	1.45E-09	1.04E-07	3.84E-09	1.46E-08	2.44E-10	1.86E-08	1.86E-09	6.62E-09	1.03E-10	8.58E-09
1343	464957.9	3807829	2.33E-08	5.2697E-08	8.6906E-10	7.68E-08	2.30E-08	7.64E-08	1.41E-09	1.01E-07	3.73E-09	1.42E-08	2.38E-10	1.81E-08	1.81E-09	6.44E-09	1.00E-10	8.35E-09
1344	464977.9	3807829	2.26E-08	5.13E-08	8.4603E-10	7.48E-08	2.24E-08	7.44E-08	1.37E-09	9.81E-08	3.63E-09	1.38E-08	2.31E-10	1.77E-08	1.76E-09	6.27E-09	9.75E-11	8.13E-09
1345	464997.9	3807829	2.21E-08	5.0031E-08	8.251E-10	7.29E-08	2.18E-08	7.25E-08	1.34E-09	9.57E-08	3.54E-09	1.34E-08	2.26E-10	1.72E-08	1.72E-09	6.12E-09	9.51E-11	7.93E-09
1346	465017.9	3807829	2.16E-08	4.8846E-08	8.0555E-10	7.12E-08	2.13E-08	7.08E-08	1.31E-09	9.34E-08	3.46E-09	1.31E-08	2.20E-10	1.68E-08	1.68E-09	5.97E-09	9.29E-11	7.74E-09
1347	465037.9	3807829	2.11E-08	4.7727E-08	7.8709E-10	6.96E-08	2.08E-08	6.92E-08	1.28E-09	9.13E-08	3.38E-09	1.28E-08	2.15E-10	1.64E-08	1.64E-09	5.83E-09	9.07E-11	7.56E-09
1348	465057.9	3807829	2.06E-08	4.6735E-08	7.7073E-10	6.81E-08	2.04E-08	6.77E-08	1.25E-09	8.94E-08	3.31E-09	1.26E-08	2.11E-10	1.61E-08	1.61E-09	5.71E-09	8.89E-11	7.41E-09
1349	465077.9	3807829	2.02E-08	4.5805E-08	7.554E-10	6.68E-08	2.00E-08	6.64E-08	1.23E-09	8.76E-08	3.24E-09	1.23E-08	2.07E-10	1.58E-08	1.57E-09	5.60E-09	8.71E-11	7.26E-09
1350	465097.9	3807829	1.98E-08	4.4941E-08	7.4115E-10	6.55E-08	1.96E-08	6.51E-08	1.20E-09	8.60E-08	3.18E-09	1.21E-08	2.03E-10	1.55E-08	1.54E-09	5.49E-09	8.54E-11	7.12E-09
1351	465117.9	3807829	1.95E-08	4.4131E-08	7.278E-10	6.43E-08	1.93E-08	6.40E-08	1.18E-09	8.44E-08	3.13E-09	1.19E-08	1.99E-10	1.52E-08	1.52E-09	5.39E-09	8.39E-11	6.99E-09
1352	465137.9	3807829	1.91E-08	4.3358E-08	7.1505E-10	6.32E-08	1.89E-08	6.28E-08	1.16E-09	8.29E-08	3.07E-09	1.17E-08	1.96E-10	1.49E-08	1.49E-09	5.30E-09	8.24E-11	6.87E-09
1353	465157.9	3807829	1.88E-08	4.2647E-08	7.0332E-10	6.22E-08	1.86E-08	6.18E-08	1.14E-09	8.16E-08	3.02E-09	1.15E-08	1.92E-10	1.47E-08	1.46E-09	5.21E-09	8.11E-11	6.76E-09
1354	465177.9	3807829	1.85E-08	4.1972E-08	6.9219E-10	6.12E-08	1.83E-08	6.08E-08	1.12E-09	8.03E-08	2.97E-09	1.13E-08	1.89E-10	1.44E-08	1.44E-09	5.13E-09	7.98E-11	6.65E-09
1355	465197.9	3807829	1.82E-08	4.1316E-08	6.8137E-10	6.02E-08	1.80E-08	5.99E-08	1.11E-09	7.90E-08	2.93E-09	1.11E-08	1.86E-10	1.42E-08	1.42E-09	5.05E-09	7.85E-11	6.55E-09
1356	465217.9	3807829	1.79E-08	4.0649E-08	6.7036E-10	5.93E-08	1.77E-08	5.89E-08	1.09E-09	7.77E-08	2.88E-09	1.09E-08	1.83E-10	1.40E-08	1.40E-09	4.97E-09	7.73E-11	6.44E-09
1357	465237.9	3807829	1.77E-08	4.0021E-08	6.6002E-10	5.83E-08	1.75E-08	5.80E-08	1.07E-09	7.65E-08	2.83E-09	1.08E-08	1.80E-10	1.38E-08	1.37E-09	4.89E-09	7.61E-11	6.34E-09
1358	465257.9	3807829	1.74E-08	3.9409E-08	6.4992E-10	5.74E-08	1.72E-08	5.71E-08	1.05E-09	7.54E-08	2.79E-09	1.06E-08	1.78E-10	1.36E-08	1.35E-09	4.82E-09	7.49E-11	6.25E-09
1359	465277.9	3807829	1.71E-08	3.8803E-08	6.3993E-10	5.66E-08	1.69E-08	5.62E-08	1.04E-09	7.42E-08	2.75E-09	1.04E-08	1.75E-10	1.34E-08	1.33E-09	4.74E-09	7.38E-11	6.15E-09
1360	465297.9	3807829	1.68E-08	3.8154E-08	6.2923E-10	5.56E-08	1.67E-08	5.53E-08	1.02E-09	7.30E-08	2.70E-09	1.03E-08	1.72E-10	1.31E-08	1.31E-09	4.66E-09	7.25E-11	6.05E-09
1361	465317.9	3807829	1.66E-08	3.752E-08	6.1876E-10	5.47E-08	1.64E-08	5.44E-08	1.00E-09	7.18E-08	2.66E-09	1.01E-08	1.69E-10	1.29E-08	1.29E-09	4.59E-09	7.13E-11	5.95E-09
1362	465337.9	3807829	1.63E-08	3.6911E-08	6.0872E-10	5.38E-08	1.61E-08	5.35E-08	9.87E-10	7.06E-08	2.61E-09	9.92E-09	1.66E-10	1.27E-08	1.27E-09	4.51E-09	7.02E-11	5.85E-09
1363	465357.9	3807829	1.6E-08	3.6291E-08	5.985E-10	5.29E-08	1.58E-08	5.26E-08	9.71E-10	6.94E-08	2.57E-09	9.75E-09	1.64E-10	1.25E-08	1.25E-09	4.44E-09	6.90E-11	5.75E-09
1364	465377.9	3807829	1.57E-08	3.5656E-08	5.8803E-10	5.20E-08	1.56E-08	5.17E-08	9.54E-10	6.82E-08	2.53E-09	9.58E-09	1.61E-10	1.23E-08	1.22E-09	4.36E-09	6.78E-11	5.65E-09
1365	464937.9	3807849	2.41E-08	5.4706E-08	9.022E-10	7.97E-08	2.39E-08	7.93E-08	1.46E-09	1.05E-07	3.88E-09	1.47E-08	2.47E-10	1.88E-08	1.88E-09	6.69E-09	1.04E-10	8.67E-09
1366	464957.9	3807849	2.35E-08	5.3262E-08	8.7838E-10	7.76E-08	2.32E-08	7.72E-08	1.42E-09	1.02E-07	3.77E-09	1.43E-08	2.40E-10	1.83E-08	1.83E-09	6.51E-09	1.01E-10	8.44E-09
1367	464977.9	3807849	2.29E-08	5.1935E-08	8.5649E-10	7.57E-08	2.27E-08	7.53E-08	1.39E-09	9.93E-08	3.68E-09	1.40E-08	2.34E-10	1.79E-08	1.78E-09	6.35E-09	9.87E-11	8.23E-09
1368	464997.9	3807849	2.24E-08	5.068E-08	8.358E-10	7.39E-08	2.21E-08	7.35E-08	1.36E-09	9.69E-08	3.59E-09	1.36E-08	2.29E-10	1.74E-08	1.74E-09	6.20E-09	9.64E-11	8.03E-09
1369	465017.9	3807849	2.19E-08	4.9532E-08	8.1686E-10	7.22E-08	2.16E-08	7.18E-08	1.32E-09	9.47E-08	3.51E-09	1.33E-08	2.23E-10	1.70E-08	1.70E-09	6.06E-09	9.42E-11	7.85E-09
1370	465037.9	3807849	2.14E-08	4.8492E-08	7.9972E-10	7.07E-08	2.12E-08	7.03E-08	1.30E-09	9.27E-08	3.43E-09	1.30E-08	2.19E-10	1.67E-08	1.67E-09	5.93E-09	9.22E-11	7.69E-09
1371	465057.9	3807849	2.1E-08	4.7512E-08	7.8354E-10	6.93E-08	2.07E-08	6.89E-08	1.27E-09	9.09E-08	3.37E-09	1.28E-08	2.14E-10	1.63E-08	1.63E-09	5.81E-09	9.03E-11	7.53E-09
1372	465077.9	3807849	2.06E-08	4.6604E-08	7.6857E-10	6.79E-08	2.03E-08	6.75E-08	1.25E-09	8.91E-08	3.30E-09	1.25E-08	2.10E-10	1.60E-08	1.60E-09	5.70E-09	8.86E-11	7.39E-09
1373	465097.9	3807849	2.02E-08	4.5747E-08	7.5444E-10	6.67E-08	2.00E-08	6.63E-08	1.22E-09	8.75E-08	3.24E-09	1.23E-08	2.06E-10	1.57E-08	1.57E-09	5.59E-09	8.70E-11	7.25E-09
1374	465117.9	3807849	1.98E-08	4.4944E-08	7.4121E-10	6.55E-08	1.96E-08	6.51E-08	1.20E-09	8.60E-08	3.18E-09	1.21E-08	2.03E-10	1.55E-08	1.54E-09	5.49E-09	8.54E-11	7.12E-09
1375	465137.9	3807849	1.95E-08	4.4182E-08	7.2864E-10	6.44E-08	1.93E-08	6.40E-08	1.18E-09	8.45E-08	3.13E-09	1.19E-08	1.99E-10	1.52E-08	1.52E-09	5.40E-09	8.40E-11	7.00E-09
1376	465157.9	3807849	1.92E-08	4.3431E-08	7.1625E-10	6.33E-08	1.90E-08	6.29E-08	1.16E-09	8.31E-08	3.08E-09	1.17E-08	1.96E-10	1.49E-08	1.49E-09	5.31E-09	8.26E-11	6.88E-09
1377	465177.9	3807849	1.89E-08	4.2742E-08	7.0488E-10	6.23E-08	1.87E-08	6.19E-08	1.14E-09	8.17E-08	3.03E-09	1.15E-08	1.93E-10	1.47E-08	1.47E-09	5.23E-09	8.13E-11	6.77E-09
1378	465197.9	3807849	1.86E-08	4.2064E-08	6.937E-10	6.13E-08	1.84E-08	6.10E-08	1									

1450	465257.9	3807909	1.84E-08	4.1735E-08	6.8828E-10	6.08E-08	1.82E-08	6.05E-08	1.12E-09	7.98E-08	2.96E-09	1.12E-08	1.88E-10	1.44E-08	1.43E-09	5.10E-09	7.93E-11	6.61E-09
1451	465277.9	3807909	1.81E-08	4.0951E-08	6.7536E-10	5.97E-08	1.79E-08	5.94E-08	1.10E-09	7.83E-08	2.90E-09	1.10E-08	1.85E-10	1.41E-08	1.41E-09	5.01E-09	7.79E-11	6.49E-09
1452	465297.9	3807909	1.77E-08	4.0156E-08	6.6224E-10	5.85E-08	1.75E-08	5.82E-08	1.07E-09	7.68E-08	2.84E-09	1.08E-08	1.81E-10	1.38E-08	1.38E-09	4.81E-09	7.63E-11	6.36E-09
1453	465317.9	3807909	1.74E-08	3.935E-08	6.4895E-10	5.74E-08	1.72E-08	5.70E-08	1.05E-09	7.53E-08	2.79E-09	1.06E-08	1.77E-10	1.35E-08	1.35E-09	4.81E-09	7.48E-11	6.24E-09
1454	465337.9	3807909	1.7E-08	3.8541E-08	6.356E-10	5.62E-08	1.68E-08	5.59E-08	1.03E-09	7.37E-08	2.73E-09	1.04E-08	1.74E-10	1.33E-08	1.32E-09	4.71E-09	7.33E-11	6.11E-09
1455	465357.9	3807909	1.67E-08	3.7793E-08	6.2328E-10	5.51E-08	1.65E-08	5.48E-08	1.01E-09	7.23E-08	2.68E-09	1.02E-08	1.70E-10	1.30E-08	1.30E-09	4.62E-09	7.19E-11	5.99E-09
1456	465377.9	3807909	1.64E-08	3.7057E-08	6.1113E-10	5.40E-08	1.62E-08	5.37E-08	9.91E-10	7.09E-08	2.62E-09	9.96E-09	1.67E-10	1.28E-08	1.27E-09	4.53E-09	7.05E-11	5.87E-09
1457	464937.9	3807929	2.56E-08	5.7919E-08	9.5518E-10	8.44E-08	2.53E-08	8.39E-08	1.55E-09	1.11E-07	4.10E-09	1.56E-08	2.61E-10	1.99E-08	1.99E-09	7.08E-09	1.10E-10	9.18E-09
1458	464957.9	3807929	2.5E-08	5.6621E-08	9.3377E-10	8.25E-08	2.47E-08	8.21E-08	1.51E-09	1.08E-07	4.01E-09	1.52E-08	2.55E-10	1.95E-08	1.94E-09	6.92E-09	1.08E-10	8.97E-09
1459	464977.9	3807929	2.45E-08	5.5428E-08	9.141E-10	8.08E-08	2.42E-08	8.03E-08	1.48E-09	1.06E-07	3.93E-09	1.49E-08	2.50E-10	1.91E-08	1.90E-09	6.78E-09	1.05E-10	8.78E-09
1460	464997.9	3807929	2.4E-08	5.4338E-08	8.9612E-10	7.92E-08	2.37E-08	7.88E-08	1.45E-09	1.04E-07	3.85E-09	1.46E-08	2.45E-10	1.87E-08	1.87E-09	6.64E-09	1.03E-10	8.61E-09
1461	465017.9	3807929	2.35E-08	5.3266E-08	8.7844E-10	7.76E-08	2.32E-08	7.72E-08	1.42E-09	1.02E-07	3.77E-09	1.43E-08	2.40E-10	1.83E-08	1.83E-09	6.51E-09	1.01E-10	8.44E-09
1462	465037.9	3807929	2.3E-08	5.2238E-08	8.6148E-10	7.61E-08	2.28E-08	7.57E-08	1.40E-09	9.99E-08	3.70E-09	1.40E-08	2.36E-10	1.80E-08	1.79E-09	6.39E-09	9.93E-11	8.28E-09
1463	465057.9	3807929	2.26E-08	5.1253E-08	8.4525E-10	7.47E-08	2.24E-08	7.43E-08	1.37E-09	9.80E-08	3.63E-09	1.38E-08	2.31E-10	1.76E-08	1.76E-09	6.27E-09	9.74E-11	8.12E-09
1464	465077.9	3807929	2.22E-08	5.0301E-08	8.2955E-10	7.33E-08	2.20E-08	7.29E-08	1.35E-09	9.62E-08	3.56E-09	1.35E-08	2.27E-10	1.73E-08	1.73E-09	6.15E-09	9.56E-11	7.97E-09
1465	465097.9	3807929	2.18E-08	4.936E-08	8.1403E-10	7.20E-08	2.15E-08	7.15E-08	1.32E-09	9.44E-08	3.50E-09	1.33E-08	2.23E-10	1.70E-08	1.70E-09	6.03E-09	9.38E-11	7.82E-09
1466	465117.9	3807929	2.14E-08	4.8445E-08	7.9894E-10	7.06E-08	2.11E-08	7.02E-08	1.30E-09	9.27E-08	3.43E-09	1.30E-08	2.18E-10	1.67E-08	1.66E-09	5.92E-09	9.21E-11	7.68E-09
1467	465137.9	3807929	2.1E-08	4.7537E-08	7.8397E-10	6.93E-08	2.07E-08	6.89E-08	1.27E-09	9.09E-08	3.37E-09	1.28E-08	2.14E-10	1.64E-08	1.63E-09	5.81E-09	9.04E-11	7.53E-09
1468	465157.9	3807929	2.06E-08	4.6625E-08	7.6893E-10	6.80E-08	2.03E-08	6.76E-08	1.25E-09	8.92E-08	3.30E-09	1.25E-08	2.10E-10	1.60E-08	1.60E-09	5.70E-09	8.86E-11	7.39E-09
1469	465177.9	3807929	2.02E-08	4.5732E-08	7.542E-10	6.67E-08	2.00E-08	6.63E-08	1.22E-09	8.75E-08	3.24E-09	1.23E-08	2.06E-10	1.57E-08	1.57E-09	5.59E-09	8.69E-11	7.25E-09
1470	465197.9	3807929	1.98E-08	4.4853E-08	7.397E-10	6.54E-08	1.96E-08	6.50E-08	1.20E-09	8.58E-08	3.18E-09	1.21E-08	2.02E-10	1.54E-08	1.54E-09	5.48E-09	8.53E-11	7.11E-09
1471	465217.9	3807929	1.94E-08	0.000000044	7.2563E-10	6.41E-08	1.92E-08	6.38E-08	1.18E-09	8.42E-08	3.12E-09	1.18E-08	1.98E-10	1.51E-08	1.51E-09	5.38E-09	8.37E-11	6.97E-09
1472	465237.9	3807929	1.9E-08	4.3117E-08	7.1108E-10	6.29E-08	1.88E-08	6.25E-08	1.15E-09	8.25E-08	3.05E-09	1.16E-08	1.94E-10	1.48E-08	1.48E-09	5.27E-09	8.20E-11	6.83E-09
1473	465257.9	3807929	1.86E-08	4.2242E-08	6.9664E-10	6.16E-08	1.84E-08	6.12E-08	1.13E-09	8.08E-08	2.99E-09	1.14E-08	1.91E-10	1.45E-08	1.45E-09	5.16E-09	8.03E-11	6.69E-09
1474	465277.9	3807929	1.83E-08	4.1385E-08	6.8251E-10	6.03E-08	1.81E-08	6.00E-08	1.11E-09	7.92E-08	2.93E-09	1.11E-08	1.87E-10	1.42E-08	1.42E-09	5.06E-09	7.87E-11	6.56E-09
1475	465297.9	3807929	1.79E-08	4.0572E-08	6.691E-10	5.91E-08	1.77E-08	5.88E-08	1.09E-09	7.76E-08	2.87E-09	1.09E-08	1.83E-10	1.40E-08	1.39E-09	4.96E-09	7.71E-11	6.43E-09
1476	465317.9	3807929	1.75E-08	3.9759E-08	6.5569E-10	5.80E-08	1.74E-08	5.76E-08	1.06E-09	7.60E-08	2.82E-09	1.07E-08	1.79E-10	1.37E-08	1.37E-09	4.86E-09	7.56E-11	6.30E-09
1477	465337.9	3807929	1.72E-08	3.8938E-08	6.4216E-10	5.68E-08	1.70E-08	5.64E-08	1.04E-09	7.45E-08	2.76E-09	1.05E-08	1.76E-10	1.34E-08	1.34E-09	4.76E-09	7.40E-11	6.17E-09
1478	465357.9	3807929	1.68E-08	3.8173E-08	6.2953E-10	5.56E-08	1.67E-08	5.53E-08	1.02E-09	7.30E-08	2.70E-09	1.03E-08	1.72E-10	1.31E-08	1.31E-09	4.67E-09	7.26E-11	6.05E-09
1479	465377.9	3807929	1.65E-08	3.7421E-08	6.1714E-10	5.45E-08	1.63E-08	5.42E-08	1.00E-09	7.16E-08	2.65E-09	1.01E-08	1.69E-10	1.29E-08	1.29E-09	4.57E-09	7.11E-11	5.93E-09
1480	464937.9	3807949	2.6E-08	5.8998E-08	9.7298E-10	8.60E-08	2.58E-08	8.55E-08	1.58E-09	1.13E-07	4.18E-09	1.59E-08	2.66E-10	2.03E-08	2.03E-09	7.21E-09	1.12E-10	9.35E-09
1481	464957.9	3807949	2.55E-08	5.7737E-08	9.5217E-10	8.42E-08	2.52E-08	8.37E-08	1.54E-09	1.10E-07	4.09E-09	1.55E-08	2.60E-10	1.99E-08	1.98E-09	7.06E-09	1.10E-10	9.15E-09
1482	464977.9	3807949	2.5E-08	5.6581E-08	9.3311E-10	8.25E-08	2.47E-08	8.20E-08	1.51E-09	1.08E-07	4.01E-09	1.52E-08	2.55E-10	1.95E-08	1.94E-09	6.92E-09	1.08E-10	8.97E-09
1483	464997.9	3807949	2.45E-08	5.5447E-08	9.1441E-10	8.08E-08	2.42E-08	8.04E-08	1.48E-09	1.06E-07	3.93E-09	1.49E-08	2.50E-10	1.91E-08	1.90E-09	6.78E-09	1.05E-10	8.79E-09
1484	465017.9	3807949	2.4E-08	5.4342E-08	8.9618E-10	7.92E-08	2.37E-08	7.88E-08	1.45E-09	1.04E-07	3.85E-09	1.46E-08	2.45E-10	1.87E-08	1.87E-09	6.64E-09	1.03E-10	8.61E-09
1485	465037.9	3807949	2.35E-08	5.331E-08	8.7916E-10	7.77E-08	2.33E-08	7.73E-08	1.43E-09	1.02E-07	3.78E-09	1.43E-08	2.40E-10	1.83E-08	1.83E-09	6.52E-09	1.01E-10	8.45E-09
1486	465057.9	3807949	2.31E-08	5.2263E-08	8.619E-10	7.62E-08	2.28E-08	7.57E-08	1.40E-09	1.00E-07	3.70E-09	1.40E-08	2.36E-10	1.80E-08	1.79E-09	6.39E-09	9.94E-11	8.28E-09
1487	465077.9	3807949	2.26E-08	5.1249E-08	8.4519E-10	7.47E-08	2.24E-08	7.43E-08	1.37E-09	9.80E-08	3.63E-09	1.38E-08	2.31E-10	1.76E-08	1.76E-09	6.27E-09	9.74E-11	8.12E-09
1488	465097.9	3807949	2.22E-08	5.0287E-08	8.2931E-10	7.33E-08	2.19E-08	7.29E-08	1.35E-09	9.62E-08	3.56E-09	1.35E-08	2.27E-10	1.73E-08	1.73E-09	6.15E-09	9.56E-11	7.97E-09
1489	465117.9	3807949	2.17E-08	4.9287E-08	8.1283E-10	7.18E-08	2.15E-08	7.14E-08	1.32E-09	9.43E-08	3.49E-09	1.32E-08	2.22E-10	1.70E-08	1.69E-09	6.03E-09	9.37E-11	7.81E-09
1490	465137.9	3807949	2.13E-08	4.8314E-08	7.9677E-10	7.04E-08	2.11E-08	7.00E-08	1.29E-09	9.24E-08	3.42E-09	1.30E-08	2.18E-10	1.66E-08	1.66E-09	5.91E-09	9.19E-11	7.66E-09
1491	465157.9	3807949	2.09E-08	4.7377E-08	7.8132E-10	6.91E-08	2.07E-08	6.87E-08	1.27E-09	9.06E-08	3.36E-09	1.27E-08	2.14E-10	1.63E-08	1.63E-09	5.79E-09	9.01E-11	7.51E-09
1492	465177.9	3807949	2.05E-08	4.6396E-08	7.6514E-10	6.76E-08	2.02E-08	6.72E-08	1.24E-09	8.87E-08	3.29E-09	1.25E-08	2.09E-10	1.60E-08	1.59E-09	5.67E-09	8.82E-11	7.35E-09
1493	465197.9	3807949	2.01E-08	4.5444E-08	7.4945E-10	6.62E-08	1.98E-08	6.59E-08	1.22E-09	8.69E-08	3.22E-09	1.22E-08	2.05E-10	1.56E-08	1.56E-09	5.56E-09	8.64E-11	7.20E-09
1494	465217.9	3807949	1.97E-08	4.4536E-08	7.3447E-10	6.49E-08	1.94E-08	6.45E-08	1.19E-09	8.52E-08	3.15E-09	1.20E-08	2.01E-10	1.53E-08	1.53E-09	5.44E-09	8.47E-11	7.06E-09
1495	465237.9	3807949	1.93E-08	4.365E-08	7.1986E-10	6.36E-08	1.91E-08	6.33E-08	1.17E-09	8.35E-08	3.09E-09	1.17E-08	1.97E-10	1.50E-08	1.50E-09	5.34E-09	8.30E-11	6.92E-09
1496	465257.9	3807949	1.89E-08	4.2749E-08	7.05E-10	6.23E-08	1.87E-08	6.20E-08	1.14E-09	8.18E-08	3.03E-09	1.15E-08	1.93E-10	1.47E-08	1.47E-09	5.23E-09	8.13E-11	6.78E-09
1497	465277.9	3807949	1.85E-08	4.1826E-08	6.8979E-10	6.10E-08	1.83E-08	6.06E-08	1.12E-09	8.00E-08	2.96E-09	1.12E-08	1.89E-10	1.44E-08	1.44E-09	5.11E-09	7.95E-11	6.63E-09
1498	465297.9	3807949	1.81E-08	4.0984E-08	6.759E-10	5.97E-08	1.79E-08	5.94E-08	1.10E-09	7.84E-08	2.90E-09	1.10E-08	1.85E-10	1.41E-08	1.41E-09	5.01E-09	7.79E-11	6.50E-09
1499	465317.9	3807949	1.77E-08	4.0167E-08	6.6243E-10	5.86E-08	1.75E-08	5.82E-08	1.07E-09									

1571	465377.9	3808009	1.74E-08	3.9471E-08	6.5094E-10	5.75E-08	1.72E-08	5.72E-08	1.06E-09	7.55E-08	2.80E-09	1.06E-08	1.78E-10	1.36E-08	1.36E-09	4.83E-09	7.50E-11	6.26E-09
1572	464937.9	3808029	2.83E-08	6.4238E-08	1.0594E-09	9.36E-08	2.80E-08	9.31E-08	1.72E-09	1.23E-07	4.55E-09	1.73E-08	2.90E-10	2.21E-08	2.21E-09	7.85E-09	1.22E-10	1.02E-08
1573	464957.9	3808029	2.77E-08	6.286E-08	1.0367E-09	9.16E-08	2.74E-08	9.11E-08	1.68E-09	1.20E-07	4.45E-09	1.69E-08	2.83E-10	2.16E-08	2.16E-09	7.68E-09	1.20E-10	9.96E-09
1574	464977.9	3808029	2.71E-08	6.1496E-08	1.0142E-09	8.96E-08	2.68E-08	8.91E-08	1.65E-09	1.18E-07	4.36E-09	1.65E-08	2.77E-10	2.12E-08	2.11E-09	7.52E-09	1.17E-10	9.75E-09
1575	464997.9	3808029	2.65E-08	6.0143E-08	9.9186E-10	8.77E-08	2.63E-08	8.72E-08	1.61E-09	1.15E-07	4.26E-09	1.62E-08	2.71E-10	2.07E-08	2.07E-09	7.35E-09	1.14E-10	9.53E-09
1576	465017.9	3808029	2.6E-08	5.8816E-08	9.6997E-10	8.57E-08	2.57E-08	8.52E-08	1.57E-09	1.12E-07	4.17E-09	1.58E-08	2.65E-10	2.02E-08	2.02E-09	7.19E-09	1.12E-10	9.32E-09
1577	465037.9	3808029	2.54E-08	5.7536E-08	9.4887E-10	8.39E-08	2.51E-08	8.34E-08	1.54E-09	1.10E-07	4.08E-09	1.55E-08	2.59E-10	1.98E-08	1.98E-09	7.03E-09	1.09E-10	9.12E-09
1578	465057.9	3808029	2.48E-08	5.6241E-08	9.2752E-10	8.20E-08	2.45E-08	8.15E-08	1.50E-09	1.08E-07	3.98E-09	1.51E-08	2.54E-10	1.94E-08	1.93E-09	6.88E-09	1.07E-10	8.91E-09
1579	465077.9	3808029	2.43E-08	5.498E-08	9.0671E-10	8.01E-08	2.40E-08	7.97E-08	1.47E-09	1.05E-07	3.89E-09	1.48E-08	2.48E-10	1.89E-08	1.89E-09	6.72E-09	1.05E-10	8.71E-09
1580	465097.9	3808029	2.37E-08	5.3765E-08	8.8668E-10	7.84E-08	2.35E-08	7.79E-08	1.44E-09	1.03E-07	3.81E-09	1.44E-08	2.42E-10	1.85E-08	1.85E-09	6.57E-09	1.02E-10	8.52E-09
1581	465117.9	3808029	2.32E-08	5.254E-08	8.6648E-10	7.66E-08	2.29E-08	7.61E-08	1.41E-09	1.00E-07	3.72E-09	1.41E-08	2.37E-10	1.81E-08	1.80E-09	6.42E-09	9.99E-11	8.33E-09
1582	465137.9	3808029	2.27E-08	5.1351E-08	8.4687E-10	7.49E-08	2.24E-08	7.44E-08	1.37E-09	9.82E-08	3.64E-09	1.38E-08	2.32E-10	1.77E-08	1.76E-09	6.28E-09	9.76E-11	8.14E-09
1583	465157.9	3808029	2.22E-08	5.0228E-08	8.2835E-10	7.32E-08	2.19E-08	7.28E-08	1.34E-09	9.61E-08	3.56E-09	1.35E-08	2.27E-10	1.73E-08	1.73E-09	6.14E-09	9.55E-11	7.96E-09
1584	465177.9	3808029	2.17E-08	4.9076E-08	8.0934E-10	7.15E-08	2.14E-08	7.11E-08	1.31E-09	9.39E-08	3.48E-09	1.32E-08	2.21E-10	1.69E-08	1.69E-09	6.00E-09	9.33E-11	7.78E-09
1585	465197.9	3808029	2.12E-08	4.7993E-08	7.9148E-10	7.00E-08	2.09E-08	6.96E-08	1.28E-09	9.18E-08	3.40E-09	1.29E-08	2.16E-10	1.65E-08	1.65E-09	5.87E-09	9.12E-11	7.61E-09
1586	465217.9	3808029	2.07E-08	4.7005E-08	7.7518E-10	6.85E-08	2.05E-08	6.81E-08	1.26E-09	8.99E-08	3.33E-09	1.26E-08	2.12E-10	1.62E-08	1.61E-09	5.75E-09	8.94E-11	7.45E-09
1587	465237.9	3808029	2.03E-08	4.5995E-08	7.5853E-10	6.70E-08	2.01E-08	6.67E-08	1.23E-09	8.80E-08	3.26E-09	1.24E-08	2.07E-10	1.58E-08	1.58E-09	5.62E-09	8.74E-11	7.29E-09
1588	465257.9	3808029	1.99E-08	4.5046E-08	7.4289E-10	6.57E-08	1.97E-08	6.53E-08	1.20E-09	8.62E-08	3.19E-09	1.21E-08	2.03E-10	1.55E-08	1.55E-09	5.51E-09	8.56E-11	7.14E-09
1589	465277.9	3808029	1.95E-08	4.4186E-08	7.287E-10	6.44E-08	1.93E-08	6.40E-08	1.18E-09	8.45E-08	3.13E-09	1.19E-08	1.99E-10	1.52E-08	1.52E-09	5.40E-09	8.40E-11	7.00E-09
1590	465297.9	3808029	1.91E-08	4.3347E-08	7.1487E-10	6.32E-08	1.89E-08	6.28E-08	1.16E-09	8.29E-08	3.07E-09	1.16E-08	1.95E-10	1.49E-08	1.49E-09	5.30E-09	8.24E-11	6.87E-09
1591	465317.9	3808029	1.88E-08	4.253E-08	7.014E-10	6.20E-08	1.86E-08	6.16E-08	1.14E-09	8.13E-08	3.01E-09	1.14E-08	1.92E-10	1.46E-08	1.46E-09	5.20E-09	8.09E-11	6.74E-09
1592	465337.9	3808029	1.84E-08	4.1721E-08	6.8804E-10	6.08E-08	1.82E-08	6.05E-08	1.12E-09	7.98E-08	2.96E-09	1.12E-08	1.88E-10	1.44E-08	1.43E-09	5.10E-09	7.93E-11	6.61E-09
1593	465357.9	3808029	1.81E-08	4.1002E-08	6.762E-10	5.98E-08	1.79E-08	5.94E-08	1.10E-09	7.84E-08	2.90E-09	1.10E-08	1.85E-10	1.41E-08	1.41E-09	5.01E-09	7.80E-11	6.50E-09
1594	465377.9	3808029	1.78E-08	4.0331E-08	6.6513E-10	5.88E-08	1.76E-08	5.85E-08	1.08E-09	7.71E-08	2.86E-09	1.08E-08	1.82E-10	1.39E-08	1.39E-09	4.93E-09	7.67E-11	6.39E-09
1595	464937.9	3808049	2.9E-08	6.5635E-08	1.0824E-09	9.57E-08	2.86E-08	9.51E-08	1.76E-09	1.26E-07	4.65E-09	1.76E-08	2.96E-10	2.26E-08	2.25E-09	8.02E-09	1.25E-10	1.04E-08
1596	464957.9	3808049	2.83E-08	6.4191E-08	1.0586E-09	9.36E-08	2.80E-08	9.30E-08	1.72E-09	1.23E-07	4.55E-09	1.72E-08	2.89E-10	2.21E-08	2.20E-09	7.85E-09	1.22E-10	1.02E-08
1597	464977.9	3808049	2.77E-08	6.2773E-08	1.0352E-09	9.15E-08	2.74E-08	9.10E-08	1.68E-09	1.20E-07	4.45E-09	1.69E-08	2.83E-10	2.16E-08	2.16E-09	7.67E-09	1.19E-10	9.95E-09
1598	464997.9	3808049	2.71E-08	6.1328E-08	1.0114E-09	8.94E-08	2.68E-08	8.89E-08	1.64E-09	1.17E-07	4.34E-09	1.65E-08	2.77E-10	2.11E-08	2.11E-09	7.50E-09	1.17E-10	9.72E-09
1599	465017.9	3808049	2.64E-08	5.991E-08	9.8802E-10	8.73E-08	2.61E-08	8.68E-08	1.60E-09	1.15E-07	4.24E-09	1.61E-08	2.70E-10	2.06E-08	2.06E-09	7.32E-09	1.14E-10	9.50E-09
1600	465037.9	3808049	2.58E-08	5.8546E-08	9.6552E-10	8.53E-08	2.56E-08	8.49E-08	1.57E-09	1.12E-07	4.15E-09	1.57E-08	2.64E-10	2.01E-08	2.01E-09	7.16E-09	1.11E-10	9.28E-09
1601	465057.9	3808049	2.52E-08	5.7201E-08	9.4333E-10	8.34E-08	2.50E-08	8.29E-08	1.53E-09	1.09E-07	4.05E-09	1.54E-08	2.58E-10	1.97E-08	1.96E-09	6.99E-09	1.09E-10	9.07E-09
1602	465077.9	3808049	2.47E-08	5.5888E-08	9.2168E-10	8.15E-08	2.44E-08	8.10E-08	1.49E-09	1.07E-07	3.96E-09	1.50E-08	2.52E-10	1.92E-08	1.92E-09	6.83E-09	1.06E-10	8.86E-09
1603	465097.9	3808049	2.41E-08	5.4611E-08	9.0063E-10	7.96E-08	2.38E-08	7.91E-08	1.46E-09	1.04E-07	3.87E-09	1.47E-08	2.46E-10	1.88E-08	1.88E-09	6.68E-09	1.04E-10	8.66E-09
1604	465117.9	3808049	2.35E-08	5.3364E-08	8.8007E-10	7.78E-08	2.33E-08	7.73E-08	1.43E-09	1.02E-07	3.78E-09	1.43E-08	2.41E-10	1.84E-08	1.83E-09	6.52E-09	1.01E-10	8.46E-09
1605	465137.9	3808049	2.3E-08	5.2154E-08	8.601E-10	7.60E-08	2.28E-08	7.56E-08	1.40E-09	9.97E-08	3.69E-09	1.40E-08	2.35E-10	1.79E-08	1.79E-09	6.38E-09	9.92E-11	8.27E-09
1606	465157.9	3808049	2.25E-08	5.1001E-08	8.411E-10	7.43E-08	2.23E-08	7.39E-08	1.36E-09	9.75E-08	3.61E-09	1.37E-08	2.30E-10	1.75E-08	1.75E-09	6.23E-09	9.70E-11	8.08E-09
1607	465177.9	3808049	2.2E-08	4.9875E-08	8.2251E-10	7.27E-08	2.18E-08	7.23E-08	1.33E-09	9.54E-08	3.53E-09	1.34E-08	2.25E-10	1.72E-08	1.71E-09	6.10E-09	9.48E-11	7.90E-09
1608	465197.9	3808049	2.15E-08	4.8799E-08	8.0477E-10	7.11E-08	2.13E-08	7.07E-08	1.31E-09	9.33E-08	3.46E-09	1.31E-08	2.20E-10	1.68E-08	1.68E-09	5.97E-09	9.28E-11	7.73E-09
1609	465217.9	3808049	2.11E-08	4.7778E-08	7.8793E-10	6.96E-08	2.09E-08	6.92E-08	1.28E-09	9.14E-08	3.38E-09	1.28E-08	2.15E-10	1.64E-08	1.64E-09	5.84E-09	9.08E-11	7.57E-09
1610	465237.9	3808049	2.06E-08	4.6793E-08	7.717E-10	6.82E-08	2.04E-08	6.78E-08	1.25E-09	8.95E-08	3.31E-09	1.26E-08	2.11E-10	1.61E-08	1.61E-09	5.72E-09	8.90E-11	7.42E-09
1611	465257.9	3808049	2.02E-08	4.586E-08	7.563E-10	6.69E-08	2.00E-08	6.65E-08	1.23E-09	8.77E-08	3.25E-09	1.23E-08	2.07E-10	1.58E-08	1.58E-09	5.61E-09	8.72E-11	7.27E-09
1612	465277.9	3808049	1.98E-08	4.4977E-08	7.4175E-10	6.56E-08	1.96E-08	6.52E-08	1.20E-09	8.60E-08	3.19E-09	1.21E-08	2.03E-10	1.55E-08	1.54E-09	5.50E-09	8.55E-11	7.13E-09
1613	465297.9	3808049	1.95E-08	4.4182E-08	7.2864E-10	6.44E-08	1.93E-08	6.40E-08	1.18E-09	8.45E-08	3.13E-09	1.19E-08	1.99E-10	1.52E-08	1.52E-09	5.40E-09	8.40E-11	7.00E-09
1614	465317.9	3808049	1.92E-08	4.3416E-08	7.1601E-10	6.33E-08	1.89E-08	6.29E-08	1.16E-09	8.30E-08	3.08E-09	1.17E-08	1.96E-10	1.49E-08	1.49E-09	5.31E-09	8.25E-11	6.88E-09
1615	465337.9	3808049	1.88E-08	4.2651E-08	7.0338E-10	6.22E-08	1.86E-08	6.18E-08	1.14E-09	8.16E-08	3.02E-09	1.15E-08	1.92E-10	1.47E-08	1.46E-09	5.21E-09	8.11E-11	6.76E-09
1616	465357.9	3808049	1.85E-08	4.195E-08	6.9183E-10	6.12E-08	1.83E-08	6.08E-08	1.12E-09	8.02E-08	2.97E-09	1.13E-08	1.89E-10	1.44E-08	1.44E-09	5.13E-09	7.98E-11	6.65E-09
1617	465377.9	3808049	1.82E-08	4.1301E-08	6.8113E-10	6.02E-08	1.80E-08	5.99E-08	1.10E-09	7.90E-08	2.93E-09	1.11E-08	1.86E-10	1.42E-08	1.42E-09	5.05E-09	7.85E-11	6.55E-09
1618	464937.9	3808069	2.96E-08	6.7076E-08	1.1062E-09	9.78E-08	2.93E-08	9.72E-08	1.79E-09	1.28E-07	4.75E-09	1.80E-08	3.02E-10	2.31E-08	2.30E-09	8.20E-09	1.28E-10	1.06E-08
1619	464957.9	3808069	2.89E-08	6.5544E-08	1.0809E-09	9.55E-08	2.86E-08	9.50E-08	1.75E-09	1.25E-07	4.64E-09	1.76E-08	2.96E-10	2.26E-08	2.25E-09	8.01E-09	1.25E-10	1.04E-08
1620	464977.9	3808069	2.83E-08	6.4045E-08	1.0562E-09	9.34E-08	2.80E-08	9.28E-08	1.71E									

1692	465037.9	3808129	2.8E-08	6.3352E-08	1.0448E-09	9.23E-08	2.77E-08	9.18E-08	1.69E-09	1.21E-07	4.49E-09	1.70E-08	2.86E-10	2.18E-08	2.18E-09	7.74E-09	1.20E-10	1.00E-08
1693	465057.9	3808129	2.73E-08	6.1872E-08	1.0204E-09	9.02E-08	2.70E-08	8.97E-08	1.66E-09	1.18E-07	4.38E-09	1.66E-08	2.79E-10	2.13E-08	2.12E-09	7.56E-09	1.18E-10	9.81E-09
1694	465077.9	3808129	2.67E-08	6.0453E-08	9.9698E-10	8.81E-08	2.64E-08	8.76E-08	1.62E-09	1.16E-07	4.28E-09	1.62E-08	2.73E-10	2.08E-08	2.08E-09	7.39E-09	1.15E-10	9.58E-09
1695	465097.9	3808129	2.61E-08	5.9093E-08	9.7454E-10	8.61E-08	2.58E-08	8.56E-08	1.58E-09	1.13E-07	4.19E-09	1.59E-08	2.66E-10	2.03E-08	2.03E-09	7.22E-09	1.12E-10	9.37E-09
1696	465117.9	3808129	2.56E-08	5.7923E-08	9.5524E-10	8.44E-08	2.53E-08	8.40E-08	1.55E-09	1.11E-07	4.10E-09	1.56E-08	2.61E-10	1.99E-08	1.99E-09	7.08E-09	1.10E-10	9.18E-09
1697	465137.9	3808129	2.51E-08	5.6821E-08	9.3708E-10	8.28E-08	2.48E-08	8.24E-08	1.52E-09	1.09E-07	4.02E-09	1.53E-08	2.56E-10	1.96E-08	1.95E-09	6.95E-09	1.08E-10	9.01E-09
1698	465157.9	3808129	2.46E-08	5.5778E-08	9.1988E-10	8.13E-08	2.43E-08	8.08E-08	1.49E-09	1.07E-07	3.95E-09	1.50E-08	2.52E-10	1.92E-08	1.92E-09	6.82E-09	1.06E-10	8.84E-09
1699	465177.9	3808129	2.41E-08	5.4714E-08	9.0232E-10	7.98E-08	2.39E-08	7.93E-08	1.46E-09	1.05E-07	3.88E-09	1.47E-08	2.47E-10	1.88E-08	1.88E-09	6.69E-09	1.04E-10	8.67E-09
1700	465197.9	3808129	2.37E-08	5.3693E-08	8.8548E-10	7.83E-08	2.34E-08	7.78E-08	1.44E-09	1.03E-07	3.80E-09	1.44E-08	2.42E-10	1.85E-08	1.84E-09	6.56E-09	1.02E-10	8.51E-09
1701	465217.9	3808129	2.33E-08	5.2719E-08	8.6942E-10	7.68E-08	2.30E-08	7.64E-08	1.41E-09	1.01E-07	3.73E-09	1.42E-08	2.38E-10	1.81E-08	1.81E-09	6.44E-09	1.00E-10	8.36E-09
1702	465237.9	3808129	2.29E-08	5.1909E-08	8.5607E-10	7.57E-08	2.27E-08	7.52E-08	1.39E-09	9.93E-08	3.68E-09	1.39E-08	2.34E-10	1.79E-08	1.78E-09	6.35E-09	9.87E-11	8.23E-09
1703	465257.9	3808129	2.26E-08	5.1162E-08	8.4374E-10	7.46E-08	2.23E-08	7.42E-08	1.37E-09	9.78E-08	3.62E-09	1.37E-08	2.31E-10	1.76E-08	1.76E-09	6.25E-09	9.73E-11	8.11E-09
1704	465277.9	3808129	2.23E-08	5.0451E-08	8.3202E-10	7.35E-08	2.20E-08	7.31E-08	1.35E-09	9.65E-08	3.57E-09	1.36E-08	2.28E-10	1.74E-08	1.73E-09	6.17E-09	9.59E-11	8.00E-09
1705	465297.9	3808129	2.19E-08	4.9692E-08	8.1951E-10	7.24E-08	2.17E-08	7.20E-08	1.33E-09	9.50E-08	3.52E-09	1.34E-08	2.24E-10	1.71E-08	1.71E-09	6.07E-09	9.45E-11	7.88E-09
1706	465317.9	3808129	2.16E-08	4.9003E-08	8.0814E-10	7.14E-08	2.14E-08	7.10E-08	1.31E-09	9.37E-08	3.47E-09	1.32E-08	2.21E-10	1.69E-08	1.68E-09	5.99E-09	9.32E-11	7.77E-09
1707	465337.9	3808129	2.14E-08	4.8412E-08	7.984E-10	7.06E-08	2.11E-08	7.02E-08	1.29E-09	9.26E-08	3.43E-09	1.30E-08	2.18E-10	1.67E-08	1.66E-09	5.92E-09	9.20E-11	7.67E-09
1708	465357.9	3808129	2.11E-08	4.7763E-08	7.8769E-10	6.96E-08	2.08E-08	6.92E-08	1.28E-09	9.13E-08	3.38E-09	1.28E-08	2.15E-10	1.64E-08	1.64E-09	5.84E-09	9.08E-11	7.57E-09
1709	465377.9	3808129	2.08E-08	4.7176E-08	7.7801E-10	6.88E-08	2.06E-08	6.84E-08	1.26E-09	9.02E-08	3.34E-09	1.27E-08	2.13E-10	1.62E-08	1.62E-09	5.77E-09	8.97E-11	7.48E-09
1710	464937.9	3808149	2.32E-08	7.3162E-08	1.2066E-09	1.07E-07	3.19E-08	1.06E-07	1.96E-09	1.40E-07	5.18E-09	1.97E-08	3.30E-10	2.52E-08	2.51E-09	8.94E-09	1.39E-10	1.16E-08
1711	464957.9	3808149	3.15E-08	7.1408E-08	1.1776E-09	1.04E-07	3.12E-08	1.03E-07	1.91E-09	1.37E-07	5.06E-09	1.92E-08	3.22E-10	2.46E-08	2.45E-09	8.73E-09	1.36E-10	1.13E-08
1712	464977.9	3808149	3.08E-08	6.9723E-08	1.1498E-09	1.02E-07	3.04E-08	1.01E-07	1.86E-09	1.33E-07	4.94E-09	1.87E-08	3.14E-10	2.40E-08	2.39E-09	8.52E-09	1.33E-10	1.11E-08
1713	464997.9	3808149	3E-08	6.8031E-08	1.1219E-09	9.92E-08	2.97E-08	9.86E-08	1.82E-09	1.30E-07	4.82E-09	1.83E-08	3.07E-10	2.34E-08	2.34E-09	8.32E-09	1.29E-10	1.08E-08
1714	465017.9	3808149	2.93E-08	6.6445E-08	1.0958E-09	9.69E-08	2.90E-08	9.63E-08	1.78E-09	1.27E-07	4.71E-09	1.79E-08	3.00E-10	2.29E-08	2.28E-09	8.12E-09	1.26E-10	1.05E-08
1715	465037.9	3808149	2.87E-08	6.5008E-08	1.0721E-09	9.48E-08	2.84E-08	9.42E-08	1.74E-09	1.24E-07	4.60E-09	1.75E-08	2.93E-10	2.24E-08	2.23E-09	7.95E-09	1.24E-10	1.03E-08
1716	465057.9	3808149	2.8E-08	6.3549E-08	1.048E-09	9.26E-08	2.77E-08	9.21E-08	1.70E-09	1.22E-07	4.50E-09	1.71E-08	2.87E-10	2.19E-08	2.18E-09	7.77E-09	1.21E-10	1.01E-08
1717	465077.9	3808149	2.74E-08	6.2156E-08	1.0251E-09	9.06E-08	2.71E-08	9.01E-08	1.66E-09	1.19E-07	4.40E-09	1.67E-08	2.80E-10	2.14E-08	2.13E-09	7.60E-09	1.18E-10	9.85E-09
1718	465097.9	3808149	2.68E-08	6.0833E-08	1.0032E-09	8.87E-08	2.66E-08	8.82E-08	1.63E-09	1.16E-07	4.31E-09	1.63E-08	2.74E-10	2.09E-08	2.09E-09	7.44E-09	1.16E-10	9.64E-09
1719	465117.9	3808149	2.63E-08	5.9691E-08	9.8441E-10	8.70E-08	2.61E-08	8.65E-08	1.60E-09	1.14E-07	4.23E-09	1.60E-08	2.69E-10	2.05E-08	2.05E-09	7.30E-09	1.13E-10	9.46E-09
1720	465137.9	3808149	2.59E-08	5.8601E-08	9.6643E-10	8.54E-08	2.56E-08	8.49E-08	1.57E-09	1.12E-07	4.15E-09	1.57E-08	2.64E-10	2.02E-08	2.01E-09	7.16E-09	1.11E-10	9.29E-09
1721	465157.9	3808149	2.54E-08	5.7511E-08	9.4844E-10	8.38E-08	2.51E-08	8.34E-08	1.54E-09	1.10E-07	4.07E-09	1.55E-08	2.59E-10	1.98E-08	1.98E-09	7.03E-09	1.09E-10	9.12E-09
1722	465177.9	3808149	2.5E-08	5.6551E-08	9.3263E-10	8.24E-08	2.47E-08	8.20E-08	1.51E-09	1.08E-07	4.01E-09	1.52E-08	2.55E-10	1.95E-08	1.94E-09	6.91E-09	1.08E-10	8.96E-09
1723	465197.9	3808149	2.45E-08	5.5614E-08	9.1717E-10	8.11E-08	2.43E-08	8.06E-08	1.49E-09	1.06E-07	3.94E-09	1.49E-08	2.51E-10	1.91E-08	1.91E-09	6.80E-09	1.06E-10	8.81E-09
1724	465217.9	3808149	2.41E-08	5.467E-08	9.016E-10	7.97E-08	2.39E-08	7.92E-08	1.46E-09	1.05E-07	3.87E-09	1.47E-08	2.47E-10	1.88E-08	1.88E-09	6.68E-09	1.04E-10	8.66E-09
1725	465237.9	3808149	2.38E-08	5.3897E-08	8.8885E-10	7.86E-08	2.35E-08	7.81E-08	1.44E-09	1.03E-07	3.82E-09	1.45E-08	2.43E-10	1.85E-08	1.85E-09	6.59E-09	1.02E-10	8.54E-09
1726	465257.9	3808149	2.34E-08	5.3146E-08	8.7646E-10	7.75E-08	2.32E-08	7.70E-08	1.42E-09	1.02E-07	3.76E-09	1.43E-08	2.40E-10	1.83E-08	1.83E-09	6.50E-09	1.01E-10	8.42E-09
1727	465277.9	3808149	2.31E-08	5.2372E-08	8.6371E-10	7.63E-08	2.29E-08	7.59E-08	1.40E-09	1.00E-07	3.71E-09	1.41E-08	2.36E-10	1.80E-08	1.80E-09	6.40E-09	9.96E-11	8.30E-09
1728	465297.9	3808149	2.28E-08	5.1701E-08	8.5264E-10	7.54E-08	2.26E-08	7.49E-08	1.38E-09	9.89E-08	3.66E-09	1.39E-08	2.33E-10	1.78E-08	1.78E-09	6.32E-09	9.83E-11	8.19E-09
1729	465317.9	3808149	2.25E-08	5.1049E-08	8.4188E-10	7.44E-08	2.23E-08	7.40E-08	1.37E-09	9.76E-08	3.62E-09	1.37E-08	2.30E-10	1.76E-08	1.75E-09	6.24E-09	9.71E-11	8.09E-09
1730	465337.9	3808149	2.22E-08	5.0381E-08	8.3087E-10	7.34E-08	2.20E-08	7.30E-08	1.35E-09	9.64E-08	3.57E-09	1.35E-08	2.27E-10	1.73E-08	1.73E-09	6.16E-09	9.58E-11	7.99E-09
1731	465357.9	3808149	2.2E-08	4.9813E-08	8.2149E-10	7.26E-08	2.17E-08	7.22E-08	1.33E-09	9.53E-08	3.53E-09	1.34E-08	2.25E-10	1.71E-08	1.71E-09	6.09E-09	9.47E-11	7.89E-09
1732	465377.9	3808149	2.17E-08	4.928E-08	8.1271E-10	7.18E-08	2.15E-08	7.14E-08	1.32E-09	9.43E-08	3.49E-09	1.32E-08	2.22E-10	1.70E-08	1.69E-09	6.02E-09	9.37E-11	7.81E-09
1733	464937.9	3808169	3.31E-08	7.5003E-08	1.2369E-09	1.09E-07	3.27E-08	1.09E-07	2.01E-09	1.43E-07	5.31E-09	2.02E-08	3.38E-10	2.58E-08	2.58E-09	9.17E-09	1.43E-10	1.19E-08
1734	464957.9	3808169	3.23E-08	7.3235E-08	1.2078E-09	1.07E-07	3.20E-08	1.06E-07	1.96E-09	1.40E-07	5.19E-09	1.97E-08	3.30E-10	2.52E-08	2.52E-09	8.95E-09	1.39E-10	1.16E-08
1735	464977.9	3808169	3.16E-08	7.1557E-08	1.1801E-09	1.04E-07	3.12E-08	1.04E-07	1.91E-09	1.37E-07	5.07E-09	1.92E-08	3.23E-10	2.46E-08	2.46E-09	8.75E-09	1.36E-10	1.13E-08
1736	464997.9	3808169	3.08E-08	6.9913E-08	1.153E-09	1.02E-07	3.05E-08	1.01E-07	1.87E-09	1.34E-07	4.95E-09	1.88E-08	3.15E-10	2.41E-08	2.40E-09	8.55E-09	1.33E-10	1.11E-08
1737	465017.9	3808169	3.02E-08	6.8359E-08	1.1274E-09	9.96E-08	2.98E-08	9.91E-08	1.83E-09	1.31E-07	4.84E-09	1.84E-08	3.08E-10	2.35E-08	2.35E-09	8.36E-09	1.30E-10	1.08E-08
1738	465037.9	3808169	2.95E-08	6.6904E-08	1.1034E-09	9.75E-08	2.92E-08	9.70E-08	1.79E-09	1.28E-07	4.74E-09	1.80E-08	3.02E-10	2.30E-08	2.30E-09	8.18E-09	1.27E-10	1.06E-08
1739	465057.9	3808169	2.89E-08	6.5467E-08	1.0797E-09	9.54E-08	2.86E-08	9.49E-08	1.75E-09	1.25E-07	4.64E-09	1.76E-08	2.95E-10	2.25E-08	2.25E-09	8.00E-09	1.24E-10	1.04E-08
1740	465077.9	3808169	2.83E-08	6.4122E-08	1.0575E-09	9.35E-08	2.80E-08	9.29E-08	1.72E-09	1.23E-07	4.54E-09	1.72E-08	2.89E-10	2.21E-08	2.20E-09	7.84E-09	1.22E-10	1.02E-08
1741	465097.9	3808169	2.78E-08	6.2897E-08	1.0373E-09	9.17E-08	2.75E-08	9.12E-08										

1813	465177.9	3808229	2.97E-08	6.7378E-08	1.1112E-09	9.82E-08	2.94E-08	9.77E-08	1.80E-09	1.29E-07	4.77E-09	1.81E-08	3.04E-10	2.32E-08	2.31E-09	8.24E-09	1.28E-10	1.07E-08
1814	465197.9	3808229	2.93E-08	6.6492E-08	1.0966E-09	9.69E-08	2.90E-08	9.64E-08	1.78E-09	1.27E-07	4.71E-09	1.79E-08	3.00E-10	2.29E-08	2.28E-09	8.13E-09	1.26E-10	1.05E-08
1815	465217.9	3808229	2.9E-08	6.5624E-08	1.0823E-09	9.57E-08	2.86E-08	9.51E-08	1.76E-09	1.26E-07	4.65E-09	1.76E-08	2.96E-10	2.26E-08	2.25E-09	8.02E-09	1.25E-10	1.04E-08
1816	465237.9	3808229	2.86E-08	6.4811E-08	1.0688E-09	9.45E-08	2.83E-08	9.39E-08	1.73E-09	1.24E-07	4.59E-09	1.74E-08	2.92E-10	2.23E-08	2.23E-09	7.92E-09	1.23E-10	1.03E-08
1817	465257.9	3808229	2.82E-08	6.402E-08	1.0558E-09	9.33E-08	2.79E-08	9.28E-08	1.71E-09	1.22E-07	4.53E-09	1.72E-08	2.89E-10	2.20E-08	2.20E-09	7.83E-09	1.22E-10	1.01E-08
1818	465277.9	3808229	2.79E-08	6.3236E-08	1.0429E-09	9.22E-08	2.76E-08	9.17E-08	1.69E-09	1.21E-07	4.48E-09	1.70E-08	2.85E-10	2.18E-08	2.17E-09	7.73E-09	1.20E-10	1.00E-08
1819	465297.9	3808229	2.76E-08	6.2503E-08	1.0308E-09	9.11E-08	2.73E-08	9.06E-08	1.67E-09	1.20E-07	4.43E-09	1.68E-08	2.82E-10	2.15E-08	2.15E-09	7.64E-09	1.19E-10	9.91E-09
1820	465317.9	3808229	2.73E-08	6.1773E-08	1.0187E-09	9.00E-08	2.70E-08	8.95E-08	1.65E-09	1.18E-07	4.38E-09	1.66E-08	2.79E-10	2.13E-08	2.12E-09	7.55E-09	1.17E-10	9.79E-09
1821	465337.9	3808229	2.69E-08	6.1051E-08	1.0068E-09	8.90E-08	2.66E-08	8.85E-08	1.63E-09	1.17E-07	4.32E-09	1.64E-08	2.75E-10	2.10E-08	2.10E-09	7.46E-09	1.16E-10	9.68E-09
1822	465357.9	3808229	2.66E-08	6.0366E-08	9.9553E-10	8.80E-08	2.63E-08	8.75E-08	1.61E-09	1.15E-07	4.28E-09	1.62E-08	2.72E-10	2.08E-08	2.07E-09	7.38E-09	1.15E-10	9.57E-09
1823	465377.9	3808229	2.63E-08	5.9695E-08	9.8447E-10	8.70E-08	2.61E-08	8.65E-08	1.60E-09	1.14E-07	4.23E-09	1.60E-08	2.69E-10	2.05E-08	2.05E-09	7.30E-09	1.13E-10	9.46E-09
1824	464977.9	3808249	3.65E-08	8.2701E-08	1.3639E-09	1.21E-07	3.61E-08	1.20E-07	2.21E-09	1.58E-07	5.86E-09	2.22E-08	3.73E-10	2.85E-08	2.84E-09	1.01E-08	1.57E-10	1.31E-08
1825	464997.9	3808249	3.59E-08	8.1312E-08	1.341E-09	1.19E-07	3.55E-08	1.18E-07	2.18E-09	1.56E-07	5.76E-09	2.19E-08	3.67E-10	2.80E-08	2.79E-09	9.94E-09	1.55E-10	1.29E-08
1826	465017.9	3808249	3.53E-08	7.9999E-08	1.3193E-09	1.17E-07	3.49E-08	1.16E-07	2.14E-09	1.53E-07	5.67E-09	2.15E-08	3.61E-10	2.75E-08	2.75E-09	9.78E-09	1.52E-10	1.27E-08
1827	465037.9	3808249	3.47E-08	7.8752E-08	1.2988E-09	1.15E-07	3.44E-08	1.14E-07	2.11E-09	1.51E-07	5.58E-09	2.12E-08	3.55E-10	2.71E-08	2.70E-09	9.63E-09	1.50E-10	1.25E-08
1828	465057.9	3808249	3.42E-08	7.7425E-08	1.2769E-09	1.13E-07	3.38E-08	1.12E-07	2.07E-09	1.48E-07	5.48E-09	2.08E-08	3.49E-10	2.66E-08	2.66E-09	9.46E-09	1.47E-10	1.23E-08
1829	465077.9	3808249	3.36E-08	7.6145E-08	1.2558E-09	1.11E-07	3.32E-08	1.10E-07	2.04E-09	1.46E-07	5.39E-09	2.05E-08	3.43E-10	2.62E-08	2.62E-09	9.31E-09	1.45E-10	1.21E-08
1830	465097.9	3808249	3.31E-08	7.4923E-08	1.2356E-09	1.09E-07	3.27E-08	1.09E-07	2.00E-09	1.43E-07	5.31E-09	2.01E-08	3.38E-10	2.58E-08	2.57E-09	9.16E-09	1.42E-10	1.19E-08
1831	465117.9	3808249	3.26E-08	7.3902E-08	1.2188E-09	1.08E-07	3.23E-08	1.07E-07	1.98E-09	1.41E-07	5.23E-09	1.99E-08	3.33E-10	2.54E-08	2.54E-09	9.03E-09	1.41E-10	1.17E-08
1832	465137.9	3808249	3.22E-08	7.2943E-08	1.203E-09	1.06E-07	3.18E-08	1.06E-07	1.95E-09	1.40E-07	5.17E-09	1.96E-08	3.29E-10	2.51E-08	2.51E-09	8.92E-09	1.39E-10	1.16E-08
1833	465157.9	3808249	3.18E-08	7.2046E-08	1.1882E-09	1.05E-07	3.14E-08	1.04E-07	1.93E-09	1.38E-07	5.10E-09	1.94E-08	3.25E-10	2.48E-08	2.47E-09	8.81E-09	1.37E-10	1.14E-08
1834	465177.9	3808249	3.13E-08	7.1028E-08	1.1714E-09	1.04E-07	3.10E-08	1.03E-07	1.90E-09	1.36E-07	5.03E-09	1.91E-08	3.20E-10	2.44E-08	2.44E-09	8.68E-09	1.35E-10	1.13E-08
1835	465197.9	3808249	3.09E-08	7.0084E-08	1.1558E-09	1.02E-07	3.06E-08	1.02E-07	1.87E-09	1.34E-07	4.96E-09	1.88E-08	3.16E-10	2.41E-08	2.41E-09	8.57E-09	1.33E-10	1.11E-08
1836	465217.9	3808249	3.06E-08	6.9267E-08	1.1423E-09	1.01E-07	3.02E-08	1.00E-07	1.85E-09	1.32E-07	4.91E-09	1.86E-08	3.12E-10	2.38E-08	2.38E-09	8.47E-09	1.32E-10	1.10E-08
1837	465237.9	3808249	3.02E-08	6.8334E-08	1.1269E-09	9.96E-08	2.98E-08	9.90E-08	1.83E-09	1.31E-07	4.84E-09	1.84E-08	3.08E-10	2.35E-08	2.35E-09	8.35E-09	1.30E-10	1.08E-08
1838	465257.9	3808249	2.98E-08	6.748E-08	1.1129E-09	9.84E-08	2.95E-08	9.78E-08	1.81E-09	1.29E-07	4.78E-09	1.81E-08	3.04E-10	2.32E-08	2.32E-09	8.25E-09	1.28E-10	1.07E-08
1839	465277.9	3808249	2.95E-08	6.6755E-08	1.1009E-09	9.73E-08	2.91E-08	9.68E-08	1.79E-09	1.28E-07	4.73E-09	1.79E-08	3.01E-10	2.30E-08	2.29E-09	8.16E-09	1.27E-10	1.06E-08
1840	465297.9	3808249	2.91E-08	6.5872E-08	1.0863E-09	9.60E-08	2.88E-08	9.55E-08	1.76E-09	1.26E-07	4.67E-09	1.77E-08	2.97E-10	2.27E-08	2.26E-09	8.05E-09	1.25E-10	1.04E-08
1841	465317.9	3808249	2.87E-08	6.5063E-08	1.073E-09	9.48E-08	2.84E-08	9.43E-08	1.74E-09	1.24E-07	4.61E-09	1.75E-08	2.93E-10	2.24E-08	2.23E-09	7.95E-09	1.24E-10	1.03E-08
1842	465337.9	3808249	2.84E-08	6.4366E-08	1.0615E-09	9.38E-08	2.81E-08	9.33E-08	1.72E-09	1.23E-07	4.56E-09	1.73E-08	2.90E-10	2.21E-08	2.21E-09	7.87E-09	1.22E-10	1.02E-08
1843	465357.9	3808249	2.8E-08	6.3553E-08	1.0481E-09	9.26E-08	2.77E-08	9.21E-08	1.70E-09	1.22E-07	4.50E-09	1.71E-08	2.87E-10	2.19E-08	2.18E-09	7.77E-09	1.21E-10	1.01E-08
1844	465377.9	3808249	2.77E-08	6.2791E-08	1.0355E-09	9.15E-08	2.74E-08	9.10E-08	1.68E-09	1.20E-07	4.45E-09	1.69E-08	2.83E-10	2.16E-08	2.16E-09	7.68E-09	1.19E-10	9.95E-09
1845	464997.9	3808269	3.76E-08	8.5163E-08	1.4045E-09	1.24E-07	3.72E-08	1.23E-07	2.28E-09	1.63E-07	6.03E-09	2.29E-08	3.84E-10	2.93E-08	2.92E-09	1.04E-08	1.62E-10	1.35E-08
1846	465017.9	3808269	3.71E-08	8.397E-08	1.3848E-09	1.22E-07	3.66E-08	1.22E-07	2.25E-09	1.61E-07	5.95E-09	2.26E-08	3.79E-10	2.89E-08	2.88E-09	1.03E-08	1.60E-10	1.33E-08
1847	465037.9	3808269	3.65E-08	8.2738E-08	1.3645E-09	1.21E-07	3.61E-08	1.20E-07	2.21E-09	1.58E-07	5.86E-09	2.22E-08	3.73E-10	2.85E-08	2.84E-09	1.01E-08	1.57E-10	1.31E-08
1848	465057.9	3808269	3.6E-08	8.1516E-08	1.3443E-09	1.19E-07	3.56E-08	1.18E-07	2.18E-09	1.56E-07	5.77E-09	2.19E-08	3.68E-10	2.80E-08	2.80E-09	9.97E-09	1.55E-10	1.29E-08
1849	465077.9	3808269	3.55E-08	8.0349E-08	1.3251E-09	1.17E-07	3.51E-08	1.16E-07	2.15E-09	1.54E-07	5.69E-09	2.16E-08	3.62E-10	2.76E-08	2.76E-09	9.82E-09	1.53E-10	1.27E-08
1850	465097.9	3808269	3.5E-08	7.9233E-08	1.3067E-09	1.15E-07	3.46E-08	1.15E-07	2.12E-09	1.52E-07	5.61E-09	2.13E-08	3.57E-10	2.73E-08	2.72E-09	9.69E-09	1.51E-10	1.26E-08
1851	465117.9	3808269	3.44E-08	7.8059E-08	1.2873E-09	1.14E-07	3.41E-08	1.13E-07	2.09E-09	1.49E-07	5.53E-09	2.10E-08	3.52E-10	2.69E-08	2.68E-09	9.54E-09	1.48E-10	1.24E-08
1852	465137.9	3808269	3.4E-08	7.698E-08	1.2695E-09	1.12E-07	3.36E-08	1.12E-07	2.06E-09	1.47E-07	5.45E-09	2.07E-08	3.47E-10	2.65E-08	2.64E-09	9.41E-09	1.46E-10	1.22E-08
1853	465157.9	3808269	3.36E-08	7.6039E-08	1.254E-09	1.11E-07	3.32E-08	1.10E-07	2.03E-09	1.45E-07	5.39E-09	2.04E-08	3.43E-10	2.62E-08	2.61E-09	9.30E-09	1.45E-10	1.21E-08
1854	465177.9	3808269	3.31E-08	7.5083E-08	1.2383E-09	1.09E-07	3.28E-08	1.09E-07	2.01E-09	1.44E-07	5.32E-09	2.02E-08	3.39E-10	2.58E-08	2.58E-09	9.18E-09	1.43E-10	1.19E-08
1855	465197.9	3808269	3.27E-08	7.4103E-08	1.2221E-09	1.08E-07	3.23E-08	1.07E-07	1.98E-09	1.42E-07	5.25E-09	1.99E-08	3.34E-10	2.55E-08	2.54E-09	9.06E-09	1.41E-10	1.17E-08
1856	465217.9	3808269	3.22E-08	7.3085E-08	1.2053E-09	1.07E-07	3.19E-08	1.06E-07	1.95E-09	1.40E-07	5.18E-09	1.96E-08	3.30E-10	2.51E-08	2.51E-09	8.93E-09	1.39E-10	1.16E-08
1857	465237.9	3808269	3.19E-08	7.2192E-08	1.1906E-09	1.05E-07	3.15E-08	1.05E-07	1.93E-09	1.38E-07	5.11E-09	1.94E-08	3.26E-10	2.48E-08	2.48E-09	8.83E-09	1.37E-10	1.14E-08
1858	465257.9	3808269	3.15E-08	7.1346E-08	1.1766E-09	1.04E-07	3.11E-08	1.03E-07	1.91E-09	1.36E-07	5.05E-09	1.92E-08	3.22E-10	2.45E-08	2.45E-09	8.72E-09	1.36E-10	1.13E-08
1859	465277.9	3808269	3.11E-08	7.0551E-08	1.1635E-09	1.03E-07	3.08E-08	1.02E-07	1.89E-09	1.35E-07	5.00E-09	1.90E-08	3.18E-10	2.43E-08	2.42E-09	8.62E-09	1.34E-10	1.12E-08
1860	465297.9	3808269	3.07E-08	6.9588E-08	1.1476E-09	1.01E-07	3.04E-08	1.01E-07	1.86E-09	1.33E-07	4.93E-09	1.87E-08	3.14E-10	2.39E-08	2.39E-09	8.51E-09	1.32E-10	1.10E-08
1861	465317.9	3808269	3.03E-08	6.864E-08	1.132E-09	1.00E-07	3.00E-08	9.95E-08	1.84E-09	1.31E-07	4.86E-09	1.84E-08	3.10E-10	2.36E-08	2.36E-09	8.39E-09	1.30E-10	1.09E-08
1862	465337.9	3808269	2.99E-08	6.7743E-08	1.1172E-09	9.88E-08	2.96E-08	9.82E-08	1.									

1934	465137.9	3808369	4.54E-08	1.0293E-07	1.6975E-09	1.50E-07	4.49E-08	1.49E-07	2.75E-09	1.97E-07	7.29E-09	2.77E-08	4.64E-10	3.54E-08	3.54E-09	1.26E-08	1.96E-10	1.63E-08
1935	465157.9	3808369	4.47E-08	1.0135E-07	1.6714E-09	1.48E-07	4.42E-08	1.47E-07	2.71E-09	1.94E-07	7.18E-09	2.72E-08	4.57E-10	3.49E-08	3.48E-09	1.24E-08	1.93E-10	1.61E-08
1936	465177.9	3808369	4.4E-08	9.9742E-08	1.6449E-09	1.45E-07	4.35E-08	1.45E-07	2.67E-09	1.91E-07	7.07E-09	2.68E-08	4.50E-10	3.43E-08	3.43E-09	1.22E-08	1.90E-10	1.58E-08
1937	465197.9	3808369	4.33E-08	9.8057E-08	1.6171E-09	1.43E-07	4.28E-08	1.42E-07	2.62E-09	1.88E-07	6.95E-09	2.64E-08	4.42E-10	3.37E-08	3.37E-09	1.20E-08	1.86E-10	1.55E-08
1938	465217.9	3808369	4.25E-08	9.6256E-08	1.5874E-09	1.40E-07	4.20E-08	1.40E-07	2.57E-09	1.84E-07	6.82E-09	2.59E-08	4.34E-10	3.31E-08	3.31E-09	1.18E-08	1.83E-10	1.53E-08
1939	465237.9	3808369	4.18E-08	9.472E-08	1.5621E-09	1.38E-07	4.13E-08	1.37E-07	2.53E-09	1.81E-07	6.71E-09	2.55E-08	4.27E-10	3.26E-08	3.25E-09	1.16E-08	1.80E-10	1.50E-08
1940	465257.9	3808369	4.11E-08	9.3123E-08	1.5358E-09	1.36E-07	4.06E-08	1.35E-07	2.49E-09	1.78E-07	6.60E-09	2.50E-08	4.20E-10	3.20E-08	3.20E-09	1.14E-08	1.77E-10	1.48E-08
1941	465277.9	3808369	4.03E-08	9.1398E-08	1.5073E-09	1.33E-07	3.99E-08	1.32E-07	2.44E-09	1.75E-07	6.47E-09	2.46E-08	4.12E-10	3.14E-08	3.14E-09	1.12E-08	1.74E-10	1.45E-08
1942	465297.9	3808369	3.96E-08	8.9735E-08	1.4799E-09	1.31E-07	3.92E-08	1.30E-07	2.40E-09	1.72E-07	6.36E-09	2.41E-08	4.05E-10	3.09E-08	3.08E-09	1.10E-08	1.71E-10	1.42E-08
1943	465317.9	3808369	3.89E-08	8.8091E-08	1.4528E-09	1.28E-07	3.84E-08	1.28E-07	2.36E-09	1.68E-07	6.24E-09	2.37E-08	3.97E-10	3.03E-08	3.03E-09	1.08E-08	1.67E-10	1.40E-08
1944	465337.9	3808369	3.82E-08	8.6472E-08	1.4261E-09	1.26E-07	3.77E-08	1.25E-07	2.31E-09	1.65E-07	6.13E-09	2.32E-08	3.90E-10	2.98E-08	2.97E-09	1.06E-08	1.64E-10	1.37E-08
1945	465357.9	3808369	3.76E-08	8.5148E-08	1.4042E-09	1.24E-07	3.72E-08	1.23E-07	2.28E-09	1.63E-07	6.03E-09	2.29E-08	3.84E-10	2.93E-08	2.92E-09	1.04E-08	1.62E-10	1.35E-08
1946	465377.9	3808369	3.7E-08	8.3879E-08	1.3833E-09	1.22E-07	3.66E-08	1.22E-07	2.24E-09	1.60E-07	5.94E-09	2.25E-08	3.78E-10	2.89E-08	2.88E-09	1.03E-08	1.59E-10	1.33E-08
1947	465257.9	3808389	4.29E-08	9.7182E-08	1.6027E-09	1.42E-07	4.24E-08	1.41E-07	2.60E-09	1.86E-07	6.88E-09	2.61E-08	4.38E-10	3.34E-08	3.34E-09	1.19E-08	1.85E-10	1.54E-08
1948	465277.9	3808389	4.2E-08	9.5275E-08	1.5712E-09	1.39E-07	4.16E-08	1.38E-07	2.55E-09	1.82E-07	6.75E-09	2.56E-08	4.30E-10	3.28E-08	3.27E-09	1.16E-08	1.81E-10	1.51E-08
1949	465297.9	3808389	4.13E-08	9.3619E-08	1.5439E-09	1.36E-07	4.09E-08	1.36E-07	2.50E-09	1.79E-07	6.63E-09	2.52E-08	4.22E-10	3.22E-08	3.22E-09	1.14E-08	1.78E-10	1.48E-08
1950	465317.9	3808389	4.06E-08	9.1938E-08	1.5162E-09	1.34E-07	4.01E-08	1.33E-07	2.46E-09	1.76E-07	6.51E-09	2.47E-08	4.15E-10	3.16E-08	3.16E-09	1.12E-08	1.75E-10	1.46E-08
1951	465337.9	3808389	3.98E-08	9.0159E-08	1.4869E-09	1.31E-07	3.93E-08	1.31E-07	2.41E-09	1.72E-07	6.39E-09	2.42E-08	4.07E-10	3.10E-08	3.10E-09	1.10E-08	1.71E-10	1.43E-08
1952	465357.9	3808389	3.91E-08	8.8689E-08	1.4626E-09	1.29E-07	3.87E-08	1.29E-07	2.37E-09	1.70E-07	6.28E-09	2.38E-08	4.00E-10	3.05E-08	3.05E-09	1.08E-08	1.69E-10	1.41E-08
1953	465377.9	3808389	3.85E-08	8.7285E-08	1.4395E-09	1.27E-07	3.81E-08	1.27E-07	2.33E-09	1.67E-07	6.18E-09	2.35E-08	3.94E-10	3.00E-08	3.00E-09	1.07E-08	1.66E-10	1.38E-08
1954	465337.9	3808409	4.14E-08	9.3721E-08	1.5456E-09	1.37E-07	4.09E-08	1.36E-07	2.51E-09	1.79E-07	6.64E-09	2.52E-08	4.23E-10	3.22E-08	3.22E-09	1.15E-08	1.78E-10	1.49E-08
1955	465357.9	3808409	4.06E-08	9.212E-08	1.5192E-09	1.34E-07	4.02E-08	1.34E-07	2.46E-09	1.76E-07	6.53E-09	2.48E-08	4.15E-10	3.17E-08	3.16E-09	1.13E-08	1.75E-10	1.46E-08
1956	465377.9	3808409	4E-08	9.0578E-08	1.4938E-09	1.32E-07	3.95E-08	1.31E-07	2.42E-09	1.73E-07	6.42E-09	2.43E-08	4.08E-10	3.12E-08	3.11E-09	1.11E-08	1.72E-10	1.44E-08
1957	465337.9	3808429	4.29E-08	9.7142E-08	1.602E-09	1.42E-07	4.24E-08	1.41E-07	2.60E-09	1.86E-07	6.88E-09	2.61E-08	4.38E-10	3.34E-08	3.34E-09	1.19E-08	1.85E-10	1.54E-08
1958	465357.9	3808429	4.21E-08	9.5453E-08	1.5742E-09	1.39E-07	4.17E-08	1.38E-07	2.55E-09	1.83E-07	6.76E-09	2.57E-08	4.30E-10	3.28E-08	3.28E-09	1.17E-08	1.81E-10	1.51E-08
1959	465377.9	3808429	4.14E-08	9.3794E-08	1.5468E-09	1.37E-07	4.09E-08	1.36E-07	2.51E-09	1.79E-07	6.64E-09	2.52E-08	4.23E-10	3.23E-08	3.22E-09	1.15E-08	1.78E-10	1.49E-08
1960	465337.9	3808449	4.3E-08	1.0043E-07	1.6563E-09	1.46E-07	4.38E-08	1.46E-07	2.69E-09	1.92E-07	7.11E-09	2.70E-08	4.53E-10	3.46E-08	3.45E-09	1.23E-08	1.91E-10	1.59E-08
1961	465357.9	3808449	4.36E-08	9.8808E-08	1.6295E-09	1.44E-07	4.31E-08	1.43E-07	2.64E-09	1.89E-07	7.00E-09	2.66E-08	4.46E-10	3.40E-08	3.39E-09	1.21E-08	1.88E-10	1.57E-08
1962	465377.9	3808449	4.29E-08	9.7145E-08	1.6021E-09	1.42E-07	4.24E-08	1.41E-07	2.60E-09	1.86E-07	6.88E-09	2.61E-08	4.38E-10	3.34E-08	3.34E-09	1.19E-08	1.85E-10	1.54E-08
1963	465357.9	3808469	4.49E-08	1.0175E-07	1.678E-09	1.48E-07	4.44E-08	1.47E-07	2.72E-09	1.95E-07	7.21E-09	2.73E-08	4.59E-10	3.50E-08	3.49E-09	1.24E-08	1.93E-10	1.61E-08
1964	465377.9	3808469	4.41E-08	9.9986E-08	1.6489E-09	1.46E-07	4.36E-08	1.45E-07	2.67E-09	1.91E-07	7.08E-09	2.69E-08	4.51E-10	3.44E-08	3.43E-09	1.22E-08	1.90E-10	1.58E-08
1965	465357.9	3808489	4.61E-08	1.0445E-07	1.7226E-09	1.52E-07	4.56E-08	1.51E-07	2.79E-09	2.00E-07	7.40E-09	2.81E-08	4.71E-10	3.59E-08	3.59E-09	1.28E-08	1.99E-10	1.66E-08
1966	464767.3	3807986	3.38E-08	7.6604E-08	1.2633E-09	1.12E-07	3.34E-08	1.11E-07	2.05E-09	1.47E-07	5.43E-09	2.06E-08	3.45E-10	2.64E-08	2.63E-09	9.36E-09	1.46E-10	1.21E-08
1967	464785.4	3808006	3.34E-08	7.5758E-08	1.2494E-09	1.10E-07	3.31E-08	1.10E-07	2.03E-09	1.45E-07	5.37E-09	2.04E-08	3.42E-10	2.61E-08	2.60E-09	9.26E-09	1.44E-10	1.20E-08
1968	464800.3	3808024	3.33E-08	7.5532E-08	1.2456E-09	1.10E-07	3.30E-08	1.09E-07	2.02E-09	1.44E-07	5.35E-09	2.03E-08	3.41E-10	2.60E-08	2.59E-09	9.23E-09	1.44E-10	1.20E-08
1969	464811.9	3808044	3.34E-08	7.5809E-08	1.2502E-09	1.11E-07	3.31E-08	1.10E-07	2.03E-09	1.45E-07	5.37E-09	2.04E-08	3.42E-10	2.61E-08	2.60E-09	9.27E-09	1.44E-10	1.20E-08
1970	464833.4	3808072	3.35E-08	7.597E-08	1.2529E-09	1.11E-07	3.32E-08	1.10E-07	2.03E-09	1.45E-07	5.38E-09	2.04E-08	3.43E-10	2.61E-08	2.61E-09	9.29E-09	1.44E-10	1.20E-08
1971	464843.3	3808088	3.37E-08	7.6436E-08	1.2606E-09	1.11E-07	3.34E-08	1.11E-07	2.04E-09	1.46E-07	5.41E-09	2.05E-08	3.45E-10	2.63E-08	2.63E-09	9.34E-09	1.45E-10	1.21E-08
1972	464762.3	3807963	3.34E-08	7.5773E-08	1.2496E-09	1.10E-07	3.31E-08	1.10E-07	2.03E-09	1.45E-07	5.37E-09	2.04E-08	3.42E-10	2.61E-08	2.60E-09	9.26E-09	1.44E-10	1.20E-08
1973	464785.4	3807963	3.22E-08	7.3052E-08	1.2048E-09	1.06E-07	3.19E-08	1.06E-07	1.95E-09	1.40E-07	5.17E-09	1.96E-08	3.29E-10	2.51E-08	2.51E-09	8.93E-09	1.39E-10	1.16E-08
1974	464818.5	3807964	3.07E-08	6.9646E-08	1.1486E-09	1.02E-07	3.04E-08	1.01E-07	1.86E-09	1.33E-07	4.93E-09	1.87E-08	3.14E-10	2.40E-08	2.39E-09	8.51E-09	1.32E-10	1.10E-08
1975	464845	3807964	2.96E-08	6.7108E-08	1.1067E-09	9.78E-08	2.93E-08	9.73E-08	1.80E-09	1.28E-07	4.75E-09	1.80E-08	3.03E-10	2.31E-08	2.30E-09	8.20E-09	1.28E-10	1.06E-08
1976	464869.8	3807966	2.87E-08	6.5041E-08	1.0726E-09	9.48E-08	2.84E-08	9.43E-08	1.74E-09	1.24E-07	4.61E-09	1.75E-08	2.93E-10	2.24E-08	2.23E-09	7.95E-09	1.24E-10	1.03E-08
1977	464887.9	3807964	2.8E-08	6.3513E-08	1.0474E-09	9.26E-08	2.77E-08	9.21E-08	1.70E-09	1.21E-07	4.50E-09	1.71E-08	2.86E-10	2.19E-08	2.18E-09	7.76E-09	1.21E-10	1.01E-08
1978	464909.4	3807964	2.73E-08	6.1883E-08	1.0205E-09	9.02E-08	2.70E-08	8.97E-08	1.66E-09	1.18E-07	4.38E-09	1.66E-08	2.79E-10	2.13E-08	2.13E-09	7.56E-09	1.18E-10	9.81E-09
1979	464912.7	3807996	2.81E-08	6.3699E-08	1.0505E-09	9.29E-08	2.78E-08	9.23E-08	1.70E-09	1.22E-07	4.51E-09	1.71E-08	2.87E-10	2.19E-08	2.19E-09	7.79E-09	1.21E-10	1.01E-08
1980	464906.1	3808007	2.87E-08	6.5012E-08	1.0721E-09	9.48E-08	2.84E-08	9.42E-08	1.74E-09	1.24E-07	4.61E-09	1.75E-08	2.93E-10	2.24E-08	2.23E-09	7.95E-09	1.24E-10	1.03E-08
1981	464904.5	3808027	2.94E-08	6.6565E-08	1.0978E-09	9.70E-08	2.91E-08	9.65E-08	1.78E-09	1.27E-07	4.72E-09	1.79E-08	3.00E-10	2.29E-08	2.29E-09	8.14E-09	1.27E-10	1.06E-08
1982	464906.1	3808047	3E-08	6.7922E-08	1.1201E-09	9.90E-08	2.96E-08	9.84E-08	1.82E-09	1.30E-07	4.81E-09	1.83E-08	3.06E-10	2.34E-08	2.33E-09	8.30E-09	1.29E-10	1.08E-08
1983	464879.7	3808074	3.18E-08	7.2111E-08	1.1892E-09	1.05E-07	3.15E-08	1.05E-07	1.93E									

			UnMitigated			T2			T2L3			T4		
			8.18E-04	2.01E-03	1.65E-04	8.09E-04	2.91E-03	2.67E-04	1.31E-04	5.39E-04	4.51E-05	6.36E-05	2.45E-04	1.90E-05
			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	463733.3	3809554	7.20E-04	1.77E-03	1.45E-04	7.13E-04	2.56E-03	2.36E-04	1.16E-04	4.75E-04	3.97E-05	5.61E-05	2.16E-04	1.67E-05
2	463753.3	3809554	7.34E-04	1.80E-03	1.48E-04	7.26E-04	2.61E-03	2.40E-04	1.18E-04	4.84E-04	4.04E-05	5.71E-05	2.20E-04	1.70E-05
3	463773.3	3809554	7.45E-04	1.83E-03	1.50E-04	7.37E-04	2.65E-03	2.44E-04	1.20E-04	4.92E-04	4.11E-05	5.80E-05	2.24E-04	1.73E-05
4	463793.3	3809554	7.56E-04	1.86E-03	1.52E-04	7.48E-04	2.69E-03	2.47E-04	1.21E-04	4.99E-04	4.17E-05	5.89E-05	2.27E-04	1.76E-05
5	463813.3	3809554	7.66E-04	1.88E-03	1.55E-04	7.58E-04	2.73E-03	2.51E-04	1.23E-04	5.05E-04	4.23E-05	5.97E-05	2.30E-04	1.78E-05
6	463833.3	3809554	7.80E-04	1.91E-03	1.57E-04	7.71E-04	2.77E-03	2.55E-04	1.25E-04	5.14E-04	4.30E-05	6.07E-05	2.34E-04	1.81E-05
7	463853.3	3809554	7.94E-04	1.95E-03	1.60E-04	7.86E-04	2.83E-03	2.60E-04	1.28E-04	5.24E-04	4.38E-05	6.18E-05	2.38E-04	1.85E-05
8	463873.3	3809554	8.08E-04	1.98E-03	1.63E-04	7.99E-04	2.87E-03	2.64E-04	1.30E-04	5.33E-04	4.46E-05	6.29E-05	2.42E-04	1.88E-05
9	463893.3	3809554	8.15E-04	2.00E-03	1.64E-04	8.06E-04	2.90E-03	2.66E-04	1.31E-04	5.37E-04	4.49E-05	6.34E-05	2.44E-04	1.89E-05
10	463913.3	3809554	8.17E-04	2.01E-03	1.65E-04	8.08E-04	2.91E-03	2.67E-04	1.31E-04	5.39E-04	4.51E-05	6.36E-05	2.45E-04	1.90E-05
11	463933.3	3809554	8.18E-04	2.01E-03	1.65E-04	8.09E-04	2.91E-03	2.67E-04	1.31E-04	5.39E-04	4.51E-05	6.36E-05	2.45E-04	1.90E-05
12	463953.3	3809554	8.18E-04	2.01E-03	1.65E-04	8.09E-04	2.91E-03	2.67E-04	1.31E-04	5.39E-04	4.51E-05	6.36E-05	2.45E-04	1.90E-05
13	463973.3	3809554	8.11E-04	1.99E-03	1.64E-04	8.02E-04	2.89E-03	2.65E-04	1.30E-04	5.35E-04	4.47E-05	6.31E-05	2.43E-04	1.89E-05
14	463993.3	3809554	8.01E-04	1.97E-03	1.62E-04	7.93E-04	2.85E-03	2.62E-04	1.29E-04	5.29E-04	4.42E-05	6.24E-05	2.40E-04	1.86E-05
15	464013.3	3809554	7.91E-04	1.94E-03	1.59E-04	7.82E-04	2.81E-03	2.59E-04	1.27E-04	5.22E-04	4.36E-05	6.16E-05	2.37E-04	1.84E-05
16	464033.3	3809554	7.83E-04	1.92E-03	1.58E-04	7.74E-04	2.78E-03	2.56E-04	1.26E-04	5.16E-04	4.32E-05	6.09E-05	2.35E-04	1.82E-05
17	464053.3	3809554	7.75E-04	1.90E-03	1.56E-04	7.66E-04	2.76E-03	2.53E-04	1.24E-04	5.11E-04	4.27E-05	6.03E-05	2.32E-04	1.80E-05
18	464073.3	3809554	7.64E-04	1.87E-03	1.54E-04	7.56E-04	2.72E-03	2.50E-04	1.23E-04	5.04E-04	4.21E-05	5.95E-05	2.29E-04	1.78E-05
19	464093.3	3809554	7.53E-04	1.85E-03	1.52E-04	7.45E-04	2.68E-03	2.46E-04	1.21E-04	4.96E-04	4.15E-05	5.86E-05	2.26E-04	1.75E-05
20	464113.3	3809554	7.41E-04	1.82E-03	1.49E-04	7.33E-04	2.64E-03	2.42E-04	1.19E-04	4.89E-04	4.09E-05	5.77E-05	2.22E-04	1.72E-05
21	464133.3	3809554	7.28E-04	1.79E-03	1.47E-04	7.21E-04	2.59E-03	2.38E-04	1.17E-04	4.80E-04	4.02E-05	5.67E-05	2.19E-04	1.69E-05
22	464153.3	3809554	7.16E-04	1.76E-03	1.44E-04	7.08E-04	2.54E-03	2.34E-04	1.15E-04	4.72E-04	3.94E-05	5.57E-05	2.15E-04	1.66E-05
23	464173.3	3809554	7.02E-04	1.72E-03	1.42E-04	6.95E-04	2.50E-03	2.30E-04	1.13E-04	4.63E-04	3.87E-05	5.47E-05	2.11E-04	1.63E-05
24	464193.3	3809554	6.90E-04	1.69E-03	1.39E-04	6.83E-04	2.46E-03	2.26E-04	1.11E-04	4.55E-04	3.81E-05	5.37E-05	2.07E-04	1.60E-05
25	464213.3	3809554	6.76E-04	1.66E-03	1.36E-04	6.69E-04	2.40E-03	2.21E-04	1.09E-04	4.46E-04	3.73E-05	5.26E-05	2.03E-04	1.57E-05
26	464233.3	3809554	6.61E-04	1.62E-03	1.33E-04	6.54E-04	2.35E-03	2.16E-04	1.06E-04	4.36E-04	3.64E-05	5.14E-05	1.98E-04	1.54E-05
27	464253.3	3809554	6.46E-04	1.59E-03	1.30E-04	6.39E-04	2.30E-03	2.11E-04	1.04E-04	4.26E-04	3.56E-05	5.03E-05	1.94E-04	1.50E-05
28	464273.3	3809554	6.31E-04	1.55E-03	1.27E-04	6.24E-04	2.24E-03	2.06E-04	1.01E-04	4.16E-04	3.48E-05	4.91E-05	1.89E-04	1.47E-05
29	464293.3	3809554	6.16E-04	1.51E-03	1.24E-04	6.09E-04	2.19E-03	2.01E-04	9.89E-05	4.06E-04	3.40E-05	4.79E-05	1.85E-04	1.43E-05
30	464313.3	3809554	6.01E-04	1.48E-03	1.21E-04	5.95E-04	2.14E-03	1.97E-04	9.65E-05	3.96E-04	3.31E-05	4.68E-05	1.80E-04	1.40E-05
31	464333.3	3809554	5.87E-04	1.44E-03	1.18E-04	5.81E-04	2.09E-03	1.92E-04	9.43E-05	3.87E-04	3.24E-05	4.57E-05	1.76E-04	1.36E-05
32	464353.3	3809554	5.73E-04	1.41E-03	1.16E-04	5.67E-04	2.04E-03	1.88E-04	9.20E-05	3.78E-04	3.16E-05	4.46E-05	1.72E-04	1.33E-05
33	464373.3	3809554	5.58E-04	1.37E-03	1.13E-04	5.52E-04	1.98E-03	1.83E-04	8.96E-05	3.68E-04	3.08E-05	4.34E-05	1.67E-04	1.30E-05
34	464393.3	3809554	5.44E-04	1.33E-03	1.10E-04	5.38E-04	1.93E-03	1.78E-04	8.73E-05	3.59E-04	3.00E-05	4.23E-05	1.63E-04	1.26E-05
35	464413.3	3809554	5.30E-04	1.30E-03	1.07E-04	5.24E-04	1.89E-03	1.73E-04	8.51E-05	3.50E-04	2.92E-05	4.13E-05	1.59E-04	1.23E-05
36	464433.3	3809554	5.15E-04	1.26E-03	1.04E-04	5.10E-04	1.83E-03	1.68E-04	8.27E-05	3.40E-04	2.84E-05	4.01E-05	1.55E-04	1.20E-05
37	464453.3	3809554	5.00E-04	1.23E-03	1.01E-04	4.94E-04	1.78E-03	1.63E-04	8.03E-05	3.30E-04	2.76E-05	3.89E-05	1.50E-04	1.16E-05
38	464473.3	3809554	4.85E-04	1.19E-03	9.77E-05	4.79E-04	1.72E-03	1.58E-04	7.78E-05	3.20E-04	2.67E-05	3.77E-05	1.45E-04	1.13E-05
39	464493.3	3809554	4.69E-04	1.15E-03	9.47E-05	4.64E-04	1.67E-03	1.54E-04	7.54E-05	3.10E-04	2.59E-05	3.65E-05	1.41E-04	1.09E-05
40	463733.3	3809574	6.96E-04	1.71E-03	1.40E-04	6.89E-04	2.48E-03	2.28E-04	1.12E-04	4.59E-04	3.84E-05	5.42E-05	2.09E-04	1.62E-05
41	463753.3	3809574	7.08E-04	1.74E-03	1.43E-04	7.01E-04	2.52E-03	2.32E-04	1.14E-04	4.67E-04	3.91E-05	5.51E-05	2.13E-04	1.65E-05
42	463773.3	3809574	7.19E-04	1.77E-03	1.45E-04	7.12E-04	2.56E-03	2.35E-04	1.15E-04	4.74E-04	3.97E-05	5.60E-05	2.16E-04	1.67E-05
43	463793.3	3809574	7.29E-04	1.79E-03	1.47E-04	7.21E-04	2.59E-03	2.38E-04	1.17E-04	4.81E-04	4.02E-05	5.67E-05	2.19E-04	1.69E-05
44	463813.3	3809574	7.38E-04	1.81E-03	1.49E-04	7.30E-04	2.62E-03	2.41E-04	1.18E-04	4.87E-04	4.07E-05	5.74E-05	2.21E-04	1.72E-05
45	463833.3	3809574	7.48E-04	1.84E-03	1.51E-04	7.40E-04	2.66E-03	2.45E-04	1.20E-04	4.93E-04	4.12E-05	5.82E-05	2.24E-04	1.74E-05
46	463853.3	3809574	7.60E-04	1.87E-03	1.53E-04	7.52E-04	2.70E-03	2.49E-04	1.22E-04	5.01E-04	4.19E-05	5.92E-05	2.28E-04	1.77E-05
47	463873.3	3809574	7.73E-04	1.90E-03	1.56E-04	7.65E-04	2.75E-03	2.53E-04	1.24E-04	5.10E-04	4.26E-05	6.02E-05	2.32E-04	1.80E-05
48	463893.3	3809574	7.82E-04	1.92E-03	1.58E-04	7.74E-04	2.78E-03	2.56E-04	1.26E-04	5.16E-04	4.31E-05	6.09E-05	2.35E-04	1.82E-05
49	463913.3	3809574	7.86E-04	1.93E-03	1.58E-04	7.78E-04	2.80E-03	2.57E-04	1.26E-04	5.18E-04	4.33E-05	6.12E-05	2.36E-04	1.83E-05
50	463933.3	3809574	7.87E-04	1.93E-03	1.59E-04	7.78E-04	2.80E-03	2.57E-04	1.26E-04	5.19E-04	4.34E-05	6.13E-05	2.36E-04	1.83E-05
51	463953.3	3809574	7.88E-04	1.93E-03	1.59E-04	7.79E-04	2.80E-03	2.58E-04	1.26E-04	5.19E-04	4.34E-05	6.13E-05	2.36E-04	1.83E-05
52	463973.3	3809574	7.83E-04	1.92E-03	1.58E-04	7.74E-04	2.78E-03	2.56E-04	1.26E-04	5.16E-04	4.32E-05	6.09E-05	2.35E-04	1.82E-05
53	463993.3	3809574	7.75E-04	1.90E-03	1.56E-04	7.66E-04	2.76E-03	2.53E-04	1.24E-04	5.11E-04	4.27E-05	6.03E-05	2.32E-04	1.80E-05
54	464013.3	3809574	7.65E-04	1.88E-03	1.54E-04	7.57E-04	2.72E-03	2.50E-04	1.23E-04	5.04E-04	4.22E-05	5.95E-05	2.29E-04	1.78E-05
55	464033.3	3809574	7.57E-04	1.86E-03	1.53E-04	7.49E-04	2.69E-03	2.48E-04	1.22E-04	4.99E-04	4.17E-05	5.89E-05	2.27E-04	1.76E-05
56	464053.3	3809574	7.50E-04	1.84E-03	1.51E-04	7.41E-04	2.67E-03	2.45E-04	1.20E-04	4.94E-04	4.13E-05	5.83E-05	2.25E-04	1.74E-05
57	464073.3	3809574	7.38E-04	1.81E-03	1.49E-04	7.30E-04	2.62E-03	2.41E-04	1.18E-04	4.87E-04	4.07E-05	5.74E-05	2.21E-04	1.71E-05
58	464093.3	3809574	7.27E-04	1.79E-03	1.47E-04	7.20E-04	2.59E-03	2.38E-04	1.17E-04	4.80E-04	4.01E-05	5.66E-05	2.18E-04	1.69E-05
59	464113.3	3809574	7.17E-04	1.76E-03	1.45E-04	7.09E-04	2.55E-03	2.34E-04	1.15E-04	4.73E-04	3.95E-05	5.58E-05	2.15E-04	1.67E-05
60	464133.3	3809574	7.04E-04	1.73E-03	1.42E-04	6.97E-04	2.51E-03	2.30E-04	1.13E-04	4.64E-04	3.88E-05	5.48E-05	2.11E-04	1.64E-05
61	464153.3	3809574	6.92E-04	1.70E-03	1.40E-04	6.85E-04	2.46E-03	2.26E-04	1.11E-04	4.57E-04	3.82E-05	5.39E-05	2.08E-04	1.61E-05
62	464173.3	3809574	6.80E-04	1.67E-03	1.37E-04	6.73E-04	2.42E-03	2.23E-04	1.09E-04	4.49E-04	3.75E-05			

89	463933.3	3809594	7.60E-04	1.87E-03	1.53E-04	7.52E-04	2.70E-03	2.49E-04	1.22E-04	5.01E-04	4.19E-05	5.92E-05	2.28E-04	1.77E-05
90	463953.3	3809594	7.58E-04	1.86E-03	1.53E-04	7.50E-04	2.70E-03	2.48E-04	1.22E-04	5.00E-04	4.18E-05	5.90E-05	2.27E-04	1.76E-05
91	463973.3	3809594	7.54E-04	1.85E-03	1.52E-04	7.46E-04	2.68E-03	2.47E-04	1.21E-04	4.98E-04	4.16E-05	5.87E-05	2.26E-04	1.75E-05
92	463993.3	3809594	7.49E-04	1.84E-03	1.51E-04	7.41E-04	2.67E-03	2.45E-04	1.20E-04	4.94E-04	4.13E-05	5.83E-05	2.25E-04	1.74E-05
93	464013.3	3809594	7.40E-04	1.82E-03	1.49E-04	7.32E-04	2.63E-03	2.42E-04	1.19E-04	4.88E-04	4.08E-05	5.76E-05	2.22E-04	1.72E-05
94	464033.3	3809594	7.33E-04	1.80E-03	1.48E-04	7.25E-04	2.61E-03	2.40E-04	1.18E-04	4.83E-04	4.04E-05	5.71E-05	2.20E-04	1.70E-05
95	464053.3	3809594	7.26E-04	1.78E-03	1.46E-04	7.18E-04	2.58E-03	2.37E-04	1.17E-04	4.79E-04	4.00E-05	5.65E-05	2.18E-04	1.69E-05
96	464073.3	3809594	7.15E-04	1.75E-03	1.44E-04	7.07E-04	2.54E-03	2.34E-04	1.15E-04	4.71E-04	3.94E-05	5.56E-05	2.14E-04	1.66E-05
97	464093.3	3809594	7.03E-04	1.73E-03	1.42E-04	6.96E-04	2.50E-03	2.30E-04	1.13E-04	4.64E-04	3.88E-05	5.48E-05	2.11E-04	1.64E-05
98	464113.3	3809594	6.92E-04	1.70E-03	1.40E-04	6.85E-04	2.46E-03	2.26E-04	1.11E-04	4.56E-04	3.82E-05	5.39E-05	2.08E-04	1.61E-05
99	464133.3	3809594	6.83E-04	1.68E-03	1.38E-04	6.75E-04	2.43E-03	2.23E-04	1.10E-04	4.50E-04	3.76E-05	5.31E-05	2.05E-04	1.59E-05
100	464153.3	3809594	6.71E-04	1.65E-03	1.35E-04	6.63E-04	2.39E-03	2.19E-04	1.08E-04	4.42E-04	3.70E-05	5.22E-05	2.01E-04	1.56E-05
101	464173.3	3809594	6.58E-04	1.61E-03	1.33E-04	6.50E-04	2.34E-03	2.15E-04	1.06E-04	4.34E-04	3.63E-05	5.12E-05	1.97E-04	1.53E-05
102	464193.3	3809594	6.47E-04	1.59E-03	1.30E-04	6.40E-04	2.30E-03	2.11E-04	1.04E-04	4.26E-04	3.57E-05	5.03E-05	1.94E-04	1.50E-05
103	464213.3	3809594	6.35E-04	1.56E-03	1.28E-04	6.28E-04	2.26E-03	2.08E-04	1.02E-04	4.19E-04	3.50E-05	4.94E-05	1.91E-04	1.48E-05
104	464233.3	3809594	6.23E-04	1.53E-03	1.26E-04	6.16E-04	2.22E-03	2.04E-04	1.00E-04	4.11E-04	3.43E-05	4.85E-05	1.87E-04	1.45E-05
105	464253.3	3809594	6.08E-04	1.49E-03	1.23E-04	6.02E-04	2.16E-03	1.99E-04	9.76E-05	4.01E-04	3.35E-05	4.73E-05	1.82E-04	1.41E-05
106	464273.3	3809594	5.95E-04	1.46E-03	1.20E-04	5.89E-04	2.12E-03	1.95E-04	9.56E-05	3.93E-04	3.28E-05	4.63E-05	1.79E-04	1.38E-05
107	464293.3	3809594	5.83E-04	1.43E-03	1.18E-04	5.77E-04	2.07E-03	1.91E-04	9.36E-05	3.85E-04	3.22E-05	4.54E-05	1.75E-04	1.36E-05
108	464313.3	3809594	5.71E-04	1.40E-03	1.15E-04	5.65E-04	2.03E-03	1.87E-04	9.17E-05	3.77E-04	3.15E-05	4.45E-05	1.71E-04	1.33E-05
109	464333.3	3809594	5.58E-04	1.37E-03	1.12E-04	5.52E-04	1.98E-03	1.82E-04	8.95E-05	3.68E-04	3.07E-05	4.34E-05	1.67E-04	1.30E-05
110	464353.3	3809594	5.44E-04	1.33E-03	1.10E-04	5.38E-04	1.93E-03	1.78E-04	8.73E-05	3.59E-04	3.00E-05	4.23E-05	1.63E-04	1.26E-05
111	464373.3	3809594	5.32E-04	1.30E-03	1.07E-04	5.26E-04	1.89E-03	1.74E-04	8.54E-05	3.51E-04	2.93E-05	4.14E-05	1.59E-04	1.24E-05
112	464393.3	3809594	5.20E-04	1.28E-03	1.05E-04	5.14E-04	1.85E-03	1.70E-04	8.34E-05	3.43E-04	2.87E-05	4.05E-05	1.56E-04	1.21E-05
113	464413.3	3809594	5.07E-04	1.25E-03	1.02E-04	5.02E-04	1.80E-03	1.66E-04	8.14E-05	3.35E-04	2.80E-05	3.95E-05	1.52E-04	1.18E-05
114	464433.3	3809594	4.93E-04	1.21E-03	9.94E-05	4.88E-04	1.75E-03	1.61E-04	7.92E-05	3.25E-04	2.72E-05	3.84E-05	1.48E-04	1.15E-05
115	464453.3	3809594	4.80E-04	1.18E-03	9.68E-05	4.75E-04	1.71E-03	1.57E-04	7.71E-05	3.17E-04	2.65E-05	3.74E-05	1.44E-04	1.12E-05
116	464473.3	3809594	4.68E-04	1.15E-03	9.43E-05	4.63E-04	1.66E-03	1.53E-04	7.51E-05	3.08E-04	2.58E-05	3.64E-05	1.40E-04	1.09E-05
117	464493.3	3809594	4.55E-04	1.12E-03	9.17E-05	4.50E-04	1.62E-03	1.49E-04	7.31E-05	3.00E-04	2.51E-05	3.54E-05	1.37E-04	1.06E-05
118	463753.3	3809614	6.60E-04	1.62E-03	1.33E-04	6.53E-04	2.35E-03	2.16E-04	1.06E-04	4.35E-04	3.64E-05	5.14E-05	1.98E-04	1.53E-05
119	463773.3	3809614	6.69E-04	1.64E-03	1.35E-04	6.62E-04	2.38E-03	2.19E-04	1.07E-04	4.41E-04	3.69E-05	5.21E-05	2.01E-04	1.55E-05
120	463793.3	3809614	6.78E-04	1.66E-03	1.37E-04	6.70E-04	2.41E-03	2.22E-04	1.09E-04	4.47E-04	3.74E-05	5.28E-05	2.03E-04	1.58E-05
121	463813.3	3809614	6.86E-04	1.68E-03	1.38E-04	6.79E-04	2.44E-03	2.24E-04	1.10E-04	4.52E-04	3.78E-05	5.34E-05	2.06E-04	1.59E-05
122	463833.3	3809614	6.92E-04	1.70E-03	1.40E-04	6.85E-04	2.46E-03	2.26E-04	1.11E-04	4.56E-04	3.82E-05	5.39E-05	2.08E-04	1.61E-05
123	463853.3	3809614	7.00E-04	1.72E-03	1.41E-04	6.92E-04	2.49E-03	2.29E-04	1.12E-04	4.62E-04	3.86E-05	5.45E-05	2.10E-04	1.63E-05
124	463873.3	3809614	7.09E-04	1.74E-03	1.43E-04	7.01E-04	2.52E-03	2.32E-04	1.14E-04	4.67E-04	3.91E-05	5.52E-05	2.13E-04	1.65E-05
125	463893.3	3809614	7.16E-04	1.76E-03	1.44E-04	7.08E-04	2.55E-03	2.34E-04	1.15E-04	4.72E-04	3.95E-05	5.57E-05	2.15E-04	1.66E-05
126	463913.3	3809614	7.23E-04	1.77E-03	1.46E-04	7.15E-04	2.57E-03	2.36E-04	1.16E-04	4.77E-04	3.98E-05	5.63E-05	2.17E-04	1.68E-05
127	463933.3	3809614	7.28E-04	1.79E-03	1.47E-04	7.20E-04	2.59E-03	2.38E-04	1.17E-04	4.80E-04	4.01E-05	5.67E-05	2.18E-04	1.69E-05
128	463953.3	3809614	7.28E-04	1.79E-03	1.47E-04	7.20E-04	2.59E-03	2.38E-04	1.17E-04	4.80E-04	4.01E-05	5.67E-05	2.18E-04	1.69E-05
129	463973.3	3809614	7.26E-04	1.78E-03	1.46E-04	7.18E-04	2.58E-03	2.37E-04	1.17E-04	4.79E-04	4.00E-05	5.65E-05	2.18E-04	1.69E-05
130	463993.3	3809614	7.22E-04	1.77E-03	1.46E-04	7.14E-04	2.57E-03	2.36E-04	1.16E-04	4.76E-04	3.98E-05	5.62E-05	2.17E-04	1.68E-05
131	464013.3	3809614	7.16E-04	1.76E-03	1.44E-04	7.08E-04	2.55E-03	2.34E-04	1.15E-04	4.72E-04	3.95E-05	5.57E-05	2.15E-04	1.66E-05
132	464033.3	3809614	7.09E-04	1.74E-03	1.43E-04	7.01E-04	2.52E-03	2.32E-04	1.14E-04	4.67E-04	3.91E-05	5.51E-05	2.13E-04	1.65E-05
133	464053.3	3809614	7.00E-04	1.72E-03	1.41E-04	6.93E-04	2.49E-03	2.29E-04	1.12E-04	4.62E-04	3.86E-05	5.45E-05	2.10E-04	1.63E-05
134	464073.3	3809614	6.90E-04	1.69E-03	1.39E-04	6.82E-04	2.45E-03	2.26E-04	1.11E-04	4.55E-04	3.80E-05	5.37E-05	2.07E-04	1.60E-05
135	464093.3	3809614	6.80E-04	1.67E-03	1.37E-04	6.73E-04	2.42E-03	2.23E-04	1.09E-04	4.49E-04	3.75E-05	5.30E-05	2.04E-04	1.58E-05
136	464113.3	3809614	6.71E-04	1.65E-03	1.35E-04	6.64E-04	2.39E-03	2.19E-04	1.08E-04	4.42E-04	3.70E-05	5.22E-05	2.01E-04	1.56E-05
137	464133.3	3809614	6.60E-04	1.62E-03	1.33E-04	6.53E-04	2.35E-03	2.16E-04	1.06E-04	4.35E-04	3.64E-05	5.14E-05	1.98E-04	1.53E-05
138	464153.3	3809614	6.50E-04	1.59E-03	1.31E-04	6.42E-04	2.31E-03	2.12E-04	1.04E-04	4.28E-04	3.58E-05	5.06E-05	1.95E-04	1.51E-05
139	464173.3	3809614	6.38E-04	1.57E-03	1.29E-04	6.31E-04	2.27E-03	2.09E-04	1.02E-04	4.21E-04	3.52E-05	4.97E-05	1.91E-04	1.48E-05
140	464193.3	3809614	6.26E-04	1.54E-03	1.26E-04	6.19E-04	2.23E-03	2.05E-04	1.01E-04	4.13E-04	3.45E-05	4.87E-05	1.88E-04	1.46E-05
141	464213.3	3809614	6.15E-04	1.51E-03	1.24E-04	6.08E-04	2.19E-03	2.01E-04	9.87E-05	4.05E-04	3.39E-05	4.79E-05	1.84E-04	1.43E-05
142	464233.3	3809614	6.04E-04	1.48E-03	1.22E-04	5.97E-04	2.15E-03	1.97E-04	9.69E-05	3.98E-04	3.33E-05	4.70E-05	1.81E-04	1.40E-05
143	464253.3	3809614	5.91E-04	1.45E-03	1.19E-04	5.85E-04	2.10E-03	1.93E-04	9.49E-05	3.90E-04	3.26E-05	4.60E-05	1.77E-04	1.37E-05
144	464273.3	3809614	5.79E-04	1.42E-03	1.17E-04	5.72E-04	2.06E-03	1.89E-04	9.29E-05	3.82E-04	3.19E-05	4.50E-05	1.74E-04	1.34E-05
145	464293.3	3809614	5.66E-04	1.39E-03	1.14E-04	5.60E-04	2.01E-03	1.85E-04	9.09E-05	3.73E-04	3.12E-05	4.41E-05	1.70E-04	1.32E-05
146	464313.3	3809614	5.55E-04	1.36E-03	1.12E-04	5.49E-04	1.97E-03	1.81E-04	8.91E-05	3.66E-04	3.06E-05	4.32E-05	1.66E-04	1.29E-05
147	464333.3	3809614	5.43E-04	1.33E-03	1.09E-04	5.37E-04	1.93E-03	1.78E-04	8.72E-05	3.58E-04	2.99E-05	4.23E-05	1.63E-04	1.26E-05
148	464353.3	3809614	5.31E-04	1.30E-03	1.07E-04	5.25E-04	1.89E-03	1.74E-04	8.52E-05	3.50E-04	2.93E-05	4.13E-05	1.59E-04	1.23E-05
149	464373.3	3809614	5.18E-04	1.27E-03	1.04E-04	5.12E-04	1.84E-03	1.69E-04	8.32E-05	3.42E-04	2.86E-05	4.03E-05	1.55E-04	1.20E-05
150	464393.3	3809614	5.06E-04	1.24E-03	1.02E-04	5.01E-04	1.80E-03	1.66E-04	8.13E-05	3.34E-04	2.79E-05	3.94E-05	1.52E-04	1.18E-05
151	464413.3	3809614	4.95E-04	1.22E-03	9.98E-05	4.90E-04	1.76E-03	1.62E-04	7.95E-05	3.26E-04	2.73E-05	3.85E-05	1.49E-04	1.15E-05
152	464433.3	3809614	4.83E-04	1.19E-03	9.74E-05	4.78E-04	1.72E-03	1.58E-04	7.75E-05	3.18E-04	2.66E-05	3.76E-05	1.45E-04	1.12E-05
153	4644													

180	464233.3	3809634	5.86E-04	1.44E-03	1.18E-04	5.80E-04	2.08E-03	1.92E-04	9.41E-05	3.86E-04	3.23E-05	4.56E-05	1.76E-04	1.36E-05
181	464253.3	3809634	5.75E-04	1.41E-03	1.16E-04	5.68E-04	2.04E-03	1.88E-04	9.23E-05	3.79E-04	3.17E-05	4.47E-05	1.72E-04	1.34E-05
182	464273.3	3809634	5.63E-04	1.38E-03	1.13E-04	5.56E-04	2.00E-03	1.84E-04	9.03E-05	3.71E-04	3.10E-05	4.38E-05	1.69E-04	1.31E-05
183	464293.3	3809634	5.50E-04	1.35E-03	1.11E-04	5.44E-04	1.96E-03	1.80E-04	8.83E-05	3.63E-04	3.03E-05	4.28E-05	1.65E-04	1.28E-05
184	464313.3	3809634	5.39E-04	1.32E-03	1.09E-04	5.33E-04	1.92E-03	1.76E-04	8.65E-05	3.55E-04	2.97E-05	4.19E-05	1.62E-04	1.25E-05
185	464333.3	3809634	5.28E-04	1.30E-03	1.06E-04	5.22E-04	1.88E-03	1.73E-04	8.48E-05	3.48E-04	2.91E-05	4.11E-05	1.58E-04	1.23E-05
186	464353.3	3809634	5.17E-04	1.27E-03	1.04E-04	5.12E-04	1.84E-03	1.69E-04	8.31E-05	3.41E-04	2.85E-05	4.03E-05	1.55E-04	1.20E-05
187	464373.3	3809634	5.05E-04	1.24E-03	1.02E-04	5.00E-04	1.80E-03	1.65E-04	8.11E-05	3.33E-04	2.79E-05	3.93E-05	1.52E-04	1.17E-05
188	464393.3	3809634	4.94E-04	1.21E-03	9.97E-05	4.89E-04	1.76E-03	1.62E-04	7.94E-05	3.26E-04	2.73E-05	3.85E-05	1.48E-04	1.15E-05
189	464413.3	3809634	4.84E-04	1.19E-03	9.75E-05	4.78E-04	1.72E-03	1.58E-04	7.77E-05	3.19E-04	2.67E-05	3.77E-05	1.45E-04	1.12E-05
190	464433.3	3809634	4.73E-04	1.16E-03	9.53E-05	4.67E-04	1.68E-03	1.55E-04	7.59E-05	3.12E-04	2.61E-05	3.68E-05	1.42E-04	1.10E-05
191	464453.3	3809634	4.62E-04	1.13E-03	9.31E-05	4.57E-04	1.64E-03	1.51E-04	7.41E-05	3.04E-04	2.55E-05	3.59E-05	1.39E-04	1.07E-05
192	464473.3	3809634	4.51E-04	1.11E-03	9.09E-05	4.46E-04	1.60E-03	1.47E-04	7.23E-05	2.97E-04	2.48E-05	3.51E-05	1.35E-04	1.05E-05
193	464493.3	3809634	4.38E-04	1.08E-03	8.83E-05	4.33E-04	1.56E-03	1.43E-04	7.03E-05	2.89E-04	2.42E-05	3.41E-05	1.31E-04	1.02E-05
194	463753.3	3809654	6.14E-04	1.51E-03	1.24E-04	6.08E-04	2.19E-03	2.01E-04	9.87E-05	4.05E-04	3.39E-05	4.78E-05	1.84E-04	1.43E-05
195	463773.3	3809654	6.24E-04	1.53E-03	1.26E-04	6.17E-04	2.22E-03	2.04E-04	1.00E-04	4.11E-04	3.44E-05	4.85E-05	1.87E-04	1.45E-05
196	463793.3	3809654	6.31E-04	1.55E-03	1.27E-04	6.24E-04	2.24E-03	2.06E-04	1.01E-04	4.16E-04	3.48E-05	4.91E-05	1.89E-04	1.47E-05
197	463813.3	3809654	6.37E-04	1.56E-03	1.28E-04	6.30E-04	2.26E-03	2.08E-04	1.02E-04	4.20E-04	3.51E-05	4.96E-05	1.91E-04	1.48E-05
198	463833.3	3809654	6.44E-04	1.58E-03	1.30E-04	6.37E-04	2.29E-03	2.11E-04	1.03E-04	4.25E-04	3.55E-05	5.01E-05	1.93E-04	1.50E-05
199	463853.3	3809654	6.49E-04	1.59E-03	1.31E-04	6.42E-04	2.31E-03	2.12E-04	1.04E-04	4.28E-04	3.58E-05	5.05E-05	1.95E-04	1.51E-05
200	463873.3	3809654	6.53E-04	1.60E-03	1.32E-04	6.46E-04	2.32E-03	2.14E-04	1.05E-04	4.31E-04	3.60E-05	5.08E-05	1.96E-04	1.52E-05
201	463893.3	3809654	6.59E-04	1.62E-03	1.33E-04	6.51E-04	2.34E-03	2.15E-04	1.06E-04	4.34E-04	3.63E-05	5.13E-05	1.98E-04	1.53E-05
202	463913.3	3809654	6.64E-04	1.63E-03	1.34E-04	6.57E-04	2.36E-03	2.17E-04	1.07E-04	4.38E-04	3.66E-05	5.17E-05	1.99E-04	1.54E-05
203	463933.3	3809654	6.68E-04	1.64E-03	1.35E-04	6.61E-04	2.38E-03	2.18E-04	1.07E-04	4.41E-04	3.68E-05	5.20E-05	2.00E-04	1.55E-05
204	463953.3	3809654	6.66E-04	1.64E-03	1.34E-04	6.59E-04	2.37E-03	2.18E-04	1.07E-04	4.39E-04	3.67E-05	5.19E-05	2.00E-04	1.55E-05
205	463973.3	3809654	6.64E-04	1.63E-03	1.34E-04	6.57E-04	2.36E-03	2.17E-04	1.07E-04	4.38E-04	3.66E-05	5.17E-05	1.99E-04	1.54E-05
206	463993.3	3809654	6.61E-04	1.62E-03	1.33E-04	6.54E-04	2.35E-03	2.16E-04	1.06E-04	4.36E-04	3.65E-05	5.15E-05	1.98E-04	1.54E-05
207	464013.3	3809654	6.61E-04	1.62E-03	1.33E-04	6.54E-04	2.35E-03	2.16E-04	1.06E-04	4.36E-04	3.64E-05	5.14E-05	1.98E-04	1.54E-05
208	464033.3	3809654	6.57E-04	1.61E-03	1.33E-04	6.50E-04	2.34E-03	2.15E-04	1.06E-04	4.33E-04	3.62E-05	5.12E-05	1.97E-04	1.53E-05
209	464053.3	3809654	6.52E-04	1.60E-03	1.31E-04	6.45E-04	2.32E-03	2.13E-04	1.05E-04	4.30E-04	3.59E-05	5.07E-05	1.95E-04	1.51E-05
210	464073.3	3809654	6.43E-04	1.58E-03	1.30E-04	6.36E-04	2.29E-03	2.10E-04	1.03E-04	4.24E-04	3.54E-05	5.00E-05	1.93E-04	1.49E-05
211	464093.3	3809654	6.36E-04	1.56E-03	1.28E-04	6.29E-04	2.26E-03	2.08E-04	1.02E-04	4.19E-04	3.50E-05	4.95E-05	1.91E-04	1.48E-05
212	464113.3	3809654	6.29E-04	1.54E-03	1.27E-04	6.22E-04	2.24E-03	2.06E-04	1.01E-04	4.15E-04	3.47E-05	4.89E-05	1.89E-04	1.46E-05
213	464133.3	3809654	6.21E-04	1.52E-03	1.25E-04	6.14E-04	2.21E-03	2.03E-04	9.97E-05	4.10E-04	3.42E-05	4.83E-05	1.86E-04	1.44E-05
214	464153.3	3809654	6.11E-04	1.50E-03	1.23E-04	6.04E-04	2.17E-03	2.00E-04	9.81E-05	4.03E-04	3.37E-05	4.75E-05	1.83E-04	1.42E-05
215	464173.3	3809654	6.00E-04	1.47E-03	1.21E-04	5.93E-04	2.13E-03	1.96E-04	9.63E-05	3.96E-04	3.31E-05	4.67E-05	1.80E-04	1.39E-05
216	464193.3	3809654	5.90E-04	1.45E-03	1.19E-04	5.84E-04	2.10E-03	1.93E-04	9.48E-05	3.89E-04	3.25E-05	4.60E-05	1.77E-04	1.37E-05
217	464213.3	3809654	5.81E-04	1.43E-03	1.17E-04	5.74E-04	2.07E-03	1.90E-04	9.32E-05	3.83E-04	3.20E-05	4.52E-05	1.74E-04	1.35E-05
218	464233.3	3809654	5.70E-04	1.40E-03	1.15E-04	5.64E-04	2.03E-03	1.87E-04	9.16E-05	3.76E-04	3.15E-05	4.44E-05	1.71E-04	1.33E-05
219	464253.3	3809654	5.58E-04	1.37E-03	1.12E-04	5.52E-04	1.98E-03	1.82E-04	8.96E-05	3.68E-04	3.08E-05	4.34E-05	1.67E-04	1.30E-05
220	464273.3	3809654	5.47E-04	1.34E-03	1.10E-04	5.41E-04	1.95E-03	1.79E-04	8.78E-05	3.61E-04	3.02E-05	4.26E-05	1.64E-04	1.27E-05
221	464293.3	3809654	5.36E-04	1.32E-03	1.08E-04	5.31E-04	1.91E-03	1.75E-04	8.61E-05	3.54E-04	2.96E-05	4.17E-05	1.61E-04	1.25E-05
222	464313.3	3809654	5.24E-04	1.29E-03	1.06E-04	5.18E-04	1.86E-03	1.71E-04	8.41E-05	3.46E-04	2.89E-05	4.08E-05	1.57E-04	1.22E-05
223	464333.3	3809654	5.13E-04	1.26E-03	1.04E-04	5.08E-04	1.83E-03	1.68E-04	8.24E-05	3.39E-04	2.83E-05	4.00E-05	1.54E-04	1.19E-05
224	464353.3	3809654	5.04E-04	1.24E-03	1.02E-04	4.98E-04	1.79E-03	1.65E-04	8.08E-05	3.32E-04	2.78E-05	3.92E-05	1.51E-04	1.17E-05
225	464373.3	3809654	4.94E-04	1.21E-03	9.95E-05	4.88E-04	1.76E-03	1.61E-04	7.92E-05	3.25E-04	2.72E-05	3.84E-05	1.48E-04	1.15E-05
226	464393.3	3809654	4.84E-04	1.19E-03	9.75E-05	4.78E-04	1.72E-03	1.58E-04	7.77E-05	3.19E-04	2.67E-05	3.76E-05	1.45E-04	1.12E-05
227	464413.3	3809654	4.74E-04	1.16E-03	9.55E-05	4.68E-04	1.68E-03	1.55E-04	7.60E-05	3.12E-04	2.61E-05	3.69E-05	1.42E-04	1.10E-05
228	464433.3	3809654	4.62E-04	1.13E-03	9.31E-05	4.57E-04	1.64E-03	1.51E-04	7.41E-05	3.04E-04	2.55E-05	3.59E-05	1.38E-04	1.07E-05
229	464453.3	3809654	4.51E-04	1.11E-03	9.09E-05	4.46E-04	1.60E-03	1.48E-04	7.24E-05	2.97E-04	2.49E-05	3.51E-05	1.35E-04	1.05E-05
230	464473.3	3809654	4.41E-04	1.08E-03	8.89E-05	4.36E-04	1.57E-03	1.44E-04	7.08E-05	2.91E-04	2.43E-05	3.43E-05	1.32E-04	1.02E-05
231	464493.3	3809654	4.30E-04	1.06E-03	8.68E-05	4.26E-04	1.53E-03	1.41E-04	6.91E-05	2.84E-04	2.37E-05	3.35E-05	1.29E-04	1.00E-05
232	463753.3	3809674	5.92E-04	1.45E-03	1.19E-04	5.86E-04	2.11E-03	1.94E-04	9.50E-05	3.90E-04	3.26E-05	4.61E-05	1.78E-04	1.38E-05
233	463773.3	3809674	6.00E-04	1.47E-03	1.21E-04	5.94E-04	2.13E-03	1.96E-04	9.64E-05	3.96E-04	3.31E-05	4.67E-05	1.80E-04	1.40E-05
234	463793.3	3809674	6.08E-04	1.49E-03	1.23E-04	6.01E-04	2.16E-03	1.99E-04	9.76E-05	4.01E-04	3.35E-05	4.73E-05	1.82E-04	1.41E-05
235	463813.3	3809674	6.15E-04	1.51E-03	1.24E-04	6.09E-04	2.19E-03	2.01E-04	9.88E-05	4.06E-04	3.39E-05	4.79E-05	1.85E-04	1.43E-05
236	463833.3	3809674	6.20E-04	1.52E-03	1.25E-04	6.14E-04	2.21E-03	2.03E-04	9.96E-05	4.09E-04	3.42E-05	4.83E-05	1.86E-04	1.44E-05
237	463853.3	3809674	6.24E-04	1.53E-03	1.26E-04	6.17E-04	2.22E-03	2.04E-04	1.00E-04	4.12E-04	3.44E-05	4.86E-05	1.87E-04	1.45E-05
238	463873.3	3809674	6.28E-04	1.54E-03	1.27E-04	6.21E-04	2.23E-03	2.05E-04	1.01E-04	4.14E-04	3.46E-05	4.89E-05	1.88E-04	1.46E-05
239	463893.3	3809674	6.33E-04	1.55E-03	1.28E-04	6.26E-04	2.25E-03	2.07E-04	1.02E-04	4.17E-04	3.49E-05	4.92E-05	1.90E-04	1.47E-05
240	463913.3	3809674	6.37E-04	1.56E-03	1.29E-04	6.31E-04	2.27E-03	2.08E-04	1.02E-04	4.20E-04	3.51E-05	4.96E-05	1.91E-04	1.48E-05
241	463933.3	3809674	6.41E-04	1.57E-03	1.29E-04	6.35E-04	2.28E-03	2.10E-04	1.03E-04	4.23E-04	3.54E-05	4.99E-05	1.92E-04	1.49E-05
242	463953.3	3809674	6.41E-04	1.57E-03	1.29E-04	6.35E-04	2.28E-03	2.10E-04	1.03E-04	4.23E-04	3.54E-05	4.99E-05	1.92E-04	1.49E-05
243	463973.3	3809674	6.40E-04	1.57E-03	1.29E-04	6.33E-04	2.28E-03	2.09E-04	1.03E-04	4.22E-04	3.53E-05	4.98E-05	1.92E-04	1.49E-05
2														

271	463793.3	3809694	5.86E-04	1.44E-03	1.18E-04	5.80E-04	2.09E-03	1.92E-04	9.41E-05	3.87E-04	3.23E-05	4.56E-05	1.76E-04	1.36E-05
272	463813.3	3809694	5.93E-04	1.46E-03	1.20E-04	5.87E-04	2.11E-03	1.94E-04	9.53E-05	3.91E-04	3.27E-05	4.62E-05	1.78E-04	1.38E-05
273	463833.3	3809694	5.98E-04	1.47E-03	1.21E-04	5.91E-04	2.13E-03	1.95E-04	9.60E-05	3.94E-04	3.30E-05	4.65E-05	1.79E-04	1.39E-05
274	463853.3	3809694	6.01E-04	1.48E-03	1.21E-04	5.95E-04	2.14E-03	1.97E-04	9.66E-05	3.97E-04	3.32E-05	4.68E-05	1.80E-04	1.40E-05
275	463873.3	3809694	6.05E-04	1.48E-03	1.22E-04	5.98E-04	2.15E-03	1.98E-04	9.71E-05	3.99E-04	3.33E-05	4.71E-05	1.81E-04	1.41E-05
276	463893.3	3809694	6.09E-04	1.49E-03	1.23E-04	6.02E-04	2.16E-03	1.99E-04	9.77E-05	4.01E-04	3.36E-05	4.74E-05	1.83E-04	1.41E-05
277	463913.3	3809694	6.13E-04	1.50E-03	1.24E-04	6.06E-04	2.18E-03	2.00E-04	9.84E-05	4.04E-04	3.38E-05	4.77E-05	1.84E-04	1.42E-05
278	463933.3	3809694	6.16E-04	1.51E-03	1.24E-04	6.10E-04	2.19E-03	2.02E-04	9.90E-05	4.07E-04	3.40E-05	4.80E-05	1.85E-04	1.43E-05
279	463953.3	3809694	6.18E-04	1.52E-03	1.25E-04	6.11E-04	2.20E-03	2.02E-04	9.91E-05	4.07E-04	3.41E-05	4.81E-05	1.85E-04	1.44E-05
280	463973.3	3809694	6.17E-04	1.51E-03	1.24E-04	6.10E-04	2.19E-03	2.02E-04	9.90E-05	4.07E-04	3.40E-05	4.80E-05	1.85E-04	1.43E-05
281	463993.3	3809694	6.15E-04	1.51E-03	1.24E-04	6.08E-04	2.19E-03	2.01E-04	9.87E-05	4.06E-04	3.39E-05	4.79E-05	1.84E-04	1.43E-05
282	464013.3	3809694	6.12E-04	1.50E-03	1.23E-04	6.05E-04	2.18E-03	2.00E-04	9.82E-05	4.04E-04	3.37E-05	4.76E-05	1.84E-04	1.42E-05
283	464033.3	3809694	6.10E-04	1.50E-03	1.23E-04	6.04E-04	2.17E-03	2.00E-04	9.80E-05	4.02E-04	3.36E-05	4.75E-05	1.83E-04	1.42E-05
284	464053.3	3809694	6.09E-04	1.49E-03	1.23E-04	6.02E-04	2.17E-03	1.99E-04	9.77E-05	4.01E-04	3.36E-05	4.74E-05	1.83E-04	1.41E-05
285	464073.3	3809694	6.04E-04	1.48E-03	1.22E-04	5.97E-04	2.15E-03	1.98E-04	9.70E-05	3.98E-04	3.33E-05	4.70E-05	1.81E-04	1.40E-05
286	464093.3	3809694	5.99E-04	1.47E-03	1.21E-04	5.92E-04	2.13E-03	1.96E-04	9.61E-05	3.95E-04	3.30E-05	4.66E-05	1.80E-04	1.39E-05
287	464113.3	3809694	5.92E-04	1.45E-03	1.19E-04	5.86E-04	2.11E-03	1.94E-04	9.51E-05	3.91E-04	3.27E-05	4.61E-05	1.78E-04	1.38E-05
288	464133.3	3809694	5.84E-04	1.43E-03	1.18E-04	5.77E-04	2.08E-03	1.91E-04	9.37E-05	3.85E-04	3.22E-05	4.54E-05	1.75E-04	1.36E-05
289	464153.3	3809694	5.76E-04	1.41E-03	1.16E-04	5.70E-04	2.05E-03	1.88E-04	9.25E-05	3.80E-04	3.18E-05	4.48E-05	1.73E-04	1.34E-05
290	464173.3	3809694	5.68E-04	1.39E-03	1.15E-04	5.62E-04	2.02E-03	1.86E-04	9.12E-05	3.75E-04	3.13E-05	4.42E-05	1.70E-04	1.32E-05
291	464193.3	3809694	5.59E-04	1.37E-03	1.13E-04	5.53E-04	1.99E-03	1.83E-04	8.97E-05	3.69E-04	3.08E-05	4.35E-05	1.68E-04	1.30E-05
292	464213.3	3809694	5.49E-04	1.35E-03	1.11E-04	5.43E-04	1.95E-03	1.80E-04	8.81E-05	3.62E-04	3.03E-05	4.27E-05	1.65E-04	1.28E-05
293	464233.3	3809694	5.38E-04	1.32E-03	1.09E-04	5.32E-04	1.91E-03	1.76E-04	8.64E-05	3.55E-04	2.97E-05	4.19E-05	1.61E-04	1.25E-05
294	464253.3	3809694	5.29E-04	1.30E-03	1.07E-04	5.23E-04	1.88E-03	1.73E-04	8.48E-05	3.49E-04	2.91E-05	4.11E-05	1.59E-04	1.23E-05
295	464273.3	3809694	5.18E-04	1.27E-03	1.04E-04	5.12E-04	1.84E-03	1.69E-04	8.32E-05	3.42E-04	2.86E-05	4.03E-05	1.55E-04	1.20E-05
296	464293.3	3809694	5.07E-04	1.25E-03	1.02E-04	5.02E-04	1.80E-03	1.66E-04	8.15E-05	3.35E-04	2.80E-05	3.95E-05	1.52E-04	1.18E-05
297	464313.3	3809694	4.98E-04	1.22E-03	1.00E-04	4.93E-04	1.77E-03	1.63E-04	8.00E-05	3.29E-04	2.75E-05	3.88E-05	1.50E-04	1.16E-05
298	464333.3	3809694	4.89E-04	1.20E-03	9.86E-05	4.84E-04	1.74E-03	1.60E-04	7.85E-05	3.23E-04	2.70E-05	3.81E-05	1.47E-04	1.14E-05
299	464353.3	3809694	4.80E-04	1.18E-03	9.67E-05	4.75E-04	1.71E-03	1.57E-04	7.70E-05	3.16E-04	2.65E-05	3.73E-05	1.44E-04	1.12E-05
300	464373.3	3809694	4.71E-04	1.16E-03	9.50E-05	4.66E-04	1.68E-03	1.54E-04	7.56E-05	3.11E-04	2.60E-05	3.67E-05	1.41E-04	1.09E-05
301	464393.3	3809694	4.61E-04	1.13E-03	9.30E-05	4.56E-04	1.64E-03	1.51E-04	7.41E-05	3.04E-04	2.54E-05	3.59E-05	1.38E-04	1.07E-05
302	464413.3	3809694	4.51E-04	1.11E-03	9.10E-05	4.46E-04	1.61E-03	1.48E-04	7.25E-05	2.98E-04	2.49E-05	3.51E-05	1.35E-04	1.05E-05
303	464433.3	3809694	4.42E-04	1.08E-03	8.91E-05	4.37E-04	1.57E-03	1.45E-04	7.10E-05	2.92E-04	2.44E-05	3.44E-05	1.33E-04	1.03E-05
304	464453.3	3809694	4.33E-04	1.06E-03	8.73E-05	4.28E-04	1.54E-03	1.42E-04	6.95E-05	2.86E-04	2.39E-05	3.37E-05	1.30E-04	1.01E-05
305	464473.3	3809694	4.24E-04	1.04E-03	8.55E-05	4.19E-04	1.51E-03	1.39E-04	6.81E-05	2.80E-04	2.34E-05	3.30E-05	1.27E-04	9.86E-06
306	464493.3	3809694	4.14E-04	1.02E-03	8.34E-05	4.09E-04	1.47E-03	1.35E-04	6.64E-05	2.73E-04	2.28E-05	3.22E-05	1.24E-04	9.62E-06
307	463773.3	3809714	5.59E-04	1.37E-03	1.13E-04	5.53E-04	1.99E-03	1.83E-04	8.98E-05	3.69E-04	3.08E-05	4.35E-05	1.68E-04	1.30E-05
308	463793.3	3809714	5.66E-04	1.39E-03	1.14E-04	5.59E-04	2.01E-03	1.85E-04	9.08E-05	3.73E-04	3.12E-05	4.40E-05	1.70E-04	1.31E-05
309	463813.3	3809714	5.71E-04	1.40E-03	1.15E-04	5.65E-04	2.03E-03	1.87E-04	9.17E-05	3.77E-04	3.15E-05	4.44E-05	1.71E-04	1.33E-05
310	463833.3	3809714	5.76E-04	1.41E-03	1.16E-04	5.70E-04	2.05E-03	1.88E-04	9.25E-05	3.80E-04	3.18E-05	4.48E-05	1.73E-04	1.34E-05
311	463853.3	3809714	5.80E-04	1.42E-03	1.17E-04	5.74E-04	2.06E-03	1.90E-04	9.32E-05	3.83E-04	3.20E-05	4.52E-05	1.74E-04	1.35E-05
312	463873.3	3809714	5.84E-04	1.43E-03	1.18E-04	5.78E-04	2.08E-03	1.91E-04	9.38E-05	3.85E-04	3.22E-05	4.55E-05	1.75E-04	1.36E-05
313	463893.3	3809714	5.86E-04	1.44E-03	1.18E-04	5.80E-04	2.09E-03	1.92E-04	9.41E-05	3.87E-04	3.23E-05	4.56E-05	1.76E-04	1.36E-05
314	463913.3	3809714	5.90E-04	1.45E-03	1.19E-04	5.83E-04	2.10E-03	1.93E-04	9.46E-05	3.89E-04	3.25E-05	4.59E-05	1.77E-04	1.37E-05
315	463933.3	3809714	5.93E-04	1.45E-03	1.20E-04	5.86E-04	2.11E-03	1.94E-04	9.52E-05	3.91E-04	3.27E-05	4.61E-05	1.78E-04	1.38E-05
316	463953.3	3809714	5.94E-04	1.46E-03	1.20E-04	5.87E-04	2.11E-03	1.94E-04	9.53E-05	3.92E-04	3.27E-05	4.62E-05	1.78E-04	1.38E-05
317	463973.3	3809714	5.94E-04	1.46E-03	1.20E-04	5.88E-04	2.11E-03	1.94E-04	9.54E-05	3.92E-04	3.28E-05	4.63E-05	1.78E-04	1.38E-05
318	463993.3	3809714	5.94E-04	1.46E-03	1.20E-04	5.88E-04	2.11E-03	1.94E-04	9.54E-05	3.92E-04	3.28E-05	4.63E-05	1.78E-04	1.38E-05
319	464013.3	3809714	5.91E-04	1.45E-03	1.19E-04	5.85E-04	2.10E-03	1.93E-04	9.50E-05	3.90E-04	3.26E-05	4.60E-05	1.77E-04	1.37E-05
320	464033.3	3809714	5.90E-04	1.45E-03	1.19E-04	5.84E-04	2.10E-03	1.93E-04	9.47E-05	3.89E-04	3.25E-05	4.59E-05	1.77E-04	1.37E-05
321	464053.3	3809714	5.89E-04	1.44E-03	1.19E-04	5.82E-04	2.09E-03	1.93E-04	9.45E-05	3.88E-04	3.25E-05	4.58E-05	1.77E-04	1.37E-05
322	464073.3	3809714	5.84E-04	1.43E-03	1.18E-04	5.78E-04	2.08E-03	1.91E-04	9.38E-05	3.85E-04	3.22E-05	4.55E-05	1.75E-04	1.36E-05
323	464093.3	3809714	5.79E-04	1.42E-03	1.17E-04	5.73E-04	2.06E-03	1.89E-04	9.30E-05	3.82E-04	3.19E-05	4.51E-05	1.74E-04	1.35E-05
324	464113.3	3809714	5.74E-04	1.41E-03	1.16E-04	5.68E-04	2.04E-03	1.88E-04	9.21E-05	3.78E-04	3.16E-05	4.47E-05	1.72E-04	1.33E-05
325	464133.3	3809714	5.68E-04	1.39E-03	1.14E-04	5.61E-04	2.02E-03	1.86E-04	9.11E-05	3.74E-04	3.13E-05	4.42E-05	1.70E-04	1.32E-05
326	464153.3	3809714	5.61E-04	1.38E-03	1.13E-04	5.55E-04	1.99E-03	1.83E-04	9.00E-05	3.70E-04	3.09E-05	4.37E-05	1.68E-04	1.30E-05
327	464173.3	3809714	0.000553	0.001357	0.000112	5.47E-04	1.97E-03	1.81E-04	8.88E-05	3.65E-04	3.05E-05	4.30E-05	1.66E-04	1.29E-05
328	464193.3	3809714	0.000543	0.001332	0.000109	5.37E-04	1.93E-03	1.77E-04	8.71E-05	3.58E-04	2.99E-05	4.22E-05	1.63E-04	1.26E-05
329	464213.3	3809714	0.000534	0.00131	0.000108	5.28E-04	1.90E-03	1.75E-04	8.57E-05	3.52E-04	2.94E-05	4.15E-05	1.60E-04	1.24E-05
330	464233.3	3809714	0.000525	0.001288	0.000106	5.19E-04	1.87E-03	1.72E-04	8.42E-05	3.46E-04	2.89E-05	4.08E-05	1.57E-04	1.22E-05
331	464253.3	3809714	0.000514	0.001261	0.000104	5.08E-04	1.83E-03	1.68E-04	8.25E-05	3.39E-04	2.83E-05	4.00E-05	1.54E-04	1.19E-05
332	464273.3	3809714	0.000504	0.001237	0.000102	4.99E-04	1.79E-03	1.65E-04	8.09E-05	3.33E-04	2.78E-05	3.92E-05	1.51E-04	1.17E-05
333	464293.3	3809714	0.000495	0.001216	9.99E-05	4.90E-04	1.76E-03	1.62E-04	7.95E-05	3.27E-04	2.73E-05	3.86E-05	1.49E-04	1.15E-05
334	464313.3	3809714	0.000487	0.001195	9.81E-05	4.82E-04	1.73E-03	1.59E-04	7.81E-05	3.21E-04	2.68E-05	3.79E-05	1.46E-04	1.13E-05
33														

362	464153.3	3809734	0.000546	0.001341	0.00011	5.40E-04	1.94E-03	1.79E-04	8.77E-05	3.60E-04	3.01E-05	4.25E-05	1.64E-04	1.27E-05
363	464173.3	3809734	0.000539	0.001323	0.000109	5.33E-04	1.92E-03	1.76E-04	8.65E-05	3.55E-04	2.97E-05	4.20E-05	1.62E-04	1.25E-05
364	464193.3	3809734	0.000529	0.001298	0.000107	5.23E-04	1.88E-03	1.73E-04	8.49E-05	3.49E-04	2.92E-05	4.12E-05	1.59E-04	1.23E-05
365	464213.3	3809734	0.00052	0.001277	0.000105	5.15E-04	1.85E-03	1.70E-04	8.35E-05	3.43E-04	2.87E-05	4.05E-05	1.56E-04	1.21E-05
366	464233.3	3809734	0.000512	0.001256	0.000103	5.06E-04	1.82E-03	1.67E-04	8.22E-05	3.38E-04	2.82E-05	3.98E-05	1.54E-04	1.19E-05
367	464253.3	3809734	0.000501	0.00123	0.000101	4.96E-04	1.78E-03	1.64E-04	8.05E-05	3.31E-04	2.76E-05	3.90E-05	1.50E-04	1.16E-05
368	464273.3	3809734	0.000492	0.001208	9.92E-05	4.87E-04	1.75E-03	1.61E-04	7.90E-05	3.25E-04	2.71E-05	3.83E-05	1.48E-04	1.14E-05
369	464293.3	3809734	0.000484	0.001187	9.75E-05	4.78E-04	1.72E-03	1.58E-04	7.76E-05	3.19E-04	2.67E-05	3.76E-05	1.45E-04	1.12E-05
370	464313.3	3809734	0.000474	0.001163	9.56E-05	4.69E-04	1.69E-03	1.55E-04	7.61E-05	3.13E-04	2.61E-05	3.69E-05	1.42E-04	1.10E-05
371	464333.3	3809734	0.000465	0.001141	9.37E-05	4.60E-04	1.65E-03	1.52E-04	7.46E-05	3.07E-04	2.56E-05	3.62E-05	1.39E-04	1.08E-05
372	464353.3	3809734	0.000456	0.00112	9.2E-05	4.51E-04	1.62E-03	1.49E-04	7.32E-05	3.01E-04	2.52E-05	3.55E-05	1.37E-04	1.06E-05
373	464373.3	3809734	0.000448	0.0011	9.04E-05	4.44E-04	1.59E-03	1.47E-04	7.20E-05	2.96E-04	2.47E-05	3.49E-05	1.35E-04	1.04E-05
374	464393.3	3809734	0.00044	0.001079	8.87E-05	4.35E-04	1.56E-03	1.44E-04	7.06E-05	2.90E-04	2.43E-05	3.42E-05	1.32E-04	1.02E-05
375	464413.3	3809734	0.000431	0.001058	8.69E-05	4.26E-04	1.53E-03	1.41E-04	6.92E-05	2.84E-04	2.38E-05	3.36E-05	1.29E-04	1.00E-05
376	464433.3	3809734	0.000423	0.001037	8.52E-05	4.18E-04	1.50E-03	1.38E-04	6.78E-05	2.79E-04	2.33E-05	3.29E-05	1.27E-04	9.82E-06
377	464453.3	3809734	0.000415	0.001018	8.36E-05	4.10E-04	1.47E-03	1.36E-04	6.66E-05	2.73E-04	2.29E-05	3.23E-05	1.24E-04	9.64E-06
378	464473.3	3809734	0.000407	0.000998	8.2E-05	4.02E-04	1.45E-03	1.33E-04	6.53E-05	2.68E-04	2.24E-05	3.17E-05	1.22E-04	9.46E-06
379	464493.3	3809734	0.000399	0.000979	8.04E-05	3.95E-04	1.42E-03	1.30E-04	6.40E-05	2.63E-04	2.20E-05	3.11E-05	1.20E-04	9.27E-06
380	463793.3	3809754	0.000528	0.001297	0.000107	5.23E-04	1.88E-03	1.73E-04	8.48E-05	3.48E-04	2.91E-05	4.11E-05	1.58E-04	1.23E-05
381	463813.3	3809754	0.000531	0.001304	0.000107	5.26E-04	1.89E-03	1.74E-04	8.53E-05	3.50E-04	2.93E-05	4.14E-05	1.59E-04	1.24E-05
382	463833.3	3809754	0.000535	0.001312	0.000108	5.29E-04	1.90E-03	1.75E-04	8.59E-05	3.53E-04	2.95E-05	4.16E-05	1.60E-04	1.24E-05
383	463853.3	3809754	0.000538	0.00132	0.000108	5.32E-04	1.91E-03	1.76E-04	8.64E-05	3.55E-04	2.97E-05	4.19E-05	1.61E-04	1.25E-05
384	463873.3	3809754	0.000541	0.001328	0.000109	5.35E-04	1.93E-03	1.77E-04	8.69E-05	3.57E-04	2.98E-05	4.21E-05	1.62E-04	1.26E-05
385	463893.3	3809754	0.000544	0.001336	0.00011	5.38E-04	1.94E-03	1.78E-04	8.74E-05	3.59E-04	3.00E-05	4.24E-05	1.63E-04	1.27E-05
386	463913.3	3809754	0.000546	0.00134	0.00011	5.40E-04	1.94E-03	1.79E-04	8.77E-05	3.60E-04	3.01E-05	4.25E-05	1.64E-04	1.27E-05
387	463933.3	3809754	0.000547	0.001343	0.00011	5.41E-04	1.95E-03	1.79E-04	8.78E-05	3.61E-04	3.02E-05	4.26E-05	1.64E-04	1.27E-05
388	463953.3	3809754	0.000549	0.001347	0.000111	5.43E-04	1.95E-03	1.79E-04	8.81E-05	3.62E-04	3.03E-05	4.27E-05	1.65E-04	1.28E-05
389	463973.3	3809754	0.000551	0.001352	0.000111	5.45E-04	1.96E-03	1.80E-04	8.85E-05	3.63E-04	3.04E-05	4.29E-05	1.65E-04	1.28E-05
390	463993.3	3809754	0.000554	0.001359	0.000112	5.48E-04	1.97E-03	1.81E-04	8.89E-05	3.65E-04	3.05E-05	4.31E-05	1.66E-04	1.29E-05
391	464013.3	3809754	0.000556	0.001364	0.000112	5.50E-04	1.98E-03	1.82E-04	8.92E-05	3.67E-04	3.06E-05	4.33E-05	1.67E-04	1.29E-05
392	464033.3	3809754	0.000555	0.001362	0.000112	5.49E-04	1.97E-03	1.82E-04	8.91E-05	3.66E-04	3.06E-05	4.32E-05	1.67E-04	1.29E-05
393	464053.3	3809754	0.000553	0.001357	0.000111	5.47E-04	1.97E-03	1.81E-04	8.87E-05	3.65E-04	3.05E-05	4.30E-05	1.66E-04	1.28E-05
394	464073.3	3809754	0.000551	0.001352	0.000111	5.45E-04	1.96E-03	1.80E-04	8.85E-05	3.63E-04	3.04E-05	4.29E-05	1.65E-04	1.28E-05
395	464093.3	3809754	0.000548	0.001345	0.00011	5.42E-04	1.95E-03	1.79E-04	8.80E-05	3.61E-04	3.02E-05	4.27E-05	1.64E-04	1.27E-05
396	464113.3	3809754	0.000544	0.001335	0.00011	5.38E-04	1.93E-03	1.78E-04	8.73E-05	3.59E-04	3.00E-05	4.23E-05	1.63E-04	1.26E-05
397	464133.3	3809754	0.000538	0.001321	0.000109	5.33E-04	1.92E-03	1.76E-04	8.64E-05	3.55E-04	2.97E-05	4.19E-05	1.62E-04	1.25E-05
398	464153.3	3809754	0.000532	0.001307	0.000107	5.27E-04	1.89E-03	1.74E-04	8.55E-05	3.51E-04	2.94E-05	4.14E-05	1.60E-04	1.24E-05
399	464173.3	3809754	0.000525	0.00129	0.000106	5.20E-04	1.87E-03	1.72E-04	8.44E-05	3.47E-04	2.90E-05	4.09E-05	1.58E-04	1.22E-05
400	464193.3	3809754	0.000516	0.001266	0.000104	5.10E-04	1.84E-03	1.69E-04	8.28E-05	3.40E-04	2.84E-05	4.02E-05	1.55E-04	1.20E-05
401	464213.3	3809754	0.000508	0.001246	0.000102	5.02E-04	1.81E-03	1.66E-04	8.15E-05	3.35E-04	2.80E-05	3.95E-05	1.52E-04	1.18E-05
402	464233.3	3809754	0.0005	0.001226	0.000101	4.94E-04	1.78E-03	1.63E-04	8.02E-05	3.29E-04	2.75E-05	3.89E-05	1.50E-04	1.16E-05
403	464253.3	3809754	0.000489	0.001201	9.87E-05	4.84E-04	1.74E-03	1.60E-04	7.86E-05	3.23E-04	2.70E-05	3.81E-05	1.47E-04	1.14E-05
404	464273.3	3809754	0.000481	0.00118	9.69E-05	4.75E-04	1.71E-03	1.57E-04	7.72E-05	3.17E-04	2.65E-05	3.74E-05	1.44E-04	1.12E-05
405	464293.3	3809754	0.000472	0.001159	9.52E-05	4.67E-04	1.68E-03	1.54E-04	7.58E-05	3.11E-04	2.60E-05	3.68E-05	1.42E-04	1.10E-05
406	464313.3	3809754	0.000462	0.001134	9.32E-05	4.57E-04	1.64E-03	1.51E-04	7.42E-05	3.05E-04	2.55E-05	3.60E-05	1.39E-04	1.07E-05
407	464333.3	3809754	0.000454	0.001114	9.15E-05	4.49E-04	1.61E-03	1.48E-04	7.29E-05	2.99E-04	2.50E-05	3.53E-05	1.36E-04	1.05E-05
408	464353.3	3809754	0.000446	0.001095	8.99E-05	4.41E-04	1.59E-03	1.46E-04	7.16E-05	2.94E-04	2.46E-05	3.47E-05	1.34E-04	1.04E-05
409	464373.3	3809754	0.000438	0.001075	8.83E-05	4.33E-04	1.56E-03	1.43E-04	7.03E-05	2.89E-04	2.42E-05	3.41E-05	1.31E-04	1.02E-05
410	464393.3	3809754	0.00043	0.001054	8.66E-05	4.25E-04	1.53E-03	1.40E-04	6.90E-05	2.83E-04	2.37E-05	3.34E-05	1.29E-04	9.98E-06
411	464413.3	3809754	0.000421	0.001034	8.49E-05	4.17E-04	1.50E-03	1.38E-04	6.76E-05	2.78E-04	2.32E-05	3.28E-05	1.26E-04	9.79E-06
412	464433.3	3809754	0.000414	0.001016	8.35E-05	4.09E-04	1.47E-03	1.35E-04	6.64E-05	2.73E-04	2.28E-05	3.22E-05	1.24E-04	9.62E-06
413	464453.3	3809754	0.000407	0.000998	8.2E-05	4.02E-04	1.45E-03	1.33E-04	6.53E-05	2.68E-04	2.24E-05	3.17E-05	1.22E-04	9.45E-06
414	464473.3	3809754	0.000399	0.00098	8.05E-05	3.95E-04	1.42E-03	1.31E-04	6.41E-05	2.63E-04	2.20E-05	3.11E-05	1.20E-04	9.28E-06
415	464493.3	3809754	0.000391	0.00096	7.89E-05	3.87E-04	1.39E-03	1.28E-04	6.28E-05	2.58E-04	2.16E-05	3.05E-05	1.17E-04	9.10E-06
416	463813.3	3809774	0.000515	0.001264	0.000104	5.10E-04	1.83E-03	1.68E-04	8.27E-05	3.40E-04	2.84E-05	4.01E-05	1.55E-04	1.20E-05
417	463833.3	3809774	0.000517	0.00127	0.000104	5.12E-04	1.84E-03	1.69E-04	8.31E-05	3.41E-04	2.85E-05	4.03E-05	1.55E-04	1.20E-05
418	463853.3	3809774	0.00052	0.001276	0.000105	5.14E-04	1.85E-03	1.70E-04	8.35E-05	3.43E-04	2.87E-05	4.05E-05	1.56E-04	1.21E-05
419	463873.3	3809774	0.000523	0.001283	0.000105	5.17E-04	1.86E-03	1.71E-04	8.39E-05	3.45E-04	2.88E-05	4.07E-05	1.57E-04	1.22E-05
420	463893.3	3809774	0.000525	0.00129	0.000106	5.20E-04	1.87E-03	1.72E-04	8.44E-05	3.47E-04	2.90E-05	4.09E-05	1.58E-04	1.22E-05
421	463913.3	3809774	0.000527	0.001293	0.000106	5.21E-04	1.87E-03	1.72E-04	8.46E-05	3.48E-04	2.91E-05	4.10E-05	1.58E-04	1.22E-05
422	463933.3	3809774	0.000528	0.001295	0.000106	5.22E-04	1.88E-03	1.73E-04	8.47E-05	3.48E-04	2.91E-05	4.11E-05	1.58E-04	1.23E-05
423	463953.3	3809774	0.000527	0.001292	0.000106	5.21E-04	1.87E-03	1.72E-04	8.45E-05	3.47E-04	2.90E-05	4.10E-05	1.58E-04	1.22E-05
424	463973.3	3809774	0.000528	0.001295	0.000106	5.22E-04	1.88E-03	1.73E-04	8.47E-05	3.48E-04	2.91E-05	4.11E-05	1.58E-04	1.23E-05
425	463993.3	3809774	0.00053	0.001302	0.000107	5.25E-04	1.89E-03	1.73E-04	8.51E-05	3.50E-04	2.92E-05	4.13E-05	1.59E-04	1.23E-05
426	464013.3	3809774</												

453	463853.3	3809794	0.000502	0.001233	0.000101	4.97E-04	1.79E-03	1.64E-04	8.06E-05	3.31E-04	2.77E-05	3.91E-05	1.51E-04	1.17E-05
454	463873.3	3809794	0.000504	0.001237	0.000102	4.99E-04	1.79E-03	1.65E-04	8.09E-05	3.32E-04	2.78E-05	3.92E-05	1.51E-04	1.17E-05
455	463893.3	3809794	0.000506	0.001243	0.000102	5.01E-04	1.80E-03	1.66E-04	8.13E-05	3.34E-04	2.79E-05	3.94E-05	1.52E-04	1.18E-05
456	463913.3	3809794	0.000508	0.001246	0.000102	5.02E-04	1.81E-03	1.66E-04	8.15E-05	3.35E-04	2.80E-05	3.95E-05	1.52E-04	1.18E-05
457	463933.3	3809794	0.000508	0.001247	0.000102	5.03E-04	1.81E-03	1.66E-04	8.16E-05	3.35E-04	2.80E-05	3.96E-05	1.52E-04	1.18E-05
458	463953.3	3809794	0.000508	0.001247	0.000102	5.03E-04	1.81E-03	1.66E-04	8.16E-05	3.35E-04	2.80E-05	3.95E-05	1.52E-04	1.18E-05
459	463973.3	3809794	0.000509	0.00125	0.000103	5.04E-04	1.81E-03	1.67E-04	8.18E-05	3.36E-04	2.81E-05	3.96E-05	1.53E-04	1.18E-05
460	463993.3	3809794	0.000511	0.001255	0.000103	5.06E-04	1.82E-03	1.67E-04	8.21E-05	3.37E-04	2.82E-05	3.98E-05	1.53E-04	1.19E-05
461	464013.3	3809794	0.000515	0.001264	0.000104	5.09E-04	1.83E-03	1.68E-04	8.27E-05	3.40E-04	2.84E-05	4.01E-05	1.54E-04	1.20E-05
462	464033.3	3809794	0.000519	0.001273	0.000105	5.13E-04	1.84E-03	1.70E-04	8.32E-05	3.42E-04	2.86E-05	4.04E-05	1.56E-04	1.21E-05
463	464053.3	3809794	0.000521	0.00128	0.000105	5.16E-04	1.85E-03	1.71E-04	8.37E-05	3.44E-04	2.88E-05	4.06E-05	1.56E-04	1.21E-05
464	464073.3	3809794	0.00052	0.001276	0.000105	5.14E-04	1.85E-03	1.70E-04	8.35E-05	3.43E-04	2.87E-05	4.05E-05	1.56E-04	1.21E-05
465	464093.3	3809794	0.000517	0.00127	0.000104	5.12E-04	1.84E-03	1.69E-04	8.31E-05	3.41E-04	2.85E-05	4.03E-05	1.55E-04	1.20E-05
466	464113.3	3809794	0.000514	0.001262	0.000104	5.09E-04	1.83E-03	1.68E-04	8.25E-05	3.39E-04	2.83E-05	4.00E-05	1.54E-04	1.19E-05
467	464133.3	3809794	0.000509	0.00125	0.000103	5.04E-04	1.81E-03	1.67E-04	8.18E-05	3.36E-04	2.81E-05	3.96E-05	1.53E-04	1.18E-05
468	464153.3	3809794	0.000504	0.001237	0.000102	4.99E-04	1.79E-03	1.65E-04	8.09E-05	3.32E-04	2.78E-05	3.92E-05	1.51E-04	1.17E-05
469	464173.3	3809794	0.000498	0.001223	0.0001	4.93E-04	1.77E-03	1.63E-04	8.00E-05	3.29E-04	2.75E-05	3.88E-05	1.49E-04	1.16E-05
470	464193.3	3809794	0.000491	0.001205	9.9E-05	4.86E-04	1.75E-03	1.61E-04	7.88E-05	3.24E-04	2.71E-05	3.82E-05	1.47E-04	1.14E-05
471	464213.3	3809794	0.000483	0.001185	9.74E-05	4.78E-04	1.72E-03	1.58E-04	7.75E-05	3.18E-04	2.66E-05	3.76E-05	1.45E-04	1.12E-05
472	464233.3	3809794	0.000475	0.001165	9.57E-05	4.70E-04	1.69E-03	1.55E-04	7.62E-05	3.13E-04	2.62E-05	3.69E-05	1.42E-04	1.10E-05
473	464253.3	3809794	0.000467	0.001145	9.41E-05	4.62E-04	1.66E-03	1.53E-04	7.49E-05	3.08E-04	2.57E-05	3.63E-05	1.40E-04	1.08E-05
474	464273.3	3809794	0.000458	0.001124	9.24E-05	4.53E-04	1.63E-03	1.50E-04	7.35E-05	3.02E-04	2.53E-05	3.57E-05	1.37E-04	1.06E-05
475	464293.3	3809794	0.00045	0.001103	9.06E-05	4.45E-04	1.60E-03	1.47E-04	7.22E-05	2.96E-04	2.48E-05	3.50E-05	1.35E-04	1.04E-05
476	464313.3	3809794	0.000441	0.001083	8.9E-05	4.37E-04	1.57E-03	1.44E-04	7.09E-05	2.91E-04	2.43E-05	3.44E-05	1.32E-04	1.03E-05
477	464333.3	3809794	0.000433	0.001063	8.74E-05	4.29E-04	1.54E-03	1.42E-04	6.96E-05	2.86E-04	2.39E-05	3.37E-05	1.30E-04	1.01E-05
478	464353.3	3809794	0.000425	0.001043	8.57E-05	4.21E-04	1.51E-03	1.39E-04	6.83E-05	2.80E-04	2.34E-05	3.31E-05	1.28E-04	9.88E-06
479	464373.3	3809794	0.000418	0.001025	8.42E-05	4.13E-04	1.49E-03	1.37E-04	6.70E-05	2.75E-04	2.30E-05	3.25E-05	1.25E-04	9.71E-06
480	464393.3	3809794	0.000411	0.001008	8.28E-05	4.06E-04	1.46E-03	1.34E-04	6.59E-05	2.71E-04	2.26E-05	3.20E-05	1.23E-04	9.54E-06
481	464413.3	3809794	0.000404	0.000991	8.15E-05	4.00E-04	1.44E-03	1.32E-04	6.49E-05	2.66E-04	2.23E-05	3.14E-05	1.21E-04	9.39E-06
482	464433.3	3809794	0.000397	0.000975	8.01E-05	3.93E-04	1.41E-03	1.30E-04	6.38E-05	2.62E-04	2.19E-05	3.09E-05	1.19E-04	9.24E-06
483	464453.3	3809794	0.00039	0.000958	7.87E-05	3.86E-04	1.39E-03	1.28E-04	6.27E-05	2.57E-04	2.15E-05	3.04E-05	1.17E-04	9.07E-06
484	464473.3	3809794	0.000383	0.00094	7.72E-05	3.79E-04	1.36E-03	1.25E-04	6.15E-05	2.52E-04	2.11E-05	2.98E-05	1.15E-04	8.90E-06
485	464493.3	3809794	0.000376	0.000922	7.57E-05	3.72E-04	1.34E-03	1.23E-04	6.03E-05	2.48E-04	2.07E-05	2.92E-05	1.13E-04	8.73E-06
486	463833.3	3809814	0.000484	0.001188	9.76E-05	4.79E-04	1.72E-03	1.58E-04	7.77E-05	3.19E-04	2.67E-05	3.77E-05	1.45E-04	1.13E-05
487	463853.3	3809814	0.000486	0.001192	9.79E-05	4.80E-04	1.73E-03	1.59E-04	7.80E-05	3.20E-04	2.68E-05	3.78E-05	1.46E-04	1.13E-05
488	463873.3	3809814	0.000487	0.001195	9.82E-05	4.82E-04	1.73E-03	1.59E-04	7.82E-05	3.21E-04	2.68E-05	3.79E-05	1.46E-04	1.13E-05
489	463893.3	3809814	0.000489	0.001199	9.85E-05	4.83E-04	1.74E-03	1.60E-04	7.84E-05	3.22E-04	2.69E-05	3.80E-05	1.47E-04	1.14E-05
490	463913.3	3809814	0.000489	0.001201	9.87E-05	4.84E-04	1.74E-03	1.60E-04	7.86E-05	3.23E-04	2.70E-05	3.81E-05	1.47E-04	1.14E-05
491	463933.3	3809814	0.00049	0.001203	9.88E-05	4.85E-04	1.74E-03	1.60E-04	7.87E-05	3.23E-04	2.70E-05	3.81E-05	1.47E-04	1.14E-05
492	463953.3	3809814	0.00049	0.001203	9.89E-05	4.85E-04	1.74E-03	1.60E-04	7.87E-05	3.23E-04	2.70E-05	3.82E-05	1.47E-04	1.14E-05
493	463973.3	3809814	0.000492	0.001207	9.91E-05	4.86E-04	1.75E-03	1.61E-04	7.89E-05	3.24E-04	2.71E-05	3.83E-05	1.47E-04	1.14E-05
494	463993.3	3809814	0.000493	0.001211	9.95E-05	4.88E-04	1.75E-03	1.61E-04	7.92E-05	3.25E-04	2.72E-05	3.84E-05	1.48E-04	1.15E-05
495	464013.3	3809814	0.000495	0.001215	9.98E-05	4.90E-04	1.76E-03	1.62E-04	7.95E-05	3.26E-04	2.73E-05	3.85E-05	1.48E-04	1.15E-05
496	464033.3	3809814	0.000499	0.001224	0.000101	4.93E-04	1.77E-03	1.63E-04	8.01E-05	3.29E-04	2.75E-05	3.88E-05	1.50E-04	1.16E-05
497	464053.3	3809814	0.000503	0.001235	0.000101	4.98E-04	1.79E-03	1.65E-04	8.08E-05	3.32E-04	2.78E-05	3.92E-05	1.51E-04	1.17E-05
498	464073.3	3809814	0.000504	0.001237	0.000102	4.98E-04	1.79E-03	1.65E-04	8.09E-05	3.32E-04	2.78E-05	3.92E-05	1.51E-04	1.17E-05
499	464093.3	3809814	0.000503	0.001233	0.000101	4.97E-04	1.79E-03	1.64E-04	8.07E-05	3.31E-04	2.77E-05	3.91E-05	1.51E-04	1.17E-05
500	464113.3	3809814	0.0005	0.001227	0.000101	4.94E-04	1.78E-03	1.63E-04	8.02E-05	3.30E-04	2.76E-05	3.89E-05	1.50E-04	1.16E-05
501	464133.3	3809814	0.000495	0.001216	9.99E-05	4.90E-04	1.76E-03	1.62E-04	7.95E-05	3.27E-04	2.73E-05	3.86E-05	1.49E-04	1.15E-05
502	464153.3	3809814	0.00049	0.001204	9.89E-05	4.85E-04	1.74E-03	1.60E-04	7.87E-05	3.23E-04	2.70E-05	3.82E-05	1.47E-04	1.14E-05
503	464173.3	3809814	0.000485	0.00119	9.78E-05	4.80E-04	1.72E-03	1.59E-04	7.78E-05	3.20E-04	2.67E-05	3.77E-05	1.45E-04	1.13E-05
504	464193.3	3809814	0.000478	0.001174	9.64E-05	4.73E-04	1.70E-03	1.56E-04	7.68E-05	3.15E-04	2.64E-05	3.72E-05	1.44E-04	1.11E-05
505	464213.3	3809814	0.000471	0.001155	9.49E-05	4.66E-04	1.67E-03	1.54E-04	7.56E-05	3.10E-04	2.60E-05	3.66E-05	1.41E-04	1.09E-05
506	464233.3	3809814	0.000463	0.001136	9.33E-05	4.58E-04	1.65E-03	1.51E-04	7.43E-05	3.05E-04	2.55E-05	3.60E-05	1.39E-04	1.08E-05
507	464253.3	3809814	0.000456	0.001118	9.19E-05	4.51E-04	1.62E-03	1.49E-04	7.32E-05	3.01E-04	2.51E-05	3.55E-05	1.37E-04	1.06E-05
508	464273.3	3809814	0.000447	0.001098	9.02E-05	4.42E-04	1.59E-03	1.46E-04	7.18E-05	2.95E-04	2.47E-05	3.48E-05	1.34E-04	1.04E-05
509	464293.3	3809814	0.000439	0.001076	8.84E-05	4.34E-04	1.56E-03	1.43E-04	7.04E-05	2.89E-04	2.42E-05	3.41E-05	1.32E-04	1.02E-05
510	464313.3	3809814	0.000431	0.001058	8.69E-05	4.26E-04	1.53E-03	1.41E-04	6.92E-05	2.84E-04	2.38E-05	3.35E-05	1.29E-04	1.00E-05
511	464333.3	3809814	0.000423	0.001038	8.53E-05	4.18E-04	1.50E-03	1.38E-04	6.79E-05	2.79E-04	2.33E-05	3.29E-05	1.27E-04	9.83E-06
512	464353.3	3809814	0.000415	0.001019	8.37E-05	4.11E-04	1.48E-03	1.36E-04	6.66E-05	2.74E-04	2.29E-05	3.23E-05	1.25E-04	9.65E-06
513	464373.3	3809814	0.000409	0.001003	8.24E-05	4.04E-04	1.45E-03	1.34E-04	6.56E-05	2.69E-04	2.25E-05	3.18E-05	1.23E-04	9.50E-06
514	464393.3	3809814	0.000402	0.000986	8.1E-05	3.97E-04	1.43E-03	1.31E-04	6.45E-05	2.65E-04	2.22E-05	3.13E-05	1.21E-04	9.34E-06
515	464413.3	3809814	0.000395	0.00097	7.97E-05	3.91E-04	1.41E-03	1.29E-04	6.34E-05	2.61E-04	2.18E-05	3.08E-05	1.19E-04	9.18E-06
516	464433.3	3809814	0.000389	0.000954	7.84E-05	3.85E-04	1.38E-03	1.27E-04	6.24E-05	2.56E-04	2.14E-05	3.03E-05	1.17E-04	9.04E-06
517	464453.3													

544	464333.3	3809834	0.000413	0.001014	8.33E-05	4.09E-04	1.47E-03	1.35E-04	6.63E-05	2.72E-04	2.28E-05	3.21E-05	1.24E-04	9.60E-06
545	464353.3	3809834	0.000406	0.000997	8.19E-05	4.02E-04	1.45E-03	1.33E-04	6.52E-05	2.68E-04	2.24E-05	3.16E-05	1.22E-04	9.45E-06
546	464373.3	3809834	0.0004	0.000982	8.07E-05	3.96E-04	1.42E-03	1.31E-04	6.42E-05	2.64E-04	2.21E-05	3.11E-05	1.20E-04	9.30E-06
547	464393.3	3809834	0.000393	0.000964	7.92E-05	3.89E-04	1.40E-03	1.28E-04	6.31E-05	2.59E-04	2.17E-05	3.06E-05	1.18E-04	9.13E-06
548	464413.3	3809834	0.000385	0.000946	7.77E-05	3.81E-04	1.37E-03	1.26E-04	6.19E-05	2.54E-04	2.13E-05	3.00E-05	1.16E-04	8.96E-06
549	464433.3	3809834	0.00038	0.000932	7.65E-05	3.75E-04	1.35E-03	1.24E-04	6.09E-05	2.50E-04	2.09E-05	2.95E-05	1.14E-04	8.82E-06
550	464453.3	3809834	0.000374	0.000917	7.53E-05	3.70E-04	1.33E-03	1.22E-04	6.00E-05	2.46E-04	2.06E-05	2.91E-05	1.12E-04	8.68E-06
551	464473.3	3809834	0.000368	0.000902	7.41E-05	3.64E-04	1.31E-03	1.20E-04	5.90E-05	2.42E-04	2.03E-05	2.86E-05	1.10E-04	8.54E-06
552	464493.3	3809834	0.00036	0.000884	7.26E-05	3.56E-04	1.28E-03	1.18E-04	5.78E-05	2.38E-04	1.99E-05	2.80E-05	1.08E-04	8.37E-06
553	463893.3	3809854	0.000456	0.00112	9.2E-05	4.51E-04	1.62E-03	1.49E-04	7.33E-05	3.01E-04	2.52E-05	3.55E-05	1.37E-04	1.06E-05
554	463913.3	3809854	0.000457	0.001121	9.21E-05	4.52E-04	1.62E-03	1.49E-04	7.33E-05	3.01E-04	2.52E-05	3.55E-05	1.37E-04	1.06E-05
555	463933.3	3809854	0.000457	0.001122	9.21E-05	4.52E-04	1.63E-03	1.49E-04	7.34E-05	3.01E-04	2.52E-05	3.56E-05	1.37E-04	1.06E-05
556	463953.3	3809854	0.000458	0.001124	9.23E-05	4.53E-04	1.63E-03	1.50E-04	7.35E-05	3.02E-04	2.52E-05	3.56E-05	1.37E-04	1.06E-05
557	463973.3	3809854	0.000459	0.001126	9.25E-05	4.54E-04	1.63E-03	1.50E-04	7.36E-05	3.03E-04	2.53E-05	3.57E-05	1.38E-04	1.07E-05
558	463993.3	3809854	0.000459	0.001127	9.26E-05	4.54E-04	1.63E-03	1.50E-04	7.37E-05	3.03E-04	2.53E-05	3.58E-05	1.38E-04	1.07E-05
559	464013.3	3809854	0.000461	0.00113	9.29E-05	4.56E-04	1.64E-03	1.51E-04	7.39E-05	3.04E-04	2.54E-05	3.59E-05	1.38E-04	1.07E-05
560	464033.3	3809854	0.000463	0.001135	9.33E-05	4.58E-04	1.65E-03	1.51E-04	7.43E-05	3.05E-04	2.55E-05	3.60E-05	1.39E-04	1.08E-05
561	464053.3	3809854	0.000465	0.001142	9.38E-05	4.60E-04	1.65E-03	1.52E-04	7.47E-05	3.07E-04	2.56E-05	3.62E-05	1.40E-04	1.08E-05
562	464073.3	3809854	0.000467	0.001146	9.41E-05	4.62E-04	1.66E-03	1.53E-04	7.50E-05	3.08E-04	2.57E-05	3.63E-05	1.40E-04	1.09E-05
563	464093.3	3809854	0.000468	0.001149	9.44E-05	4.63E-04	1.66E-03	1.53E-04	7.51E-05	3.09E-04	2.58E-05	3.64E-05	1.40E-04	1.09E-05
564	464113.3	3809854	0.000468	0.001149	9.44E-05	4.63E-04	1.67E-03	1.53E-04	7.52E-05	3.09E-04	2.58E-05	3.64E-05	1.40E-04	1.09E-05
565	464133.3	3809854	0.000466	0.001143	9.39E-05	4.61E-04	1.66E-03	1.52E-04	7.48E-05	3.07E-04	2.57E-05	3.62E-05	1.40E-04	1.08E-05
566	464153.3	3809854	0.000462	0.001133	9.31E-05	4.57E-04	1.64E-03	1.51E-04	7.41E-05	3.05E-04	2.55E-05	3.59E-05	1.39E-04	1.07E-05
567	464173.3	3809854	0.000457	0.001121	9.21E-05	4.52E-04	1.62E-03	1.49E-04	7.33E-05	3.01E-04	2.52E-05	3.56E-05	1.37E-04	1.06E-05
568	464193.3	3809854	0.000451	0.001106	9.09E-05	4.46E-04	1.60E-03	1.47E-04	7.24E-05	2.97E-04	2.49E-05	3.51E-05	1.35E-04	1.05E-05
569	464213.3	3809854	0.000445	0.001092	8.97E-05	4.40E-04	1.58E-03	1.45E-04	7.14E-05	2.93E-04	2.45E-05	3.46E-05	1.33E-04	1.03E-05
570	464233.3	3809854	0.000439	0.001077	8.85E-05	4.34E-04	1.56E-03	1.43E-04	7.04E-05	2.89E-04	2.42E-05	3.41E-05	1.32E-04	1.02E-05
571	464253.3	3809854	0.000432	0.001061	8.72E-05	4.28E-04	1.54E-03	1.41E-04	6.94E-05	2.85E-04	2.38E-05	3.37E-05	1.30E-04	1.00E-05
572	464273.3	3809854	0.000425	0.001044	8.58E-05	4.21E-04	1.51E-03	1.39E-04	6.83E-05	2.81E-04	2.35E-05	3.31E-05	1.28E-04	9.89E-06
573	464293.3	3809854	0.000418	0.001026	8.43E-05	4.14E-04	1.49E-03	1.37E-04	6.71E-05	2.76E-04	2.31E-05	3.25E-05	1.25E-04	9.72E-06
574	464313.3	3809854	0.000411	0.001008	8.28E-05	4.06E-04	1.46E-03	1.34E-04	6.60E-05	2.71E-04	2.27E-05	3.20E-05	1.23E-04	9.55E-06
575	464333.3	3809854	0.000404	0.00099	8.14E-05	3.99E-04	1.44E-03	1.32E-04	6.48E-05	2.66E-04	2.22E-05	3.14E-05	1.21E-04	9.38E-06
576	464353.3	3809854	0.000396	0.000973	7.99E-05	3.92E-04	1.41E-03	1.30E-04	6.36E-05	2.61E-04	2.19E-05	3.09E-05	1.19E-04	9.21E-06
577	464373.3	3809854	0.00039	0.000958	7.87E-05	3.86E-04	1.39E-03	1.28E-04	6.27E-05	2.57E-04	2.15E-05	3.04E-05	1.17E-04	9.07E-06
578	464393.3	3809854	0.000384	0.000942	7.74E-05	3.80E-04	1.37E-03	1.26E-04	6.16E-05	2.53E-04	2.12E-05	2.99E-05	1.15E-04	8.92E-06
579	464413.3	3809854	0.000378	0.000927	7.61E-05	3.73E-04	1.34E-03	1.23E-04	6.06E-05	2.49E-04	2.08E-05	2.94E-05	1.13E-04	8.78E-06
580	464433.3	3809854	0.000372	0.000913	7.5E-05	3.68E-04	1.32E-03	1.22E-04	5.97E-05	2.45E-04	2.05E-05	2.89E-05	1.12E-04	8.64E-06
581	464453.3	3809854	0.000366	0.000897	7.37E-05	3.62E-04	1.30E-03	1.20E-04	5.87E-05	2.41E-04	2.02E-05	2.85E-05	1.10E-04	8.50E-06
582	464473.3	3809854	0.000359	0.000882	7.25E-05	3.55E-04	1.28E-03	1.18E-04	5.77E-05	2.37E-04	1.98E-05	2.80E-05	1.08E-04	8.35E-06
583	464493.3	3809854	0.000353	0.000867	7.12E-05	3.49E-04	1.26E-03	1.16E-04	5.67E-05	2.33E-04	1.95E-05	2.75E-05	1.06E-04	8.21E-06
584	463913.3	3809874	0.000442	0.001084	8.91E-05	4.37E-04	1.57E-03	1.45E-04	7.09E-05	2.91E-04	2.44E-05	3.44E-05	1.33E-04	1.03E-05
585	463933.3	3809874	0.000442	0.001085	8.91E-05	4.37E-04	1.57E-03	1.45E-04	7.10E-05	2.92E-04	2.44E-05	3.44E-05	1.33E-04	1.03E-05
586	463953.3	3809874	0.000443	0.001088	8.94E-05	4.38E-04	1.58E-03	1.45E-04	7.12E-05	2.92E-04	2.44E-05	3.45E-05	1.33E-04	1.03E-05
587	463973.3	3809874	0.000444	0.00109	8.95E-05	4.39E-04	1.58E-03	1.45E-04	7.13E-05	2.93E-04	2.45E-05	3.46E-05	1.33E-04	1.03E-05
588	463993.3	3809874	0.000444	0.001091	8.96E-05	4.40E-04	1.58E-03	1.45E-04	7.14E-05	2.93E-04	2.45E-05	3.46E-05	1.33E-04	1.03E-05
589	464013.3	3809874	0.000446	0.001094	8.98E-05	4.41E-04	1.58E-03	1.46E-04	7.15E-05	2.94E-04	2.46E-05	3.47E-05	1.34E-04	1.04E-05
590	464033.3	3809874	0.000447	0.001097	9.02E-05	4.42E-04	1.59E-03	1.46E-04	7.18E-05	2.95E-04	2.47E-05	3.48E-05	1.34E-04	1.04E-05
591	464053.3	3809874	0.000449	0.001102	9.05E-05	4.44E-04	1.60E-03	1.47E-04	7.21E-05	2.96E-04	2.48E-05	3.49E-05	1.35E-04	1.04E-05
592	464073.3	3809874	0.00045	0.001104	9.07E-05	4.45E-04	1.60E-03	1.47E-04	7.22E-05	2.97E-04	2.48E-05	3.50E-05	1.35E-04	1.05E-05
593	464093.3	3809874	0.00045	0.001105	9.08E-05	4.46E-04	1.60E-03	1.47E-04	7.23E-05	2.97E-04	2.48E-05	3.51E-05	1.35E-04	1.05E-05
594	464113.3	3809874	0.00045	0.001106	9.08E-05	4.46E-04	1.60E-03	1.47E-04	7.23E-05	2.97E-04	2.48E-05	3.51E-05	1.35E-04	1.05E-05
595	464133.3	3809874	0.000449	0.001101	9.05E-05	4.44E-04	1.60E-03	1.47E-04	7.20E-05	2.96E-04	2.47E-05	3.49E-05	1.35E-04	1.04E-05
596	464153.3	3809874	0.000445	0.001093	8.98E-05	4.41E-04	1.58E-03	1.46E-04	7.15E-05	2.94E-04	2.46E-05	3.47E-05	1.34E-04	1.04E-05
597	464173.3	3809874	0.000441	0.001082	8.89E-05	4.36E-04	1.57E-03	1.44E-04	7.08E-05	2.91E-04	2.43E-05	3.43E-05	1.32E-04	1.02E-05
598	464193.3	3809874	0.000436	0.001071	8.8E-05	4.32E-04	1.55E-03	1.43E-04	7.01E-05	2.88E-04	2.41E-05	3.40E-05	1.31E-04	1.01E-05
599	464213.3	3809874	0.000431	0.001058	8.69E-05	4.27E-04	1.53E-03	1.41E-04	6.92E-05	2.84E-04	2.38E-05	3.36E-05	1.29E-04	1.00E-05
600	464233.3	3809874	0.000425	0.001044	8.58E-05	4.21E-04	1.51E-03	1.39E-04	6.83E-05	2.81E-04	2.35E-05	3.31E-05	1.28E-04	9.89E-06
601	464253.3	3809874	0.000419	0.001029	8.46E-05	4.15E-04	1.49E-03	1.37E-04	6.73E-05	2.77E-04	2.31E-05	3.26E-05	1.26E-04	9.75E-06
602	464273.3	3809874	0.000414	0.001015	8.34E-05	4.09E-04	1.47E-03	1.35E-04	6.64E-05	2.73E-04	2.28E-05	3.22E-05	1.24E-04	9.61E-06
603	464293.3	3809874	0.000408	0.001	8.22E-05	4.03E-04	1.45E-03	1.33E-04	6.54E-05	2.69E-04	2.25E-05	3.17E-05	1.22E-04	9.48E-06
604	464313.3	3809874	0.000401	0.000985	8.09E-05	3.97E-04	1.43E-03	1.31E-04	6.44E-05	2.65E-04	2.21E-05	3.12E-05	1.20E-04	9.33E-06
605	464333.3	3809874	0.000394	0.000968	7.95E-05	3.90E-04	1.40E-03	1.29E-04	6.33E-05	2.60E-04	2.17E-05	3.07E-05	1.18E-04	9.17E-06
606	464353.3	3809874	0.000387	0.00095	7.81E-05	3.83E-04	1.38E-03	1.27E-04	6.22E-05	2.55E-04	2.14E-05	3.01E-05	1.16E-04	9.00E-06
607	464373.3	3809874	0.000381	0.000936	7.69E-05	3.77E-04	1.36E-03	1.25E-04	6.12E-05	2.52E-04	2.10E-05	2.97E-05	1.14E-04	8.87E-06
608	464393.3													

635	464373.3	3809894	0.000374	0.000917	7.53E-05	3.70E-04	1.33E-03	1.22E-04	6.00E-05	2.46E-04	2.06E-05	2.91E-05	1.12E-04	8.69E-06
636	464393.3	3809894	0.000368	0.000903	7.42E-05	3.64E-04	1.31E-03	1.20E-04	5.91E-05	2.43E-04	2.03E-05	2.87E-05	1.10E-04	8.56E-06
637	464413.3	3809894	0.000363	0.00089	7.31E-05	3.59E-04	1.29E-03	1.19E-04	5.82E-05	2.39E-04	2.00E-05	2.82E-05	1.09E-04	8.43E-06
638	464433.3	3809894	0.000356	0.000873	7.18E-05	3.52E-04	1.27E-03	1.16E-04	5.71E-05	2.35E-04	1.96E-05	2.77E-05	1.07E-04	8.27E-06
639	464453.3	3809894	0.00035	0.00086	7.06E-05	3.47E-04	1.25E-03	1.15E-04	5.62E-05	2.31E-04	1.93E-05	2.73E-05	1.05E-04	8.14E-06
640	464473.3	3809894	0.000345	0.000847	6.96E-05	3.41E-04	1.23E-03	1.13E-04	5.54E-05	2.28E-04	1.90E-05	2.69E-05	1.04E-04	8.02E-06
641	464493.3	3809894	0.00034	0.000835	6.86E-05	3.37E-04	1.21E-03	1.11E-04	5.46E-05	2.24E-04	1.88E-05	2.65E-05	1.02E-04	7.91E-06
642	464033.3	3809914	0.00042	0.00103	8.46E-05	4.15E-04	1.49E-03	1.37E-04	6.74E-05	2.77E-04	2.31E-05	3.27E-05	1.26E-04	9.75E-06
643	464053.3	3809914	0.000421	0.001033	8.49E-05	4.16E-04	1.50E-03	1.38E-04	6.76E-05	2.78E-04	2.32E-05	3.28E-05	1.26E-04	9.78E-06
644	464073.3	3809914	0.000421	0.001034	8.5E-05	4.17E-04	1.50E-03	1.38E-04	6.77E-05	2.78E-04	2.32E-05	3.28E-05	1.26E-04	9.80E-06
645	464093.3	3809914	0.000421	0.001034	8.5E-05	4.17E-04	1.50E-03	1.38E-04	6.76E-05	2.78E-04	2.32E-05	3.28E-05	1.26E-04	9.79E-06
646	464113.3	3809914	0.000421	0.001032	8.48E-05	4.16E-04	1.50E-03	1.38E-04	6.75E-05	2.77E-04	2.32E-05	3.27E-05	1.26E-04	9.78E-06
647	464133.3	3809914	0.00042	0.00103	8.47E-05	4.15E-04	1.49E-03	1.37E-04	6.74E-05	2.77E-04	2.32E-05	3.27E-05	1.26E-04	9.76E-06
648	464153.3	3809914	0.000418	0.001025	8.42E-05	4.13E-04	1.49E-03	1.37E-04	6.71E-05	2.75E-04	2.30E-05	3.25E-05	1.25E-04	9.71E-06
649	464173.3	3809914	0.000415	0.001018	8.36E-05	4.10E-04	1.48E-03	1.36E-04	6.66E-05	2.74E-04	2.29E-05	3.23E-05	1.24E-04	9.64E-06
650	464193.3	3809914	0.000412	0.001011	8.31E-05	4.07E-04	1.47E-03	1.35E-04	6.61E-05	2.72E-04	2.27E-05	3.21E-05	1.24E-04	9.57E-06
651	464213.3	3809914	0.000408	0.001	8.22E-05	4.03E-04	1.45E-03	1.33E-04	6.54E-05	2.69E-04	2.25E-05	3.17E-05	1.22E-04	9.47E-06
652	464233.3	3809914	0.000403	0.000988	8.12E-05	3.98E-04	1.43E-03	1.32E-04	6.46E-05	2.66E-04	2.22E-05	3.13E-05	1.21E-04	9.36E-06
653	464253.3	3809914	0.000398	0.000977	8.03E-05	3.94E-04	1.42E-03	1.30E-04	6.39E-05	2.63E-04	2.19E-05	3.10E-05	1.19E-04	9.25E-06
654	464273.3	3809914	0.000393	0.000965	7.93E-05	3.89E-04	1.40E-03	1.29E-04	6.31E-05	2.59E-04	2.17E-05	3.06E-05	1.18E-04	9.14E-06
655	464293.3	3809914	0.000388	0.000952	7.82E-05	3.84E-04	1.38E-03	1.27E-04	6.23E-05	2.56E-04	2.14E-05	3.02E-05	1.16E-04	9.01E-06
656	464313.3	3809914	0.000382	0.000937	7.7E-05	3.78E-04	1.36E-03	1.25E-04	6.13E-05	2.52E-04	2.11E-05	2.97E-05	1.15E-04	8.88E-06
657	464333.3	3809914	0.000376	0.000923	7.59E-05	3.72E-04	1.34E-03	1.23E-04	6.04E-05	2.48E-04	2.07E-05	2.93E-05	1.13E-04	8.74E-06
658	464353.3	3809914	0.000371	0.000909	7.47E-05	3.67E-04	1.32E-03	1.21E-04	5.95E-05	2.44E-04	2.04E-05	2.88E-05	1.11E-04	8.61E-06
659	464373.3	3809914	0.000365	0.000896	7.36E-05	3.61E-04	1.30E-03	1.19E-04	5.86E-05	2.41E-04	2.01E-05	2.84E-05	1.09E-04	8.48E-06
660	464393.3	3809914	0.00036	0.000882	7.25E-05	3.56E-04	1.28E-03	1.18E-04	5.77E-05	2.37E-04	1.98E-05	2.80E-05	1.08E-04	8.36E-06
661	464413.3	3809914	0.000354	0.000869	7.14E-05	3.50E-04	1.26E-03	1.16E-04	5.69E-05	2.34E-04	1.95E-05	2.76E-05	1.06E-04	8.23E-06
662	464433.3	3809914	0.000349	0.000856	7.03E-05	3.45E-04	1.24E-03	1.14E-04	5.60E-05	2.30E-04	1.92E-05	2.71E-05	1.05E-04	8.10E-06
663	464453.3	3809914	0.000344	0.000843	6.93E-05	3.40E-04	1.22E-03	1.12E-04	5.52E-05	2.27E-04	1.89E-05	2.67E-05	1.03E-04	7.99E-06
664	464473.3	3809914	0.000339	0.000831	6.83E-05	3.35E-04	1.20E-03	1.11E-04	5.44E-05	2.23E-04	1.87E-05	2.64E-05	1.02E-04	7.87E-06
665	464493.3	3809914	0.000333	0.000817	6.72E-05	3.29E-04	1.18E-03	1.09E-04	5.35E-05	2.20E-04	1.84E-05	2.59E-05	9.99E-05	7.74E-06
666	464113.3	3809934	0.000407	0.000999	8.21E-05	4.03E-04	1.45E-03	1.33E-04	6.54E-05	2.69E-04	2.25E-05	3.17E-05	1.22E-04	9.47E-06
667	464133.3	3809934	0.000407	0.000999	8.2E-05	4.03E-04	1.45E-03	1.33E-04	6.53E-05	2.68E-04	2.24E-05	3.17E-05	1.22E-04	9.46E-06
668	464153.3	3809934	0.000406	0.000996	8.18E-05	4.01E-04	1.44E-03	1.33E-04	6.51E-05	2.68E-04	2.24E-05	3.16E-05	1.22E-04	9.43E-06
669	464173.3	3809934	0.000404	0.000991	8.14E-05	3.99E-04	1.44E-03	1.32E-04	6.48E-05	2.66E-04	2.23E-05	3.14E-05	1.21E-04	9.38E-06
670	464193.3	3809934	0.000401	0.000985	8.09E-05	3.97E-04	1.43E-03	1.31E-04	6.44E-05	2.65E-04	2.21E-05	3.12E-05	1.20E-04	9.33E-06
671	464213.3	3809934	0.000398	0.000976	8.02E-05	3.93E-04	1.41E-03	1.30E-04	6.39E-05	2.62E-04	2.19E-05	3.10E-05	1.19E-04	9.24E-06
672	464233.3	3809934	0.000393	0.000965	7.93E-05	3.89E-04	1.40E-03	1.29E-04	6.31E-05	2.59E-04	2.17E-05	3.06E-05	1.18E-04	9.14E-06
673	464253.3	3809934	0.000389	0.000955	7.85E-05	3.85E-04	1.38E-03	1.27E-04	6.25E-05	2.57E-04	2.15E-05	3.03E-05	1.17E-04	9.05E-06
674	464273.3	3809934	0.000384	0.000943	7.74E-05	3.80E-04	1.37E-03	1.26E-04	6.17E-05	2.53E-04	2.12E-05	2.99E-05	1.15E-04	8.93E-06
675	464293.3	3809934	0.000379	0.000929	7.63E-05	3.74E-04	1.35E-03	1.24E-04	6.08E-05	2.50E-04	2.09E-05	2.95E-05	1.14E-04	8.80E-06
676	464313.3	3809934	0.000373	0.000916	7.53E-05	3.69E-04	1.33E-03	1.22E-04	5.99E-05	2.46E-04	2.06E-05	2.91E-05	1.12E-04	8.68E-06
677	464333.3	3809934	0.000368	0.000903	7.42E-05	3.64E-04	1.31E-03	1.20E-04	5.91E-05	2.43E-04	2.03E-05	2.86E-05	1.10E-04	8.55E-06
678	464353.3	3809934	0.000362	0.000889	7.31E-05	3.58E-04	1.29E-03	1.18E-04	5.82E-05	2.39E-04	2.00E-05	2.82E-05	1.09E-04	8.42E-06
679	464373.3	3809934	0.000357	0.000876	7.2E-05	3.53E-04	1.27E-03	1.17E-04	5.73E-05	2.35E-04	1.97E-05	2.78E-05	1.07E-04	8.30E-06
680	464393.3	3809934	0.000352	0.000863	7.09E-05	3.48E-04	1.25E-03	1.15E-04	5.65E-05	2.32E-04	1.94E-05	2.74E-05	1.06E-04	8.18E-06
681	464413.3	3809934	0.000347	0.000851	6.99E-05	3.43E-04	1.23E-03	1.13E-04	5.57E-05	2.29E-04	1.91E-05	2.70E-05	1.04E-04	8.06E-06
682	464433.3	3809934	0.000342	0.000839	6.89E-05	3.38E-04	1.22E-03	1.12E-04	5.49E-05	2.25E-04	1.88E-05	2.66E-05	1.03E-04	7.94E-06
683	464453.3	3809934	0.000337	0.000827	6.79E-05	3.33E-04	1.20E-03	1.10E-04	5.41E-05	2.22E-04	1.86E-05	2.62E-05	1.01E-04	7.83E-06
684	464473.3	3809934	0.000332	0.000814	6.69E-05	3.28E-04	1.18E-03	1.08E-04	5.33E-05	2.19E-04	1.83E-05	2.58E-05	9.95E-05	7.71E-06
685	464493.3	3809934	0.000326	0.000801	6.58E-05	3.23E-04	1.16E-03	1.07E-04	5.24E-05	2.15E-04	1.80E-05	2.54E-05	9.79E-05	7.58E-06
686	464133.3	3809954	0.000394	0.000967	7.95E-05	3.90E-04	1.40E-03	1.29E-04	6.33E-05	2.60E-04	2.17E-05	3.07E-05	1.18E-04	9.16E-06
687	464153.3	3809954	0.000393	0.000966	7.93E-05	3.89E-04	1.40E-03	1.29E-04	6.32E-05	2.59E-04	2.17E-05	3.06E-05	1.18E-04	9.15E-06
688	464173.3	3809954	0.000392	0.000963	7.91E-05	3.88E-04	1.40E-03	1.28E-04	6.30E-05	2.59E-04	2.16E-05	3.05E-05	1.18E-04	9.12E-06
689	464193.3	3809954	0.000391	0.00096	7.89E-05	3.87E-04	1.39E-03	1.28E-04	6.28E-05	2.58E-04	2.16E-05	3.04E-05	1.17E-04	9.09E-06
690	464213.3	3809954	0.000389	0.000954	7.83E-05	3.84E-04	1.38E-03	1.27E-04	6.24E-05	2.56E-04	2.14E-05	3.02E-05	1.17E-04	9.03E-06
691	464233.3	3809954	0.000385	0.000945	7.76E-05	3.81E-04	1.37E-03	1.26E-04	6.18E-05	2.54E-04	2.12E-05	3.00E-05	1.15E-04	8.95E-06
692	464253.3	3809954	0.00038	0.000933	7.66E-05	3.76E-04	1.35E-03	1.24E-04	6.10E-05	2.51E-04	2.10E-05	2.96E-05	1.14E-04	8.83E-06
693	464273.3	3809954	0.000375	0.00092	7.56E-05	3.71E-04	1.33E-03	1.23E-04	6.02E-05	2.47E-04	2.07E-05	2.92E-05	1.12E-04	8.71E-06
694	464293.3	3809954	0.00037	0.000907	7.46E-05	3.66E-04	1.32E-03	1.21E-04	5.94E-05	2.44E-04	2.04E-05	2.88E-05	1.11E-04	8.59E-06
695	464313.3	3809954	0.000366	0.000897	7.37E-05	3.62E-04	1.30E-03	1.20E-04	5.87E-05	2.41E-04	2.02E-05	2.85E-05	1.10E-04	8.50E-06
696	464333.3	3809954	0.000361	0.000885	7.27E-05	3.57E-04	1.28E-03	1.18E-04	5.79E-05	2.38E-04	1.99E-05	2.81E-05	1.08E-04	8.38E-06
697	464353.3	3809954	0.000355	0.000872	7.16E-05	3.51E-04	1.26E-03	1.16E-04	5.70E-05	2.34E-04	1.96E-05	2.77E-05	1.07E-04	8.26E-06
698	464373.3	3809954	0.00035	0.000859	7.06E-05	3.46E-04	1.25E-03	1.14E-04	5.62E-05	2.31E-04	1.93E-05	2.72E-05	1.05E-04	8.14E-06
699	464393.3	38												

726	464193.3	3809994	0.00037	0.000909	7.47E-05	3.66E-04	1.32E-03	1.21E-04	5.95E-05	2.44E-04	2.04E-05	2.88E-05	1.11E-04	8.61E-06
727	464213.3	3809994	0.000369	0.000905	7.44E-05	3.65E-04	1.31E-03	1.21E-04	5.92E-05	2.43E-04	2.03E-05	2.87E-05	1.11E-04	8.57E-06
728	464233.3	3809994	0.000367	0.0009	7.39E-05	3.63E-04	1.30E-03	1.20E-04	5.89E-05	2.42E-04	2.02E-05	2.85E-05	1.10E-04	8.52E-06
729	464253.3	3809994	0.000363	0.000892	7.33E-05	3.59E-04	1.29E-03	1.19E-04	5.83E-05	2.40E-04	2.00E-05	2.83E-05	1.09E-04	8.45E-06
730	464273.3	3809994	0.000359	0.000882	7.25E-05	3.56E-04	1.28E-03	1.18E-04	5.77E-05	2.37E-04	1.98E-05	2.80E-05	1.08E-04	8.36E-06
731	464293.3	3809994	0.000355	0.000871	7.16E-05	3.51E-04	1.26E-03	1.16E-04	5.70E-05	2.34E-04	1.96E-05	2.76E-05	1.07E-04	8.25E-06
732	464313.3	3809994	0.00035	0.000859	7.06E-05	3.46E-04	1.25E-03	1.14E-04	5.62E-05	2.31E-04	1.93E-05	2.72E-05	1.05E-04	8.14E-06
733	464333.3	3809994	0.000346	0.000848	6.97E-05	3.42E-04	1.23E-03	1.13E-04	5.55E-05	2.28E-04	1.91E-05	2.69E-05	1.04E-04	8.03E-06
734	464353.3	3809994	0.000341	0.000838	6.88E-05	3.38E-04	1.21E-03	1.12E-04	5.48E-05	2.25E-04	1.88E-05	2.66E-05	1.02E-04	7.93E-06
735	464373.3	3809994	0.000336	0.000826	6.78E-05	3.33E-04	1.20E-03	1.10E-04	5.40E-05	2.22E-04	1.85E-05	2.62E-05	1.01E-04	7.82E-06
736	464393.3	3809994	0.000332	0.000814	6.69E-05	3.28E-04	1.18E-03	1.08E-04	5.32E-05	2.19E-04	1.83E-05	2.58E-05	9.95E-05	7.71E-06
737	464413.3	3809994	0.000327	0.000802	6.59E-05	3.23E-04	1.16E-03	1.07E-04	5.25E-05	2.16E-04	1.80E-05	2.54E-05	9.80E-05	7.60E-06
738	464433.3	3809994	0.000321	0.000789	6.48E-05	3.18E-04	1.14E-03	1.05E-04	5.16E-05	2.12E-04	1.77E-05	2.50E-05	9.64E-05	7.47E-06
739	464453.3	3809994	0.000317	0.000777	6.39E-05	3.13E-04	1.13E-03	1.04E-04	5.09E-05	2.09E-04	1.75E-05	2.47E-05	9.50E-05	7.36E-06
740	464473.3	3809994	0.000313	0.000767	6.3E-05	3.09E-04	1.11E-03	1.02E-04	5.02E-05	2.06E-04	1.72E-05	2.43E-05	9.38E-05	7.27E-06
741	464493.3	3809994	0.000308	0.000756	6.21E-05	3.05E-04	1.10E-03	1.01E-04	4.95E-05	2.03E-04	1.70E-05	2.40E-05	9.25E-05	7.16E-06
742	464173.3	3810014	0.000363	0.00089	7.31E-05	3.59E-04	1.29E-03	1.19E-04	5.82E-05	2.39E-04	2.00E-05	2.82E-05	1.09E-04	8.43E-06
743	464193.3	3810014	0.000362	0.000888	7.29E-05	3.58E-04	1.29E-03	1.18E-04	5.81E-05	2.38E-04	1.99E-05	2.82E-05	1.08E-04	8.41E-06
744	464213.3	3810014	0.00036	0.000882	7.25E-05	3.56E-04	1.28E-03	1.18E-04	5.77E-05	2.37E-04	1.98E-05	2.80E-05	1.08E-04	8.36E-06
745	464233.3	3810014	0.000357	0.000876	7.19E-05	3.53E-04	1.27E-03	1.17E-04	5.73E-05	2.35E-04	1.97E-05	2.78E-05	1.07E-04	8.29E-06
746	464253.3	3810014	0.000354	0.000868	7.13E-05	3.50E-04	1.26E-03	1.16E-04	5.68E-05	2.33E-04	1.95E-05	2.75E-05	1.06E-04	8.22E-06
747	464273.3	3810014	0.000351	0.000862	7.08E-05	3.47E-04	1.25E-03	1.15E-04	5.64E-05	2.32E-04	1.94E-05	2.73E-05	1.05E-04	8.16E-06
748	464293.3	3810014	0.000348	0.000855	7.02E-05	3.45E-04	1.24E-03	1.14E-04	5.59E-05	2.30E-04	1.92E-05	2.71E-05	1.04E-04	8.10E-06
749	464313.3	3810014	0.000343	0.000843	6.92E-05	3.40E-04	1.22E-03	1.12E-04	5.51E-05	2.26E-04	1.89E-05	2.67E-05	1.03E-04	7.98E-06
750	464333.3	3810014	0.000339	0.000831	6.83E-05	3.35E-04	1.20E-03	1.11E-04	5.43E-05	2.23E-04	1.87E-05	2.64E-05	1.02E-04	7.87E-06
751	464353.3	3810014	0.000334	0.000819	6.73E-05	3.30E-04	1.19E-03	1.09E-04	5.36E-05	2.20E-04	1.84E-05	2.60E-05	1.00E-04	7.76E-06
752	464373.3	3810014	0.000329	0.000807	6.63E-05	3.25E-04	1.17E-03	1.08E-04	5.28E-05	2.17E-04	1.81E-05	2.56E-05	9.87E-05	7.65E-06
753	464393.3	3810014	0.000324	0.000796	6.54E-05	3.21E-04	1.15E-03	1.06E-04	5.21E-05	2.14E-04	1.79E-05	2.52E-05	9.73E-05	7.54E-06
754	464413.3	3810014	0.00032	0.000785	6.45E-05	3.16E-04	1.14E-03	1.05E-04	5.13E-05	2.11E-04	1.76E-05	2.49E-05	9.59E-05	7.43E-06
755	464433.3	3810014	0.000315	0.000774	6.36E-05	3.12E-04	1.12E-03	1.03E-04	5.06E-05	2.08E-04	1.74E-05	2.45E-05	9.46E-05	7.33E-06
756	464453.3	3810014	0.000311	0.000763	6.27E-05	3.08E-04	1.11E-03	1.02E-04	4.99E-05	2.05E-04	1.71E-05	2.42E-05	9.33E-05	7.23E-06
757	464473.3	3810014	0.000307	0.000753	6.19E-05	3.04E-04	1.09E-03	1.00E-04	4.93E-05	2.02E-04	1.69E-05	2.39E-05	9.20E-05	7.13E-06
758	464493.3	3810014	0.000302	0.000741	6.09E-05	2.99E-04	1.07E-03	9.87E-05	4.85E-05	1.99E-04	1.66E-05	2.35E-05	9.06E-05	7.02E-06
759	464193.3	3810034	0.000352	0.000864	7.1E-05	3.48E-04	1.25E-03	1.15E-04	5.66E-05	2.32E-04	1.94E-05	2.74E-05	1.06E-04	8.19E-06
760	464213.3	3810034	0.000351	0.00086	7.07E-05	3.47E-04	1.25E-03	1.15E-04	5.63E-05	2.31E-04	1.93E-05	2.73E-05	1.05E-04	8.15E-06
761	464233.3	3810034	0.000348	0.000855	7.03E-05	3.45E-04	1.24E-03	1.14E-04	5.59E-05	2.30E-04	1.92E-05	2.71E-05	1.05E-04	8.10E-06
762	464253.3	3810034	0.000346	0.000848	6.97E-05	3.42E-04	1.23E-03	1.13E-04	5.55E-05	2.28E-04	1.90E-05	2.69E-05	1.04E-04	8.03E-06
763	464273.3	3810034	0.000343	0.000841	6.91E-05	3.39E-04	1.22E-03	1.12E-04	5.50E-05	2.26E-04	1.89E-05	2.67E-05	1.03E-04	7.96E-06
764	464293.3	3810034	0.00034	0.000833	6.85E-05	3.36E-04	1.21E-03	1.11E-04	5.45E-05	2.24E-04	1.87E-05	2.64E-05	1.02E-04	7.89E-06
765	464313.3	3810034	0.000336	0.000824	6.77E-05	3.32E-04	1.19E-03	1.10E-04	5.39E-05	2.21E-04	1.85E-05	2.61E-05	1.01E-04	7.80E-06
766	464333.3	3810034	0.000332	0.000814	6.69E-05	3.28E-04	1.18E-03	1.08E-04	5.32E-05	2.19E-04	1.83E-05	2.58E-05	9.95E-05	7.71E-06
767	464353.3	3810034	0.000327	0.000804	6.6E-05	3.24E-04	1.16E-03	1.07E-04	5.26E-05	2.16E-04	1.81E-05	2.55E-05	9.82E-05	7.61E-06
768	464373.3	3810034	0.000323	0.000792	6.51E-05	3.19E-04	1.15E-03	1.06E-04	5.18E-05	2.13E-04	1.78E-05	2.51E-05	9.68E-05	7.50E-06
769	464393.3	3810034	0.000318	0.000781	6.42E-05	3.15E-04	1.13E-03	1.04E-04	5.11E-05	2.10E-04	1.75E-05	2.48E-05	9.55E-05	7.40E-06
770	464413.3	3810034	0.000314	0.00077	6.33E-05	3.10E-04	1.12E-03	1.03E-04	5.04E-05	2.07E-04	1.73E-05	2.44E-05	9.41E-05	7.29E-06
771	464433.3	3810034	0.00031	0.00076	6.24E-05	3.06E-04	1.10E-03	1.01E-04	4.97E-05	2.04E-04	1.71E-05	2.41E-05	9.29E-05	7.19E-06
772	464453.3	3810034	0.000305	0.000748	6.15E-05	3.02E-04	1.08E-03	9.97E-05	4.90E-05	2.01E-04	1.68E-05	2.37E-05	9.15E-05	7.09E-06
773	464473.3	3810034	0.0003	0.000737	6.06E-05	2.97E-04	1.07E-03	9.82E-05	4.82E-05	1.98E-04	1.66E-05	2.34E-05	9.01E-05	6.98E-06
774	464493.3	3810034	0.000296	0.000727	5.97E-05	2.93E-04	1.05E-03	9.69E-05	4.76E-05	1.95E-04	1.63E-05	2.31E-05	8.89E-05	6.88E-06
775	464213.3	3810054	0.000342	0.000839	6.89E-05	3.38E-04	1.22E-03	1.12E-04	5.49E-05	2.25E-04	1.88E-05	2.66E-05	1.03E-04	7.95E-06
776	464233.3	3810054	0.00034	0.000835	6.86E-05	3.36E-04	1.21E-03	1.11E-04	5.46E-05	2.24E-04	1.88E-05	2.65E-05	1.02E-04	7.91E-06
777	464253.3	3810054	0.000337	0.000828	6.8E-05	3.34E-04	1.20E-03	1.10E-04	5.42E-05	2.22E-04	1.86E-05	2.63E-05	1.01E-04	7.84E-06
778	464273.3	3810054	0.000334	0.000821	6.74E-05	3.31E-04	1.19E-03	1.09E-04	5.37E-05	2.21E-04	1.84E-05	2.60E-05	1.00E-04	7.77E-06
779	464293.3	3810054	0.000331	0.000813	6.68E-05	3.28E-04	1.18E-03	1.08E-04	5.32E-05	2.19E-04	1.83E-05	2.58E-05	9.94E-05	7.70E-06
780	464313.3	3810054	0.000328	0.000805	6.61E-05	3.25E-04	1.17E-03	1.07E-04	5.27E-05	2.16E-04	1.81E-05	2.55E-05	9.84E-05	7.63E-06
781	464333.3	3810054	0.000325	0.000797	6.55E-05	3.21E-04	1.15E-03	1.06E-04	5.21E-05	2.14E-04	1.79E-05	2.53E-05	9.74E-05	7.55E-06
782	464353.3	3810054	0.000321	0.000788	6.47E-05	3.18E-04	1.14E-03	1.05E-04	5.15E-05	2.12E-04	1.77E-05	2.50E-05	9.63E-05	7.46E-06
783	464373.3	3810054	0.000317	0.000778	6.39E-05	3.13E-04	1.13E-03	1.04E-04	5.09E-05	2.09E-04	1.75E-05	2.47E-05	9.51E-05	7.36E-06
784	464393.3	3810054	0.000312	0.000767	6.3E-05	3.09E-04	1.11E-03	1.02E-04	5.02E-05	2.06E-04	1.72E-05	2.43E-05	9.37E-05	7.26E-06
785	464413.3	3810054	0.000308	0.000756	6.21E-05	3.05E-04	1.10E-03	1.01E-04	4.95E-05	2.03E-04	1.70E-05	2.40E-05	9.24E-05	7.16E-06
786	464433.3	3810054	0.000304	0.000745	6.12E-05	3.00E-04	1.08E-03	9.93E-05	4.87E-05	2.00E-04	1.67E-05	2.36E-05	9.11E-05	7.06E-06
787	464453.3	3810054	0.000299	0.000734	6.03E-05	2.96E-04	1.06E-03	9.78E-05	4.80E-05	1.97E-04	1.65E-05	2.33E-05	8.97E-05	6.95E-06
788	464473.3	3810054	0.000294	0.000723	5.94E-05	2.91E-04	1.05E-03	9.63E-05	4.73E-05	1.94E-04	1.62E-05	2.29E-05	8.83E-05	6.84E-06
789	464493.3	3810054	0.000291	0.000713	5.86E-05	2.87E-04	1.03E-03	9.50E-05	4.66E-05	1.92E-04	1.60E-05	2.26E-05	8.72E-05	6.75E-06
790	464233.3													

817	464293.3	3810114	0.000309	0.000758	6.23E-05	3.06E-04	1.10E-03	1.01E-04	4.96E-05	2.04E-04	1.70E-05	2.40E-05	9.27E-05	7.18E-06
818	464313.3	3810114	0.000306	0.00075	6.16E-05	3.02E-04	1.09E-03	1.00E-04	4.91E-05	2.02E-04	1.69E-05	2.38E-05	9.17E-05	7.10E-06
819	464333.3	3810114	0.000302	0.000742	6.09E-05	2.99E-04	1.08E-03	9.88E-05	4.85E-05	1.99E-04	1.67E-05	2.35E-05	9.07E-05	7.03E-06
820	464353.3	3810114	0.000299	0.000733	6.02E-05	2.96E-04	1.06E-03	9.77E-05	4.80E-05	1.97E-04	1.65E-05	2.33E-05	8.96E-05	6.94E-06
821	464373.3	3810114	0.000295	0.000724	5.95E-05	2.92E-04	1.05E-03	9.64E-05	4.73E-05	1.94E-04	1.63E-05	2.30E-05	8.85E-05	6.85E-06
822	464393.3	3810114	0.000291	0.000715	5.87E-05	2.88E-04	1.04E-03	9.53E-05	4.68E-05	1.92E-04	1.61E-05	2.27E-05	8.74E-05	6.77E-06
823	464413.3	3810114	0.000288	0.000707	5.81E-05	2.85E-04	1.02E-03	9.42E-05	4.62E-05	1.90E-04	1.59E-05	2.24E-05	8.64E-05	6.69E-06
824	464433.3	3810114	0.000284	0.000698	5.73E-05	2.81E-04	1.01E-03	9.30E-05	4.57E-05	1.88E-04	1.57E-05	2.21E-05	8.53E-05	6.61E-06
825	464453.3	3810114	0.00028	0.000688	5.65E-05	2.77E-04	9.97E-04	9.17E-05	4.50E-05	1.85E-04	1.55E-05	2.18E-05	8.41E-05	6.52E-06
826	464473.3	3810114	0.000276	0.000678	5.57E-05	2.73E-04	9.82E-04	9.03E-05	4.43E-05	1.82E-04	1.52E-05	2.15E-05	8.29E-05	6.42E-06
827	464493.3	3810114	0.000273	0.00067	5.5E-05	2.70E-04	9.70E-04	8.92E-05	4.38E-05	1.80E-04	1.50E-05	2.12E-05	8.18E-05	6.34E-06
828	464313.3	3810134	0.000299	0.000733	6.02E-05	2.95E-04	1.06E-03	9.77E-05	4.79E-05	1.97E-04	1.65E-05	2.32E-05	8.96E-05	6.94E-06
829	464333.3	3810134	0.000295	0.000723	5.94E-05	2.92E-04	1.05E-03	9.64E-05	4.73E-05	1.94E-04	1.63E-05	2.29E-05	8.84E-05	6.85E-06
830	464353.3	3810134	0.000291	0.000714	5.87E-05	2.88E-04	1.03E-03	9.51E-05	4.67E-05	1.92E-04	1.60E-05	2.26E-05	8.73E-05	6.76E-06
831	464373.3	3810134	0.000288	0.000706	5.8E-05	2.85E-04	1.02E-03	9.41E-05	4.62E-05	1.90E-04	1.59E-05	2.24E-05	8.63E-05	6.69E-06
832	464393.3	3810134	0.000284	0.000697	5.73E-05	2.81E-04	1.01E-03	9.29E-05	4.56E-05	1.87E-04	1.57E-05	2.21E-05	8.52E-05	6.60E-06
833	464413.3	3810134	0.00028	0.000688	5.65E-05	2.77E-04	9.97E-04	9.17E-05	4.50E-05	1.85E-04	1.55E-05	2.18E-05	8.41E-05	6.52E-06
834	464433.3	3810134	0.000278	0.000681	5.6E-05	2.75E-04	9.87E-04	9.08E-05	4.46E-05	1.83E-04	1.53E-05	2.16E-05	8.33E-05	6.45E-06
835	464453.3	3810134	0.000274	0.000673	5.53E-05	2.71E-04	9.75E-04	8.97E-05	4.40E-05	1.81E-04	1.51E-05	2.13E-05	8.22E-05	6.37E-06
836	464473.3	3810134	0.000271	0.000664	5.46E-05	2.68E-04	9.63E-04	8.85E-05	4.35E-05	1.78E-04	1.49E-05	2.11E-05	8.12E-05	6.29E-06
837	464493.3	3810134	0.000267	0.000656	5.39E-05	2.64E-04	9.51E-04	8.74E-05	4.29E-05	1.76E-04	1.47E-05	2.08E-05	8.02E-05	6.21E-06
838	464937.9	3807269	1.77E-05	4.35E-05	3.57E-06	1.75E-05	6.30E-05	5.79E-06	2.84E-06	1.17E-05	9.77E-07	1.38E-06	5.32E-06	4.12E-07
839	464937.9	3807289	1.82E-05	4.47E-05	3.67E-06	1.80E-05	6.48E-05	5.95E-06	2.92E-06	1.20E-05	1.00E-06	1.42E-06	5.46E-06	4.23E-07
840	464957.9	3807289	1.81E-05	4.43E-05	3.64E-06	1.79E-05	6.42E-05	5.91E-06	2.90E-06	1.19E-05	9.96E-07	1.41E-06	5.42E-06	4.20E-07
841	464977.9	3807289	1.8E-05	4.41E-05	3.62E-06	1.78E-05	6.39E-05	5.88E-06	2.88E-06	1.18E-05	9.91E-07	1.40E-06	5.39E-06	4.18E-07
842	464937.9	3807309	1.86E-05	4.56E-05	3.75E-06	1.84E-05	6.61E-05	6.08E-06	2.98E-06	1.23E-05	1.03E-06	1.45E-06	5.58E-06	4.32E-07
843	464957.9	3807309	1.85E-05	4.54E-05	3.73E-06	1.83E-05	6.57E-05	6.04E-06	2.97E-06	1.22E-05	1.02E-06	1.44E-06	5.54E-06	4.30E-07
844	464977.9	3807309	1.84E-05	4.52E-05	3.72E-06	1.82E-05	6.55E-05	6.03E-06	2.96E-06	1.22E-05	1.02E-06	1.43E-06	5.53E-06	4.28E-07
845	464997.9	3807309	1.86E-05	4.55E-05	3.74E-06	1.84E-05	6.60E-05	6.07E-06	2.98E-06	1.22E-05	1.02E-06	1.44E-06	5.57E-06	4.31E-07
846	465017.9	3807309	1.87E-05	4.59E-05	3.77E-06	1.85E-05	6.65E-05	6.11E-06	3.00E-06	1.23E-05	1.03E-06	1.46E-06	5.61E-06	4.35E-07
847	464937.9	3807329	1.91E-05	4.69E-05	3.85E-06	1.89E-05	6.79E-05	6.24E-06	3.07E-06	1.26E-05	1.05E-06	1.49E-06	5.73E-06	4.44E-07
848	464957.9	3807329	1.91E-05	4.68E-05	3.85E-06	1.89E-05	6.78E-05	6.24E-06	3.06E-06	1.26E-05	1.05E-06	1.48E-06	5.72E-06	4.43E-07
849	464977.9	3807329	1.91E-05	4.68E-05	3.84E-06	1.89E-05	6.78E-05	6.23E-06	3.06E-06	1.26E-05	1.05E-06	1.48E-06	5.72E-06	4.43E-07
850	464997.9	3807329	1.92E-05	4.71E-05	3.87E-06	1.90E-05	6.83E-05	6.28E-06	3.08E-06	1.27E-05	1.06E-06	1.49E-06	5.76E-06	4.46E-07
851	465017.9	3807329	1.94E-05	4.75E-05	3.9E-06	1.92E-05	6.89E-05	6.33E-06	3.11E-06	1.28E-05	1.07E-06	1.51E-06	5.81E-06	4.50E-07
852	465037.9	3807329	1.95E-05	4.8E-05	3.94E-06	1.93E-05	6.95E-05	6.39E-06	3.14E-06	1.29E-05	1.08E-06	1.52E-06	5.86E-06	4.54E-07
853	465057.9	3807329	1.97E-05	4.83E-05	3.97E-06	1.95E-05	7.00E-05	6.44E-06	3.16E-06	1.30E-05	1.09E-06	1.53E-06	5.91E-06	4.58E-07
854	464937.9	3807349	1.97E-05	4.83E-05	3.97E-06	1.95E-05	7.00E-05	6.44E-06	3.16E-06	1.30E-05	1.09E-06	1.53E-06	5.90E-06	4.57E-07
855	464957.9	3807349	1.98E-05	4.85E-05	3.98E-06	1.95E-05	7.02E-05	6.46E-06	3.17E-06	1.30E-05	1.09E-06	1.54E-06	5.93E-06	4.59E-07
856	464977.9	3807349	1.98E-05	4.85E-05	3.99E-06	1.96E-05	7.03E-05	6.47E-06	3.17E-06	1.30E-05	1.09E-06	1.54E-06	5.93E-06	4.60E-07
857	464997.9	3807349	1.99E-05	4.87E-05	4E-06	1.96E-05	7.06E-05	6.49E-06	3.19E-06	1.31E-05	1.09E-06	1.55E-06	5.96E-06	4.62E-07
858	465017.9	3807349	2E-05	4.92E-05	4.04E-06	1.98E-05	7.12E-05	6.55E-06	3.22E-06	1.32E-05	1.10E-06	1.56E-06	6.01E-06	4.66E-07
859	465037.9	3807349	2.03E-05	4.97E-05	4.09E-06	2.01E-05	7.21E-05	6.63E-06	3.25E-06	1.34E-05	1.12E-06	1.58E-06	6.08E-06	4.71E-07
860	465057.9	3807349	2.04E-05	5.01E-05	4.11E-06	2.02E-05	7.26E-05	6.67E-06	3.28E-06	1.35E-05	1.13E-06	1.59E-06	6.12E-06	4.74E-07
861	465077.9	3807349	2.05E-05	5.04E-05	4.14E-06	2.03E-05	7.30E-05	6.71E-06	3.30E-06	1.35E-05	1.13E-06	1.60E-06	6.16E-06	4.77E-07
862	464937.9	3807369	2.03E-05	4.98E-05	4.09E-06	2.01E-05	7.21E-05	6.63E-06	3.26E-06	1.34E-05	1.12E-06	1.58E-06	6.09E-06	4.71E-07
863	464957.9	3807369	2.03E-05	4.99E-05	4.1E-06	2.01E-05	7.23E-05	6.64E-06	3.26E-06	1.34E-05	1.12E-06	1.58E-06	6.09E-06	4.72E-07
864	464977.9	3807369	2.04E-05	5E-05	4.11E-06	2.01E-05	7.24E-05	6.66E-06	3.27E-06	1.34E-05	1.12E-06	1.59E-06	6.11E-06	4.73E-07
865	464997.9	3807369	2.06E-05	5.05E-05	4.15E-06	2.04E-05	7.32E-05	6.73E-06	3.30E-06	1.36E-05	1.13E-06	1.60E-06	6.17E-06	4.78E-07
866	465017.9	3807369	2.08E-05	5.1E-05	4.19E-06	2.05E-05	7.39E-05	6.79E-06	3.33E-06	1.37E-05	1.15E-06	1.62E-06	6.23E-06	4.83E-07
867	465037.9	3807369	2.09E-05	5.13E-05	4.22E-06	2.07E-05	7.44E-05	6.84E-06	3.36E-06	1.38E-05	1.15E-06	1.63E-06	6.27E-06	4.86E-07
868	465057.9	3807369	2.1E-05	5.16E-05	4.24E-06	2.08E-05	7.48E-05	6.88E-06	3.38E-06	1.39E-05	1.16E-06	1.64E-06	6.31E-06	4.89E-07
869	465077.9	3807369	2.11E-05	5.19E-05	4.26E-06	2.09E-05	7.52E-05	6.91E-06	3.39E-06	1.39E-05	1.17E-06	1.65E-06	6.34E-06	4.91E-07
870	465097.9	3807369	2.12E-05	5.21E-05	4.28E-06	2.10E-05	7.55E-05	6.94E-06	3.41E-06	1.40E-05	1.17E-06	1.65E-06	6.37E-06	4.93E-07
871	465117.9	3807369	2.12E-05	5.21E-05	4.28E-06	2.10E-05	7.55E-05	6.94E-06	3.41E-06	1.40E-05	1.17E-06	1.65E-06	6.36E-06	4.93E-07
872	464937.9	3807389	2.1E-05	5.14E-05	4.23E-06	2.07E-05	7.46E-05	6.86E-06	3.37E-06	1.38E-05	1.16E-06	1.63E-06	6.29E-06	4.87E-07
873	464957.9	3807389	2.1E-05	5.16E-05	4.24E-06	2.08E-05	7.48E-05	6.88E-06	3.38E-06	1.39E-05	1.16E-06	1.64E-06	6.31E-06	4.89E-07
874	464977.9	3807389	2.11E-05	5.18E-05	4.26E-06	2.09E-05	7.51E-05	6.91E-06	3.39E-06	1.39E-05	1.16E-06	1.64E-06	6.34E-06	4.91E-07
875	464997.9	3807389	2.13E-05	5.23E-05	4.29E-06	2.11E-05	7.57E-05	6.96E-06	3.42E-06	1.40E-05	1.17E-06	1.66E-06	6.39E-06	4.95E-07
876	465017.9	3807389	2.14E-05	5.26E-05	4.32E-06	2.12E-05	7.63E-05	7.01E-06	3.44E-06	1.41E-05	1.18E-06	1.67E-06	6.43E-06	4.99E-07
877	465037.9	3807389	2.16E-05	5.29E-05	4.35E-06	2.13E-05	7.67E-05	7.05E-06	3.46E-06	1.42E-05	1.19E-06	1.68E-06	6.47E-06	5.01E-07
878	465057.9	3807389	2.17E-05	5.32E-05	4.37E-06	2.14E-05	7.71E-05	7.09E-06	3.48E-06	1.43E-05	1.19E-06	1.69E-06	6.50E-06	5.04E-07
879	465077.9	3807389	2.17E-05	5.34E-05	4.38E-06	2.15E-05	7.73E-05	7.11E-06	3.49E-06	1.43E-05	1.20E-06	1.69E-06	6.52E-06	5.05E-07
880	465097.9	3807389	2.17E-05	5.34E-05	4.38E-06	2.15E-05	7.73E-05	7.11E-06	3.49E-06	1.43E-05	1.20E-06	1.69E-06	6.52E-06	5.05E-07
881	465117.9	3807												

908	465137.9	3807429	2.21E-05	5.43E-05	4.46E-06	2.19E-05	7.87E-05	7.23E-06	3.55E-06	1.46E-05	1.22E-06	1.72E-06	6.63E-06	5.14E-07
909	465157.9	3807429	2.18E-05	5.34E-05	4.39E-06	2.15E-05	7.74E-05	7.11E-06	3.49E-06	1.43E-05	1.20E-06	1.69E-06	6.53E-06	5.06E-07
910	465177.9	3807429	2.13E-05	5.24E-05	4.3E-06	2.11E-05	7.59E-05	6.98E-06	3.43E-06	1.41E-05	1.18E-06	1.66E-06	6.40E-06	4.96E-07
911	465197.9	3807429	2.09E-05	5.12E-05	4.21E-06	2.06E-05	7.42E-05	6.82E-06	3.35E-06	1.38E-05	1.15E-06	1.62E-06	6.26E-06	4.85E-07
912	465217.9	3807429	1.99E-05	4.89E-05	4.02E-06	1.97E-05	7.09E-05	6.52E-06	3.20E-06	1.32E-05	1.10E-06	1.55E-06	5.98E-06	4.64E-07
913	465237.9	3807429	1.95E-05	4.79E-05	3.94E-06	1.93E-05	6.94E-05	6.38E-06	3.13E-06	1.29E-05	1.08E-06	1.52E-06	5.86E-06	4.54E-07
914	464937.9	3807449	2.31E-05	5.68E-05	4.67E-06	2.29E-05	8.23E-05	7.57E-06	3.72E-06	1.53E-05	1.28E-06	1.80E-06	6.94E-06	5.38E-07
915	464957.9	3807449	2.32E-05	5.7E-05	4.68E-06	2.30E-05	8.26E-05	7.60E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.97E-06	5.40E-07
916	464977.9	3807449	2.34E-05	5.73E-05	4.71E-06	2.31E-05	8.31E-05	7.64E-06	3.75E-06	1.54E-05	1.29E-06	1.82E-06	7.01E-06	5.43E-07
917	464997.9	3807449	2.34E-05	5.75E-05	4.72E-06	2.32E-05	8.33E-05	7.66E-06	3.76E-06	1.54E-05	1.29E-06	1.82E-06	7.03E-06	5.44E-07
918	465017.9	3807449	2.35E-05	5.76E-05	4.73E-06	2.32E-05	8.34E-05	7.67E-06	3.77E-06	1.55E-05	1.29E-06	1.83E-06	7.04E-06	5.45E-07
919	465037.9	3807449	2.35E-05	5.76E-05	4.73E-06	2.32E-05	8.34E-05	7.67E-06	3.77E-06	1.55E-05	1.29E-06	1.83E-06	7.04E-06	5.45E-07
920	465057.9	3807449	2.34E-05	5.74E-05	4.71E-06	2.31E-05	8.32E-05	7.65E-06	3.75E-06	1.54E-05	1.29E-06	1.82E-06	7.01E-06	5.43E-07
921	465077.9	3807449	2.32E-05	5.7E-05	4.68E-06	2.30E-05	8.26E-05	7.59E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.97E-06	5.40E-07
922	465097.9	3807449	2.3E-05	5.64E-05	4.64E-06	2.28E-05	8.18E-05	7.52E-06	3.69E-06	1.52E-05	1.27E-06	1.79E-06	6.90E-06	5.35E-07
923	465117.9	3807449	2.27E-05	5.57E-05	4.58E-06	2.24E-05	8.07E-05	7.42E-06	3.64E-06	1.50E-05	1.25E-06	1.77E-06	6.81E-06	5.27E-07
924	465137.9	3807449	2.23E-05	5.48E-05	4.5E-06	2.21E-05	7.94E-05	7.30E-06	3.58E-06	1.47E-05	1.23E-06	1.74E-06	6.69E-06	5.19E-07
925	465157.9	3807449	2.19E-05	5.37E-05	4.41E-06	2.17E-05	7.78E-05	7.16E-06	3.51E-06	1.44E-05	1.21E-06	1.70E-06	6.57E-06	5.09E-07
926	465177.9	3807449	2.14E-05	5.25E-05	4.31E-06	2.12E-05	7.61E-05	7.00E-06	3.44E-06	1.41E-05	1.18E-06	1.67E-06	6.42E-06	4.97E-07
927	465197.9	3807449	2.05E-05	5.02E-05	4.13E-06	2.02E-05	7.28E-05	6.69E-06	3.28E-06	1.35E-05	1.13E-06	1.59E-06	6.14E-06	4.76E-07
928	465217.9	3807449	2E-05	4.91E-05	4.04E-06	1.98E-05	7.12E-05	6.55E-06	3.21E-06	1.32E-05	1.10E-06	1.56E-06	6.01E-06	4.65E-07
929	465237.9	3807449	1.96E-05	4.8E-05	3.95E-06	1.94E-05	6.96E-05	6.40E-06	3.14E-06	1.29E-05	1.08E-06	1.52E-06	5.87E-06	4.55E-07
930	465257.9	3807449	1.91E-05	4.69E-05	3.85E-06	1.89E-05	6.80E-05	6.25E-06	3.07E-06	1.26E-05	1.05E-06	1.49E-06	5.74E-06	4.44E-07
931	465277.9	3807449	1.87E-05	4.58E-05	3.76E-06	1.85E-05	6.64E-05	6.10E-06	3.00E-06	1.23E-05	1.03E-06	1.45E-06	5.60E-06	4.34E-07
932	464937.9	3807469	2.39E-05	5.86E-05	4.81E-06	2.36E-05	8.49E-05	7.81E-06	3.83E-06	1.57E-05	1.32E-06	1.86E-06	7.16E-06	5.55E-07
933	464957.9	3807469	2.4E-05	5.89E-05	4.84E-06	2.37E-05	8.53E-05	7.84E-06	3.85E-06	1.58E-05	1.32E-06	1.87E-06	7.20E-06	5.57E-07
934	464977.9	3807469	2.41E-05	5.92E-05	4.86E-06	2.39E-05	8.58E-05	7.89E-06	3.87E-06	1.59E-05	1.33E-06	1.88E-06	7.23E-06	5.61E-07
935	464997.9	3807469	2.41E-05	5.92E-05	4.86E-06	2.39E-05	8.58E-05	7.89E-06	3.87E-06	1.59E-05	1.33E-06	1.88E-06	7.24E-06	5.61E-07
936	465017.9	3807469	2.41E-05	5.91E-05	4.86E-06	2.38E-05	8.57E-05	7.88E-06	3.87E-06	1.59E-05	1.33E-06	1.88E-06	7.23E-06	5.60E-07
937	465037.9	3807469	2.4E-05	5.89E-05	4.84E-06	2.37E-05	8.54E-05	7.85E-06	3.85E-06	1.58E-05	1.32E-06	1.87E-06	7.20E-06	5.58E-07
938	465057.9	3807469	2.38E-05	5.85E-05	4.81E-06	2.36E-05	8.48E-05	7.79E-06	3.83E-06	1.57E-05	1.31E-06	1.86E-06	7.15E-06	5.54E-07
939	465077.9	3807469	2.36E-05	5.79E-05	4.75E-06	2.33E-05	8.39E-05	7.71E-06	3.79E-06	1.56E-05	1.30E-06	1.84E-06	7.07E-06	5.48E-07
940	465097.9	3807469	2.33E-05	5.71E-05	4.69E-06	2.30E-05	8.28E-05	7.61E-06	3.74E-06	1.53E-05	1.28E-06	1.81E-06	6.98E-06	5.41E-07
941	465117.9	3807469	2.29E-05	5.62E-05	4.62E-06	2.26E-05	8.14E-05	7.49E-06	3.68E-06	1.51E-05	1.26E-06	1.78E-06	6.87E-06	5.32E-07
942	465137.9	3807469	2.25E-05	5.51E-05	4.53E-06	2.22E-05	7.99E-05	7.34E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.74E-06	5.22E-07
943	465157.9	3807469	2.2E-05	5.39E-05	4.43E-06	2.17E-05	7.81E-05	7.18E-06	3.53E-06	1.45E-05	1.21E-06	1.71E-06	6.59E-06	5.11E-07
944	465177.9	3807469	2.1E-05	5.16E-05	4.24E-06	2.08E-05	7.47E-05	6.87E-06	3.37E-06	1.39E-05	1.16E-06	1.64E-06	6.30E-06	4.88E-07
945	465197.9	3807469	2.06E-05	5.04E-05	4.14E-06	2.03E-05	7.31E-05	6.72E-06	3.30E-06	1.36E-05	1.13E-06	1.60E-06	6.17E-06	4.78E-07
946	465217.9	3807469	2.01E-05	4.93E-05	4.05E-06	1.99E-05	7.14E-05	6.57E-06	3.22E-06	1.32E-05	1.11E-06	1.56E-06	6.03E-06	4.67E-07
947	465237.9	3807469	1.96E-05	4.81E-05	3.96E-06	1.94E-05	6.98E-05	6.41E-06	3.15E-06	1.29E-05	1.08E-06	1.53E-06	5.88E-06	4.56E-07
948	465257.9	3807469	1.91E-05	4.7E-05	3.86E-06	1.89E-05	6.81E-05	6.26E-06	3.07E-06	1.26E-05	1.06E-06	1.49E-06	5.74E-06	4.45E-07
949	465277.9	3807469	1.87E-05	4.58E-05	3.76E-06	1.85E-05	6.64E-05	6.10E-06	3.00E-06	1.23E-05	1.03E-06	1.45E-06	5.60E-06	4.34E-07
950	465297.9	3807469	1.82E-05	4.46E-05	3.67E-06	1.80E-05	6.47E-05	5.95E-06	2.92E-06	1.20E-05	1.00E-06	1.42E-06	5.46E-06	4.23E-07
951	465317.9	3807469	1.77E-05	4.35E-05	3.58E-06	1.76E-05	6.31E-05	5.80E-06	2.85E-06	1.17E-05	9.78E-07	1.38E-06	5.32E-06	4.12E-07
952	464937.9	3807489	2.47E-05	6.06E-05	4.98E-06	2.44E-05	8.78E-05	8.07E-06	3.96E-06	1.63E-05	1.36E-06	1.92E-06	7.40E-06	5.74E-07
953	464957.9	3807489	2.48E-05	6.08E-05	4.99E-06	2.45E-05	8.81E-05	8.10E-06	3.98E-06	1.63E-05	1.37E-06	1.93E-06	7.43E-06	5.76E-07
954	464977.9	3807489	2.48E-05	6.08E-05	5E-06	2.45E-05	8.82E-05	8.11E-06	3.98E-06	1.63E-05	1.37E-06	1.93E-06	7.44E-06	5.76E-07
955	464997.9	3807489	2.47E-05	6.07E-05	4.99E-06	2.45E-05	8.80E-05	8.09E-06	3.97E-06	1.63E-05	1.36E-06	1.93E-06	7.42E-06	5.75E-07
956	465017.9	3807489	2.47E-05	6.05E-05	4.97E-06	2.44E-05	8.77E-05	8.06E-06	3.96E-06	1.63E-05	1.36E-06	1.92E-06	7.40E-06	5.73E-07
957	465037.9	3807489	2.45E-05	6.01E-05	4.94E-06	2.42E-05	8.71E-05	8.00E-06	3.93E-06	1.61E-05	1.35E-06	1.91E-06	7.34E-06	5.69E-07
958	465057.9	3807489	2.42E-05	5.94E-05	4.88E-06	2.40E-05	8.62E-05	7.92E-06	3.89E-06	1.60E-05	1.34E-06	1.89E-06	7.27E-06	5.63E-07
959	465077.9	3807489	2.39E-05	5.87E-05	4.82E-06	2.36E-05	8.50E-05	7.82E-06	3.84E-06	1.58E-05	1.32E-06	1.86E-06	7.17E-06	5.55E-07
960	465097.9	3807489	2.35E-05	5.77E-05	4.74E-06	2.33E-05	8.36E-05	7.69E-06	3.77E-06	1.55E-05	1.30E-06	1.83E-06	7.05E-06	5.46E-07
961	465117.9	3807489	2.3E-05	5.65E-05	4.64E-06	2.28E-05	8.19E-05	7.53E-06	3.70E-06	1.52E-05	1.27E-06	1.79E-06	6.91E-06	5.35E-07
962	465137.9	3807489	2.2E-05	5.41E-05	4.44E-06	2.18E-05	7.84E-05	7.21E-06	3.54E-06	1.45E-05	1.22E-06	1.72E-06	6.61E-06	5.12E-07
963	465157.9	3807489	2.16E-05	5.3E-05	4.35E-06	2.13E-05	7.68E-05	7.06E-06	3.46E-06	1.42E-05	1.19E-06	1.68E-06	6.47E-06	5.02E-07
964	465177.9	3807489	2.11E-05	5.18E-05	4.26E-06	2.09E-05	7.51E-05	6.90E-06	3.39E-06	1.39E-05	1.16E-06	1.64E-06	6.33E-06	4.91E-07
965	465197.9	3807489	2.06E-05	5.06E-05	4.16E-06	2.04E-05	7.34E-05	6.74E-06	3.31E-06	1.36E-05	1.14E-06	1.61E-06	6.19E-06	4.79E-07
966	465217.9	3807489	2.01E-05	4.94E-05	4.06E-06	1.99E-05	7.16E-05	6.59E-06	3.23E-06	1.33E-05	1.11E-06	1.57E-06	6.04E-06	4.68E-07
967	465237.9	3807489	1.96E-05	4.82E-05	3.96E-06	1.94E-05	6.99E-05	6.42E-06	3.15E-06	1.30E-05	1.08E-06	1.53E-06	5.89E-06	4.57E-07
968	465257.9	3807489	1.91E-05	4.7E-05	3.86E-06	1.89E-05	6.81E-05	6.26E-06	3.07E-06	1.26E-05	1.06E-06	1.49E-06	5.74E-06	4.45E-07
969	465277.9	3807489	1.87E-05	4.58E-05	3.76E-06	1.85E-05	6.64E-05	6.10E-06	3.00E-06	1.23E-05	1.03E-06	1.45E-06	5.60E-06	4.34E-07
970	465297.9	3807489	1.82E-05	4.47E-05	3.67E-06	1.80E-05	6.47E-05	5.95E-06	2.92E-06	1.20E-05	1.00E-06	1.42E-06	5.46E-06	4.23E-07
971	465317.9	3807489	1.78E-05	4.36E-05	3.58E-06	1.76E-05	6.32E-05	5.81E-06	2.85E-06	1.17E-05	9.79E-07	1.38E-06	5.33E-06	4.13E-07
972	465337.9	3												

999	464977.9	3807529	2.6E-05	6.39E-05	5.25E-06	2.58E-05	9.26E-05	8.51E-06	4.18E-06	1.72E-05	1.44E-06	2.03E-06	7.81E-06	6.05E-07
1000	464997.9	3807529	2.59E-05	6.35E-05	5.21E-06	2.56E-05	9.20E-05	8.46E-06	4.15E-06	1.71E-05	1.43E-06	2.01E-06	7.76E-06	6.01E-07
1001	465017.9	3807529	2.56E-05	6.28E-05	5.16E-06	2.53E-05	9.10E-05	8.37E-06	4.11E-06	1.69E-05	1.41E-06	1.99E-06	7.67E-06	5.95E-07
1002	465037.9	3807529	2.52E-05	6.19E-05	5.09E-06	2.50E-05	8.98E-05	8.25E-06	4.05E-06	1.66E-05	1.39E-06	1.96E-06	7.57E-06	5.87E-07
1003	465057.9	3807529	2.48E-05	6.09E-05	5E-06	2.45E-05	8.83E-05	8.12E-06	3.98E-06	1.64E-05	1.37E-06	1.93E-06	7.44E-06	5.77E-07
1004	465077.9	3807529	2.43E-05	5.97E-05	4.9E-06	2.41E-05	8.65E-05	7.95E-06	3.90E-06	1.60E-05	1.34E-06	1.89E-06	7.29E-06	5.65E-07
1005	465097.9	3807529	2.33E-05	5.72E-05	4.7E-06	2.30E-05	8.29E-05	7.62E-06	3.74E-06	1.54E-05	1.28E-06	1.81E-06	6.99E-06	5.42E-07
1006	465117.9	3807529	2.28E-05	5.6E-05	4.6E-06	2.26E-05	8.11E-05	7.46E-06	3.66E-06	1.50E-05	1.26E-06	1.78E-06	6.84E-06	5.30E-07
1007	465137.9	3807529	2.23E-05	5.47E-05	4.5E-06	2.21E-05	7.93E-05	7.29E-06	3.58E-06	1.47E-05	1.23E-06	1.74E-06	6.69E-06	5.18E-07
1008	465157.9	3807529	2.18E-05	5.34E-05	4.39E-06	2.15E-05	7.74E-05	7.12E-06	3.49E-06	1.44E-05	1.20E-06	1.69E-06	6.53E-06	5.06E-07
1009	465177.9	3807529	2.12E-05	5.21E-05	4.28E-06	2.10E-05	7.56E-05	6.95E-06	3.41E-06	1.40E-05	1.17E-06	1.65E-06	6.37E-06	4.94E-07
1010	465197.9	3807529	2.07E-05	5.09E-05	4.18E-06	2.05E-05	7.37E-05	6.78E-06	3.33E-06	1.37E-05	1.14E-06	1.61E-06	6.22E-06	4.82E-07
1011	465217.9	3807529	2.02E-05	4.96E-05	4.07E-06	2.00E-05	7.18E-05	6.60E-06	3.24E-06	1.33E-05	1.11E-06	1.57E-06	6.06E-06	4.69E-07
1012	465237.9	3807529	1.97E-05	4.83E-05	3.97E-06	1.95E-05	7.00E-05	6.43E-06	3.16E-06	1.30E-05	1.08E-06	1.53E-06	5.90E-06	4.57E-07
1013	465257.9	3807529	1.92E-05	4.71E-05	3.87E-06	1.90E-05	6.82E-05	6.27E-06	3.08E-06	1.26E-05	1.06E-06	1.49E-06	5.75E-06	4.46E-07
1014	465277.9	3807529	1.87E-05	4.59E-05	3.77E-06	1.85E-05	6.66E-05	6.12E-06	3.00E-06	1.23E-05	1.03E-06	1.46E-06	5.61E-06	4.35E-07
1015	465297.9	3807529	1.83E-05	4.48E-05	3.68E-06	1.81E-05	6.50E-05	5.97E-06	2.93E-06	1.20E-05	1.01E-06	1.42E-06	5.48E-06	4.24E-07
1016	465317.9	3807529	1.78E-05	4.38E-05	3.6E-06	1.76E-05	6.34E-05	5.83E-06	2.86E-06	1.18E-05	9.84E-07	1.39E-06	5.35E-06	4.15E-07
1017	465337.9	3807529	1.74E-05	4.28E-05	3.52E-06	1.73E-05	6.21E-05	5.71E-06	2.80E-06	1.15E-05	9.62E-07	1.36E-06	5.23E-06	4.06E-07
1018	465357.9	3807529	1.71E-05	4.19E-05	3.44E-06	1.69E-05	6.08E-05	5.59E-06	2.74E-06	1.13E-05	9.42E-07	1.33E-06	5.12E-06	3.97E-07
1019	465377.9	3807529	1.67E-05	4.11E-05	3.38E-06	1.66E-05	5.96E-05	5.48E-06	2.69E-06	1.10E-05	9.23E-07	1.30E-06	5.02E-06	3.89E-07
1020	464937.9	3807549	2.69E-05	6.6E-05	5.42E-06	2.66E-05	9.56E-05	8.79E-06	4.32E-06	1.77E-05	1.48E-06	2.09E-06	8.07E-06	6.25E-07
1021	464957.9	3807549	2.68E-05	6.57E-05	5.4E-06	2.65E-05	9.53E-05	8.76E-06	4.30E-06	1.77E-05	1.48E-06	2.08E-06	8.04E-06	6.23E-07
1022	464977.9	3807549	2.66E-05	6.53E-05	5.36E-06	2.63E-05	9.46E-05	8.70E-06	4.27E-06	1.75E-05	1.47E-06	2.07E-06	7.98E-06	6.18E-07
1023	464997.9	3807549	2.63E-05	6.46E-05	5.31E-06	2.60E-05	9.36E-05	8.61E-06	4.22E-06	1.74E-05	1.45E-06	2.05E-06	7.90E-06	6.12E-07
1024	465017.9	3807549	2.6E-05	6.37E-05	5.23E-06	2.57E-05	9.23E-05	8.49E-06	4.17E-06	1.71E-05	1.43E-06	2.02E-06	7.79E-06	6.03E-07
1025	465037.9	3807549	2.55E-05	6.26E-05	5.15E-06	2.52E-05	9.08E-05	8.35E-06	4.10E-06	1.68E-05	1.41E-06	1.99E-06	7.66E-06	5.93E-07
1026	465057.9	3807549	2.5E-05	6.13E-05	5.04E-06	2.47E-05	8.89E-05	8.17E-06	4.01E-06	1.65E-05	1.38E-06	1.95E-06	7.50E-06	5.81E-07
1027	465077.9	3807549	2.4E-05	5.88E-05	4.83E-06	2.37E-05	8.53E-05	7.84E-06	3.85E-06	1.58E-05	1.32E-06	1.87E-06	7.19E-06	5.57E-07
1028	465097.9	3807549	2.35E-05	5.76E-05	4.73E-06	2.32E-05	8.34E-05	7.67E-06	3.77E-06	1.55E-05	1.29E-06	1.83E-06	7.04E-06	5.45E-07
1029	465117.9	3807549	2.29E-05	5.63E-05	4.63E-06	2.27E-05	8.16E-05	7.50E-06	3.68E-06	1.51E-05	1.26E-06	1.79E-06	6.88E-06	5.33E-07
1030	465137.9	3807549	2.24E-05	5.5E-05	4.52E-06	2.22E-05	7.97E-05	7.33E-06	3.60E-06	1.48E-05	1.24E-06	1.74E-06	6.72E-06	5.21E-07
1031	465157.9	3807549	2.18E-05	5.36E-05	4.4E-06	2.16E-05	7.77E-05	7.14E-06	3.51E-06	1.44E-05	1.20E-06	1.70E-06	6.55E-06	5.08E-07
1032	465177.9	3807549	2.13E-05	5.23E-05	4.29E-06	2.11E-05	7.57E-05	6.96E-06	3.42E-06	1.40E-05	1.17E-06	1.66E-06	6.39E-06	4.95E-07
1033	465197.9	3807549	2.08E-05	5.09E-05	4.18E-06	2.05E-05	7.38E-05	6.79E-06	3.33E-06	1.37E-05	1.14E-06	1.62E-06	6.23E-06	4.82E-07
1034	465217.9	3807549	2.02E-05	4.96E-05	4.08E-06	2.00E-05	7.19E-05	6.61E-06	3.25E-06	1.33E-05	1.11E-06	1.57E-06	6.06E-06	4.70E-07
1035	465237.9	3807549	1.97E-05	4.84E-05	3.97E-06	1.95E-05	7.01E-05	6.44E-06	3.16E-06	1.30E-05	1.09E-06	1.53E-06	5.91E-06	4.58E-07
1036	465257.9	3807549	1.92E-05	4.72E-05	3.88E-06	1.90E-05	6.84E-05	6.29E-06	3.09E-06	1.27E-05	1.06E-06	1.50E-06	5.77E-06	4.47E-07
1037	465277.9	3807549	1.88E-05	4.6E-05	3.78E-06	1.86E-05	6.67E-05	6.13E-06	3.01E-06	1.24E-05	1.03E-06	1.46E-06	5.63E-06	4.36E-07
1038	465297.9	3807549	1.83E-05	4.5E-05	3.7E-06	1.81E-05	6.52E-05	5.99E-06	2.94E-06	1.21E-05	1.01E-06	1.43E-06	5.50E-06	4.26E-07
1039	465317.9	3807549	1.79E-05	4.4E-05	3.61E-06	1.77E-05	6.38E-05	5.86E-06	2.88E-06	1.18E-05	9.88E-07	1.40E-06	5.38E-06	4.17E-07
1040	465337.9	3807549	1.75E-05	4.31E-05	3.54E-06	1.74E-05	6.24E-05	5.74E-06	2.82E-06	1.16E-05	9.68E-07	1.37E-06	5.26E-06	4.08E-07
1041	465357.9	3807549	1.72E-05	4.22E-05	3.47E-06	1.70E-05	6.12E-05	5.63E-06	2.76E-06	1.13E-05	9.49E-07	1.34E-06	5.16E-06	4.00E-07
1042	465377.9	3807549	1.69E-05	4.15E-05	3.41E-06	1.67E-05	6.01E-05	5.52E-06	2.71E-06	1.11E-05	9.31E-07	1.31E-06	5.07E-06	3.93E-07
1043	464937.9	3807569	2.76E-05	6.77E-05	5.56E-06	2.73E-05	9.81E-05	9.02E-06	4.43E-06	1.82E-05	1.52E-06	2.15E-06	8.27E-06	6.41E-07
1044	464957.9	3807569	2.74E-05	6.72E-05	5.52E-06	2.71E-05	9.74E-05	8.95E-06	4.39E-06	1.81E-05	1.51E-06	2.13E-06	8.21E-06	6.36E-07
1045	464977.9	3807569	2.71E-05	6.65E-05	5.46E-06	2.68E-05	9.63E-05	8.86E-06	4.35E-06	1.79E-05	1.49E-06	2.11E-06	8.12E-06	6.29E-07
1046	464997.9	3807569	2.67E-05	6.55E-05	5.38E-06	2.64E-05	9.50E-05	8.73E-06	4.29E-06	1.76E-05	1.47E-06	2.08E-06	8.01E-06	6.21E-07
1047	465017.9	3807569	2.63E-05	6.44E-05	5.29E-06	2.60E-05	9.34E-05	8.58E-06	4.21E-06	1.73E-05	1.45E-06	2.04E-06	7.88E-06	6.10E-07
1048	465037.9	3807569	2.57E-05	6.31E-05	5.19E-06	2.54E-05	9.15E-05	8.41E-06	4.13E-06	1.70E-05	1.42E-06	2.00E-06	7.72E-06	5.98E-07
1049	465057.9	3807569	2.47E-05	6.05E-05	4.97E-06	2.44E-05	8.78E-05	8.07E-06	3.96E-06	1.63E-05	1.36E-06	1.92E-06	7.40E-06	5.73E-07
1050	465077.9	3807569	2.42E-05	5.93E-05	4.87E-06	2.39E-05	8.59E-05	7.90E-06	3.88E-06	1.59E-05	1.33E-06	1.88E-06	7.25E-06	5.61E-07
1051	465097.9	3807569	2.36E-05	5.79E-05	4.76E-06	2.33E-05	8.40E-05	7.72E-06	3.79E-06	1.56E-05	1.30E-06	1.84E-06	7.08E-06	5.49E-07
1052	465117.9	3807569	2.3E-05	5.66E-05	4.65E-06	2.28E-05	8.20E-05	7.54E-06	3.70E-06	1.52E-05	1.27E-06	1.79E-06	6.91E-06	5.36E-07
1053	465137.9	3807569	2.25E-05	5.52E-05	4.53E-06	2.22E-05	7.99E-05	7.35E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.74E-06	5.22E-07
1054	465157.9	3807569	2.19E-05	5.38E-05	4.42E-06	2.17E-05	7.79E-05	7.16E-06	3.52E-06	1.44E-05	1.21E-06	1.70E-06	6.57E-06	5.09E-07
1055	465177.9	3807569	2.13E-05	5.24E-05	4.3E-06	2.11E-05	7.59E-05	6.98E-06	3.43E-06	1.41E-05	1.18E-06	1.66E-06	6.40E-06	4.96E-07
1056	465197.9	3807569	2.08E-05	5.1E-05	4.19E-06	2.06E-05	7.39E-05	6.80E-06	3.34E-06	1.37E-05	1.15E-06	1.62E-06	6.24E-06	4.83E-07
1057	465217.9	3807569	2.03E-05	4.97E-05	4.08E-06	2.00E-05	7.21E-05	6.63E-06	3.25E-06	1.34E-05	1.12E-06	1.58E-06	6.08E-06	4.71E-07
1058	465237.9	3807569	1.98E-05	4.85E-05	3.98E-06	1.95E-05	7.03E-05	6.46E-06	3.17E-06	1.30E-05	1.09E-06	1.54E-06	5.93E-06	4.59E-07
1059	465257.9	3807569	1.93E-05	4.73E-05	3.89E-06	1.91E-05	6.86E-05	6.31E-06	3.10E-06	1.27E-05	1.06E-06	1.50E-06	5.78E-06	4.48E-07
1060	465277.9	3807569	1.88E-05	4.62E-05	3.8E-06	1.86E-05	6.70E-05	6.16E-06	3.02E-06	1.24E-05	1.04E-06	1.47E-06	5.65E-06	4.38E-07
1061	465297.9	3807569	1.84E-05	4.52E-05	3.71E-06	1.82E-05	6.55E-05	6.02E-06	2.96E-06	1.21E-05	1.02E-06	1.43E-06	5.53E-06	4.28E-07
1062	465317.9	3807569	1.8E-05	4.43E-05	3.64E-06	1.78E-05	6.42E-05	5.90E-06	2.90E-06	1.19E-05	9.95E-07	1.40E-0		

1090	464957.9	3807609	2.83E-05	6.95E-05	5.71E-06	2.80E-05	1.01E-04	9.26E-06	4.55E-06	1.87E-05	1.56E-06	2.20E-06	8.50E-06	6.58E-07
1091	464977.9	3807609	2.78E-05	6.83E-05	5.61E-06	2.75E-05	9.90E-05	9.10E-06	4.47E-06	1.84E-05	1.53E-06	2.17E-06	8.35E-06	6.47E-07
1092	464997.9	3807609	2.73E-05	6.69E-05	5.5E-06	2.70E-05	9.70E-05	8.91E-06	4.38E-06	1.80E-05	1.50E-06	2.12E-06	8.18E-06	6.34E-07
1093	465017.9	3807609	2.62E-05	6.43E-05	5.28E-06	2.59E-05	9.32E-05	8.57E-06	4.21E-06	1.73E-05	1.44E-06	2.04E-06	7.86E-06	6.09E-07
1094	465037.9	3807609	2.56E-05	6.29E-05	5.17E-06	2.53E-05	9.11E-05	8.38E-06	4.11E-06	1.69E-05	1.41E-06	1.99E-06	7.69E-06	5.96E-07
1095	465057.9	3807609	2.5E-05	6.15E-05	5.05E-06	2.48E-05	8.91E-05	8.19E-06	4.02E-06	1.65E-05	1.38E-06	1.95E-06	7.51E-06	5.82E-07
1096	465077.9	3807609	2.44E-05	6E-05	4.93E-06	2.42E-05	8.69E-05	7.99E-06	3.92E-06	1.61E-05	1.35E-06	1.90E-06	7.33E-06	5.68E-07
1097	465097.9	3807609	2.38E-05	5.85E-05	4.8E-06	2.36E-05	8.47E-05	7.79E-06	3.82E-06	1.57E-05	1.31E-06	1.85E-06	7.15E-06	5.54E-07
1098	465117.9	3807609	2.32E-05	5.69E-05	4.68E-06	2.30E-05	8.25E-05	7.59E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.96E-06	5.39E-07
1099	465137.9	3807609	2.26E-05	5.55E-05	4.56E-06	2.24E-05	8.04E-05	7.39E-06	3.63E-06	1.49E-05	1.25E-06	1.76E-06	6.78E-06	5.25E-07
1100	465157.9	3807609	2.2E-05	5.4E-05	4.44E-06	2.18E-05	7.83E-05	7.20E-06	3.53E-06	1.45E-05	1.21E-06	1.71E-06	6.61E-06	5.12E-07
1101	465177.9	3807609	2.14E-05	5.26E-05	4.32E-06	2.12E-05	7.63E-05	7.01E-06	3.44E-06	1.41E-05	1.18E-06	1.67E-06	6.43E-06	4.99E-07
1102	465197.9	3807609	2.09E-05	5.13E-05	4.22E-06	2.07E-05	7.44E-05	6.84E-06	3.36E-06	1.38E-05	1.15E-06	1.63E-06	6.27E-06	4.86E-07
1103	465217.9	3807609	2.04E-05	5.01E-05	4.11E-06	2.02E-05	7.26E-05	6.67E-06	3.28E-06	1.35E-05	1.12E-06	1.59E-06	6.12E-06	4.74E-07
1104	465237.9	3807609	1.99E-05	4.89E-05	4.02E-06	1.97E-05	7.09E-05	6.52E-06	3.20E-06	1.31E-05	1.10E-06	1.55E-06	5.98E-06	4.63E-07
1105	465257.9	3807609	1.95E-05	4.78E-05	3.93E-06	1.93E-05	6.93E-05	6.37E-06	3.13E-06	1.29E-05	1.07E-06	1.52E-06	5.85E-06	4.53E-07
1106	465277.9	3807609	1.91E-05	4.68E-05	3.85E-06	1.89E-05	6.79E-05	6.24E-06	3.06E-06	1.26E-05	1.05E-06	1.49E-06	5.73E-06	4.44E-07
1107	465297.9	3807609	1.87E-05	4.59E-05	3.77E-06	1.85E-05	6.66E-05	6.12E-06	3.01E-06	1.23E-05	1.03E-06	1.46E-06	5.62E-06	4.35E-07
1108	465317.9	3807609	1.84E-05	4.51E-05	3.71E-06	1.82E-05	6.54E-05	6.01E-06	2.95E-06	1.21E-05	1.01E-06	1.43E-06	5.52E-06	4.27E-07
1109	465337.9	3807609	1.81E-05	4.43E-05	3.64E-06	1.79E-05	6.43E-05	5.91E-06	2.90E-06	1.19E-05	9.96E-07	1.41E-06	5.42E-06	4.20E-07
1110	465357.9	3807609	1.78E-05	4.36E-05	3.59E-06	1.76E-05	6.33E-05	5.82E-06	2.86E-06	1.17E-05	9.81E-07	1.38E-06	5.34E-06	4.13E-07
1111	465377.9	3807609	1.75E-05	4.3E-05	3.53E-06	1.73E-05	6.23E-05	5.73E-06	2.81E-06	1.16E-05	9.66E-07	1.36E-06	5.26E-06	4.07E-07
1112	464937.9	3807629	2.92E-05	7.16E-05	5.89E-06	2.89E-05	1.04E-04	9.55E-06	4.69E-06	1.93E-05	1.61E-06	2.27E-06	8.76E-06	6.79E-07
1113	464957.9	3807629	2.87E-05	7.04E-05	5.78E-06	2.84E-05	1.02E-04	9.38E-06	4.60E-06	1.89E-05	1.58E-06	2.23E-06	8.60E-06	6.67E-07
1114	464977.9	3807629	2.81E-05	6.89E-05	5.66E-06	2.78E-05	9.99E-05	9.19E-06	4.51E-06	1.85E-05	1.55E-06	2.19E-06	8.43E-06	6.53E-07
1115	464997.9	3807629	2.7E-05	6.63E-05	5.45E-06	2.67E-05	9.61E-05	8.83E-06	4.34E-06	1.78E-05	1.49E-06	2.10E-06	8.10E-06	6.28E-07
1116	465017.9	3807629	2.64E-05	6.48E-05	5.33E-06	2.61E-05	9.40E-05	8.64E-06	4.24E-06	1.74E-05	1.46E-06	2.06E-06	7.93E-06	6.14E-07
1117	465037.9	3807629	2.58E-05	6.33E-05	5.2E-06	2.55E-05	9.18E-05	8.44E-06	4.14E-06	1.70E-05	1.42E-06	2.01E-06	7.74E-06	6.00E-07
1118	465057.9	3807629	2.52E-05	6.18E-05	5.08E-06	2.49E-05	8.96E-05	8.24E-06	4.04E-06	1.66E-05	1.39E-06	1.96E-06	7.56E-06	5.85E-07
1119	465077.9	3807629	2.45E-05	6.02E-05	4.95E-06	2.43E-05	8.73E-05	8.03E-06	3.94E-06	1.62E-05	1.35E-06	1.91E-06	7.36E-06	5.70E-07
1120	465097.9	3807629	2.39E-05	5.87E-05	4.82E-06	2.36E-05	8.50E-05	7.82E-06	3.84E-06	1.58E-05	1.32E-06	1.86E-06	7.17E-06	5.56E-07
1121	465117.9	3807629	2.33E-05	5.71E-05	4.69E-06	2.30E-05	8.28E-05	7.61E-06	3.74E-06	1.54E-05	1.28E-06	1.81E-06	6.98E-06	5.41E-07
1122	465137.9	3807629	2.27E-05	5.56E-05	4.57E-06	2.24E-05	8.06E-05	7.41E-06	3.64E-06	1.50E-05	1.25E-06	1.76E-06	6.80E-06	5.27E-07
1123	465157.9	3807629	2.21E-05	5.42E-05	4.45E-06	2.19E-05	7.86E-05	7.22E-06	3.55E-06	1.46E-05	1.22E-06	1.72E-06	6.63E-06	5.13E-07
1124	465177.9	3807629	2.15E-05	5.29E-05	4.34E-06	2.13E-05	7.66E-05	7.04E-06	3.46E-06	1.42E-05	1.19E-06	1.68E-06	6.46E-06	5.01E-07
1125	465197.9	3807629	2.1E-05	5.16E-05	4.24E-06	2.08E-05	7.47E-05	6.87E-06	3.37E-06	1.39E-05	1.16E-06	1.64E-06	6.30E-06	4.88E-07
1126	465217.9	3807629	2.05E-05	5.04E-05	4.14E-06	2.03E-05	7.30E-05	6.71E-06	3.29E-06	1.35E-05	1.13E-06	1.60E-06	6.16E-06	4.77E-07
1127	465237.9	3807629	2.01E-05	4.92E-05	4.05E-06	1.99E-05	7.14E-05	6.56E-06	3.22E-06	1.32E-05	1.11E-06	1.56E-06	6.02E-06	4.66E-07
1128	465257.9	3807629	1.97E-05	4.82E-05	3.96E-06	1.94E-05	6.99E-05	6.43E-06	3.15E-06	1.30E-05	1.08E-06	1.53E-06	5.90E-06	4.57E-07
1129	465277.9	3807629	1.93E-05	4.73E-05	3.89E-06	1.91E-05	6.86E-05	6.30E-06	3.09E-06	1.27E-05	1.06E-06	1.50E-06	5.78E-06	4.48E-07
1130	465297.9	3807629	1.89E-05	4.64E-05	3.82E-06	1.87E-05	6.73E-05	6.19E-06	3.04E-06	1.25E-05	1.04E-06	1.47E-06	5.68E-06	4.40E-07
1131	465317.9	3807629	1.86E-05	4.57E-05	3.75E-06	1.84E-05	6.62E-05	6.09E-06	2.99E-06	1.23E-05	1.03E-06	1.45E-06	5.58E-06	4.32E-07
1132	465337.9	3807629	1.83E-05	4.49E-05	3.69E-06	1.81E-05	6.51E-05	5.99E-06	2.94E-06	1.21E-05	1.01E-06	1.43E-06	5.49E-06	4.26E-07
1133	465357.9	3807629	1.8E-05	4.43E-05	3.64E-06	1.79E-05	6.42E-05	5.90E-06	2.90E-06	1.19E-05	9.95E-07	1.40E-06	5.41E-06	4.19E-07
1134	465377.9	3807629	1.78E-05	4.37E-05	3.59E-06	1.76E-05	6.33E-05	5.82E-06	2.86E-06	1.17E-05	9.81E-07	1.39E-06	5.34E-06	4.14E-07
1135	464937.9	3807649	2.96E-05	7.26E-05	5.96E-06	2.93E-05	1.05E-04	9.67E-06	4.75E-06	1.95E-05	1.63E-06	2.30E-06	8.87E-06	6.88E-07
1136	464957.9	3807649	2.9E-05	7.11E-05	5.84E-06	2.87E-05	1.03E-04	9.47E-06	4.65E-06	1.91E-05	1.60E-06	2.25E-06	8.69E-06	6.73E-07
1137	464977.9	3807649	2.79E-05	6.84E-05	5.62E-06	2.76E-05	9.92E-05	9.12E-06	4.48E-06	1.84E-05	1.54E-06	2.17E-06	8.37E-06	6.48E-07
1138	464997.9	3807649	2.73E-05	6.69E-05	5.5E-06	2.70E-05	9.70E-05	8.91E-06	4.38E-06	1.80E-05	1.50E-06	2.12E-06	8.18E-06	6.34E-07
1139	465017.9	3807649	2.66E-05	6.53E-05	5.37E-06	2.63E-05	9.47E-05	8.70E-06	4.27E-06	1.76E-05	1.47E-06	2.07E-06	7.99E-06	6.19E-07
1140	465037.9	3807649	2.6E-05	6.37E-05	5.24E-06	2.57E-05	9.24E-05	8.50E-06	4.17E-06	1.71E-05	1.43E-06	2.02E-06	7.79E-06	6.04E-07
1141	465057.9	3807649	2.53E-05	6.21E-05	5.1E-06	2.50E-05	9.00E-05	8.28E-06	4.06E-06	1.67E-05	1.40E-06	1.97E-06	7.59E-06	5.88E-07
1142	465077.9	3807649	2.46E-05	6.05E-05	4.97E-06	2.44E-05	8.76E-05	8.06E-06	3.96E-06	1.62E-05	1.36E-06	1.92E-06	7.39E-06	5.73E-07
1143	465097.9	3807649	2.4E-05	5.89E-05	4.84E-06	2.37E-05	8.53E-05	7.84E-06	3.85E-06	1.58E-05	1.32E-06	1.87E-06	7.20E-06	5.57E-07
1144	465117.9	3807649	2.34E-05	5.73E-05	4.71E-06	2.31E-05	8.31E-05	7.64E-06	3.75E-06	1.54E-05	1.29E-06	1.82E-06	7.01E-06	5.43E-07
1145	465137.9	3807649	2.28E-05	5.59E-05	4.59E-06	2.25E-05	8.10E-05	7.44E-06	3.65E-06	1.50E-05	1.26E-06	1.77E-06	6.83E-06	5.29E-07
1146	465157.9	3807649	2.22E-05	5.44E-05	4.47E-06	2.19E-05	7.89E-05	7.26E-06	3.56E-06	1.46E-05	1.22E-06	1.73E-06	6.66E-06	5.16E-07
1147	465177.9	3807649	2.17E-05	5.31E-05	4.37E-06	2.14E-05	7.70E-05	7.08E-06	3.48E-06	1.43E-05	1.19E-06	1.69E-06	6.50E-06	5.03E-07
1148	465197.9	3807649	2.12E-05	5.19E-05	4.26E-06	2.09E-05	7.52E-05	6.92E-06	3.40E-06	1.39E-05	1.17E-06	1.65E-06	6.35E-06	4.92E-07
1149	465217.9	3807649	2.07E-05	5.08E-05	4.17E-06	2.05E-05	7.36E-05	6.76E-06	3.32E-06	1.36E-05	1.14E-06	1.61E-06	6.20E-06	4.81E-07
1150	465237.9	3807649	2.02E-05	4.97E-05	4.08E-06	2.00E-05	7.20E-05	6.62E-06	3.25E-06	1.34E-05	1.12E-06	1.58E-06	6.07E-06	4.71E-07
1151	465257.9	3807649	1.99E-05	4.87E-05	4E-06	1.96E-05	7.06E-05	6.49E-06	3.19E-06	1.31E-05	1.09E-06	1.55E-06	5.96E-06	4.61E-07
1152	465277.9	3807649	1.95E-05	4.79E-05	3.93E-06	1.93E-05	6.94E-05	6.38E-06	3.13E-06	1.29E-05	1.08E-06	1.52E-06	5.85E-06	4.53E-07
1153	465297.9	3807649	1.92E-05	4.7E-05	3.87E-06	1.90E-05	6.82E-05	6.27E-06	3.08E-06	1.26E-05	1.06E-06	1.		

1181	464937.9	3807689	2.97E-05	7.3E-05	6E-06	2.94E-05	1.06E-04	9.73E-06	4.78E-06	1.96E-05	1.64E-06	2.32E-06	8.92E-06	6.91E-07
1182	464957.9	3807689	2.91E-05	7.14E-05	5.86E-06	2.88E-05	1.03E-04	9.51E-06	4.67E-06	1.92E-05	1.60E-06	2.26E-06	8.72E-06	6.76E-07
1183	464977.9	3807689	2.84E-05	6.96E-05	5.72E-06	2.81E-05	1.01E-04	9.28E-06	4.56E-06	1.87E-05	1.56E-06	2.21E-06	8.51E-06	6.60E-07
1184	464997.9	3807689	2.77E-05	6.79E-05	5.58E-06	2.74E-05	9.84E-05	9.05E-06	4.44E-06	1.82E-05	1.53E-06	2.15E-06	8.30E-06	6.43E-07
1185	465017.9	3807689	2.7E-05	6.62E-05	5.44E-06	2.67E-05	9.59E-05	8.82E-06	4.33E-06	1.78E-05	1.49E-06	2.10E-06	8.09E-06	6.27E-07
1186	465037.9	3807689	2.62E-05	6.44E-05	5.29E-06	2.60E-05	9.33E-05	8.58E-06	4.21E-06	1.73E-05	1.45E-06	2.04E-06	7.87E-06	6.10E-07
1187	465057.9	3807689	2.55E-05	6.27E-05	5.15E-06	2.53E-05	9.09E-05	8.36E-06	4.10E-06	1.68E-05	1.41E-06	1.99E-06	7.66E-06	5.94E-07
1188	465077.9	3807689	2.49E-05	6.1E-05	5.01E-06	2.46E-05	8.85E-05	8.13E-06	3.99E-06	1.64E-05	1.37E-06	1.94E-06	7.46E-06	5.78E-07
1189	465097.9	3807689	2.42E-05	5.95E-05	4.88E-06	2.40E-05	8.62E-05	7.92E-06	3.89E-06	1.60E-05	1.34E-06	1.89E-06	7.27E-06	5.63E-07
1190	465117.9	3807689	2.36E-05	5.79E-05	4.76E-06	2.33E-05	8.40E-05	7.72E-06	3.79E-06	1.56E-05	1.30E-06	1.84E-06	7.08E-06	5.49E-07
1191	465137.9	3807689	2.3E-05	5.65E-05	4.64E-06	2.28E-05	8.19E-05	7.53E-06	3.70E-06	1.52E-05	1.27E-06	1.79E-06	6.91E-06	5.35E-07
1192	465157.9	3807689	2.25E-05	5.52E-05	4.53E-06	2.22E-05	8.00E-05	7.35E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.75E-06	5.23E-07
1193	465177.9	3807689	2.2E-05	5.4E-05	4.43E-06	2.18E-05	7.82E-05	7.19E-06	3.53E-06	1.45E-05	1.21E-06	1.71E-06	6.60E-06	5.11E-07
1194	465197.9	3807689	2.15E-05	5.28E-05	4.34E-06	2.13E-05	7.66E-05	7.04E-06	3.46E-06	1.42E-05	1.19E-06	1.68E-06	6.46E-06	5.00E-07
1195	465217.9	3807689	2.11E-05	5.18E-05	4.26E-06	2.09E-05	7.51E-05	6.90E-06	3.39E-06	1.39E-05	1.16E-06	1.64E-06	6.33E-06	4.91E-07
1196	465237.9	3807689	2.07E-05	5.09E-05	4.18E-06	2.05E-05	7.37E-05	6.78E-06	3.33E-06	1.37E-05	1.14E-06	1.61E-06	6.22E-06	4.82E-07
1197	465257.9	3807689	2.04E-05	5E-05	4.11E-06	2.02E-05	7.25E-05	6.67E-06	3.27E-06	1.34E-05	1.12E-06	1.59E-06	6.11E-06	4.74E-07
1198	465277.9	3807689	2.01E-05	4.92E-05	4.04E-06	1.98E-05	7.14E-05	6.56E-06	3.22E-06	1.32E-05	1.11E-06	1.56E-06	6.02E-06	4.66E-07
1199	465297.9	3807689	1.98E-05	4.85E-05	3.98E-06	1.95E-05	7.03E-05	6.46E-06	3.17E-06	1.30E-05	1.09E-06	1.54E-06	5.93E-06	4.59E-07
1200	465317.9	3807689	1.95E-05	4.78E-05	3.93E-06	1.93E-05	6.93E-05	6.37E-06	3.13E-06	1.28E-05	1.07E-06	1.52E-06	5.84E-06	4.53E-07
1201	465337.9	3807689	1.92E-05	4.72E-05	3.88E-06	1.90E-05	6.84E-05	6.29E-06	3.09E-06	1.27E-05	1.06E-06	1.50E-06	5.77E-06	4.47E-07
1202	465357.9	3807689	1.9E-05	4.66E-05	3.83E-06	1.88E-05	6.75E-05	6.21E-06	3.05E-06	1.25E-05	1.05E-06	1.48E-06	5.69E-06	4.41E-07
1203	465377.9	3807689	1.87E-05	4.6E-05	3.78E-06	1.85E-05	6.67E-05	6.13E-06	3.01E-06	1.24E-05	1.03E-06	1.46E-06	5.62E-06	4.36E-07
1204	464937.9	3807709	3.01E-05	7.38E-05	6.06E-06	2.97E-05	1.07E-04	9.83E-06	4.83E-06	1.98E-05	1.66E-06	2.34E-06	9.02E-06	6.99E-07
1205	464957.9	3807709	2.93E-05	7.2E-05	5.91E-06	2.90E-05	1.04E-04	9.59E-06	4.71E-06	1.93E-05	1.62E-06	2.28E-06	8.80E-06	6.82E-07
1206	464977.9	3807709	2.86E-05	7.02E-05	5.77E-06	2.83E-05	1.02E-04	9.35E-06	4.59E-06	1.89E-05	1.58E-06	2.23E-06	8.58E-06	6.65E-07
1207	464997.9	3807709	2.79E-05	6.83E-05	5.62E-06	2.75E-05	9.91E-05	9.11E-06	4.47E-06	1.84E-05	1.54E-06	2.17E-06	8.36E-06	6.47E-07
1208	465017.9	3807709	2.71E-05	6.65E-05	5.47E-06	2.68E-05	9.64E-05	8.86E-06	4.35E-06	1.79E-05	1.49E-06	2.11E-06	8.13E-06	6.30E-07
1209	465037.9	3807709	2.64E-05	6.48E-05	5.32E-06	2.61E-05	9.39E-05	8.63E-06	4.24E-06	1.74E-05	1.46E-06	2.05E-06	7.92E-06	6.13E-07
1210	465057.9	3807709	2.57E-05	6.3E-05	5.18E-06	2.54E-05	9.13E-05	8.40E-06	4.12E-06	1.69E-05	1.42E-06	2.00E-06	7.70E-06	5.97E-07
1211	465077.9	3807709	2.5E-05	6.14E-05	5.04E-06	2.47E-05	8.89E-05	8.18E-06	4.01E-06	1.65E-05	1.38E-06	1.95E-06	7.50E-06	5.81E-07
1212	465097.9	3807709	2.44E-05	5.98E-05	4.92E-06	2.41E-05	8.67E-05	7.97E-06	3.91E-06	1.61E-05	1.34E-06	1.90E-06	7.31E-06	5.67E-07
1213	465117.9	3807709	2.38E-05	5.83E-05	4.79E-06	2.35E-05	8.46E-05	7.78E-06	3.82E-06	1.57E-05	1.31E-06	1.85E-06	7.13E-06	5.53E-07
1214	465137.9	3807709	2.32E-05	5.7E-05	4.68E-06	2.30E-05	8.26E-05	7.59E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.96E-06	5.40E-07
1215	465157.9	3807709	2.27E-05	5.57E-05	4.58E-06	2.25E-05	8.07E-05	7.42E-06	3.64E-06	1.50E-05	1.25E-06	1.77E-06	6.81E-06	5.28E-07
1216	465177.9	3807709	2.22E-05	5.45E-05	4.48E-06	2.20E-05	7.90E-05	7.27E-06	3.57E-06	1.47E-05	1.23E-06	1.73E-06	6.67E-06	5.17E-07
1217	465197.9	3807709	2.18E-05	5.35E-05	4.39E-06	2.16E-05	7.75E-05	7.13E-06	3.50E-06	1.44E-05	1.20E-06	1.70E-06	6.54E-06	5.06E-07
1218	465217.9	3807709	2.14E-05	5.25E-05	4.32E-06	2.12E-05	7.61E-05	7.00E-06	3.44E-06	1.41E-05	1.18E-06	1.67E-06	6.42E-06	4.98E-07
1219	465237.9	3807709	2.1E-05	5.16E-05	4.24E-06	2.08E-05	7.48E-05	6.88E-06	3.38E-06	1.39E-05	1.16E-06	1.64E-06	6.31E-06	4.89E-07
1220	465257.9	3807709	2.07E-05	5.08E-05	4.17E-06	2.05E-05	7.36E-05	6.77E-06	3.32E-06	1.37E-05	1.14E-06	1.61E-06	6.21E-06	4.81E-07
1221	465277.9	3807709	2.04E-05	5E-05	4.11E-06	2.02E-05	7.25E-05	6.67E-06	3.27E-06	1.34E-05	1.12E-06	1.59E-06	6.12E-06	4.74E-07
1222	465297.9	3807709	2.01E-05	4.93E-05	4.05E-06	1.99E-05	7.15E-05	6.57E-06	3.23E-06	1.33E-05	1.11E-06	1.56E-06	6.03E-06	4.67E-07
1223	465317.9	3807709	1.98E-05	4.87E-05	4E-06	1.96E-05	7.05E-05	6.48E-06	3.18E-06	1.31E-05	1.09E-06	1.54E-06	5.95E-06	4.61E-07
1224	465337.9	3807709	1.96E-05	4.8E-05	3.95E-06	1.94E-05	6.96E-05	6.40E-06	3.14E-06	1.29E-05	1.08E-06	1.52E-06	5.87E-06	4.55E-07
1225	465357.9	3807709	1.93E-05	4.74E-05	3.9E-06	1.91E-05	6.87E-05	6.32E-06	3.10E-06	1.27E-05	1.07E-06	1.50E-06	5.80E-06	4.49E-07
1226	465377.9	3807709	1.91E-05	4.68E-05	3.85E-06	1.89E-05	6.78E-05	6.24E-06	3.06E-06	1.26E-05	1.05E-06	1.48E-06	5.72E-06	4.43E-07
1227	464937.9	3807729	3.03E-05	7.45E-05	6.12E-06	3.00E-05	1.08E-04	9.92E-06	4.87E-06	2.00E-05	1.67E-06	2.36E-06	9.10E-06	7.05E-07
1228	464957.9	3807729	2.96E-05	7.26E-05	5.96E-06	2.93E-05	1.05E-04	9.67E-06	4.75E-06	1.95E-05	1.63E-06	2.30E-06	8.87E-06	6.87E-07
1229	464977.9	3807729	2.88E-05	7.07E-05	5.8E-06	2.85E-05	1.02E-04	9.42E-06	4.62E-06	1.90E-05	1.59E-06	2.24E-06	8.64E-06	6.69E-07
1230	464997.9	3807729	2.8E-05	6.88E-05	5.65E-06	2.77E-05	9.97E-05	9.16E-06	4.50E-06	1.85E-05	1.55E-06	2.18E-06	8.41E-06	6.51E-07
1231	465017.9	3807729	2.73E-05	6.69E-05	5.5E-06	2.70E-05	9.70E-05	8.92E-06	4.38E-06	1.80E-05	1.50E-06	2.12E-06	8.18E-06	6.34E-07
1232	465037.9	3807729	2.65E-05	6.51E-05	5.35E-06	2.62E-05	9.44E-05	8.68E-06	4.26E-06	1.75E-05	1.46E-06	2.07E-06	7.96E-06	6.17E-07
1233	465057.9	3807729	2.58E-05	6.34E-05	5.21E-06	2.56E-05	9.19E-05	8.45E-06	4.15E-06	1.70E-05	1.42E-06	2.01E-06	7.75E-06	6.01E-07
1234	465077.9	3807729	2.52E-05	6.18E-05	5.08E-06	2.49E-05	8.96E-05	8.24E-06	4.04E-06	1.66E-05	1.39E-06	1.96E-06	7.55E-06	5.85E-07
1235	465097.9	3807729	2.46E-05	6.03E-05	4.95E-06	2.43E-05	8.74E-05	8.03E-06	3.94E-06	1.62E-05	1.35E-06	1.91E-06	7.37E-06	5.71E-07
1236	465117.9	3807729	2.4E-05	5.88E-05	4.83E-06	2.37E-05	8.53E-05	7.84E-06	3.85E-06	1.58E-05	1.32E-06	1.87E-06	7.19E-06	5.57E-07
1237	465137.9	3807729	2.34E-05	5.75E-05	4.73E-06	2.32E-05	8.34E-05	7.67E-06	3.76E-06	1.55E-05	1.29E-06	1.82E-06	7.03E-06	5.45E-07
1238	465157.9	3807729	2.3E-05	5.64E-05	4.63E-06	2.27E-05	8.17E-05	7.51E-06	3.69E-06	1.51E-05	1.27E-06	1.79E-06	6.89E-06	5.34E-07
1239	465177.9	3807729	2.25E-05	5.52E-05	4.54E-06	2.23E-05	8.01E-05	7.36E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.75E-06	5.23E-07
1240	465197.9	3807729	2.21E-05	5.42E-05	4.46E-06	2.19E-05	7.86E-05	7.23E-06	3.55E-06	1.46E-05	1.22E-06	1.72E-06	6.63E-06	5.14E-07
1241	465217.9	3807729	2.17E-05	5.33E-05	4.38E-06	2.15E-05	7.73E-05	7.10E-06	3.49E-06	1.43E-05	1.20E-06	1.69E-06	6.52E-06	5.05E-07
1242	465237.9	3807729	2.14E-05	5.25E-05	4.31E-06	2.11E-05	7.60E-05	6.99E-06	3.43E-06	1.41E-05	1.18E-06	1.66E-06	6.41E-06	4.97E-07
1243	465257.9	3807729	2.1E-05	5.17E-05	4.24E-06	2.08E-05	7.49E-05	6.88E-06	3.38E-06	1.39E-05	1.16E-06	1.64E-06	6.31E-06	4.89E-07
1244	465277.9	3807729	2.07E-05	5.09E-05	4.18E-06	2.05E-05	7.38E-05	6.78E-06	3.33E-06	1.37E-05	1.14E-06	1.61E-06		

1272	465377.9	3807749	1.97E-05	4.84E-05	3.97E-06	1.95E-05	7.01E-05	6.44E-06	3.16E-06	1.30E-05	1.09E-06	1.53E-06	5.91E-06	4.58E-07
1273	464937.9	3807769	3.08E-05	7.57E-05	6.22E-06	3.05E-05	1.10E-04	1.01E-05	4.95E-06	2.03E-05	1.70E-06	2.40E-06	9.25E-06	7.17E-07
1274	464957.9	3807769	3E-05	7.36E-05	6.05E-06	2.97E-05	1.07E-04	9.81E-06	4.82E-06	1.98E-05	1.65E-06	2.33E-06	9.00E-06	6.97E-07
1275	464977.9	3807769	2.92E-05	7.16E-05	5.88E-06	2.88E-05	1.04E-04	9.54E-06	4.68E-06	1.92E-05	1.61E-06	2.27E-06	8.75E-06	6.78E-07
1276	464997.9	3807769	2.84E-05	6.97E-05	5.72E-06	2.81E-05	1.01E-04	9.28E-06	4.56E-06	1.87E-05	1.56E-06	2.21E-06	8.51E-06	6.60E-07
1277	465017.9	3807769	2.76E-05	6.78E-05	5.57E-06	2.73E-05	9.83E-05	9.04E-06	4.44E-06	1.82E-05	1.52E-06	2.15E-06	8.29E-06	6.42E-07
1278	465037.9	3807769	2.69E-05	6.61E-05	5.43E-06	2.66E-05	9.58E-05	8.81E-06	4.32E-06	1.78E-05	1.49E-06	2.10E-06	8.08E-06	6.26E-07
1279	465057.9	3807769	2.63E-05	6.45E-05	5.3E-06	2.60E-05	9.34E-05	8.59E-06	4.22E-06	1.73E-05	1.45E-06	2.04E-06	7.88E-06	6.10E-07
1280	465077.9	3807769	2.56E-05	6.29E-05	5.17E-06	2.54E-05	9.12E-05	8.38E-06	4.12E-06	1.69E-05	1.41E-06	2.00E-06	7.69E-06	5.96E-07
1281	465097.9	3807769	2.51E-05	6.15E-05	5.05E-06	2.48E-05	8.91E-05	8.20E-06	4.02E-06	1.65E-05	1.38E-06	1.95E-06	7.52E-06	5.83E-07
1282	465117.9	3807769	2.45E-05	6.02E-05	4.95E-06	2.43E-05	8.73E-05	8.03E-06	3.94E-06	1.62E-05	1.35E-06	1.91E-06	7.36E-06	5.71E-07
1283	465137.9	3807769	2.41E-05	5.91E-05	4.85E-06	2.38E-05	8.56E-05	7.87E-06	3.86E-06	1.59E-05	1.33E-06	1.87E-06	7.22E-06	5.59E-07
1284	465157.9	3807769	2.36E-05	5.8E-05	4.76E-06	2.34E-05	8.40E-05	7.73E-06	3.79E-06	1.56E-05	1.30E-06	1.84E-06	7.09E-06	5.49E-07
1285	465177.9	3807769	2.32E-05	5.7E-05	4.68E-06	2.30E-05	8.26E-05	7.59E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.96E-06	5.39E-07
1286	465197.9	3807769	2.28E-05	5.6E-05	4.6E-06	2.26E-05	8.12E-05	7.46E-06	3.66E-06	1.51E-05	1.26E-06	1.78E-06	6.85E-06	5.30E-07
1287	465217.9	3807769	2.25E-05	5.51E-05	4.53E-06	2.22E-05	7.99E-05	7.35E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.74E-06	5.22E-07
1288	465237.9	3807769	2.21E-05	5.43E-05	4.46E-06	2.19E-05	7.87E-05	7.24E-06	3.55E-06	1.46E-05	1.22E-06	1.72E-06	6.64E-06	5.14E-07
1289	465257.9	3807769	2.18E-05	5.35E-05	4.4E-06	2.16E-05	7.76E-05	7.13E-06	3.50E-06	1.44E-05	1.20E-06	1.70E-06	6.55E-06	5.07E-07
1290	465277.9	3807769	2.15E-05	5.28E-05	4.34E-06	2.13E-05	7.65E-05	7.04E-06	3.45E-06	1.42E-05	1.19E-06	1.67E-06	6.45E-06	5.00E-07
1291	465297.9	3807769	2.12E-05	5.2E-05	4.27E-06	2.10E-05	7.54E-05	6.93E-06	3.40E-06	1.40E-05	1.17E-06	1.65E-06	6.36E-06	4.93E-07
1292	465317.9	3807769	2.09E-05	5.13E-05	4.21E-06	2.07E-05	7.43E-05	6.83E-06	3.35E-06	1.38E-05	1.15E-06	1.63E-06	6.27E-06	4.86E-07
1293	465337.9	3807769	2.06E-05	5.06E-05	4.16E-06	2.04E-05	7.33E-05	6.74E-06	3.31E-06	1.36E-05	1.14E-06	1.60E-06	6.18E-06	4.79E-07
1294	465357.9	3807769	2.03E-05	4.98E-05	4.09E-06	2.01E-05	7.22E-05	6.64E-06	3.26E-06	1.34E-05	1.12E-06	1.58E-06	6.09E-06	4.72E-07
1295	465377.9	3807769	2E-05	4.91E-05	4.03E-06	1.98E-05	7.11E-05	6.54E-06	3.21E-06	1.32E-05	1.10E-06	1.56E-06	6.00E-06	4.65E-07
1296	464937.9	3807789	3.11E-05	7.62E-05	6.26E-06	3.07E-05	1.11E-04	1.02E-05	4.99E-06	2.05E-05	1.71E-06	2.42E-06	9.32E-06	7.22E-07
1297	464957.9	3807789	3.02E-05	7.41E-05	6.09E-06	2.99E-05	1.07E-04	9.88E-06	4.85E-06	1.99E-05	1.67E-06	2.35E-06	9.06E-06	7.02E-07
1298	464977.9	3807789	2.94E-05	7.21E-05	5.93E-06	2.91E-05	1.05E-04	9.61E-06	4.72E-06	1.94E-05	1.62E-06	2.29E-06	8.82E-06	6.83E-07
1299	464997.9	3807789	2.86E-05	7.02E-05	5.77E-06	2.83E-05	1.02E-04	9.36E-06	4.59E-06	1.89E-05	1.58E-06	2.23E-06	8.58E-06	6.65E-07
1300	465017.9	3807789	2.79E-05	6.84E-05	5.62E-06	2.76E-05	9.91E-05	9.11E-06	4.47E-06	1.84E-05	1.54E-06	2.17E-06	8.36E-06	6.48E-07
1301	465037.9	3807789	2.72E-05	6.67E-05	5.48E-06	2.69E-05	9.67E-05	8.89E-06	4.36E-06	1.79E-05	1.50E-06	2.12E-06	8.16E-06	6.32E-07
1302	465057.9	3807789	2.65E-05	6.51E-05	5.35E-06	2.63E-05	9.44E-05	8.68E-06	4.26E-06	1.75E-05	1.46E-06	2.07E-06	7.96E-06	6.17E-07
1303	465077.9	3807789	2.59E-05	6.37E-05	5.23E-06	2.57E-05	9.23E-05	8.49E-06	4.17E-06	1.71E-05	1.43E-06	2.02E-06	7.78E-06	6.03E-07
1304	465097.9	3807789	2.54E-05	6.24E-05	5.12E-06	2.51E-05	9.04E-05	8.31E-06	4.08E-06	1.68E-05	1.40E-06	1.98E-06	7.62E-06	5.91E-07
1305	465117.9	3807789	2.49E-05	6.11E-05	5.02E-06	2.46E-05	8.86E-05	8.15E-06	4.00E-06	1.64E-05	1.37E-06	1.94E-06	7.47E-06	5.79E-07
1306	465137.9	3807789	2.44E-05	6E-05	4.93E-06	2.42E-05	8.69E-05	7.99E-06	3.92E-06	1.61E-05	1.35E-06	1.90E-06	7.33E-06	5.68E-07
1307	465157.9	3807789	2.4E-05	5.89E-05	4.84E-06	2.38E-05	8.54E-05	7.85E-06	3.85E-06	1.58E-05	1.32E-06	1.87E-06	7.20E-06	5.58E-07
1308	465177.9	3807789	2.36E-05	5.79E-05	4.76E-06	2.34E-05	8.40E-05	7.72E-06	3.79E-06	1.56E-05	1.30E-06	1.84E-06	7.08E-06	5.49E-07
1309	465197.9	3807789	2.32E-05	5.7E-05	4.69E-06	2.30E-05	8.26E-05	7.60E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.97E-06	5.40E-07
1310	465217.9	3807789	2.29E-05	5.62E-05	4.61E-06	2.26E-05	8.14E-05	7.48E-06	3.67E-06	1.51E-05	1.26E-06	1.78E-06	6.87E-06	5.32E-07
1311	465237.9	3807789	2.25E-05	5.53E-05	4.54E-06	2.23E-05	8.02E-05	7.37E-06	3.62E-06	1.49E-05	1.24E-06	1.75E-06	6.76E-06	5.24E-07
1312	465257.9	3807789	2.22E-05	5.45E-05	4.48E-06	2.20E-05	7.90E-05	7.26E-06	3.57E-06	1.46E-05	1.22E-06	1.73E-06	6.66E-06	5.16E-07
1313	465277.9	3807789	2.19E-05	5.37E-05	4.41E-06	2.17E-05	7.79E-05	7.16E-06	3.51E-06	1.44E-05	1.21E-06	1.70E-06	6.57E-06	5.09E-07
1314	465297.9	3807789	2.16E-05	5.29E-05	4.35E-06	2.13E-05	7.67E-05	7.06E-06	3.46E-06	1.42E-05	1.19E-06	1.68E-06	6.47E-06	5.01E-07
1315	465317.9	3807789	2.13E-05	5.22E-05	4.29E-06	2.10E-05	7.56E-05	6.95E-06	3.41E-06	1.40E-05	1.17E-06	1.65E-06	6.38E-06	4.94E-07
1316	465337.9	3807789	2.09E-05	5.14E-05	4.22E-06	2.07E-05	7.44E-05	6.84E-06	3.36E-06	1.38E-05	1.15E-06	1.63E-06	6.28E-06	4.86E-07
1317	465357.9	3807789	2.06E-05	5.06E-05	4.16E-06	2.04E-05	7.33E-05	6.74E-06	3.31E-06	1.36E-05	1.14E-06	1.60E-06	6.18E-06	4.79E-07
1318	465377.9	3807789	2.03E-05	4.98E-05	4.09E-06	2.01E-05	7.22E-05	6.64E-06	3.26E-06	1.34E-05	1.12E-06	1.58E-06	6.09E-06	4.72E-07
1319	464937.9	3807809	3.13E-05	7.69E-05	6.32E-06	3.10E-05	1.11E-04	1.02E-05	5.03E-06	2.07E-05	1.73E-06	2.44E-06	9.40E-06	7.28E-07
1320	464957.9	3807809	3.05E-05	7.48E-05	6.14E-06	3.01E-05	1.08E-04	9.96E-06	4.89E-06	2.01E-05	1.68E-06	2.37E-06	9.14E-06	7.08E-07
1321	464977.9	3807809	2.97E-05	7.28E-05	5.98E-06	2.93E-05	1.05E-04	9.70E-06	4.76E-06	1.96E-05	1.63E-06	2.31E-06	8.90E-06	6.89E-07
1322	464997.9	3807809	2.89E-05	7.09E-05	5.82E-06	2.86E-05	1.03E-04	9.44E-06	4.64E-06	1.90E-05	1.59E-06	2.25E-06	8.66E-06	6.71E-07
1323	465017.9	3807809	2.82E-05	6.91E-05	5.68E-06	2.79E-05	1.00E-04	9.21E-06	4.52E-06	1.86E-05	1.55E-06	2.19E-06	8.45E-06	6.55E-07
1324	465037.9	3807809	2.75E-05	6.75E-05	5.54E-06	2.72E-05	9.78E-05	8.99E-06	4.41E-06	1.81E-05	1.52E-06	2.14E-06	8.25E-06	6.39E-07
1325	465057.9	3807809	2.69E-05	6.6E-05	5.42E-06	2.66E-05	9.56E-05	8.79E-06	4.32E-06	1.77E-05	1.48E-06	2.09E-06	8.06E-06	6.25E-07
1326	465077.9	3807809	2.63E-05	6.46E-05	5.31E-06	2.60E-05	9.36E-05	8.61E-06	4.22E-06	1.74E-05	1.45E-06	2.05E-06	7.89E-06	6.12E-07
1327	465097.9	3807809	2.58E-05	6.33E-05	5.2E-06	2.55E-05	9.18E-05	8.44E-06	4.14E-06	1.70E-05	1.42E-06	2.01E-06	7.74E-06	6.00E-07
1328	465117.9	3807809	2.53E-05	6.21E-05	5.1E-06	2.50E-05	9.00E-05	8.28E-06	4.06E-06	1.67E-05	1.40E-06	1.97E-06	7.59E-06	5.88E-07
1329	465137.9	3807809	2.49E-05	6.1E-05	5.01E-06	2.46E-05	8.84E-05	8.13E-06	3.99E-06	1.64E-05	1.37E-06	1.94E-06	7.46E-06	5.78E-07
1330	465157.9	3807809	2.44E-05	6E-05	4.93E-06	2.42E-05	8.69E-05	7.99E-06	3.92E-06	1.61E-05	1.35E-06	1.90E-06	7.33E-06	5.68E-07
1331	465177.9	3807809	2.4E-05	5.9E-05	4.85E-06	2.38E-05	8.55E-05	7.86E-06	3.86E-06	1.59E-05	1.33E-06	1.87E-06	7.21E-06	5.59E-07
1332	465197.9	3807809	2.37E-05	5.81E-05	4.77E-06	2.34E-05	8.42E-05	7.74E-06	3.80E-06	1.56E-05	1.31E-06	1.84E-06	7.10E-06	5.50E-07
1333	465217.9	3807809	2.33E-05	5.72E-05	4.7E-06	2.31E-05	8.29E-05	7.62E-06	3.74E-06	1.54E-05	1.29E-06	1.81E-06	6.99E-06	5.42E-07
1334	465237.9	3807809	2.3E-05	5.63E-05	4.63E-06	2.27E-05	8.16E-05	7.51E-06	3.68E-06	1.51E-05	1.27E-06	1.79E-06	6.89E-06	5.33E-07
1335	465257.9	3807809	2.26E-05	5.55E-05	4.56E-06	2.24E-05	8.04E-05	7.39E-06	3.63E-06	1.49E-05	1.25E-06	1.76E-06</		

1363	465357.9	3807829	2.12E-05	5.2E-05	4.27E-06	2.10E-05	7.53E-05	6.93E-06	3.40E-06	1.40E-05	1.17E-06	1.65E-06	6.36E-06	4.92E-07
1364	465377.9	3807829	2.08E-05	5.11E-05	4.2E-06	2.06E-05	7.40E-05	6.81E-06	3.34E-06	1.37E-05	1.15E-06	1.62E-06	6.24E-06	4.84E-07
1365	464937.9	3807849	3.19E-05	7.84E-05	6.44E-06	3.16E-05	1.14E-04	1.04E-05	5.13E-06	2.11E-05	1.76E-06	2.49E-06	9.58E-06	7.42E-07
1366	464957.9	3807849	3.11E-05	7.63E-05	6.27E-06	3.08E-05	1.11E-04	1.02E-05	4.99E-06	2.05E-05	1.71E-06	2.42E-06	9.33E-06	7.23E-07
1367	464977.9	3807849	3.03E-05	7.44E-05	6.11E-06	3.00E-05	1.08E-04	9.91E-06	4.87E-06	2.00E-05	1.67E-06	2.36E-06	9.10E-06	7.05E-07
1368	464997.9	3807849	2.96E-05	7.26E-05	5.97E-06	2.93E-05	1.05E-04	9.68E-06	4.75E-06	1.95E-05	1.63E-06	2.30E-06	8.88E-06	6.88E-07
1369	465017.9	3807849	2.89E-05	7.1E-05	5.83E-06	2.86E-05	1.03E-04	9.46E-06	4.64E-06	1.91E-05	1.59E-06	2.25E-06	8.67E-06	6.72E-07
1370	465037.9	3807849	2.83E-05	6.95E-05	5.71E-06	2.80E-05	1.01E-04	9.26E-06	4.54E-06	1.87E-05	1.56E-06	2.20E-06	8.49E-06	6.58E-07
1371	465057.9	3807849	2.77E-05	6.81E-05	5.59E-06	2.74E-05	9.86E-05	9.07E-06	4.45E-06	1.83E-05	1.53E-06	2.16E-06	8.32E-06	6.45E-07
1372	465077.9	3807849	2.72E-05	6.68E-05	5.49E-06	2.69E-05	9.68E-05	8.90E-06	4.37E-06	1.79E-05	1.50E-06	2.12E-06	8.16E-06	6.32E-07
1373	465097.9	3807849	2.67E-05	6.55E-05	5.38E-06	2.64E-05	9.50E-05	8.73E-06	4.29E-06	1.76E-05	1.47E-06	2.08E-06	8.01E-06	6.21E-07
1374	465117.9	3807849	2.62E-05	6.44E-05	5.29E-06	2.60E-05	9.33E-05	8.58E-06	4.21E-06	1.73E-05	1.45E-06	2.04E-06	7.87E-06	6.10E-07
1375	465137.9	3807849	2.58E-05	6.33E-05	5.2E-06	2.55E-05	9.17E-05	8.43E-06	4.14E-06	1.70E-05	1.42E-06	2.01E-06	7.74E-06	5.99E-07
1376	465157.9	3807849	2.54E-05	6.22E-05	5.11E-06	2.51E-05	9.02E-05	8.29E-06	4.07E-06	1.67E-05	1.40E-06	1.97E-06	7.61E-06	5.89E-07
1377	465177.9	3807849	2.5E-05	6.12E-05	5.03E-06	2.47E-05	8.87E-05	8.16E-06	4.01E-06	1.65E-05	1.38E-06	1.94E-06	7.49E-06	5.80E-07
1378	465197.9	3807849	2.46E-05	6.03E-05	4.95E-06	2.43E-05	8.73E-05	8.03E-06	3.94E-06	1.62E-05	1.35E-06	1.91E-06	7.37E-06	5.71E-07
1379	465217.9	3807849	2.42E-05	5.93E-05	4.87E-06	2.39E-05	8.59E-05	7.90E-06	3.88E-06	1.59E-05	1.33E-06	1.88E-06	7.25E-06	5.62E-07
1380	465237.9	3807849	2.38E-05	5.83E-05	4.79E-06	2.35E-05	8.45E-05	7.77E-06	3.81E-06	1.57E-05	1.31E-06	1.85E-06	7.13E-06	5.52E-07
1381	465257.9	3807849	2.34E-05	5.73E-05	4.71E-06	2.31E-05	8.31E-05	7.64E-06	3.75E-06	1.54E-05	1.29E-06	1.82E-06	7.01E-06	5.43E-07
1382	465277.9	3807849	2.3E-05	5.64E-05	4.63E-06	2.27E-05	8.18E-05	7.52E-06	3.69E-06	1.52E-05	1.27E-06	1.79E-06	6.90E-06	5.34E-07
1383	465297.9	3807849	2.26E-05	5.55E-05	4.56E-06	2.24E-05	8.04E-05	7.39E-06	3.63E-06	1.49E-05	1.25E-06	1.76E-06	6.78E-06	5.25E-07
1384	465317.9	3807849	2.22E-05	5.45E-05	4.48E-06	2.20E-05	7.90E-05	7.26E-06	3.57E-06	1.46E-05	1.22E-06	1.73E-06	6.66E-06	5.16E-07
1385	465337.9	3807849	2.18E-05	5.36E-05	4.4E-06	2.16E-05	7.77E-05	7.14E-06	3.50E-06	1.44E-05	1.20E-06	1.70E-06	6.55E-06	5.07E-07
1386	465357.9	3807849	2.14E-05	5.26E-05	4.32E-06	2.12E-05	7.62E-05	7.01E-06	3.44E-06	1.41E-05	1.18E-06	1.67E-06	6.43E-06	4.98E-07
1387	465377.9	3807849	2.1E-05	5.16E-05	4.24E-06	2.08E-05	7.48E-05	6.88E-06	3.38E-06	1.39E-05	1.16E-06	1.64E-06	6.31E-06	4.89E-07
1388	464937.9	3807869	3.23E-05	7.93E-05	6.51E-06	3.20E-05	1.15E-04	1.06E-05	5.19E-06	2.13E-05	1.78E-06	2.51E-06	9.69E-06	7.51E-07
1389	464957.9	3807869	3.15E-05	7.73E-05	6.35E-06	3.11E-05	1.12E-04	1.03E-05	5.06E-06	2.08E-05	1.74E-06	2.45E-06	9.45E-06	7.32E-07
1390	464977.9	3807869	3.07E-05	7.54E-05	6.2E-06	3.04E-05	1.09E-04	1.01E-05	4.93E-06	2.03E-05	1.69E-06	2.39E-06	9.22E-06	7.14E-07
1391	464997.9	3807869	3E-05	7.37E-05	6.05E-06	2.97E-05	1.07E-04	9.82E-06	4.82E-06	1.98E-05	1.66E-06	2.34E-06	9.01E-06	6.98E-07
1392	465017.9	3807869	2.94E-05	7.21E-05	5.93E-06	2.91E-05	1.05E-04	9.61E-06	4.72E-06	1.94E-05	1.62E-06	2.29E-06	8.82E-06	6.83E-07
1393	465037.9	3807869	2.88E-05	7.07E-05	5.81E-06	2.85E-05	1.02E-04	9.42E-06	4.62E-06	1.90E-05	1.59E-06	2.24E-06	8.64E-06	6.69E-07
1394	465057.9	3807869	2.82E-05	6.93E-05	5.69E-06	2.79E-05	1.00E-04	9.23E-06	4.53E-06	1.86E-05	1.56E-06	2.20E-06	8.47E-06	6.56E-07
1395	465077.9	3807869	2.77E-05	6.8E-05	5.59E-06	2.74E-05	9.86E-05	9.06E-06	4.45E-06	1.83E-05	1.53E-06	2.16E-06	8.31E-06	6.44E-07
1396	465097.9	3807869	2.72E-05	6.68E-05	5.49E-06	2.69E-05	9.68E-05	8.90E-06	4.37E-06	1.79E-05	1.50E-06	2.12E-06	8.16E-06	6.32E-07
1397	465117.9	3807869	2.67E-05	6.56E-05	5.39E-06	2.64E-05	9.51E-05	8.74E-06	4.29E-06	1.76E-05	1.47E-06	2.08E-06	8.02E-06	6.21E-07
1398	465137.9	3807869	2.63E-05	6.45E-05	5.3E-06	2.60E-05	9.35E-05	8.59E-06	4.22E-06	1.73E-05	1.45E-06	2.05E-06	7.88E-06	6.11E-07
1399	465157.9	3807869	2.58E-05	6.34E-05	5.21E-06	2.56E-05	9.19E-05	8.45E-06	4.15E-06	1.70E-05	1.42E-06	2.01E-06	7.75E-06	6.00E-07
1400	465177.9	3807869	2.54E-05	6.23E-05	5.12E-06	2.51E-05	9.03E-05	8.31E-06	4.08E-06	1.68E-05	1.40E-06	1.98E-06	7.62E-06	5.90E-07
1401	465197.9	3807869	2.5E-05	6.13E-05	5.04E-06	2.47E-05	8.89E-05	8.17E-06	4.01E-06	1.65E-05	1.38E-06	1.94E-06	7.49E-06	5.81E-07
1402	465217.9	3807869	2.46E-05	6.03E-05	4.95E-06	2.43E-05	8.74E-05	8.03E-06	3.94E-06	1.62E-05	1.35E-06	1.91E-06	7.37E-06	5.71E-07
1403	465237.9	3807869	2.41E-05	5.93E-05	4.87E-06	2.39E-05	8.59E-05	7.90E-06	3.88E-06	1.59E-05	1.33E-06	1.88E-06	7.24E-06	5.61E-07
1404	465257.9	3807869	2.37E-05	5.82E-05	4.78E-06	2.35E-05	8.44E-05	7.76E-06	3.81E-06	1.56E-05	1.31E-06	1.85E-06	7.12E-06	5.51E-07
1405	465277.9	3807869	2.33E-05	5.72E-05	4.7E-06	2.31E-05	8.29E-05	7.63E-06	3.74E-06	1.54E-05	1.29E-06	1.82E-06	7.00E-06	5.42E-07
1406	465297.9	3807869	2.29E-05	5.62E-05	4.62E-06	2.27E-05	8.14E-05	7.49E-06	3.68E-06	1.51E-05	1.26E-06	1.78E-06	6.87E-06	5.32E-07
1407	465317.9	3807869	2.25E-05	5.52E-05	4.53E-06	2.22E-05	8.00E-05	7.35E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.74E-06	5.23E-07
1408	465337.9	3807869	2.21E-05	5.42E-05	4.45E-06	2.18E-05	7.85E-05	7.22E-06	3.54E-06	1.46E-05	1.22E-06	1.72E-06	6.62E-06	5.13E-07
1409	465357.9	3807869	2.17E-05	5.31E-05	4.37E-06	2.14E-05	7.70E-05	7.08E-06	3.48E-06	1.43E-05	1.19E-06	1.69E-06	6.50E-06	5.03E-07
1410	465377.9	3807869	2.12E-05	5.21E-05	4.28E-06	2.10E-05	7.55E-05	6.94E-06	3.41E-06	1.40E-05	1.17E-06	1.65E-06	6.37E-06	4.94E-07
1411	464937.9	3807889	3.27E-05	8.04E-05	6.6E-06	3.24E-05	1.16E-04	1.07E-05	5.26E-06	2.16E-05	1.81E-06	2.55E-06	9.82E-06	7.61E-07
1412	464957.9	3807889	3.2E-05	7.84E-05	6.44E-06	3.16E-05	1.14E-04	1.04E-05	5.13E-06	2.11E-05	1.76E-06	2.49E-06	9.59E-06	7.43E-07
1413	464977.9	3807889	3.12E-05	7.66E-05	6.29E-06	3.09E-05	1.11E-04	1.02E-05	5.01E-06	2.06E-05	1.72E-06	2.43E-06	9.36E-06	7.25E-07
1414	464997.9	3807889	3.05E-05	7.49E-05	6.16E-06	3.02E-05	1.09E-04	9.99E-06	4.90E-06	2.01E-05	1.68E-06	2.38E-06	9.16E-06	7.10E-07
1415	465017.9	3807889	2.99E-05	7.34E-05	6.03E-06	2.96E-05	1.06E-04	9.78E-06	4.80E-06	1.97E-05	1.65E-06	2.33E-06	8.98E-06	6.95E-07
1416	465037.9	3807889	2.93E-05	7.2E-05	5.91E-06	2.90E-05	1.04E-04	9.59E-06	4.71E-06	1.93E-05	1.62E-06	2.28E-06	8.80E-06	6.82E-07
1417	465057.9	3807889	2.88E-05	7.06E-05	5.8E-06	2.85E-05	1.02E-04	9.41E-06	4.62E-06	1.90E-05	1.59E-06	2.24E-06	8.63E-06	6.69E-07
1418	465077.9	3807889	2.82E-05	6.93E-05	5.69E-06	2.79E-05	1.00E-04	9.24E-06	4.53E-06	1.86E-05	1.56E-06	2.20E-06	8.47E-06	6.56E-07
1419	465097.9	3807889	2.77E-05	6.81E-05	5.59E-06	2.74E-05	9.87E-05	9.07E-06	4.45E-06	1.83E-05	1.53E-06	2.16E-06	8.32E-06	6.45E-07
1420	465117.9	3807889	2.73E-05	6.69E-05	5.49E-06	2.70E-05	9.69E-05	8.91E-06	4.37E-06	1.80E-05	1.50E-06	2.12E-06	8.17E-06	6.33E-07
1421	465137.9	3807889	2.68E-05	6.57E-05	5.4E-06	2.65E-05	9.52E-05	8.75E-06	4.30E-06	1.77E-05	1.48E-06	2.08E-06	8.03E-06	6.22E-07
1422	465157.9	3807889	2.63E-05	6.46E-05	5.31E-06	2.60E-05	9.36E-05	8.61E-06	4.22E-06	1.74E-05	1.45E-06	2.05E-06	7.90E-06	6.12E-07
1423	465177.9	3807889	2.58E-05	6.34E-05	5.21E-06	2.56E-05	9.19E-05	8.45E-06	4.15E-06	1.70E-05	1.43E-06	2.01E-06	7.75E-06	6.01E-07
1424	465197.9	3807889	2.54E-05	6.23E-05	5.12E-06	2.51E-05	9.03E-05	8.30E-06	4.08E-06	1.67E-05	1.40E-06	1.98E-06	7.62E-06	5.90E-07
1425	465217.9	3807889	2.5E-05	6.12E-05	5.03E-06	2.47E-05	8.87E-05	8.16E-06	4.01E-06	1.65E-05	1.38E-06	1.94E-06	7.49E-06	5.80E-07
1426	465237.9	3807889	2.45E-05	6.01E-05	4.94E-06	2.42E-05	8.72E-05	8.02E-06	3.93E-06	1.62E-05	1.35E-06	1.		

1454	465337.9	3807909	2.25E-05	5.52E-05	4.54E-06	2.23E-05	8.00E-05	7.36E-06	3.61E-06	1.48E-05	1.24E-06	1.75E-06	6.75E-06	5.23E-07
1455	465357.9	3807909	2.21E-05	5.41E-05	4.45E-06	2.18E-05	7.85E-05	7.21E-06	3.54E-06	1.45E-05	1.22E-06	1.72E-06	6.62E-06	5.13E-07
1456	465377.9	3807909	2.16E-05	5.31E-05	4.36E-06	2.14E-05	7.69E-05	7.07E-06	3.47E-06	1.43E-05	1.19E-06	1.68E-06	6.49E-06	5.03E-07
1457	464937.9	3807929	3.38E-05	8.3E-05	6.82E-06	3.34E-05	1.20E-04	1.11E-05	5.43E-06	2.23E-05	1.86E-06	2.63E-06	1.01E-05	7.86E-07
1458	464957.9	3807929	3.31E-05	8.11E-05	6.66E-06	3.27E-05	1.18E-04	1.08E-05	5.31E-06	2.18E-05	1.82E-06	2.57E-06	9.92E-06	7.68E-07
1459	464977.9	3807929	3.24E-05	7.94E-05	6.52E-06	3.20E-05	1.15E-04	1.06E-05	5.19E-06	2.13E-05	1.78E-06	2.52E-06	9.71E-06	7.52E-07
1460	464997.9	3807929	3.17E-05	7.78E-05	6.4E-06	3.14E-05	1.13E-04	1.04E-05	5.09E-06	2.09E-05	1.75E-06	2.47E-06	9.52E-06	7.37E-07
1461	465017.9	3807929	3.11E-05	7.63E-05	6.27E-06	3.08E-05	1.11E-04	1.02E-05	4.99E-06	2.05E-05	1.71E-06	2.42E-06	9.33E-06	7.23E-07
1462	465037.9	3807929	3.05E-05	7.48E-05	6.15E-06	3.02E-05	1.08E-04	9.97E-06	4.90E-06	2.01E-05	1.68E-06	2.37E-06	9.15E-06	7.09E-07
1463	465057.9	3807929	2.99E-05	7.34E-05	6.03E-06	2.96E-05	1.06E-04	9.78E-06	4.80E-06	1.97E-05	1.65E-06	2.33E-06	8.98E-06	6.95E-07
1464	465077.9	3807929	2.94E-05	7.21E-05	5.92E-06	2.90E-05	1.04E-04	9.60E-06	4.71E-06	1.94E-05	1.62E-06	2.29E-06	8.81E-06	6.83E-07
1465	465097.9	3807929	2.88E-05	7.07E-05	5.81E-06	2.85E-05	1.02E-04	9.42E-06	4.63E-06	1.90E-05	1.59E-06	2.24E-06	8.64E-06	6.70E-07
1466	465117.9	3807929	2.83E-05	6.94E-05	5.7E-06	2.80E-05	1.01E-04	9.25E-06	4.54E-06	1.86E-05	1.56E-06	2.20E-06	8.48E-06	6.57E-07
1467	465137.9	3807929	2.78E-05	6.81E-05	5.6E-06	2.75E-05	9.87E-05	9.08E-06	4.46E-06	1.83E-05	1.53E-06	2.16E-06	8.33E-06	6.45E-07
1468	465157.9	3807929	2.72E-05	6.68E-05	5.49E-06	2.69E-05	9.68E-05	8.90E-06	4.37E-06	1.79E-05	1.50E-06	2.12E-06	8.17E-06	6.33E-07
1469	465177.9	3807929	2.67E-05	6.55E-05	5.38E-06	2.64E-05	9.50E-05	8.73E-06	4.29E-06	1.76E-05	1.47E-06	2.08E-06	8.01E-06	6.21E-07
1470	465197.9	3807929	2.62E-05	6.43E-05	5.28E-06	2.59E-05	9.31E-05	8.56E-06	4.20E-06	1.73E-05	1.44E-06	2.04E-06	7.85E-06	6.09E-07
1471	465217.9	3807929	2.57E-05	6.3E-05	5.18E-06	2.54E-05	9.14E-05	8.40E-06	4.12E-06	1.69E-05	1.42E-06	2.00E-06	7.71E-06	5.97E-07
1472	465237.9	3807929	2.52E-05	6.18E-05	5.07E-06	2.49E-05	8.95E-05	8.23E-06	4.04E-06	1.66E-05	1.39E-06	1.96E-06	7.55E-06	5.85E-07
1473	465257.9	3807929	2.47E-05	6.05E-05	4.97E-06	2.44E-05	8.77E-05	8.06E-06	3.96E-06	1.63E-05	1.36E-06	1.92E-06	7.40E-06	5.73E-07
1474	465277.9	3807929	2.42E-05	5.93E-05	4.87E-06	2.39E-05	8.59E-05	7.90E-06	3.88E-06	1.59E-05	1.33E-06	1.88E-06	7.25E-06	5.62E-07
1475	465297.9	3807929	2.37E-05	5.81E-05	4.78E-06	2.34E-05	8.42E-05	7.75E-06	3.80E-06	1.56E-05	1.31E-06	1.84E-06	7.11E-06	5.50E-07
1476	465317.9	3807929	2.32E-05	5.7E-05	4.68E-06	2.30E-05	8.26E-05	7.59E-06	3.73E-06	1.53E-05	1.28E-06	1.81E-06	6.96E-06	5.39E-07
1477	465337.9	3807929	2.27E-05	5.58E-05	4.58E-06	2.25E-05	8.08E-05	7.43E-06	3.65E-06	1.50E-05	1.25E-06	1.77E-06	6.82E-06	5.28E-07
1478	465357.9	3807929	2.23E-05	5.47E-05	4.49E-06	2.20E-05	7.93E-05	7.29E-06	3.58E-06	1.47E-05	1.23E-06	1.73E-06	6.69E-06	5.18E-07
1479	465377.9	3807929	2.18E-05	5.36E-05	4.4E-06	2.16E-05	7.77E-05	7.14E-06	3.51E-06	1.44E-05	1.20E-06	1.70E-06	6.55E-06	5.08E-07
1480	464937.9	3807949	3.44E-05	8.45E-05	6.94E-06	3.41E-05	1.22E-04	1.13E-05	5.53E-06	2.27E-05	1.90E-06	2.68E-06	1.03E-05	8.01E-07
1481	464957.9	3807949	3.37E-05	8.27E-05	6.8E-06	3.33E-05	1.20E-04	1.10E-05	5.41E-06	2.22E-05	1.86E-06	2.62E-06	1.01E-05	7.83E-07
1482	464977.9	3807949	3.3E-05	8.11E-05	6.66E-06	3.27E-05	1.17E-04	1.08E-05	5.30E-06	2.18E-05	1.82E-06	2.57E-06	9.91E-06	7.68E-07
1483	464997.9	3807949	3.24E-05	7.94E-05	6.53E-06	3.20E-05	1.15E-04	1.06E-05	5.20E-06	2.13E-05	1.78E-06	2.52E-06	9.71E-06	7.52E-07
1484	465017.9	3807949	3.17E-05	7.78E-05	6.4E-06	3.14E-05	1.13E-04	1.04E-05	5.09E-06	2.09E-05	1.75E-06	2.47E-06	9.52E-06	7.37E-07
1485	465037.9	3807949	3.11E-05	7.64E-05	6.27E-06	3.08E-05	1.11E-04	1.02E-05	5.00E-06	2.05E-05	1.72E-06	2.42E-06	9.34E-06	7.23E-07
1486	465057.9	3807949	3.05E-05	7.49E-05	6.15E-06	3.02E-05	1.09E-04	9.98E-06	4.90E-06	2.01E-05	1.68E-06	2.37E-06	9.15E-06	7.09E-07
1487	465077.9	3807949	2.99E-05	7.34E-05	6.03E-06	2.96E-05	1.06E-04	9.78E-06	4.80E-06	1.97E-05	1.65E-06	2.33E-06	8.98E-06	6.95E-07
1488	465097.9	3807949	2.94E-05	7.2E-05	5.92E-06	2.90E-05	1.04E-04	9.60E-06	4.71E-06	1.94E-05	1.62E-06	2.28E-06	8.81E-06	6.82E-07
1489	465117.9	3807949	2.88E-05	7.06E-05	5.8E-06	2.85E-05	1.02E-04	9.41E-06	4.62E-06	1.90E-05	1.59E-06	2.24E-06	8.63E-06	6.69E-07
1490	465137.9	3807949	2.82E-05	6.92E-05	5.69E-06	2.79E-05	1.00E-04	9.22E-06	4.53E-06	1.86E-05	1.55E-06	2.20E-06	8.46E-06	6.56E-07
1491	465157.9	3807949	2.77E-05	6.79E-05	5.58E-06	2.74E-05	9.84E-05	9.04E-06	4.44E-06	1.82E-05	1.52E-06	2.15E-06	8.30E-06	6.43E-07
1492	465177.9	3807949	2.71E-05	6.65E-05	5.46E-06	2.68E-05	9.63E-05	8.86E-06	4.35E-06	1.79E-05	1.49E-06	2.11E-06	8.13E-06	6.30E-07
1493	465197.9	3807949	2.65E-05	6.51E-05	5.35E-06	2.62E-05	9.44E-05	8.68E-06	4.26E-06	1.75E-05	1.46E-06	2.06E-06	7.96E-06	6.17E-07
1494	465217.9	3807949	2.6E-05	6.38E-05	5.24E-06	2.57E-05	9.25E-05	8.50E-06	4.17E-06	1.71E-05	1.43E-06	2.02E-06	7.80E-06	6.04E-07
1495	465237.9	3807949	2.55E-05	6.25E-05	5.14E-06	2.52E-05	9.06E-05	8.33E-06	4.09E-06	1.68E-05	1.40E-06	1.98E-06	7.64E-06	5.92E-07
1496	465257.9	3807949	2.5E-05	6.12E-05	5.03E-06	2.47E-05	8.88E-05	8.16E-06	4.01E-06	1.65E-05	1.38E-06	1.94E-06	7.49E-06	5.80E-07
1497	465277.9	3807949	2.44E-05	5.99E-05	4.92E-06	2.42E-05	8.68E-05	7.98E-06	3.92E-06	1.61E-05	1.35E-06	1.90E-06	7.32E-06	5.68E-07
1498	465297.9	3807949	2.39E-05	5.87E-05	4.82E-06	2.37E-05	8.51E-05	7.82E-06	3.84E-06	1.58E-05	1.32E-06	1.86E-06	7.18E-06	5.56E-07
1499	465317.9	3807949	2.34E-05	5.75E-05	4.73E-06	2.32E-05	8.34E-05	7.67E-06	3.76E-06	1.55E-05	1.29E-06	1.83E-06	7.03E-06	5.45E-07
1500	465337.9	3807949	2.3E-05	5.64E-05	4.63E-06	2.27E-05	8.17E-05	7.52E-06	3.69E-06	1.52E-05	1.27E-06	1.79E-06	6.89E-06	5.34E-07
1501	465357.9	3807949	2.25E-05	5.53E-05	4.54E-06	2.23E-05	8.01E-05	7.37E-06	3.62E-06	1.49E-05	1.24E-06	1.75E-06	6.76E-06	5.24E-07
1502	465377.9	3807949	2.21E-05	5.42E-05	4.45E-06	2.19E-05	7.86E-05	7.22E-06	3.55E-06	1.46E-05	1.22E-06	1.72E-06	6.63E-06	5.13E-07
1503	464937.9	3807969	3.51E-05	8.63E-05	7.09E-06	3.48E-05	1.25E-04	1.15E-05	5.64E-06	2.32E-05	1.94E-06	2.74E-06	1.05E-05	8.17E-07
1504	464957.9	3807969	3.44E-05	8.45E-05	6.94E-06	3.40E-05	1.22E-04	1.13E-05	5.53E-06	2.27E-05	1.90E-06	2.68E-06	1.03E-05	8.00E-07
1505	464977.9	3807969	3.37E-05	8.28E-05	6.8E-06	3.34E-05	1.20E-04	1.10E-05	5.41E-06	2.22E-05	1.86E-06	2.62E-06	1.01E-05	7.84E-07
1506	464997.9	3807969	3.3E-05	8.11E-05	6.66E-06	3.27E-05	1.18E-04	1.08E-05	5.31E-06	2.18E-05	1.82E-06	2.57E-06	9.91E-06	7.68E-07
1507	465017.9	3807969	3.24E-05	7.95E-05	6.53E-06	3.20E-05	1.15E-04	1.06E-05	5.20E-06	2.14E-05	1.79E-06	2.52E-06	9.72E-06	7.53E-07
1508	465037.9	3807969	3.18E-05	7.79E-05	6.4E-06	3.14E-05	1.13E-04	1.04E-05	5.10E-06	2.09E-05	1.75E-06	2.47E-06	9.53E-06	7.38E-07
1509	465057.9	3807969	3.11E-05	7.64E-05	6.27E-06	3.08E-05	1.11E-04	1.02E-05	5.00E-06	2.05E-05	1.72E-06	2.42E-06	9.33E-06	7.23E-07
1510	465077.9	3807969	3.05E-05	7.48E-05	6.15E-06	3.02E-05	1.08E-04	9.97E-06	4.89E-06	2.01E-05	1.68E-06	2.37E-06	9.14E-06	7.08E-07
1511	465097.9	3807969	2.99E-05	7.33E-05	6.02E-06	2.95E-05	1.06E-04	9.76E-06	4.79E-06	1.97E-05	1.65E-06	2.32E-06	8.96E-06	6.94E-07
1512	465117.9	3807969	2.93E-05	7.18E-05	5.9E-06	2.89E-05	1.04E-04	9.57E-06	4.70E-06	1.93E-05	1.61E-06	2.28E-06	8.78E-06	6.80E-07
1513	465137.9	3807969	2.87E-05	7.03E-05	5.78E-06	2.83E-05	1.02E-04	9.37E-06	4.60E-06	1.89E-05	1.58E-06	2.23E-06	8.60E-06	6.66E-07
1514	465157.9	3807969	2.8E-05	6.88E-05	5.66E-06	2.77E-05	9.98E-05	9.17E-06	4.50E-06	1.85E-05	1.55E-06	2.18E-06	8.41E-06	6.52E-07
1515	465177.9	3807969	2.75E-05	6.74E-05	5.54E-06	2.72E-05	9.77E-05	8.98E-06	4.41E-06	1.81E-05	1.51E-06	2.14E-06	8.24E-06	6.38E-07
1516	465197.9	3807969	2.69E-05	6.6E-05	5.42E-06	2.66E-05	9.56E-05	8.79E-06	4.32E-06	1.77E-05	1.48E-06	2.09E-06	8.07E-06	6.25E-07
1517	465217.9	3807969	2.63E-05	6.46E-05	5.3E-06	2.60E-05	9.36E-05	8.60E-06	4.22E-06	1.73E-05	1.45E-06	2.		

1545	465317.9	3807989	2.4E-05	5.9E-05	4.85E-06	2.38E-05	8.55E-05	7.86E-06	3.86E-06	1.58E-05	1.32E-06	1.87E-06	7.21E-06	5.59E-07
1546	465337.9	3807989	2.35E-05	5.78E-05	4.75E-06	2.33E-05	8.37E-05	7.70E-06	3.78E-06	1.55E-05	1.30E-06	1.83E-06	7.06E-06	5.47E-07
1547	465357.9	3807989	2.31E-05	5.67E-05	4.66E-06	2.28E-05	8.21E-05	7.55E-06	3.71E-06	1.52E-05	1.27E-06	1.80E-06	6.93E-06	5.37E-07
1548	465377.9	3807989	2.27E-05	5.56E-05	4.57E-06	2.24E-05	8.06E-05	7.41E-06	3.64E-06	1.49E-05	1.25E-06	1.76E-06	6.80E-06	5.27E-07
1549	464937.9	3808009	3.67E-05	9.01E-05	7.4E-06	3.63E-05	1.31E-04	1.20E-05	5.89E-06	2.42E-05	2.02E-06	2.86E-06	1.10E-05	8.53E-07
1550	464957.9	3808009	3.59E-05	8.82E-05	7.24E-06	3.55E-05	1.28E-04	1.17E-05	5.77E-06	2.37E-05	1.98E-06	2.80E-06	1.08E-05	8.35E-07
1551	464977.9	3808009	3.52E-05	8.63E-05	7.09E-06	3.48E-05	1.25E-04	1.15E-05	5.64E-06	2.32E-05	1.94E-06	2.74E-06	1.05E-05	8.17E-07
1552	464997.9	3808009	3.44E-05	8.45E-05	6.94E-06	3.41E-05	1.22E-04	1.13E-05	5.53E-06	2.27E-05	1.90E-06	2.68E-06	1.03E-05	8.00E-07
1553	465017.9	3808009	3.37E-05	8.27E-05	6.8E-06	3.33E-05	1.20E-04	1.10E-05	5.41E-06	2.22E-05	1.86E-06	2.62E-06	1.01E-05	7.83E-07
1554	465037.9	3808009	3.3E-05	8.09E-05	6.65E-06	3.26E-05	1.17E-04	1.08E-05	5.29E-06	2.17E-05	1.82E-06	2.57E-06	9.89E-06	7.66E-07
1555	465057.9	3808009	3.23E-05	7.92E-05	6.51E-06	3.19E-05	1.15E-04	1.06E-05	5.18E-06	2.13E-05	1.78E-06	2.51E-06	9.68E-06	7.50E-07
1556	465077.9	3808009	3.16E-05	7.75E-05	6.37E-06	3.12E-05	1.12E-04	1.03E-05	5.07E-06	2.08E-05	1.74E-06	2.46E-06	9.47E-06	7.34E-07
1557	465097.9	3808009	3.09E-05	7.58E-05	6.23E-06	3.05E-05	1.10E-04	1.01E-05	4.96E-06	2.04E-05	1.70E-06	2.40E-06	9.26E-06	7.18E-07
1558	465117.9	3808009	3.02E-05	7.41E-05	6.09E-06	2.99E-05	1.07E-04	9.88E-06	4.85E-06	1.99E-05	1.67E-06	2.35E-06	9.06E-06	7.02E-07
1559	465137.9	3808009	2.96E-05	7.25E-05	5.96E-06	2.92E-05	1.05E-04	9.67E-06	4.74E-06	1.95E-05	1.63E-06	2.30E-06	8.87E-06	6.87E-07
1560	465157.9	3808009	2.89E-05	7.09E-05	5.82E-06	2.86E-05	1.03E-04	9.44E-06	4.64E-06	1.90E-05	1.59E-06	2.25E-06	8.66E-06	6.71E-07
1561	465177.9	3808009	2.82E-05	6.92E-05	5.69E-06	2.79E-05	1.00E-04	9.23E-06	4.53E-06	1.86E-05	1.56E-06	2.20E-06	8.46E-06	6.56E-07
1562	465197.9	3808009	2.76E-05	6.77E-05	5.56E-06	2.73E-05	9.81E-05	9.02E-06	4.43E-06	1.82E-05	1.52E-06	2.15E-06	8.28E-06	6.41E-07
1563	465217.9	3808009	2.7E-05	6.63E-05	5.45E-06	2.67E-05	9.61E-05	8.83E-06	4.34E-06	1.78E-05	1.49E-06	2.10E-06	8.10E-06	6.28E-07
1564	465237.9	3808009	2.65E-05	6.49E-05	5.33E-06	2.62E-05	9.41E-05	8.65E-06	4.25E-06	1.74E-05	1.46E-06	2.06E-06	7.94E-06	6.15E-07
1565	465257.9	3808009	2.59E-05	6.36E-05	5.23E-06	2.56E-05	9.22E-05	8.48E-06	4.16E-06	1.71E-05	1.43E-06	2.02E-06	7.78E-06	6.02E-07
1566	465277.9	3808009	2.54E-05	6.24E-05	5.12E-06	2.51E-05	9.04E-05	8.31E-06	4.08E-06	1.68E-05	1.40E-06	1.98E-06	7.62E-06	5.91E-07
1567	465297.9	3808009	2.49E-05	6.1E-05	5.02E-06	2.46E-05	8.85E-05	8.14E-06	3.99E-06	1.64E-05	1.37E-06	1.94E-06	7.46E-06	5.78E-07
1568	465317.9	3808009	2.44E-05	5.98E-05	4.92E-06	2.41E-05	8.67E-05	7.97E-06	3.91E-06	1.61E-05	1.34E-06	1.90E-06	7.31E-06	5.67E-07
1569	465337.9	3808009	2.39E-05	5.87E-05	4.83E-06	2.37E-05	8.51E-05	7.83E-06	3.84E-06	1.58E-05	1.32E-06	1.86E-06	7.18E-06	5.56E-07
1570	465357.9	3808009	2.35E-05	5.76E-05	4.73E-06	2.32E-05	8.35E-05	7.67E-06	3.77E-06	1.55E-05	1.29E-06	1.83E-06	7.04E-06	5.45E-07
1571	465377.9	3808009	2.3E-05	5.65E-05	4.65E-06	2.28E-05	8.20E-05	7.54E-06	3.70E-06	1.52E-05	1.27E-06	1.79E-06	6.91E-06	5.36E-07
1572	464937.9	3808029	3.75E-05	9.2E-05	7.56E-06	3.71E-05	1.33E-04	1.23E-05	6.02E-06	2.47E-05	2.07E-06	2.92E-06	1.12E-05	8.72E-07
1573	464957.9	3808029	3.67E-05	9.01E-05	7.4E-06	3.63E-05	1.31E-04	1.20E-05	5.89E-06	2.42E-05	2.02E-06	2.86E-06	1.10E-05	8.53E-07
1574	464977.9	3808029	3.59E-05	8.81E-05	7.24E-06	3.55E-05	1.28E-04	1.17E-05	5.76E-06	2.37E-05	1.98E-06	2.79E-06	1.08E-05	8.34E-07
1575	464997.9	3808029	3.51E-05	8.62E-05	7.08E-06	3.47E-05	1.25E-04	1.15E-05	5.64E-06	2.32E-05	1.94E-06	2.73E-06	1.05E-05	8.16E-07
1576	465017.9	3808029	3.43E-05	8.43E-05	6.92E-06	3.40E-05	1.22E-04	1.12E-05	5.51E-06	2.26E-05	1.89E-06	2.67E-06	1.03E-05	7.98E-07
1577	465037.9	3808029	3.36E-05	8.24E-05	6.77E-06	3.32E-05	1.19E-04	1.10E-05	5.39E-06	2.21E-05	1.85E-06	2.61E-06	1.01E-05	7.81E-07
1578	465057.9	3808029	3.28E-05	8.06E-05	6.62E-06	3.25E-05	1.17E-04	1.07E-05	5.27E-06	2.17E-05	1.81E-06	2.56E-06	9.85E-06	7.63E-07
1579	465077.9	3808029	3.21E-05	7.88E-05	6.47E-06	3.17E-05	1.14E-04	1.05E-05	5.15E-06	2.12E-05	1.77E-06	2.50E-06	9.63E-06	7.46E-07
1580	465097.9	3808029	3.14E-05	7.7E-05	6.33E-06	3.10E-05	1.12E-04	1.03E-05	5.04E-06	2.07E-05	1.73E-06	2.44E-06	9.42E-06	7.30E-07
1581	465117.9	3808029	3.07E-05	7.53E-05	6.18E-06	3.03E-05	1.09E-04	1.00E-05	4.92E-06	2.02E-05	1.69E-06	2.39E-06	9.20E-06	7.13E-07
1582	465137.9	3808029	3E-05	7.36E-05	6.04E-06	2.97E-05	1.07E-04	9.80E-06	4.81E-06	1.98E-05	1.65E-06	2.33E-06	8.99E-06	6.97E-07
1583	465157.9	3808029	2.93E-05	7.2E-05	5.91E-06	2.90E-05	1.04E-04	9.59E-06	4.71E-06	1.93E-05	1.62E-06	2.28E-06	8.80E-06	6.82E-07
1584	465177.9	3808029	2.86E-05	7.03E-05	5.78E-06	2.83E-05	1.02E-04	9.37E-06	4.60E-06	1.89E-05	1.58E-06	2.23E-06	8.59E-06	6.66E-07
1585	465197.9	3808029	2.8E-05	6.88E-05	5.65E-06	2.77E-05	9.96E-05	9.16E-06	4.50E-06	1.85E-05	1.54E-06	2.18E-06	8.40E-06	6.51E-07
1586	465217.9	3808029	2.74E-05	6.73E-05	5.53E-06	2.71E-05	9.76E-05	8.97E-06	4.41E-06	1.81E-05	1.51E-06	2.14E-06	8.23E-06	6.38E-07
1587	465237.9	3808029	2.69E-05	6.59E-05	5.41E-06	2.66E-05	9.55E-05	8.78E-06	4.31E-06	1.77E-05	1.48E-06	2.09E-06	8.05E-06	6.24E-07
1588	465257.9	3808029	2.63E-05	6.45E-05	5.3E-06	2.60E-05	9.35E-05	8.60E-06	4.22E-06	1.73E-05	1.45E-06	2.05E-06	7.89E-06	6.11E-07
1589	465277.9	3808029	2.58E-05	6.33E-05	5.2E-06	2.55E-05	9.17E-05	8.44E-06	4.14E-06	1.70E-05	1.42E-06	2.01E-06	7.74E-06	6.00E-07
1590	465297.9	3808029	2.53E-05	6.21E-05	5.1E-06	2.50E-05	9.00E-05	8.28E-06	4.06E-06	1.67E-05	1.40E-06	1.97E-06	7.59E-06	5.88E-07
1591	465317.9	3808029	2.48E-05	6.09E-05	5.01E-06	2.46E-05	8.83E-05	8.12E-06	3.99E-06	1.64E-05	1.37E-06	1.93E-06	7.45E-06	5.77E-07
1592	465337.9	3808029	2.44E-05	5.98E-05	4.91E-06	2.41E-05	8.66E-05	7.96E-06	3.91E-06	1.61E-05	1.34E-06	1.90E-06	7.31E-06	5.66E-07
1593	465357.9	3808029	2.39E-05	5.87E-05	4.83E-06	2.37E-05	8.51E-05	7.83E-06	3.84E-06	1.58E-05	1.32E-06	1.86E-06	7.18E-06	5.56E-07
1594	465377.9	3808029	2.35E-05	5.78E-05	4.75E-06	2.33E-05	8.37E-05	7.70E-06	3.78E-06	1.55E-05	1.30E-06	1.83E-06	7.06E-06	5.47E-07
1595	464937.9	3808049	3.83E-05	9.4E-05	7.73E-06	3.79E-05	1.36E-04	1.25E-05	6.15E-06	2.53E-05	2.11E-06	2.98E-06	1.15E-05	8.91E-07
1596	464957.9	3808049	3.75E-05	9.2E-05	7.56E-06	3.71E-05	1.33E-04	1.23E-05	6.02E-06	2.47E-05	2.07E-06	2.92E-06	1.12E-05	8.71E-07
1597	464977.9	3808049	3.66E-05	8.99E-05	7.39E-06	3.62E-05	1.30E-04	1.20E-05	5.88E-06	2.42E-05	2.02E-06	2.85E-06	1.10E-05	8.52E-07
1598	464997.9	3808049	3.58E-05	8.79E-05	7.22E-06	3.54E-05	1.27E-04	1.17E-05	5.75E-06	2.36E-05	1.97E-06	2.79E-06	1.07E-05	8.32E-07
1599	465017.9	3808049	3.5E-05	8.58E-05	7.05E-06	3.46E-05	1.24E-04	1.14E-05	5.61E-06	2.31E-05	1.93E-06	2.72E-06	1.05E-05	8.13E-07
1600	465037.9	3808049	3.42E-05	8.39E-05	6.89E-06	3.38E-05	1.22E-04	1.12E-05	5.49E-06	2.25E-05	1.88E-06	2.66E-06	1.03E-05	7.94E-07
1601	465057.9	3808049	3.34E-05	8.19E-05	6.73E-06	3.30E-05	1.19E-04	1.09E-05	5.36E-06	2.20E-05	1.84E-06	2.60E-06	1.00E-05	7.76E-07
1602	465077.9	3808049	3.26E-05	8.01E-05	6.58E-06	3.23E-05	1.16E-04	1.07E-05	5.24E-06	2.15E-05	1.80E-06	2.54E-06	9.79E-06	7.58E-07
1603	465097.9	3808049	3.19E-05	7.82E-05	6.43E-06	3.15E-05	1.13E-04	1.04E-05	5.12E-06	2.10E-05	1.76E-06	2.48E-06	9.56E-06	7.41E-07
1604	465117.9	3808049	3.12E-05	7.64E-05	6.28E-06	3.08E-05	1.11E-04	1.02E-05	5.00E-06	2.05E-05	1.72E-06	2.42E-06	9.35E-06	7.24E-07
1605	465137.9	3808049	3.04E-05	7.47E-05	6.14E-06	3.01E-05	1.08E-04	9.96E-06	4.89E-06	2.01E-05	1.68E-06	2.37E-06	9.13E-06	7.08E-07
1606	465157.9	3808049	2.98E-05	7.31E-05	6E-06	2.95E-05	1.06E-04	9.74E-06	4.78E-06	1.96E-05	1.64E-06	2.32E-06	8.93E-06	6.92E-07
1607	465177.9	3808049	2.91E-05	7.14E-05	5.87E-06	2.88E-05	1.04E-04	9.52E-06	4.67E-06	1.92E-05	1.61E-06	2.27E-06	8.73E-06	6.77E-07
1608	465197.9	3808049	2.85E-05	6.99E-05	5.74E-06	2.82E-05	1.01E-04	9.32E-06	4.57E-06	1.88E-05	1.57E-06	2.22E		

1636	465297.9	3808069	2.64E-05	6.47E-05	5.32E-06	2.61E-05	9.38E-05	8.63E-06	4.23E-06	1.74E-05	1.45E-06	2.05E-06	7.91E-06	6.13E-07
1637	465317.9	3808069	2.6E-05	6.37E-05	5.23E-06	2.57E-05	9.23E-05	8.49E-06	4.17E-06	1.71E-05	1.43E-06	2.02E-06	7.79E-06	6.03E-07
1638	465337.9	3808069	2.56E-05	6.27E-05	5.15E-06	2.53E-05	9.09E-05	8.36E-06	4.10E-06	1.69E-05	1.41E-06	1.99E-06	7.67E-06	5.94E-07
1639	465357.9	3808069	2.51E-05	6.17E-05	5.07E-06	2.49E-05	8.94E-05	8.22E-06	4.04E-06	1.66E-05	1.39E-06	1.96E-06	7.54E-06	5.84E-07
1640	465377.9	3808069	2.48E-05	6.08E-05	4.99E-06	2.45E-05	8.81E-05	8.10E-06	3.98E-06	1.63E-05	1.37E-06	1.93E-06	7.43E-06	5.76E-07
1641	464937.9	3808089	4E-05	9.82E-05	8.07E-06	3.96E-05	1.42E-04	1.31E-05	6.42E-06	2.64E-05	2.21E-06	3.11E-06	1.20E-05	9.30E-07
1642	464957.9	3808089	3.91E-05	9.58E-05	7.87E-06	3.86E-05	1.39E-04	1.28E-05	6.27E-06	2.58E-05	2.15E-06	3.04E-06	1.17E-05	9.08E-07
1643	464977.9	3808089	3.81E-05	9.35E-05	7.68E-06	3.77E-05	1.36E-04	1.25E-05	6.12E-06	2.51E-05	2.10E-06	2.97E-06	1.14E-05	8.86E-07
1644	464997.9	3808089	3.72E-05	9.13E-05	7.5E-06	3.68E-05	1.32E-04	1.22E-05	5.97E-06	2.45E-05	2.05E-06	2.90E-06	1.12E-05	8.65E-07
1645	465017.9	3808089	3.63E-05	8.91E-05	7.32E-06	3.59E-05	1.29E-04	1.19E-05	5.83E-06	2.40E-05	2.00E-06	2.83E-06	1.09E-05	8.44E-07
1646	465037.9	3808089	3.54E-05	8.7E-05	7.14E-06	3.50E-05	1.26E-04	1.16E-05	5.69E-06	2.34E-05	1.95E-06	2.76E-06	1.06E-05	8.24E-07
1647	465057.9	3808089	3.46E-05	8.5E-05	6.98E-06	3.42E-05	1.23E-04	1.13E-05	5.56E-06	2.28E-05	1.91E-06	2.70E-06	1.04E-05	8.05E-07
1648	465077.9	3808089	3.38E-05	8.3E-05	6.82E-06	3.35E-05	1.20E-04	1.11E-05	5.43E-06	2.23E-05	1.86E-06	2.63E-06	1.01E-05	7.86E-07
1649	465097.9	3808089	3.3E-05	8.11E-05	6.66E-06	3.27E-05	1.17E-04	1.08E-05	5.30E-06	2.18E-05	1.82E-06	2.57E-06	9.91E-06	7.68E-07
1650	465117.9	3808089	3.23E-05	7.92E-05	6.51E-06	3.19E-05	1.15E-04	1.06E-05	5.18E-06	2.13E-05	1.78E-06	2.51E-06	9.68E-06	7.50E-07
1651	465137.9	3808089	3.16E-05	7.75E-05	6.36E-06	3.12E-05	1.12E-04	1.03E-05	5.07E-06	2.08E-05	1.74E-06	2.46E-06	9.47E-06	7.34E-07
1652	465157.9	3808089	3.09E-05	7.58E-05	6.23E-06	3.06E-05	1.10E-04	1.01E-05	4.96E-06	2.04E-05	1.70E-06	2.41E-06	9.27E-06	7.18E-07
1653	465177.9	3808089	3.03E-05	7.42E-05	6.1E-06	2.99E-05	1.08E-04	9.89E-06	4.86E-06	2.00E-05	1.67E-06	2.36E-06	9.08E-06	7.03E-07
1654	465197.9	3808089	2.96E-05	7.28E-05	5.98E-06	2.93E-05	1.05E-04	9.70E-06	4.76E-06	1.96E-05	1.63E-06	2.31E-06	8.89E-06	6.89E-07
1655	465217.9	3808089	2.91E-05	7.14E-05	5.87E-06	2.88E-05	1.03E-04	9.51E-06	4.67E-06	1.92E-05	1.60E-06	2.26E-06	8.73E-06	6.76E-07
1656	465237.9	3808089	2.85E-05	7E-05	5.75E-06	2.82E-05	1.02E-04	9.33E-06	4.58E-06	1.88E-05	1.57E-06	2.22E-06	8.56E-06	6.63E-07
1657	465257.9	3808089	2.8E-05	6.88E-05	5.65E-06	2.77E-05	9.97E-05	9.16E-06	4.50E-06	1.85E-05	1.55E-06	2.18E-06	8.41E-06	6.51E-07
1658	465277.9	3808089	2.76E-05	6.76E-05	5.56E-06	2.73E-05	9.80E-05	9.01E-06	4.42E-06	1.82E-05	1.52E-06	2.15E-06	8.27E-06	6.41E-07
1659	465297.9	3808089	2.71E-05	6.66E-05	5.47E-06	2.68E-05	9.65E-05	8.87E-06	4.36E-06	1.79E-05	1.50E-06	2.11E-06	8.14E-06	6.31E-07
1660	465317.9	3808089	2.67E-05	6.56E-05	5.39E-06	2.64E-05	9.50E-05	8.74E-06	4.29E-06	1.76E-05	1.47E-06	2.08E-06	8.02E-06	6.21E-07
1661	465337.9	3808089	2.63E-05	6.45E-05	5.3E-06	2.60E-05	9.35E-05	8.60E-06	4.22E-06	1.73E-05	1.45E-06	2.05E-06	7.89E-06	6.11E-07
1662	465357.9	3808089	2.59E-05	6.36E-05	5.23E-06	2.57E-05	9.22E-05	8.48E-06	4.16E-06	1.71E-05	1.43E-06	2.02E-06	7.78E-06	6.03E-07
1663	465377.9	3808089	2.56E-05	6.28E-05	5.16E-06	2.53E-05	9.10E-05	8.37E-06	4.11E-06	1.69E-05	1.41E-06	1.99E-06	7.68E-06	5.95E-07
1664	464937.9	3808109	4.08E-05	0.0001	8.24E-06	4.04E-05	1.45E-04	1.34E-05	6.56E-06	2.69E-05	2.25E-06	3.18E-06	1.23E-05	9.49E-07
1665	464957.9	3808109	3.99E-05	9.78E-05	8.04E-06	3.94E-05	1.42E-04	1.30E-05	6.40E-06	2.63E-05	2.20E-06	3.10E-06	1.20E-05	9.26E-07
1666	464977.9	3808109	3.89E-05	9.54E-05	7.84E-06	3.85E-05	1.38E-04	1.27E-05	6.24E-06	2.56E-05	2.14E-06	3.03E-06	1.17E-05	9.04E-07
1667	464997.9	3808109	3.79E-05	9.31E-05	7.65E-06	3.75E-05	1.35E-04	1.24E-05	6.09E-06	2.50E-05	2.09E-06	2.95E-06	1.14E-05	8.82E-07
1668	465017.9	3808109	3.7E-05	9.09E-05	7.47E-06	3.66E-05	1.32E-04	1.21E-05	5.95E-06	2.44E-05	2.04E-06	2.88E-06	1.11E-05	8.61E-07
1669	465037.9	3808109	3.62E-05	8.87E-05	7.29E-06	3.58E-05	1.29E-04	1.18E-05	5.80E-06	2.38E-05	1.99E-06	2.81E-06	1.08E-05	8.40E-07
1670	465057.9	3808109	3.53E-05	8.67E-05	7.12E-06	3.49E-05	1.26E-04	1.16E-05	5.67E-06	2.33E-05	1.95E-06	2.75E-06	1.06E-05	8.21E-07
1671	465077.9	3808109	3.45E-05	8.47E-05	6.96E-06	3.41E-05	1.23E-04	1.13E-05	5.54E-06	2.28E-05	1.90E-06	2.69E-06	1.04E-05	8.02E-07
1672	465097.9	3808109	3.37E-05	8.27E-05	6.8E-06	3.33E-05	1.20E-04	1.10E-05	5.41E-06	2.22E-05	1.86E-06	2.62E-06	1.01E-05	7.83E-07
1673	465117.9	3808109	3.3E-05	8.09E-05	6.65E-06	3.26E-05	1.17E-04	1.08E-05	5.29E-06	2.17E-05	1.82E-06	2.57E-06	9.89E-06	7.66E-07
1674	465137.9	3808109	3.23E-05	7.92E-05	6.51E-06	3.19E-05	1.15E-04	1.06E-05	5.18E-06	2.13E-05	1.78E-06	2.51E-06	9.69E-06	7.50E-07
1675	465157.9	3808109	3.17E-05	7.77E-05	6.38E-06	3.13E-05	1.13E-04	1.04E-05	5.08E-06	2.09E-05	1.75E-06	2.46E-06	9.50E-06	7.36E-07
1676	465177.9	3808109	3.1E-05	7.61E-05	6.25E-06	3.07E-05	1.10E-04	1.01E-05	4.98E-06	2.05E-05	1.71E-06	2.41E-06	9.31E-06	7.21E-07
1677	465197.9	3808109	3.04E-05	7.46E-05	6.13E-06	3.01E-05	1.08E-04	9.95E-06	4.88E-06	2.01E-05	1.68E-06	2.37E-06	9.12E-06	7.07E-07
1678	465217.9	3808109	2.99E-05	7.33E-05	6.02E-06	2.95E-05	1.06E-04	9.77E-06	4.79E-06	1.97E-05	1.65E-06	2.32E-06	8.96E-06	6.94E-07
1679	465237.9	3808109	2.93E-05	7.2E-05	5.92E-06	2.90E-05	1.04E-04	9.60E-06	4.71E-06	1.93E-05	1.62E-06	2.28E-06	8.80E-06	6.82E-07
1680	465257.9	3808109	2.89E-05	7.08E-05	5.82E-06	2.85E-05	1.03E-04	9.44E-06	4.63E-06	1.90E-05	1.59E-06	2.25E-06	8.66E-06	6.71E-07
1681	465277.9	3808109	2.84E-05	6.98E-05	5.73E-06	2.81E-05	1.01E-04	9.30E-06	4.56E-06	1.87E-05	1.57E-06	2.21E-06	8.53E-06	6.61E-07
1682	465297.9	3808109	2.8E-05	6.87E-05	5.65E-06	2.77E-05	9.96E-05	9.16E-06	4.50E-06	1.85E-05	1.54E-06	2.18E-06	8.40E-06	6.51E-07
1683	465317.9	3808109	2.76E-05	6.77E-05	5.56E-06	2.73E-05	9.82E-05	9.02E-06	4.43E-06	1.82E-05	1.52E-06	2.15E-06	8.28E-06	6.41E-07
1684	465337.9	3808109	2.72E-05	6.68E-05	5.48E-06	2.69E-05	9.67E-05	8.90E-06	4.37E-06	1.79E-05	1.50E-06	2.12E-06	8.16E-06	6.32E-07
1685	465357.9	3808109	2.68E-05	6.59E-05	5.41E-06	2.66E-05	9.55E-05	8.78E-06	4.31E-06	1.77E-05	1.48E-06	2.09E-06	8.05E-06	6.24E-07
1686	465377.9	3808109	2.65E-05	6.51E-05	5.34E-06	2.62E-05	9.43E-05	8.67E-06	4.26E-06	1.75E-05	1.46E-06	2.06E-06	7.95E-06	6.16E-07
1687	464937.9	3808129	4.17E-05	0.000102	8.41E-06	4.13E-05	1.48E-04	1.36E-05	6.70E-06	2.75E-05	2.30E-06	3.25E-06	1.25E-05	9.70E-07
1688	464957.9	3808129	4.07E-05	9.99E-05	8.21E-06	4.03E-05	1.45E-04	1.33E-05	6.54E-06	2.68E-05	2.24E-06	3.17E-06	1.22E-05	9.46E-07
1689	464977.9	3808129	3.97E-05	9.75E-05	8.01E-06	3.93E-05	1.41E-04	1.30E-05	6.38E-06	2.62E-05	2.19E-06	3.09E-06	1.19E-05	9.24E-07
1690	464997.9	3808129	3.88E-05	9.51E-05	7.81E-06	3.83E-05	1.38E-04	1.27E-05	6.22E-06	2.56E-05	2.14E-06	3.02E-06	1.16E-05	9.01E-07
1691	465017.9	3808129	3.78E-05	9.28E-05	7.63E-06	3.74E-05	1.35E-04	1.24E-05	6.07E-06	2.49E-05	2.09E-06	2.94E-06	1.14E-05	8.79E-07
1692	465037.9	3808129	3.7E-05	9.08E-05	7.46E-06	3.66E-05	1.32E-04	1.21E-05	5.94E-06	2.44E-05	2.04E-06	2.88E-06	1.11E-05	8.60E-07
1693	465057.9	3808129	3.61E-05	8.86E-05	7.28E-06	3.57E-05	1.28E-04	1.18E-05	5.80E-06	2.38E-05	1.99E-06	2.81E-06	1.08E-05	8.40E-07
1694	465077.9	3808129	3.53E-05	8.66E-05	7.12E-06	3.49E-05	1.26E-04	1.15E-05	5.67E-06	2.33E-05	1.95E-06	2.75E-06	1.06E-05	8.20E-07
1695	465097.9	3808129	3.45E-05	8.47E-05	6.96E-06	3.41E-05	1.23E-04	1.13E-05	5.54E-06	2.27E-05	1.90E-06	2.69E-06	1.03E-05	8.02E-07
1696	465117.9	3808129	3.38E-05	8.3E-05	6.82E-06	3.34E-05	1.20E-04	1.11E-05	5.43E-06	2.23E-05	1.86E-06	2.63E-06	1.01E-05	7.86E-07
1697	465137.9	3808129	3.32E-05	8.14E-05	6.69E-06	3.28E-05	1.18E-04	1.08E-05	5.33E-06	2.19E-05	1.83E-06	2.58E-06	9.95E-06	7.71E-07
1698	465157.9	3808129	3.26E-05	7.99E-05	6.57E-06	3.22E-05	1.16E-04	1.06E-05	5.23E-06	2.15E-05	1.80E-06	2.53E-06	9.77E-06	7.57E-07
1699	465177.9	3808129	3.19E-05	7.84E-05	6.44E-06	3.16E-05	1.14E-04	1.04E-05	5.13E-06	2.11E-05	1.76E-06	2.49E		

1727	465277.9	3808149	3.06E-05	7.5E-05	6.16E-06	3.02E-05	1.09E-04	1.00E-05	4.91E-06	2.02E-05	1.69E-06	2.38E-06	9.17E-06	7.11E-07
1728	465297.9	3808149	3.02E-05	7.41E-05	6.09E-06	2.99E-05	1.07E-04	9.87E-06	4.85E-06	1.99E-05	1.66E-06	2.35E-06	9.05E-06	7.01E-07
1729	465317.9	3808149	2.98E-05	7.31E-05	6.01E-06	2.95E-05	1.06E-04	9.75E-06	4.78E-06	1.97E-05	1.64E-06	2.32E-06	8.94E-06	6.93E-07
1730	465337.9	3808149	2.94E-05	7.22E-05	5.93E-06	2.91E-05	1.05E-04	9.62E-06	4.72E-06	1.94E-05	1.62E-06	2.29E-06	8.82E-06	6.84E-07
1731	465357.9	3808149	2.91E-05	7.14E-05	5.86E-06	2.88E-05	1.03E-04	9.51E-06	4.67E-06	1.92E-05	1.60E-06	2.26E-06	8.72E-06	6.76E-07
1732	465377.9	3808149	2.88E-05	7.06E-05	5.8E-06	2.85E-05	1.02E-04	9.41E-06	4.62E-06	1.90E-05	1.59E-06	2.24E-06	8.63E-06	6.69E-07
1733	464937.9	3808169	4.38E-05	0.000107	8.83E-06	4.33E-05	1.56E-04	1.43E-05	7.03E-06	2.89E-05	2.41E-06	3.41E-06	1.31E-05	1.02E-06
1734	464957.9	3808169	4.28E-05	0.000105	8.62E-06	4.23E-05	1.52E-04	1.40E-05	6.86E-06	2.82E-05	2.36E-06	3.33E-06	1.28E-05	9.94E-07
1735	464977.9	3808169	4.18E-05	0.000103	8.42E-06	4.13E-05	1.49E-04	1.37E-05	6.71E-06	2.75E-05	2.30E-06	3.25E-06	1.25E-05	9.71E-07
1736	464997.9	3808169	4.08E-05	0.0001	8.23E-06	4.04E-05	1.45E-04	1.33E-05	6.55E-06	2.69E-05	2.25E-06	3.18E-06	1.22E-05	9.49E-07
1737	465017.9	3808169	3.99E-05	9.79E-05	8.05E-06	3.95E-05	1.42E-04	1.30E-05	6.41E-06	2.63E-05	2.20E-06	3.11E-06	1.20E-05	9.28E-07
1738	465037.9	3808169	3.91E-05	9.58E-05	7.87E-06	3.86E-05	1.39E-04	1.28E-05	6.27E-06	2.58E-05	2.15E-06	3.04E-06	1.17E-05	9.08E-07
1739	465057.9	3808169	3.82E-05	9.38E-05	7.71E-06	3.78E-05	1.36E-04	1.25E-05	6.14E-06	2.52E-05	2.11E-06	2.97E-06	1.15E-05	8.88E-07
1740	465077.9	3808169	3.74E-05	9.19E-05	7.55E-06	3.70E-05	1.33E-04	1.22E-05	6.01E-06	2.47E-05	2.06E-06	2.91E-06	1.12E-05	8.70E-07
1741	465097.9	3808169	3.67E-05	9.01E-05	7.4E-06	3.63E-05	1.31E-04	1.20E-05	5.89E-06	2.42E-05	2.02E-06	2.86E-06	1.10E-05	8.53E-07
1742	465117.9	3808169	3.6E-05	8.85E-05	7.27E-06	3.57E-05	1.28E-04	1.18E-05	5.79E-06	2.38E-05	1.99E-06	2.81E-06	1.08E-05	8.38E-07
1743	465137.9	3808169	3.54E-05	8.69E-05	7.14E-06	3.50E-05	1.26E-04	1.16E-05	5.69E-06	2.34E-05	1.95E-06	2.76E-06	1.06E-05	8.23E-07
1744	465157.9	3808169	3.48E-05	8.54E-05	7.02E-06	3.44E-05	1.24E-04	1.14E-05	5.59E-06	2.30E-05	1.92E-06	2.71E-06	1.04E-05	8.09E-07
1745	465177.9	3808169	3.43E-05	8.41E-05	6.91E-06	3.39E-05	1.22E-04	1.12E-05	5.50E-06	2.26E-05	1.89E-06	2.67E-06	1.03E-05	7.97E-07
1746	465197.9	3808169	3.37E-05	8.28E-05	6.8E-06	3.34E-05	1.20E-04	1.10E-05	5.42E-06	2.23E-05	1.86E-06	2.63E-06	1.01E-05	7.84E-07
1747	465217.9	3808169	3.32E-05	8.16E-05	6.7E-06	3.29E-05	1.18E-04	1.09E-05	5.34E-06	2.19E-05	1.83E-06	2.59E-06	9.97E-06	7.73E-07
1748	465237.9	3808169	3.28E-05	8.04E-05	6.61E-06	3.24E-05	1.17E-04	1.07E-05	5.26E-06	2.16E-05	1.81E-06	2.55E-06	9.83E-06	7.62E-07
1749	465257.9	3808169	3.23E-05	7.93E-05	6.52E-06	3.20E-05	1.15E-04	1.06E-05	5.19E-06	2.13E-05	1.78E-06	2.52E-06	9.70E-06	7.52E-07
1750	465277.9	3808169	3.19E-05	7.83E-05	6.43E-06	3.16E-05	1.13E-04	1.04E-05	5.12E-06	2.10E-05	1.76E-06	2.48E-06	9.57E-06	7.42E-07
1751	465297.9	3808169	3.15E-05	7.73E-05	6.35E-06	3.12E-05	1.12E-04	1.03E-05	5.06E-06	2.08E-05	1.74E-06	2.45E-06	9.45E-06	7.32E-07
1752	465317.9	3808169	3.11E-05	7.64E-05	6.28E-06	3.08E-05	1.11E-04	1.02E-05	5.00E-06	2.05E-05	1.72E-06	2.42E-06	9.34E-06	7.23E-07
1753	465337.9	3808169	3.08E-05	7.55E-05	6.2E-06	3.04E-05	1.09E-04	1.01E-05	4.94E-06	2.03E-05	1.70E-06	2.39E-06	9.23E-06	7.15E-07
1754	465357.9	3808169	3.04E-05	7.46E-05	6.13E-06	3.01E-05	1.08E-04	9.94E-06	4.88E-06	2.01E-05	1.68E-06	2.37E-06	9.12E-06	7.07E-07
1755	465377.9	3808169	3.01E-05	7.38E-05	6.07E-06	2.98E-05	1.07E-04	9.84E-06	4.83E-06	1.98E-05	1.66E-06	2.34E-06	9.03E-06	6.99E-07
1756	464937.9	3808189	4.5E-05	0.00011	9.07E-06	4.45E-05	1.60E-04	1.47E-05	7.22E-06	2.97E-05	2.48E-06	3.50E-06	1.35E-05	1.05E-06
1757	464957.9	3808189	4.4E-05	0.000108	8.87E-06	4.35E-05	1.56E-04	1.44E-05	7.06E-06	2.90E-05	2.42E-06	3.42E-06	1.32E-05	1.02E-06
1758	464977.9	3808189	4.3E-05	0.000106	8.67E-06	4.25E-05	1.53E-04	1.41E-05	6.90E-06	2.84E-05	2.37E-06	3.35E-06	1.29E-05	1.00E-06
1759	464997.9	3808189	4.21E-05	0.000103	8.49E-06	4.16E-05	1.50E-04	1.38E-05	6.76E-06	2.78E-05	2.32E-06	3.28E-06	1.26E-05	9.79E-07
1760	465017.9	3808189	4.12E-05	0.000101	8.31E-06	4.08E-05	1.47E-04	1.35E-05	6.62E-06	2.72E-05	2.27E-06	3.21E-06	1.24E-05	9.58E-07
1761	465037.9	3808189	4.04E-05	9.9E-05	8.14E-06	3.99E-05	1.44E-04	1.32E-05	6.48E-06	2.66E-05	2.22E-06	3.14E-06	1.21E-05	9.38E-07
1762	465057.9	3808189	3.95E-05	9.7E-05	7.97E-06	3.91E-05	1.41E-04	1.29E-05	6.35E-06	2.61E-05	2.18E-06	3.08E-06	1.19E-05	9.19E-07
1763	465077.9	3808189	3.88E-05	9.52E-05	7.82E-06	3.84E-05	1.38E-04	1.27E-05	6.23E-06	2.56E-05	2.14E-06	3.02E-06	1.16E-05	9.02E-07
1764	465097.9	3808189	3.81E-05	9.36E-05	7.69E-06	3.77E-05	1.36E-04	1.25E-05	6.12E-06	2.51E-05	2.10E-06	2.97E-06	1.14E-05	8.86E-07
1765	465117.9	3808189	3.75E-05	9.19E-05	7.55E-06	3.71E-05	1.33E-04	1.22E-05	6.01E-06	2.47E-05	2.07E-06	2.92E-06	1.12E-05	8.71E-07
1766	465137.9	3808189	3.68E-05	9.04E-05	7.43E-06	3.64E-05	1.31E-04	1.20E-05	5.91E-06	2.43E-05	2.03E-06	2.87E-06	1.11E-05	8.56E-07
1767	465157.9	3808189	3.63E-05	8.91E-05	7.32E-06	3.59E-05	1.29E-04	1.19E-05	5.83E-06	2.39E-05	2.00E-06	2.83E-06	1.09E-05	8.44E-07
1768	465177.9	3808189	3.57E-05	8.77E-05	7.2E-06	3.53E-05	1.27E-04	1.17E-05	5.74E-06	2.36E-05	1.97E-06	2.78E-06	1.07E-05	8.30E-07
1769	465197.9	3808189	3.52E-05	8.64E-05	7.1E-06	3.48E-05	1.25E-04	1.15E-05	5.65E-06	2.32E-05	1.94E-06	2.74E-06	1.06E-05	8.18E-07
1770	465217.9	3808189	3.48E-05	8.53E-05	7.01E-06	3.44E-05	1.24E-04	1.14E-05	5.58E-06	2.29E-05	1.92E-06	2.71E-06	1.04E-05	8.08E-07
1771	465237.9	3808189	3.43E-05	8.41E-05	6.91E-06	3.39E-05	1.22E-04	1.12E-05	5.50E-06	2.26E-05	1.89E-06	2.67E-06	1.03E-05	7.96E-07
1772	465257.9	3808189	3.38E-05	8.3E-05	6.82E-06	3.34E-05	1.20E-04	1.11E-05	5.43E-06	2.23E-05	1.86E-06	2.63E-06	1.01E-05	7.86E-07
1773	465277.9	3808189	3.34E-05	8.2E-05	6.74E-06	3.31E-05	1.19E-04	1.09E-05	5.37E-06	2.20E-05	1.84E-06	2.60E-06	1.00E-05	7.77E-07
1774	465297.9	3808189	3.3E-05	8.1E-05	6.65E-06	3.26E-05	1.17E-04	1.08E-05	5.30E-06	2.18E-05	1.82E-06	2.57E-06	9.90E-06	7.67E-07
1775	465317.9	3808189	3.26E-05	8E-05	6.57E-06	3.22E-05	1.16E-04	1.07E-05	5.23E-06	2.15E-05	1.80E-06	2.54E-06	9.78E-06	7.58E-07
1776	465337.9	3808189	3.23E-05	7.92E-05	6.5E-06	3.19E-05	1.15E-04	1.06E-05	5.18E-06	2.13E-05	1.78E-06	2.51E-06	9.68E-06	7.50E-07
1777	465357.9	3808189	3.19E-05	7.82E-05	6.43E-06	3.15E-05	1.13E-04	1.04E-05	5.12E-06	2.10E-05	1.76E-06	2.48E-06	9.56E-06	7.41E-07
1778	465377.9	3808189	3.15E-05	7.73E-05	6.35E-06	3.12E-05	1.12E-04	1.03E-05	5.06E-06	2.08E-05	1.74E-06	2.45E-06	9.45E-06	7.33E-07
1779	464937.9	3808209	4.64E-05	0.000114	9.35E-06	4.59E-05	1.65E-04	1.52E-05	7.44E-06	3.06E-05	2.56E-06	3.61E-06	1.39E-05	1.08E-06
1780	464957.9	3808209	4.54E-05	0.000111	9.16E-06	4.49E-05	1.62E-04	1.49E-05	7.29E-06	2.99E-05	2.50E-06	3.53E-06	1.36E-05	1.06E-06
1781	464977.9	3808209	4.45E-05	0.000109	8.97E-06	4.40E-05	1.58E-04	1.45E-05	7.14E-06	2.93E-05	2.45E-06	3.46E-06	1.33E-05	1.03E-06
1782	464997.9	3808209	4.36E-05	0.000107	8.79E-06	4.31E-05	1.55E-04	1.43E-05	7.00E-06	2.88E-05	2.40E-06	3.39E-06	1.31E-05	1.01E-06
1783	465017.9	3808209	4.27E-05	0.000105	8.62E-06	4.23E-05	1.52E-04	1.40E-05	6.86E-06	2.82E-05	2.36E-06	3.33E-06	1.28E-05	9.94E-07
1784	465037.9	3808209	4.19E-05	0.000103	8.45E-06	4.14E-05	1.49E-04	1.37E-05	6.73E-06	2.76E-05	2.31E-06	3.26E-06	1.26E-05	9.74E-07
1785	465057.9	3808209	4.11E-05	0.000101	8.3E-06	4.07E-05	1.46E-04	1.35E-05	6.61E-06	2.71E-05	2.27E-06	3.20E-06	1.23E-05	9.56E-07
1786	465077.9	3808209	4.04E-05	9.92E-05	8.15E-06	4.00E-05	1.44E-04	1.32E-05	6.49E-06	2.67E-05	2.23E-06	3.15E-06	1.21E-05	9.40E-07
1787	465097.9	3808209	3.97E-05	9.75E-05	8.01E-06	3.93E-05	1.41E-04	1.30E-05	6.38E-06	2.62E-05	2.19E-06	3.09E-06	1.19E-05	9.24E-07
1788	465117.9	3808209	3.91E-05	9.6E-05	7.89E-06	3.87E-05	1.39E-04	1.28E-05	6.28E-06	2.58E-05	2.16E-06	3.05E-06	1.17E-05	9.09E-07
1789	465137.9	3808209	3.85E-05	9.46E-05	7.77E-06	3.81E-05	1.37E-04	1.26E-05	6.19E-06	2.54E-05	2.12E-06	3.00E-06	1.16E-05	8.96E-07
1790	465157.9	3808209	3.79E-05	9.31E-05	7.65E-06	3.75E-05	1.35E-04	1.24E-05	6.09E-06	2.50E-05	2.09E-06	2.95E-0		

1818	465277.9	3808229	3.69E-05	9.06E-05	7.44E-06	3.65E-05	1.31E-04	1.21E-05	5.93E-06	2.43E-05	2.04E-06	2.87E-06	1.11E-05	8.58E-07
1819	465297.9	3808229	3.65E-05	8.95E-05	7.36E-06	3.61E-05	1.30E-04	1.19E-05	5.86E-06	2.41E-05	2.01E-06	2.84E-06	1.09E-05	8.48E-07
1820	465317.9	3808229	3.61E-05	8.85E-05	7.27E-06	3.57E-05	1.28E-04	1.18E-05	5.79E-06	2.38E-05	1.99E-06	2.81E-06	1.08E-05	8.38E-07
1821	465337.9	3808229	3.56E-05	8.75E-05	7.19E-06	3.53E-05	1.27E-04	1.17E-05	5.72E-06	2.35E-05	1.96E-06	2.77E-06	1.07E-05	8.28E-07
1822	465357.9	3808229	3.52E-05	8.65E-05	7.1E-06	3.49E-05	1.25E-04	1.15E-05	5.66E-06	2.32E-05	1.94E-06	2.74E-06	1.06E-05	8.19E-07
1823	465377.9	3808229	3.48E-05	8.55E-05	7.03E-06	3.45E-05	1.24E-04	1.14E-05	5.59E-06	2.30E-05	1.92E-06	2.71E-06	1.05E-05	8.10E-07
1824	464977.9	3808249	4.83E-05	0.000118	9.73E-06	4.78E-05	1.72E-04	1.58E-05	7.75E-06	3.18E-05	2.66E-06	3.76E-06	1.45E-05	1.12E-06
1825	464997.9	3808249	4.75E-05	0.000116	9.57E-06	4.70E-05	1.69E-04	1.55E-05	7.62E-06	3.13E-05	2.62E-06	3.69E-06	1.42E-05	1.10E-06
1826	465017.9	3808249	4.67E-05	0.000115	9.42E-06	4.62E-05	1.66E-04	1.53E-05	7.50E-06	3.08E-05	2.57E-06	3.64E-06	1.40E-05	1.09E-06
1827	465037.9	3808249	4.6E-05	0.000113	9.27E-06	4.55E-05	1.64E-04	1.50E-05	7.38E-06	3.03E-05	2.53E-06	3.58E-06	1.38E-05	1.07E-06
1828	465057.9	3808249	4.52E-05	0.000111	9.11E-06	4.47E-05	1.61E-04	1.48E-05	7.26E-06	2.98E-05	2.49E-06	3.52E-06	1.36E-05	1.05E-06
1829	465077.9	3808249	4.45E-05	0.000109	8.96E-06	4.40E-05	1.58E-04	1.45E-05	7.14E-06	2.93E-05	2.45E-06	3.46E-06	1.33E-05	1.03E-06
1830	465097.9	3808249	4.37E-05	0.000107	8.82E-06	4.33E-05	1.56E-04	1.43E-05	7.02E-06	2.88E-05	2.41E-06	3.40E-06	1.31E-05	1.02E-06
1831	465117.9	3808249	4.31E-05	0.000106	8.7E-06	4.27E-05	1.53E-04	1.41E-05	6.93E-06	2.84E-05	2.38E-06	3.36E-06	1.29E-05	1.00E-06
1832	465137.9	3808249	4.26E-05	0.000105	8.59E-06	4.21E-05	1.51E-04	1.39E-05	6.84E-06	2.81E-05	2.35E-06	3.31E-06	1.28E-05	9.90E-07
1833	465157.9	3808249	4.21E-05	0.000103	8.48E-06	4.16E-05	1.50E-04	1.38E-05	6.75E-06	2.77E-05	2.32E-06	3.27E-06	1.26E-05	9.78E-07
1834	465177.9	3808249	4.15E-05	0.000102	8.36E-06	4.10E-05	1.47E-04	1.36E-05	6.66E-06	2.73E-05	2.29E-06	3.23E-06	1.24E-05	9.64E-07
1835	465197.9	3808249	4.09E-05	0.0001	8.25E-06	4.05E-05	1.46E-04	1.34E-05	6.57E-06	2.70E-05	2.26E-06	3.18E-06	1.23E-05	9.51E-07
1836	465217.9	3808249	4.04E-05	9.92E-05	8.15E-06	4.00E-05	1.44E-04	1.32E-05	6.49E-06	2.67E-05	2.23E-06	3.15E-06	1.21E-05	9.40E-07
1837	465237.9	3808249	3.99E-05	9.79E-05	8.04E-06	3.95E-05	1.42E-04	1.30E-05	6.40E-06	2.63E-05	2.20E-06	3.10E-06	1.20E-05	9.27E-07
1838	465257.9	3808249	3.94E-05	9.67E-05	7.94E-06	3.90E-05	1.40E-04	1.29E-05	6.32E-06	2.60E-05	2.17E-06	3.07E-06	1.18E-05	9.16E-07
1839	465277.9	3808249	3.9E-05	9.56E-05	7.86E-06	3.85E-05	1.39E-04	1.27E-05	6.26E-06	2.57E-05	2.15E-06	3.03E-06	1.17E-05	9.06E-07
1840	465297.9	3808249	3.85E-05	9.44E-05	7.75E-06	3.80E-05	1.37E-04	1.26E-05	6.17E-06	2.54E-05	2.12E-06	2.99E-06	1.15E-05	8.94E-07
1841	465317.9	3808249	3.8E-05	9.32E-05	7.66E-06	3.76E-05	1.35E-04	1.24E-05	6.10E-06	2.50E-05	2.09E-06	2.96E-06	1.14E-05	8.83E-07
1842	465337.9	3808249	3.76E-05	9.22E-05	7.58E-06	3.72E-05	1.34E-04	1.23E-05	6.03E-06	2.48E-05	2.07E-06	2.92E-06	1.13E-05	8.73E-07
1843	465357.9	3808249	3.71E-05	9.1E-05	7.48E-06	3.67E-05	1.32E-04	1.21E-05	5.96E-06	2.45E-05	2.05E-06	2.89E-06	1.11E-05	8.62E-07
1844	465377.9	3808249	3.67E-05	9E-05	7.39E-06	3.63E-05	1.30E-04	1.20E-05	5.88E-06	2.42E-05	2.02E-06	2.85E-06	1.10E-05	8.52E-07
1845	464997.9	3808269	4.97E-05	0.000122	1E-05	4.92E-05	1.77E-04	1.63E-05	7.98E-06	3.28E-05	2.74E-06	3.87E-06	1.49E-05	1.16E-06
1846	465017.9	3808269	4.9E-05	0.00012	9.88E-06	4.85E-05	1.74E-04	1.60E-05	7.87E-06	3.23E-05	2.70E-06	3.82E-06	1.47E-05	1.14E-06
1847	465037.9	3808269	4.83E-05	0.000119	9.74E-06	4.78E-05	1.72E-04	1.58E-05	7.75E-06	3.19E-05	2.66E-06	3.76E-06	1.45E-05	1.12E-06
1848	465057.9	3808269	4.76E-05	0.000117	9.59E-06	4.71E-05	1.69E-04	1.56E-05	7.64E-06	3.14E-05	2.62E-06	3.70E-06	1.43E-05	1.11E-06
1849	465077.9	3808269	4.69E-05	0.000115	9.46E-06	4.64E-05	1.67E-04	1.53E-05	7.53E-06	3.09E-05	2.59E-06	3.65E-06	1.41E-05	1.09E-06
1850	465097.9	3808269	4.63E-05	0.000114	9.33E-06	4.58E-05	1.65E-04	1.51E-05	7.43E-06	3.05E-05	2.55E-06	3.60E-06	1.39E-05	1.08E-06
1851	465117.9	3808269	4.56E-05	0.000112	9.19E-06	4.51E-05	1.62E-04	1.49E-05	7.32E-06	3.00E-05	2.51E-06	3.55E-06	1.37E-05	1.06E-06
1852	465137.9	3808269	4.49E-05	0.00011	9.06E-06	4.45E-05	1.60E-04	1.47E-05	7.21E-06	2.96E-05	2.48E-06	3.50E-06	1.35E-05	1.04E-06
1853	465157.9	3808269	4.44E-05	0.000109	8.95E-06	4.39E-05	1.58E-04	1.45E-05	7.13E-06	2.93E-05	2.45E-06	3.46E-06	1.33E-05	1.03E-06
1854	465177.9	3808269	4.38E-05	0.000108	8.84E-06	4.34E-05	1.56E-04	1.43E-05	7.04E-06	2.89E-05	2.42E-06	3.41E-06	1.31E-05	1.02E-06
1855	465197.9	3808269	4.33E-05	0.000106	8.72E-06	4.28E-05	1.54E-04	1.41E-05	6.94E-06	2.85E-05	2.39E-06	3.37E-06	1.30E-05	1.01E-06
1856	465217.9	3808269	4.27E-05	0.000105	8.6E-06	4.22E-05	1.52E-04	1.40E-05	6.85E-06	2.81E-05	2.35E-06	3.32E-06	1.28E-05	9.92E-07
1857	465237.9	3808269	4.21E-05	0.000103	8.5E-06	4.17E-05	1.50E-04	1.38E-05	6.77E-06	2.78E-05	2.32E-06	3.28E-06	1.26E-05	9.80E-07
1858	465257.9	3808269	4.16E-05	0.000102	8.4E-06	4.12E-05	1.48E-04	1.36E-05	6.69E-06	2.75E-05	2.30E-06	3.24E-06	1.25E-05	9.68E-07
1859	465277.9	3808269	4.12E-05	0.000101	8.3E-06	4.07E-05	1.46E-04	1.35E-05	6.61E-06	2.72E-05	2.27E-06	3.21E-06	1.24E-05	9.57E-07
1860	465297.9	3808269	4.06E-05	9.97E-05	8.19E-06	4.02E-05	1.44E-04	1.33E-05	6.52E-06	2.68E-05	2.24E-06	3.16E-06	1.22E-05	9.44E-07
1861	465317.9	3808269	4.01E-05	9.83E-05	8.08E-06	3.96E-05	1.43E-04	1.31E-05	6.43E-06	2.64E-05	2.21E-06	3.12E-06	1.20E-05	9.31E-07
1862	465337.9	3808269	3.95E-05	9.7E-05	7.97E-06	3.91E-05	1.41E-04	1.29E-05	6.35E-06	2.61E-05	2.18E-06	3.08E-06	1.19E-05	9.19E-07
1863	465357.9	3808269	3.91E-05	9.59E-05	7.88E-06	3.87E-05	1.39E-04	1.28E-05	6.27E-06	2.58E-05	2.15E-06	3.04E-06	1.17E-05	9.08E-07
1864	465377.9	3808269	3.86E-05	9.48E-05	7.79E-06	3.82E-05	1.37E-04	1.26E-05	6.20E-06	2.55E-05	2.13E-06	3.01E-06	1.16E-05	8.97E-07
1865	465017.9	3808289	5.17E-05	0.000127	1.04E-05	5.11E-05	1.84E-04	1.69E-05	8.29E-06	3.41E-05	2.85E-06	4.02E-06	1.55E-05	1.20E-06
1866	465037.9	3808289	5.1E-05	0.000125	1.03E-05	5.04E-05	1.81E-04	1.67E-05	8.19E-06	3.36E-05	2.81E-06	3.97E-06	1.53E-05	1.19E-06
1867	465057.9	3808289	5.02E-05	0.000123	1.01E-05	4.97E-05	1.79E-04	1.64E-05	8.06E-06	3.31E-05	2.77E-06	3.91E-06	1.51E-05	1.17E-06
1868	465077.9	3808289	4.95E-05	0.000122	9.99E-06	4.90E-05	1.76E-04	1.62E-05	7.95E-06	3.27E-05	2.73E-06	3.86E-06	1.49E-05	1.15E-06
1869	465097.9	3808289	4.9E-05	0.00012	9.87E-06	4.84E-05	1.74E-04	1.60E-05	7.86E-06	3.23E-05	2.70E-06	3.81E-06	1.47E-05	1.14E-06
1870	465117.9	3808289	4.83E-05	0.000118	9.73E-06	4.77E-05	1.72E-04	1.58E-05	7.75E-06	3.18E-05	2.66E-06	3.76E-06	1.45E-05	1.12E-06
1871	465137.9	3808289	4.76E-05	0.000117	9.6E-06	4.71E-05	1.69E-04	1.56E-05	7.64E-06	3.14E-05	2.62E-06	3.71E-06	1.43E-05	1.11E-06
1872	465157.9	3808289	4.7E-05	0.000115	9.48E-06	4.65E-05	1.67E-04	1.54E-05	7.55E-06	3.10E-05	2.59E-06	3.66E-06	1.41E-05	1.09E-06
1873	465177.9	3808289	4.64E-05	0.000114	9.35E-06	4.59E-05	1.65E-04	1.52E-05	7.45E-06	3.06E-05	2.56E-06	3.61E-06	1.39E-05	1.08E-06
1874	465197.9	3808289	4.58E-05	0.000112	9.23E-06	4.53E-05	1.63E-04	1.50E-05	7.35E-06	3.02E-05	2.52E-06	3.56E-06	1.37E-05	1.06E-06
1875	465217.9	3808289	4.51E-05	0.000111	9.1E-06	4.46E-05	1.61E-04	1.48E-05	7.25E-06	2.98E-05	2.49E-06	3.51E-06	1.35E-05	1.05E-06
1876	465237.9	3808289	4.46E-05	0.000109	8.99E-06	4.41E-05	1.59E-04	1.46E-05	7.16E-06	2.94E-05	2.46E-06	3.47E-06	1.34E-05	1.04E-06
1877	465257.9	3808289	4.4E-05	0.000108	8.88E-06	4.36E-05	1.57E-04	1.44E-05	7.07E-06	2.90E-05	2.43E-06	3.43E-06	1.32E-05	1.02E-06
1878	465277.9	3808289	4.35E-05	0.000107	8.76E-06	4.30E-05	1.55E-04	1.42E-05	6.98E-06	2.87E-05	2.40E-06	3.38E-06	1.30E-05	1.01E-06
1879	465297.9	3808289	4.28E-05	0.000105	8.64E-06	4.24E-05	1.52E-04	1.40E-05	6.88E-06	2.83E-05	2.36E-06	3.33E-06	1.29E-05	9.96E-07
1880	465317.9	3808289	4.22E-05	0.000104	8.52E-06	4.18E-05	1.50E-04	1.38E-05	6.78E-06	2.79E-05	2.33E-06	3.29E-06	1.27E-05	9.82E-07
1881	465337.9	3808289	4.17E-05	0.000102	8.4E-06	4.12E-05	1.48E-04	1.36E-05	6.69E-06	2.75E-05	2.30E-06	3.24E-06		

1909	465197.9	3808329	5.13E-05	0.000126	1.03E-05	5.07E-05	1.82E-04	1.68E-05	8.23E-06	3.38E-05	2.83E-06	3.99E-06	1.54E-05	1.19E-06
1910	465217.9	3808329	5.06E-05	0.000124	1.02E-05	5.01E-05	1.80E-04	1.65E-05	8.12E-06	3.34E-05	2.79E-06	3.94E-06	1.52E-05	1.18E-06
1911	465237.9	3808329	4.98E-05	0.000122	1E-05	4.93E-05	1.77E-04	1.63E-05	8.00E-06	3.29E-05	2.75E-06	3.88E-06	1.49E-05	1.16E-06
1912	465257.9	3808329	4.9E-05	0.00012	9.88E-06	4.85E-05	1.74E-04	1.60E-05	7.87E-06	3.23E-05	2.70E-06	3.82E-06	1.47E-05	1.14E-06
1913	465277.9	3808329	4.82E-05	0.000118	9.72E-06	4.77E-05	1.71E-04	1.58E-05	7.74E-06	3.18E-05	2.66E-06	3.75E-06	1.45E-05	1.12E-06
1914	465297.9	3808329	4.75E-05	0.000117	9.58E-06	4.70E-05	1.69E-04	1.55E-05	7.63E-06	3.13E-05	2.62E-06	3.70E-06	1.43E-05	1.10E-06
1915	465317.9	3808329	4.68E-05	0.000115	9.44E-06	4.63E-05	1.67E-04	1.53E-05	7.52E-06	3.09E-05	2.58E-06	3.64E-06	1.40E-05	1.09E-06
1916	465337.9	3808329	4.61E-05	0.000113	9.29E-06	4.56E-05	1.64E-04	1.51E-05	7.40E-06	3.04E-05	2.54E-06	3.59E-06	1.38E-05	1.07E-06
1917	465357.9	3808329	4.55E-05	0.000112	9.16E-06	4.50E-05	1.62E-04	1.49E-05	7.30E-06	3.00E-05	2.51E-06	3.54E-06	1.36E-05	1.06E-06
1918	465377.9	3808329	4.48E-05	0.00011	9.03E-06	4.43E-05	1.59E-04	1.46E-05	7.19E-06	2.95E-05	2.47E-06	3.49E-06	1.34E-05	1.04E-06
1919	465097.9	3808349	5.83E-05	0.000143	1.18E-05	5.77E-05	2.07E-04	1.91E-05	9.36E-06	3.84E-05	3.21E-06	4.54E-06	1.75E-05	1.36E-06
1920	465117.9	3808349	5.75E-05	0.000141	1.16E-05	5.69E-05	2.05E-04	1.88E-05	9.23E-06	3.79E-05	3.17E-06	4.48E-06	1.73E-05	1.34E-06
1921	465137.9	3808349	5.67E-05	0.000139	1.14E-05	5.61E-05	2.02E-04	1.86E-05	9.11E-06	3.74E-05	3.13E-06	4.42E-06	1.70E-05	1.32E-06
1922	465157.9	3808349	5.59E-05	0.000137	1.13E-05	5.53E-05	1.99E-04	1.83E-05	8.97E-06	3.69E-05	3.08E-06	4.35E-06	1.68E-05	1.30E-06
1923	465177.9	3808349	5.51E-05	0.000135	1.11E-05	5.45E-05	1.96E-04	1.80E-05	8.84E-06	3.63E-05	3.04E-06	4.29E-06	1.65E-05	1.28E-06
1924	465197.9	3808349	5.43E-05	0.000133	1.09E-05	5.37E-05	1.93E-04	1.77E-05	8.71E-06	3.58E-05	2.99E-06	4.22E-06	1.63E-05	1.26E-06
1925	465217.9	3808349	5.34E-05	0.000131	1.08E-05	5.28E-05	1.90E-04	1.75E-05	8.57E-06	3.52E-05	2.94E-06	4.16E-06	1.60E-05	1.24E-06
1926	465237.9	3808349	5.25E-05	0.000129	1.06E-05	5.20E-05	1.87E-04	1.72E-05	8.43E-06	3.46E-05	2.90E-06	4.09E-06	1.58E-05	1.22E-06
1927	465257.9	3808349	5.17E-05	0.000127	1.04E-05	5.11E-05	1.84E-04	1.69E-05	8.29E-06	3.41E-05	2.85E-06	4.02E-06	1.55E-05	1.20E-06
1928	465277.9	3808349	5.08E-05	0.000125	1.02E-05	5.02E-05	1.81E-04	1.66E-05	8.15E-06	3.35E-05	2.80E-06	3.95E-06	1.52E-05	1.18E-06
1929	465297.9	3808349	5E-05	0.000123	1.01E-05	4.94E-05	1.78E-04	1.63E-05	8.02E-06	3.29E-05	2.75E-06	3.89E-06	1.50E-05	1.16E-06
1930	465317.9	3808349	4.91E-05	0.000121	9.91E-06	4.86E-05	1.75E-04	1.61E-05	7.89E-06	3.24E-05	2.71E-06	3.83E-06	1.47E-05	1.14E-06
1931	465337.9	3808349	4.83E-05	0.000119	9.74E-06	4.78E-05	1.72E-04	1.58E-05	7.75E-06	3.18E-05	2.66E-06	3.76E-06	1.45E-05	1.12E-06
1932	465357.9	3808349	4.76E-05	0.000117	9.6E-06	4.71E-05	1.69E-04	1.56E-05	7.64E-06	3.14E-05	2.62E-06	3.71E-06	1.43E-05	1.11E-06
1933	465377.9	3808349	4.69E-05	0.000115	9.46E-06	4.64E-05	1.67E-04	1.53E-05	7.53E-06	3.09E-05	2.59E-06	3.65E-06	1.41E-05	1.09E-06
1934	465137.9	3808369	6.01E-05	0.000147	1.21E-05	5.94E-05	2.14E-04	1.97E-05	9.65E-06	3.96E-05	3.31E-06	4.68E-06	1.80E-05	1.40E-06
1935	465157.9	3808369	5.92E-05	0.000145	1.19E-05	5.85E-05	2.10E-04	1.93E-05	9.50E-06	3.90E-05	3.26E-06	4.61E-06	1.77E-05	1.38E-06
1936	465177.9	3808369	5.82E-05	0.000143	1.17E-05	5.76E-05	2.07E-04	1.90E-05	9.35E-06	3.84E-05	3.21E-06	4.53E-06	1.75E-05	1.35E-06
1937	465197.9	3808369	5.72E-05	0.00014	1.15E-05	5.66E-05	2.04E-04	1.87E-05	9.19E-06	3.77E-05	3.16E-06	4.46E-06	1.72E-05	1.33E-06
1938	465217.9	3808369	5.62E-05	0.000138	1.13E-05	5.56E-05	2.00E-04	1.84E-05	9.02E-06	3.71E-05	3.10E-06	4.37E-06	1.69E-05	1.31E-06
1939	465237.9	3808369	5.53E-05	0.000136	1.11E-05	5.47E-05	1.97E-04	1.81E-05	8.88E-06	3.65E-05	3.05E-06	4.30E-06	1.66E-05	1.29E-06
1940	465257.9	3808369	5.44E-05	0.000133	1.1E-05	5.38E-05	1.93E-04	1.78E-05	8.73E-06	3.59E-05	3.00E-06	4.23E-06	1.63E-05	1.26E-06
1941	465277.9	3808369	5.34E-05	0.000131	1.08E-05	5.28E-05	1.90E-04	1.74E-05	8.57E-06	3.52E-05	2.94E-06	4.15E-06	1.60E-05	1.24E-06
1942	465297.9	3808369	5.24E-05	0.000129	1.06E-05	5.18E-05	1.86E-04	1.71E-05	8.41E-06	3.45E-05	2.89E-06	4.08E-06	1.57E-05	1.22E-06
1943	465317.9	3808369	5.14E-05	0.000126	1.04E-05	5.09E-05	1.83E-04	1.68E-05	8.26E-06	3.39E-05	2.84E-06	4.00E-06	1.54E-05	1.20E-06
1944	465337.9	3808369	5.05E-05	0.000124	1.02E-05	4.99E-05	1.80E-04	1.65E-05	8.10E-06	3.33E-05	2.78E-06	3.93E-06	1.51E-05	1.17E-06
1945	465357.9	3808369	4.97E-05	0.000122	1E-05	4.92E-05	1.77E-04	1.63E-05	7.98E-06	3.28E-05	2.74E-06	3.87E-06	1.49E-05	1.16E-06
1946	465377.9	3808369	4.9E-05	0.00012	9.87E-06	4.84E-05	1.74E-04	1.60E-05	7.86E-06	3.23E-05	2.70E-06	3.81E-06	1.47E-05	1.14E-06
1947	465257.9	3808389	5.67E-05	0.000139	1.14E-05	5.61E-05	2.02E-04	1.86E-05	9.11E-06	3.74E-05	3.13E-06	4.42E-06	1.70E-05	1.32E-06
1948	465277.9	3808389	5.56E-05	0.000136	1.12E-05	5.50E-05	1.98E-04	1.82E-05	8.93E-06	3.67E-05	3.07E-06	4.33E-06	1.67E-05	1.29E-06
1949	465297.9	3808389	5.47E-05	0.000134	1.1E-05	5.41E-05	1.94E-04	1.79E-05	8.77E-06	3.60E-05	3.01E-06	4.25E-06	1.64E-05	1.27E-06
1950	465317.9	3808389	5.37E-05	0.000132	1.08E-05	5.31E-05	1.91E-04	1.76E-05	8.62E-06	3.54E-05	2.96E-06	4.18E-06	1.61E-05	1.25E-06
1951	465337.9	3808389	5.26E-05	0.000129	1.06E-05	5.21E-05	1.87E-04	1.72E-05	8.45E-06	3.47E-05	2.90E-06	4.10E-06	1.58E-05	1.22E-06
1952	465357.9	3808389	5.18E-05	0.000127	1.04E-05	5.12E-05	1.84E-04	1.69E-05	8.31E-06	3.41E-05	2.85E-06	4.03E-06	1.55E-05	1.20E-06
1953	465377.9	3808389	5.1E-05	0.000125	1.03E-05	5.04E-05	1.81E-04	1.67E-05	8.18E-06	3.36E-05	2.81E-06	3.97E-06	1.53E-05	1.18E-06
1954	465337.9	3808409	5.47E-05	0.000134	1.1E-05	5.41E-05	1.95E-04	1.79E-05	8.78E-06	3.61E-05	3.02E-06	4.26E-06	1.64E-05	1.27E-06
1955	465357.9	3808409	5.38E-05	0.000132	1.08E-05	5.32E-05	1.91E-04	1.76E-05	8.63E-06	3.55E-05	2.96E-06	4.19E-06	1.61E-05	1.25E-06
1956	465377.9	3808409	5.29E-05	0.00013	1.07E-05	5.23E-05	1.88E-04	1.73E-05	8.49E-06	3.49E-05	2.92E-06	4.12E-06	1.59E-05	1.23E-06
1957	465337.9	3808429	5.67E-05	0.000139	1.14E-05	5.61E-05	2.02E-04	1.85E-05	9.10E-06	3.74E-05	3.13E-06	4.41E-06	1.70E-05	1.32E-06
1958	465357.9	3808429	5.57E-05	0.000137	1.12E-05	5.51E-05	1.98E-04	1.82E-05	8.95E-06	3.67E-05	3.07E-06	4.34E-06	1.67E-05	1.30E-06
1959	465377.9	3808429	5.48E-05	0.000134	1.1E-05	5.42E-05	1.95E-04	1.79E-05	8.79E-06	3.61E-05	3.02E-06	4.26E-06	1.64E-05	1.27E-06
1960	465337.9	3808449	5.86E-05	0.000144	1.18E-05	5.80E-05	2.09E-04	1.92E-05	9.41E-06	3.87E-05	3.23E-06	4.56E-06	1.76E-05	1.36E-06
1961	465357.9	3808449	5.77E-05	0.000142	1.16E-05	5.71E-05	2.05E-04	1.89E-05	9.26E-06	3.80E-05	3.18E-06	4.49E-06	1.73E-05	1.34E-06
1962	465377.9	3808449	5.67E-05	0.000139	1.14E-05	5.61E-05	2.02E-04	1.85E-05	9.10E-06	3.74E-05	3.13E-06	4.41E-06	1.70E-05	1.32E-06
1963	465357.9	3808469	5.94E-05	0.000146	1.2E-05	5.88E-05	2.11E-04	1.94E-05	9.54E-06	3.92E-05	3.27E-06	4.62E-06	1.78E-05	1.38E-06
1964	465377.9	3808469	5.84E-05	0.000143	1.18E-05	5.77E-05	2.08E-04	1.91E-05	9.37E-06	3.85E-05	3.22E-06	4.54E-06	1.75E-05	1.36E-06
1965	465357.9	3808489	6.1E-05	0.00015	1.23E-05	6.03E-05	2.17E-04	1.99E-05	9.79E-06	4.02E-05	3.36E-06	4.75E-06	1.83E-05	1.42E-06
1966	464767.3	3807986	4.47E-05	0.00011	9.02E-06	4.42E-05	1.59E-04	1.46E-05	7.18E-06	2.95E-05	2.47E-06	3.48E-06	1.34E-05	1.04E-06
1967	464785.4	3808006	4.42E-05	0.000109	8.92E-06	4.37E-05	1.57E-04	1.45E-05	7.10E-06	2.92E-05	2.44E-06	3.44E-06	1.33E-05	1.03E-06
1968	464800.3	3808024	4.41E-05	0.000108	8.89E-06	4.36E-05	1.57E-04	1.44E-05	7.08E-06	2.91E-05	2.43E-06	3.43E-06	1.32E-05	1.02E-06
1969	464811.9	3808044	4.43E-05	0.000109	8.92E-06	4.38E-05	1.57E-04	1.45E-05	7.10E-06	2.92E-05	2.44E-06	3.44E-06	1.33E-05	1.03E-06
1970	464833.4	3808072	4.43E-05	0.000109	8.94E-06	4.39E-05	1.58E-04	1.45E-05	7.12E-06	2.92E-05	2.45E-06	3.45E-06	1.33E-05	1.03E-06
1971	464843.3	3808088	4.46E-05	0.00011	9E-06	4.41E-05	1.59E-04	1.46E-05	7.16E-06	2.94E-05	2.46E-06	3.47E-06	1.34E-05	1.04E-06
1972	464762.3	3807963	4.42E-05	0.000109	8.92E-06	4.38E-05	1.57E-04	1.45E-05	7.10E-06	2.92E-05	2.44E-06	3.44E-06		

2000	464684.2	3807761	3.83E-05	9.41E-05	7.73E-06	3.79E-05	1.36E-04	1.25E-05	6.15E-06	2.53E-05	2.11E-06	2.98E-06	1.15E-05	8.91E-07
2001	464614.8	3807743	3.77E-05	9.25E-05	7.6E-06	3.73E-05	1.34E-04	1.23E-05	6.05E-06	2.49E-05	2.08E-06	2.93E-06	1.13E-05	8.76E-07
2002	464558.6	3807677	3.44E-05	8.44E-05	6.93E-06	3.40E-05	1.22E-04	1.12E-05	5.52E-06	2.27E-05	1.90E-06	2.68E-06	1.03E-05	7.99E-07
2003	464697.4	3807670	3.28E-05	8.05E-05	6.61E-06	3.24E-05	1.17E-04	1.07E-05	5.26E-06	2.16E-05	1.81E-06	2.55E-06	9.84E-06	7.62E-07
2004	464694.1	3807566	2.76E-05	6.78E-05	5.57E-06	2.73E-05	9.83E-05	9.04E-06	4.44E-06	1.82E-05	1.52E-06	2.15E-06	8.29E-06	6.42E-07
2005	464479.2	3807657	3.49E-05	8.55E-05	7.03E-06	3.45E-05	1.24E-04	1.14E-05	5.60E-06	2.30E-05	1.92E-06	2.71E-06	1.05E-05	8.10E-07
2006	464505.7	3807693	3.69E-05	9.05E-05	7.44E-06	3.65E-05	1.31E-04	1.21E-05	5.92E-06	2.43E-05	2.03E-06	2.87E-06	1.11E-05	8.58E-07
2007	464490.6	3807584	3.04E-05	7.46E-05	6.13E-06	3.01E-05	1.08E-04	9.95E-06	4.88E-06	2.01E-05	1.68E-06	2.37E-06	9.12E-06	7.07E-07
2008	464568.3	3807565	2.89E-05	7.1E-05	5.83E-06	2.86E-05	1.03E-04	9.46E-06	4.64E-06	1.91E-05	1.59E-06	2.25E-06	8.68E-06	6.72E-07
2009	464377.6	3807484	2.73E-05	6.71E-05	5.51E-06	2.70E-05	9.72E-05	8.94E-06	4.39E-06	1.80E-05	1.51E-06	2.13E-06	8.20E-06	6.35E-07
2010	464483.7	3807491	2.59E-05	6.35E-05	5.22E-06	2.56E-05	9.21E-05	8.46E-06	4.16E-06	1.71E-05	1.43E-06	2.01E-06	7.76E-06	6.02E-07
2011	464583.8	3807447	2.47E-05	6.05E-05	4.97E-06	2.44E-05	8.77E-05	8.06E-06	3.96E-06	1.63E-05	1.36E-06	1.91E-06	7.40E-06	5.73E-07
2012	464697.8	3807483	2.45E-05	6.02E-05	4.94E-06	2.43E-05	8.72E-05	8.02E-06	3.94E-06	1.62E-05	1.35E-06	1.91E-06	7.36E-06	5.70E-07
2013	464787.5	3807490	2.42E-05	5.94E-05	4.88E-06	2.40E-05	8.61E-05	7.92E-06	3.89E-06	1.60E-05	1.33E-06	1.88E-06	7.26E-06	5.63E-07
2014	464892.8	3807475	2.38E-05	5.84E-05	4.8E-06	2.35E-05	8.47E-05	7.78E-06	3.82E-06	1.57E-05	1.31E-06	1.85E-06	7.14E-06	5.53E-07
2015	464686.6	3807363	2.19E-05	5.38E-05	4.42E-06	2.17E-05	7.80E-05	7.17E-06	3.52E-06	1.45E-05	1.21E-06	1.71E-06	6.58E-06	5.09E-07
2016	464564.9	3807375	2.22E-05	5.44E-05	4.47E-06	2.19E-05	7.89E-05	7.26E-06	3.56E-06	1.46E-05	1.22E-06	1.73E-06	6.66E-06	5.16E-07
2017	464488	3807409	2.33E-05	5.73E-05	4.7E-06	2.31E-05	8.30E-05	7.63E-06	3.75E-06	1.54E-05	1.29E-06	1.82E-06	7.00E-06	5.42E-07
2018	464400.9	3807351	2.2E-05	5.4E-05	4.44E-06	2.18E-05	7.83E-05	7.20E-06	3.53E-06	1.45E-05	1.21E-06	1.71E-06	6.61E-06	5.12E-07
2019	464362.9	3807305	2.09E-05	5.13E-05	4.21E-06	2.07E-05	7.43E-05	6.83E-06	3.36E-06	1.38E-05	1.15E-06	1.63E-06	6.27E-06	4.86E-07
2020	464350.8	3807239	1.82E-05	4.46E-05	3.66E-06	1.80E-05	6.46E-05	5.94E-06	2.92E-06	1.20E-05	1.00E-06	1.41E-06	5.45E-06	4.22E-07
2021	464452.6	3807280	1.99E-05	4.88E-05	4.01E-06	1.97E-05	7.08E-05	6.51E-06	3.19E-06	1.31E-05	1.10E-06	1.55E-06	5.97E-06	4.63E-07
2022	464453.5	3807237	1.87E-05	4.59E-05	3.77E-06	1.85E-05	6.65E-05	6.11E-06	3.00E-06	1.23E-05	1.03E-06	1.45E-06	5.61E-06	4.34E-07
2023	464394.8	3807293	2.01E-05	4.94E-05	4.06E-06	1.99E-05	7.16E-05	6.59E-06	3.23E-06	1.33E-05	1.11E-06	1.57E-06	6.04E-06	4.68E-07
2024	464595.9	3807301	2.05E-05	5.03E-05	4.13E-06	2.03E-05	7.29E-05	6.70E-06	3.29E-06	1.35E-05	1.13E-06	1.59E-06	6.15E-06	4.76E-07
2025	464606.3	3807253	1.93E-05	4.74E-05	3.89E-06	1.91E-05	6.87E-05	6.31E-06	3.10E-06	1.27E-05	1.06E-06	1.50E-06	5.79E-06	4.49E-07
2026	464696.9	3807285	2.05E-05	5.03E-05	4.14E-06	2.03E-05	7.30E-05	6.71E-06	3.29E-06	1.35E-05	1.13E-06	1.60E-06	6.15E-06	4.77E-07
2027	464896.3	3807378	2.05E-05	5.03E-05	4.13E-06	2.03E-05	7.29E-05	6.70E-06	3.29E-06	1.35E-05	1.13E-06	1.60E-06	6.15E-06	4.76E-07
2028	464888.5	3807301	1.88E-05	4.62E-05	3.79E-06	1.86E-05	6.69E-05	6.15E-06	3.02E-06	1.24E-05	1.04E-06	1.46E-06	5.65E-06	4.37E-07
2029	464827.2	3807283	1.91E-05	4.68E-05	3.84E-06	1.89E-05	6.78E-05	6.23E-06	3.06E-06	1.26E-05	1.05E-06	1.48E-06	5.72E-06	4.43E-07
2030	464885.1	3807254	1.78E-05	4.37E-05	3.59E-06	1.76E-05	6.33E-05	5.82E-06	2.86E-06	1.17E-05	9.82E-07	1.39E-06	5.34E-06	4.14E-07
2031	464777.2	3807256	1.93E-05	4.74E-05	3.89E-06	1.91E-05	6.86E-05	6.31E-06	3.10E-06	1.27E-05	1.06E-06	1.50E-06	5.79E-06	4.49E-07
2032	464090	3807074	2.29E-05	5.61E-05	4.61E-06	2.26E-05	8.13E-05	7.48E-06	3.67E-06	1.51E-05	1.26E-06	1.78E-06	6.86E-06	5.32E-07

UnMitigated						T2				T2L3				T4								
						9.48E-08				1.50E-07				2.54E-08				1.08E-08				
						Total				Total				Total				Total				
						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	463683.6	3808289	2.63E-09	6.45E-09	4.52E-08	5.42E-08	2.60E-09	9.35E-09	7.32E-08	8.52E-08	4.22E-10	1.73E-09	1.23E-08	1.45E-08	2.05E-10	7.88E-10	5.21E-09	6.20E-09	1.87E-10	7.20E-10	6.15E-09	7.06E-09
2	463657.4	3808289	2.40E-09	5.89E-09	5.34E-08	6.17E-08	2.37E-09	8.54E-09	8.66E-08	9.75E-08	3.85E-10	1.58E-09	1.46E-08	1.66E-08	1.87E-10	7.20E-10	6.15E-09	7.06E-09	1.66E-10	6.40E-10	6.80E-09	7.60E-09
3	463628.2	3808289	2.13E-09	5.23E-09	5.89E-08	6.63E-08	2.11E-09	7.58E-09	9.56E-08	1.05E-07	3.42E-10	1.41E-09	1.61E-08	1.79E-08	1.66E-10	6.20E-10	6.80E-09	7.60E-09	1.40E-10	5.40E-10	7.39E-09	8.07E-09
4	463577.3	3808291	1.80E-09	4.42E-09	6.41E-08	7.03E-08	1.78E-09	6.40E-09	1.04E-07	1.12E-07	2.89E-10	1.19E-09	1.75E-08	1.90E-08	1.40E-10	5.40E-10	7.39E-09	8.07E-09	1.29E-10	4.97E-10	7.94E-09	8.57E-09
5	463545	3808291	1.66E-09	4.06E-09	6.89E-08	7.46E-08	1.64E-09	5.89E-09	1.12E-07	1.19E-07	2.66E-10	1.09E-09	1.88E-08	2.02E-08	1.29E-10	4.97E-10	7.94E-09	8.57E-09	1.18E-10	4.56E-10	8.46E-09	9.04E-09
6	463509.5	3808291	1.52E-09	3.73E-09	7.34E-08	7.86E-08	1.50E-09	5.41E-09	1.19E-07	1.26E-07	2.44E-10	1.00E-09	2.01E-08	2.13E-08	1.18E-10	4.56E-10	8.46E-09	9.04E-09	3.53E-10	1.45E-09	2.12E-08	2.30E-08
7	463674.4	3808248	2.20E-09	5.40E-09	7.74E-08	8.50E-08	2.18E-09	7.82E-09	1.25E-07	1.35E-07	2.89E-10	1.19E-09	2.21E-08	2.35E-08	1.40E-10	5.40E-10	9.30E-09	9.98E-09	2.65E-10	1.09E-09	2.28E-08	2.41E-08
8	463615.8	3808246	1.80E-09	4.42E-09	8.07E-08	8.69E-08	1.78E-09	6.41E-09	1.31E-07	1.39E-07	2.89E-10	1.19E-09	2.21E-08	2.35E-08	1.40E-10	5.40E-10	9.30E-09	9.98E-09	2.20E-10	9.05E-10	2.33E-08	2.44E-08
9	463588.1	3808246	1.65E-09	4.05E-09	8.32E-08	8.89E-08	1.63E-09	5.87E-09	1.35E-07	1.43E-07	2.65E-10	1.09E-09	2.28E-08	2.41E-08	1.28E-10	4.95E-10	9.60E-09	1.02E-08	3.27E-10	1.34E-09	2.35E-08	2.52E-08
10	463517.2	3808249	1.37E-09	3.37E-09	8.50E-08	8.98E-08	1.36E-09	4.88E-09	1.38E-07	1.44E-07	2.20E-10	9.05E-10	2.33E-08	2.44E-08	1.07E-10	4.12E-10	9.80E-09	1.03E-08	3.52E-10	1.44E-09	2.36E-08	2.54E-08
11	463753	3808163	2.04E-09	5.00E-09	8.61E-08	9.31E-08	2.01E-09	7.24E-09	1.40E-07	1.49E-07	3.27E-10	1.34E-09	2.35E-08	2.52E-08	1.59E-10	6.11E-10	9.92E-09	1.07E-08	3.45E-10	1.42E-09	2.34E-08	2.51E-08
12	463780.7	3808157	2.19E-09	5.38E-09	8.63E-08	9.39E-08	2.17E-09	7.79E-09	1.40E-07	1.50E-07	3.52E-10	1.44E-09	2.36E-08	2.54E-08	1.71E-10	6.57E-10	9.95E-09	1.08E-08	2.88E-10	1.18E-09	2.27E-08	2.42E-08
13	463934.8	3808109	2.15E-09	5.27E-09	8.54E-08	9.28E-08	2.12E-09	7.64E-09	1.39E-07	1.48E-07	3.45E-10	1.42E-09	2.34E-08	2.51E-08	1.67E-10	6.44E-10	9.85E-09	1.07E-08	2.71E-10	1.11E-09	2.18E-08	2.32E-08
14	463977.9	3808058	1.79E-09	4.40E-09	8.32E-08	8.94E-08	1.77E-09	6.38E-09	1.35E-07	1.43E-07	2.88E-10	1.18E-09	2.27E-08	2.42E-08	1.40E-10	5.38E-10	9.59E-09	1.03E-08	2.71E-10	1.11E-09	2.18E-08	2.32E-08
15	464005.6	3808041	1.69E-09	4.14E-09	7.98E-08	8.57E-08	1.67E-09	6.00E-09	1.29E-07	1.37E-07	2.71E-10	1.11E-09	2.18E-08	2.32E-08	1.31E-10	5.06E-10	9.20E-09	9.84E-09	2.56E-10	1.05E-09	2.07E-08	2.20E-08
16	463911.6	3808014	1.60E-09	3.92E-09	7.56E-08	8.11E-08	1.58E-09	5.67E-09	1.23E-07	1.30E-07	2.56E-10	1.05E-09	2.07E-08	2.20E-08	1.24E-10	4.79E-10	8.71E-09	9.32E-09	2.44E-10	9.05E-10	2.33E-08	2.44E-08
17	463899.3	3807998	1.52E-09	3.74E-09	7.12E-08	7.65E-08	1.51E-09	5.41E-09	1.16E-07	1.22E-07	2.44E-10	1.00E-09	1.95E-08	2.07E-08	1.18E-10	4.57E-10	8.21E-09	8.79E-09	9.37E-10	9.05E-10	2.33E-08	2.44E-08
18	463890.1	3807977	1.42E-09	3.49E-09	3.98E-08	4.47E-08	1.41E-09	5.06E-09	6.46E-08	7.10E-08	2.28E-10	9.37E-10	1.09E-08	1.21E-08	1.11E-10	4.26E-10	4.59E-09	5.13E-09	9.24E-11	3.79E-10	1.93E-08	1.98E-08
19	463361.6	3808106	7.51E-10	1.84E-09	4.66E-08	4.92E-08	7.43E-10	2.67E-09	7.56E-08	7.90E-08	1.21E-10	4.95E-10	1.27E-08	1.34E-08	5.84E-11	2.25E-10	5.37E-09	5.66E-09	5.66E-11	2.31E-10	1.80E-08	1.83E-08
20	463386.3	3808101	7.78E-10	1.91E-09	5.10E-08	5.37E-08	7.69E-10	2.77E-09	8.27E-08	8.62E-08	1.25E-10	5.13E-10	1.39E-08	1.46E-08	6.05E-11	2.33E-10	5.88E-09	6.17E-09	5.62E-11	2.31E-10	1.80E-08	1.83E-08
21	463421.7	3808106	8.25E-10	2.02E-09	5.54E-08	5.82E-08	8.16E-10	2.93E-09	8.98E-08	9.36E-08	1.32E-10	5.44E-10	1.51E-08	1.58E-08	6.42E-11	2.47E-10	6.39E-09	6.70E-09	4.62E-11	2.31E-10	1.80E-08	1.83E-08
22	463451	3808106	8.59E-10	2.11E-09	5.97E-08	6.27E-08	8.49E-10	3.05E-09	9.69E-08	1.01E-07	1.38E-10	5.66E-10	1.63E-08	1.70E-08	6.68E-11	2.58E-10	6.89E-09	7.21E-09	4.07E-11	1.67E-10	1.13E-08	1.15E-08
23	463457.1	3808080	8.10E-10	1.99E-09	6.39E-08	6.67E-08	8.01E-10	2.88E-09	1.04E-07	1.07E-07	1.30E-10	5.34E-10	1.75E-08	1.81E-08	6.30E-11	2.43E-10	7.36E-09	7.67E-09	4.07E-11	1.67E-10	1.13E-08	1.15E-08
24	463427.9	3808081	7.80E-10	1.91E-09	6.75E-08	7.02E-08	7.72E-10	2.77E-09	1.10E-07	1.13E-07	1.25E-10	5.14E-10	1.85E-08	1.91E-08	6.07E-11	2.34E-10	7.79E-09	8.08E-09	9.24E-11	3.79E-10	1.93E-08	1.98E-08
25	463369.3	3807961	5.75E-10	1.41E-09	7.06E-08	7.26E-08	5.69E-10	2.05E-09	1.15E-07	1.17E-07	9.24E-11	3.79E-10	1.93E-08	1.98E-08	4.48E-11	1.73E-10	8.14E-09	8.36E-09	1.45E-10	5.39E-10	2.07E-08	2.14E-08
26	463629.7	3807980	9.05E-10	2.22E-09	7.31E-08	7.62E-08	8.95E-10	3.22E-09	1.19E-07	1.23E-07	1.45E-10	5.97E-10	2.00E-08	2.07E-08	7.05E-11	2.72E-10	8.43E-09	8.77E-09	1.54E-10	6.34E-10	2.05E-08	2.13E-08
27	463659	3807981	9.62E-10	2.36E-09	7.49E-08	7.82E-08	9.51E-10	3.42E-09	1.21E-07	1.26E-07	1.54E-10	6.34E-10	2.05E-08	2.13E-08	7.49E-11	2.88E-10	8.63E-09	8.99E-09	1.31E-10	5.39E-10	2.07E-08	2.14E-08
28	463742.2	3807816	8.18E-10	2.01E-09	7.59E-08	7.87E-08	8.09E-10	2.91E-09	1.23E-07	1.27E-07	1.31E-10	5.39E-10	2.07E-08	2.14E-08	6.							

110	464568.2	3809701	4.84E-09	1.19E-08	3.47E-08	5.14E-08	4.79E-09	1.72E-08	5.63E-08	7.83E-08	7.77E-10	3.19E-09	9.49E-09	1.35E-08	3.77E-10	1.45E-09	4.00E-09	5.83E-09
111	464693.3	3809685	4.02E-09	9.87E-09	3.68E-08	5.07E-08	3.98E-09	1.43E-08	5.96E-08	7.79E-08	6.46E-10	2.65E-09	1.01E-08	1.34E-08	3.13E-10	1.21E-09	4.24E-09	5.76E-09
112	464689.6	3809645	4.12E-09	1.01E-08	3.87E-08	5.30E-08	4.07E-09	1.46E-08	6.28E-08	8.16E-08	6.61E-10	2.71E-09	1.06E-08	1.40E-08	3.20E-10	1.23E-09	4.47E-09	6.02E-09
113	464673.3	3809605	4.31E-09	1.06E-08	4.06E-08	5.54E-08	4.26E-09	1.53E-08	6.58E-08	8.54E-08	6.92E-10	2.84E-09	1.11E-08	1.46E-08	3.36E-10	1.29E-09	4.68E-09	6.30E-09
114	464608.1	3809587	4.89E-09	1.20E-08	4.21E-08	5.90E-08	4.83E-09	1.74E-08	6.84E-08	9.06E-08	7.85E-10	3.22E-09	1.15E-08	1.55E-08	3.80E-10	1.47E-09	4.86E-09	6.71E-09
115	465006.9	3809280	2.66E-09	6.52E-09	4.35E-08	5.27E-08	2.63E-09	9.45E-09	7.06E-08	8.27E-08	4.27E-10	1.75E-09	1.19E-08	1.41E-08	2.07E-10	7.97E-10	5.02E-09	6.02E-09
116	464968.8	3808773	2.08E-09	5.12E-09	4.47E-08	5.19E-08	2.06E-09	7.41E-09	7.24E-08	8.19E-08	3.35E-10	1.37E-09	1.22E-08	1.39E-08	1.62E-10	6.25E-10	5.15E-09	5.94E-09

			UnMitigated			T2			T2L3			T4		
			8.39E-04	2.06E-03	1.69E-04	8.30E-04	2.98E-03	2.74E-04	1.35E-04	5.53E-04	4.62E-05	6.53E-05	2.52E-04	1.95E-05
			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	463683.6	3808289	2.03E-04	4.99E-04	2.60E-06	2.01E-04	7.24E-04	4.22E-06	3.27E-05	1.34E-04	7.11E-07	1.58E-05	6.10E-05	3.00E-07
2	463657.4	3808289	1.86E-04	4.56E-04	2.64E-06	1.84E-04	6.61E-04	4.29E-06	2.98E-05	1.23E-04	7.23E-07	1.45E-05	5.57E-05	3.05E-07
3	463628.2	3808289	1.65E-04	4.05E-04	2.76E-06	1.63E-04	5.87E-04	4.47E-06	2.65E-05	1.09E-04	7.54E-07	1.28E-05	4.95E-05	3.18E-07
4	463577.3	3808291	1.39E-04	3.42E-04	2.80E-06	1.38E-04	4.96E-04	4.54E-06	2.24E-05	9.19E-05	7.66E-07	1.08E-05	4.18E-05	3.23E-07
5	463545	3808291	1.28E-04	3.14E-04	3.06E-06	1.27E-04	4.56E-04	4.97E-06	2.06E-05	8.45E-05	8.38E-07	9.97E-06	3.84E-05	3.53E-07
6	463509.5	3808291	1.18E-04	2.89E-04	3.92E-06	1.16E-04	4.19E-04	6.36E-06	1.89E-05	7.76E-05	1.07E-06	9.16E-06	3.53E-05	4.52E-07
7	463674.4	3808248	1.70E-04	4.18E-04	3.96E-06	1.68E-04	6.06E-04	6.42E-06	2.73E-05	1.12E-04	1.08E-06	1.33E-05	5.11E-05	4.56E-07
8	463615.8	3808246	1.39E-04	3.42E-04	3.98E-06	1.38E-04	4.96E-04	6.45E-06	2.24E-05	9.20E-05	1.09E-06	1.09E-05	4.18E-05	4.59E-07
9	463588.1	3808246	1.28E-04	3.13E-04	4.00E-06	1.26E-04	4.54E-04	6.48E-06	2.05E-05	8.42E-05	1.09E-06	9.94E-06	3.83E-05	4.61E-07
10	463517.2	3808249	1.06E-04	2.61E-04	4.09E-06	1.05E-04	3.78E-04	6.64E-06	1.71E-05	7.01E-05	1.12E-06	8.27E-06	3.19E-05	4.72E-07
11	463753	3808163	1.58E-04	3.87E-04	4.15E-06	1.56E-04	5.61E-04	6.73E-06	2.53E-05	1.04E-04	1.13E-06	1.23E-05	4.73E-05	4.78E-07
12	463780.7	3808157	1.70E-04	4.16E-04	4.27E-06	1.68E-04	6.03E-04	6.93E-06	2.72E-05	1.12E-04	1.17E-06	1.32E-05	5.09E-05	4.93E-07
13	463934.8	3808109	1.66E-04	4.08E-04	4.45E-06	1.65E-04	5.92E-04	7.22E-06	2.67E-05	1.10E-04	1.22E-06	1.29E-05	4.99E-05	5.13E-07
14	463977.9	3808058	1.39E-04	3.41E-04	4.49E-06	1.37E-04	4.94E-04	7.28E-06	2.23E-05	9.16E-05	1.23E-06	1.08E-05	4.16E-05	5.17E-07
15	464005.6	3808041	1.31E-04	3.20E-04	4.53E-06	1.29E-04	4.64E-04	7.35E-06	2.10E-05	8.61E-05	1.24E-06	1.02E-05	3.92E-05	5.23E-07
16	463911.6	3808014	1.24E-04	3.03E-04	4.66E-06	1.22E-04	4.39E-04	7.55E-06	1.98E-05	8.15E-05	1.27E-06	9.61E-06	3.71E-05	5.37E-07
17	463899.3	3807998	1.18E-04	2.89E-04	5.21E-06	1.17E-04	4.19E-04	8.46E-06	1.89E-05	7.77E-05	1.43E-06	9.17E-06	3.54E-05	6.01E-07
18	463890.1	3807977	1.10E-04	2.70E-04	5.22E-06	1.09E-04	3.91E-04	8.47E-06	1.77E-05	7.26E-05	1.43E-06	8.57E-06	3.30E-05	6.02E-07
19	463361.6	3808106	5.81E-05	1.43E-04	5.47E-06	5.75E-05	2.07E-04	8.87E-06	9.33E-06	3.83E-05	1.50E-06	4.52E-06	1.74E-05	6.30E-07
20	463386.3	3808101	6.02E-05	1.48E-04	5.48E-06	5.95E-05	2.14E-04	8.89E-06	9.66E-06	3.97E-05	1.50E-06	4.69E-06	1.81E-05	6.32E-07
21	463421.7	3808106	6.39E-05	1.57E-04	5.50E-06	6.32E-05	2.27E-04	8.92E-06	1.03E-05	4.21E-05	1.50E-06	4.97E-06	1.92E-05	6.34E-07
22	463451	3808106	6.65E-05	1.63E-04	5.55E-06	6.58E-05	2.36E-04	9.01E-06	1.07E-05	4.38E-05	1.52E-06	5.18E-06	1.99E-05	6.40E-07
23	463457.1	3808080	6.27E-05	1.54E-04	5.94E-06	6.20E-05	2.23E-04	9.63E-06	1.01E-05	4.13E-05	1.62E-06	4.88E-06	1.88E-05	6.85E-07
24	463427.9	3808081	6.04E-05	1.48E-04	6.09E-06	5.98E-05	2.15E-04	9.88E-06	9.70E-06	3.98E-05	1.67E-06	4.70E-06	1.81E-05	7.02E-07
25	463369.3	3807961	4.45E-05	1.09E-04	6.47E-06	4.41E-05	1.58E-04	1.05E-05	7.15E-06	2.94E-05	1.77E-06	3.47E-06	1.34E-05	7.45E-07
26	463629.7	3807980	7.01E-05	1.72E-04	6.48E-06	6.93E-05	2.49E-04	1.05E-05	1.13E-05	4.62E-05	1.77E-06	5.46E-06	2.10E-05	7.47E-07
27	463659	3807981	7.45E-05	1.83E-04	7.03E-06	7.36E-05	2.65E-04	1.14E-05	1.20E-05	4.91E-05	1.92E-06	5.80E-06	2.23E-05	8.10E-07
28	463742.2	3807816	6.33E-05	1.55E-04	8.98E-06	6.26E-05	2.25E-04	1.46E-05	1.02E-05	4.18E-05	2.46E-06	4.93E-06	1.90E-05	1.04E-06
29	463737.5	3807778	5.82E-05	1.43E-04	1.07E-05	5.75E-05	2.07E-04	1.74E-05	9.34E-06	3.83E-05	2.93E-06	4.53E-06	1.74E-05	1.24E-06
30	463816.1	3807796	6.77E-05	1.66E-04	1.17E-05	6.69E-05	2.41E-04	1.90E-05	1.09E-05	4.46E-05	3.20E-06	5.27E-06	2.03E-05	1.35E-06
31	463788.4	3807761	6.14E-05	1.51E-04	1.17E-05	6.08E-05	2.18E-04	1.90E-05	9.86E-06	4.05E-05	3.21E-06	4.78E-06	1.84E-05	1.35E-06
32	463757.6	3807718	5.32E-05	1.31E-04	1.21E-05	5.26E-05	1.89E-04	1.97E-05	8.54E-06	3.51E-05	3.32E-06	4.14E-06	1.60E-05	1.40E-06
33	463266.1	3807755	2.73E-05	6.69E-05	1.22E-05	2.70E-05	9.70E-05	1.98E-05	4.38E-06	1.80E-05	3.33E-06	2.12E-06	8.18E-06	1.40E-06
34	463241.4	3807756	2.71E-05	6.66E-05	1.24E-05	2.68E-05	9.65E-05	2.01E-05	4.35E-06	1.79E-05	3.39E-06	2.11E-06	8.14E-06	1.43E-06
35	463015	3807895	2.23E-05	5.46E-05	1.26E-05	2.20E-05	7.92E-05	2.05E-05	3.57E-06	1.47E-05	3.46E-06	1.73E-06	6.68E-06	1.46E-06
36	462939.5	3807893	1.96E-05	4.82E-05	1.28E-05	1.94E-05	6.98E-05	2.07E-05	3.15E-06	1.29E-05	3.49E-06	1.53E-06	5.89E-06	1.47E-06
37	462959.5	3807850	1.94E-05	4.77E-05	1.29E-05	1.92E-05	6.92E-05	2.09E-05	3.12E-06	1.28E-05	3.52E-06	1.51E-06	5.83E-06	1.48E-06
38	463015	3807832	2.21E-05	5.42E-05	1.34E-05	2.18E-05	7.86E-05	2.17E-05	3.55E-06	1.46E-05	3.67E-06	1.72E-06	6.63E-06	1.55E-06
39	462971.8	3807812	1.98E-05	4.86E-05	1.36E-05	1.96E-05	7.05E-05	2.21E-05	3.18E-06	1.31E-05	3.73E-06	1.54E-06	5.95E-06	1.57E-06
40	463021.1	3807796	2.25E-05	5.52E-05	1.41E-05	2.22E-05	8.00E-05	2.29E-05	3.61E-06	1.48E-05	3.86E-06	1.75E-06	6.75E-06	1.63E-06
41	462834.7	3807761	1.52E-05	3.73E-05	1.50E-05	1.50E-05	5.41E-05	2.43E-05	2.44E-06	1.00E-05	4.11E-06	1.18E-06	4.56E-06	1.73E-06
42	462765.4	3807764	1.39E-05	3.41E-05	2.14E-05	1.37E-05	4.94E-05	3.48E-05	2.23E-06	9.16E-06	5.86E-06	1.08E-06	4.17E-06	2.47E-06
43	462808.5	3807502	1.31E-05	3.22E-05	2.22E-05	1.30E-05	4.66E-05	3.60E-05	2.10E-06	8.64E-06	6.07E-06	1.02E-06	3.93E-06	2.56E-06
44	462836.2	3807502	1.37E-05	3.36E-05	2.37E-05	1.35E-05	4.86E-05	3.85E-05	2.20E-06	9.02E-06	6.49E-06	1.06E-06	4.10E-06	2.74E-06
45	462813.1	3807450	1.29E-05	3.17E-05	2.38E-05	1.28E-05	4.59E-05	3.85E-05	2.07E-06	8.51E-06	6.50E-06	1.00E-06	3.87E-06	2.74E-06
46	463363.2	3807689	2.59E-05	6.35E-05	2.49E-05	2.56E-05	9.21E-05	4.04E-05	4.16E-06	1.71E-05	6.81E-06	2.02E-06	7.77E-06	2.87E-06
47	463403.2	3807685	2.72E-05	6.67E-05	2.57E-05	2.69E-05	9.67E-05	4.18E-05	4.36E-06	1.79E-05	7.04E-06	2.12E-06	8.15E-06	2.97E-06
48	463449.4	3807676	2.95E-05	7.23E-05	2.58E-05	2.91E-05	1.05E-04	4.19E-05	4.73E-06	1.94E-05	7.07E-06	2.29E-06	8.84E-06	2.98E-06
49	463503.4	3807676	3.21E-05	7.87E-05	2.63E-05	3.17E-05	1.14E-04	4.27E-05	5.15E-06	2.11E-05	7.20E-06	2.50E-06	9.62E-06	3.03E-06
50	463566.5	3807662	3.48E-05	8.55E-05	2.80E-05	3.45E-05	1.24E-04	4.54E-05	5.59E-06	2.30E-05	7.65E-06	2.71E-06	1.05E-05	3.23E-06
51	463563.5	3807615	3.22E-05	7.89E-05	2.81E-05	3.18E-05	1.14E-04	4.56E-05	5.16E-06	2.12E-05	7.68E-06	2.50E-06	9.65E-06	3.24E-06
52	463511.1	3807632	3.02E-05	7.42E-05	2.81E-05	2.99E-05	1.07E-04	4.56E-05	4.85E-06	1.99E-05	7.69E-06	2.35E-06	9.07E-06	3.24E-06
53	463454.1	3807633	2.75E-05	6.76E-05	3.18E-05	2.72E-05	9.80E-05	5.16E-05	4.42E-06	1.82E-05	8.69E-06	2.14E-06	8.26E-06	3.66E-06
54	463369.3	3807599	2.31E-05	5.67E-05	3.25E-05	2.28E-05	8.21E-05	5.28E-05	3.71E-06	1.52E-05	8.90E-06	1.80E-06	6.93E-06	3.75E-06
55	463363.2	3807524	2.06E-05	5.05E-05	3.33E-05	2.04E-05	7.32E-05	5.40E-05	3.30E-06	1.36E-05	9.10E-06	1.60E-06	6.17E-06	3.84E-06
56	463383.2	3807524	2.12E-05	5.20E-05	3.35E-05	2.10E-05	7.54E-05	5.44E-05	3.40E-06	1.40E-05	9.17E-06	1.65E-06	6.36E-06	3.87E-06
57	463369.3	3807476	1.97E-05	4.84E-05	3.42E-05	1.95E-05	7.02E-05	5.55E-05	3.17E-06	1.30E-05	9.35E-06	1.54E-06	5.92E-06	3.94E-06
58	463412.5	3807450	2.03E-05	4.98E-05	3.43E-05	2.01E-05	7.22E-05	5.57E-05	3.26E-06	1.34E-05	9.39E-06	1.58E-06	6.09E-06	3.96E-06
59	463475.6	3807553	2.59E-05	6.35E-05	3.75E-05	2.56E-05	9.20E-05	6.08E-05	4.15E-06	1.71E-05	1.02E-05	2.01E-06	7.76E-06	4.32E-06
60	464194.8	3809438	8.39E-04	2.06E-03	4.10E-05	8.30E-04	2.98E-03	6.65E-05	1.35E-04	5.53E-04	1.12E-05	6.53E-05	2.52E-04	1.73E-06
61	464194.8	3809462	8.04E-04	1.97E-03	4.15E-05	7.95E-04	2.86E-03	6.73E-05	1.29E-04	5.30E-04	1.13E-05	6.26E-05	2.41E-04	4.78E-06
62	464338	3809456	6.66E-04	1.63E-03	4.74E-05	6.58E-04	2.37E-03	7.69E-05	1.07E-04	4.39E-04	1.30E-05	5.18E-05	2	

94	464628	3809491	3.81E-04	9.35E-04	7.78E-05	3.77E-04	1.36E-03	1.26E-04	6.12E-05	2.51E-04	2.13E-05	2.97E-05	1.14E-04	8.97E-06
95	464577.3	3809500	4.19E-04	1.03E-03	8.00E-05	4.15E-04	1.49E-03	1.30E-04	6.73E-05	2.76E-04	2.19E-05	3.26E-05	1.26E-04	9.22E-06
96	464555.5	3809474	4.42E-04	1.09E-03	8.06E-05	4.38E-04	1.57E-03	1.31E-04	7.10E-05	2.92E-04	2.20E-05	3.44E-05	1.33E-04	9.29E-06
97	464551.9	3809389	4.68E-04	1.15E-03	8.21E-05	4.63E-04	1.66E-03	1.33E-04	7.51E-05	3.09E-04	2.24E-05	3.64E-05	1.40E-04	9.46E-06
98	464559.1	3809260	4.93E-04	1.21E-03	8.22E-05	4.87E-04	1.75E-03	1.33E-04	7.91E-05	3.25E-04	2.25E-05	3.83E-05	1.48E-04	9.48E-06
99	464713.2	3808840	2.89E-04	7.10E-04	8.29E-05	2.86E-04	1.03E-03	1.34E-04	4.65E-05	1.91E-04	2.27E-05	2.25E-05	8.68E-05	9.56E-06
100	464740.4	3808834	2.69E-04	6.60E-04	8.33E-05	2.66E-04	9.57E-04	1.35E-04	4.32E-05	1.77E-04	2.28E-05	2.09E-05	8.07E-05	9.61E-06
101	464803.8	3808854	2.35E-04	5.77E-04	8.45E-05	2.32E-04	8.36E-04	1.37E-04	3.77E-05	1.55E-04	2.31E-05	1.83E-05	7.05E-05	9.74E-06
102	464794.8	3808885	2.46E-04	6.05E-04	8.54E-05	2.44E-04	8.77E-04	1.38E-04	3.96E-05	1.63E-04	2.33E-05	1.92E-05	7.39E-05	9.84E-06
103	464742.2	3808940	2.97E-04	7.30E-04	8.59E-05	2.94E-04	1.06E-03	1.39E-04	4.77E-05	1.96E-04	2.35E-05	2.31E-05	8.92E-05	9.90E-06
104	464769.4	3808938	2.77E-04	6.79E-04	8.77E-05	2.74E-04	9.84E-04	1.42E-04	4.44E-05	1.83E-04	2.40E-05	2.15E-05	8.30E-05	1.01E-05
105	464793	3808936	2.61E-04	6.40E-04	8.92E-05	2.58E-04	9.28E-04	1.45E-04	4.19E-05	1.72E-04	2.44E-05	2.03E-05	7.82E-05	1.03E-05
106	464829.2	3809067	2.70E-04	6.62E-04	9.12E-05	2.67E-04	9.60E-04	1.48E-04	4.33E-05	1.78E-04	2.49E-05	2.10E-05	8.10E-05	1.05E-05
107	464560.9	3809574	4.13E-04	1.01E-03	9.38E-05	4.09E-04	1.47E-03	1.52E-04	6.64E-05	2.73E-04	2.56E-05	3.22E-05	1.24E-04	1.08E-05
108	464557.3	3809605	4.08E-04	1.00E-03	9.44E-05	4.03E-04	1.45E-03	1.53E-04	6.55E-05	2.69E-04	2.58E-05	3.17E-05	1.22E-04	1.09E-05
109	464571.8	3809666	3.82E-04	9.38E-04	9.93E-05	3.78E-04	1.36E-03	1.61E-04	6.14E-05	2.52E-04	2.72E-05	2.98E-05	1.15E-04	1.15E-05
110	464568.2	3809701	3.75E-04	9.19E-04	9.99E-05	3.71E-04	1.33E-03	1.62E-04	6.01E-05	2.47E-04	2.73E-05	2.92E-05	1.12E-04	1.15E-05
111	464693.3	3809685	3.11E-04	7.64E-04	1.01E-04	3.08E-04	1.11E-03	1.65E-04	5.00E-05	2.05E-04	2.78E-05	2.42E-05	9.34E-05	1.17E-05
112	464689.6	3809645	3.19E-04	7.82E-04	1.03E-04	3.15E-04	1.13E-03	1.68E-04	5.12E-05	2.10E-04	2.82E-05	2.48E-05	9.56E-05	1.19E-05
113	464673.3	3809605	3.34E-04	8.19E-04	1.06E-04	3.30E-04	1.19E-03	1.72E-04	5.36E-05	2.20E-04	2.90E-05	2.60E-05	1.00E-04	1.22E-05
114	464608.1	3809587	3.78E-04	9.29E-04	1.34E-04	3.74E-04	1.35E-03	2.18E-04	6.07E-05	2.50E-04	3.67E-05	2.95E-05	1.14E-04	1.55E-05
115	465006.9	3809280	2.06E-04	5.05E-04	1.62E-04	2.04E-04	7.32E-04	2.63E-04	3.30E-05	1.36E-04	4.43E-05	1.60E-05	6.17E-05	1.87E-05
116	464968.8	3808773	1.61E-04	3.96E-04	1.69E-04	1.60E-04	5.74E-04	2.74E-04	2.59E-05	1.06E-04	4.62E-05	1.26E-05	4.84E-05	1.95E-05

	Daily Trips				
	568				
	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Percentage	69.0%	6.8%	5.5%	18.7%	100%
# Daily Vehicles	391.92	38.62	31.24	106.22	568
# Annual Vehicles	143,051	14,098	11,403	38,769	207,320

Truck Travel

Onsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	14,098	21.9%	6.45E-05
3-Axle Trks	11,403	17.7%	1.51E-04
4-Axle Trks	38,769	60.3%	8.53E-05
Total	64,269	100%	---

Offsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	14,098	21.9%	6.45E-05
3-Axle Trks	11,403	17.7%	2.96E-05
4-Axle Trks	38,769	60.3%	6.30E-05
Total	64,269	100%	---

DPM Lbs/ Yr	Masa_N	LASSEN	395_S	395_N	MASA_S		Total
Distance (m)	959.8	693.4	609.8	409.2	1005.2		3677.4
2-Axle Trks	2.41E-05	1.74E-05	1.53E-05	1.03E-05	2.52E-05	0.00E+00	4.15E-05
3-Axle Trks	9.01E-05	6.51E-05	5.72E-05	3.84E-05	9.43E-05	0.00E+00	1.55E-04
4-Axle Trks	5.09E-05	3.67E-05	3.23E-05	2.17E-05	5.33E-05	0.00E+00	8.76E-05
Total	1.65E-04	1.19E-04	1.05E-04	7.04E-05	1.73E-04	0.00E+00	2.84E-04

DPM Lbs/ Yr	OUT_W	OUT_E	N	N	N	N	Total
Gas Only	N	N	N	N	N	N	
Distance (m)	213.8	202.4	0	0	0	0	416.2
2-Axle Trks	8.57E-06	8.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-05
3-Axle Trks	3.93E-06	3.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-06
4-Axle Trks	8.37E-06	7.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-05
Total	2.09E-05	1.98E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-05

Truck Idle

# of Idling Pts	15											
Truck Idling						Idle					Total	
Category	# of Trucks / Yr	Idle EF (lbs / Event)	Time (Hr)	Lbs/ Yr	Lbs / Yr /Unit	15	0	0	0	0	0	15
2-Axle Trks	14,098	6.09E-05	0.25	2.14E-01	1.43E-02	2.14E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E-01
3-Axle Trks	11,403	6.40E-05	0.25	1.82E-01	1.22E-02	1.82E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-01
4-Axle Trks	38,769	8.55E-05	0.25	8.29E-01	5.52E-02	8.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.29E-01
Total	64,269	--	--	1.23E+00	8.17E-02	8.17E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E+00

TRUs

Percent of Trucks	10	# 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	3,213	0.50	4.19E-03	6.73	
3-Axle Trks	4.9	1,016			2.13	
4-Axle Trks	24.3	5,038			10.55	
Total	45	9,267	Emission/Unit		19.41	

* TRU EF * BHP * Load factor * Time in hours

Vehicle Emissions

Vehicle Travel Percentage / Count			
Category	# of Vehicles / Yr	% LDA	% LDT
Passenger Vehicles	143,051	70%	30.43%
# Vehicles	99,515		43,536

Category	TOG Exhaust EF (lb/Mile)	TOG Runloss EF (lb/Mile)
LDA	3.46E-05	5.11E-04
LDT	8.37E-05	9.31E-04

CARB TOG Speciation Profile Run Exhaust			Lbs/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
75070	Acetaldehyde	2.80E-03	9.64E-03	1.02E-02
107028	Acrolein	1.30E-03	4.48E-03	4.74E-03
71432	Benzene	2.47E-02	8.51E-02	9.00E-02
106990	1,3-Butadiene	5.50E-03	1.89E-02	2.00E-02
100414	Ethylbenzene	1.05E-02	3.62E-02	3.83E-02
50000	Formaldehyde	1.58E-02	5.44E-02	5.76E-02
110543	Hexane	1.60E-02	5.51E-02	5.83E-02
67561	Methanol	1.20E-03	4.13E-03	4.37E-03
78933	Methyl Ethyl Ketone	2.00E-04	6.89E-04	7.29E-04
91203	Naphthalene	5.00E-04	1.72E-03	1.82E-03
115071	Propylene	3.06E-02	1.05E-01	1.12E-01
100425	Styrene	1.20E-03	4.13E-03	4.37E-03
108883	Toluene	5.76E-02	1.98E-01	2.10E-01
1330207	Xylenes	4.80E-02	1.65E-01	1.75E-01
9901	Diesel	1.56E-02	3.41E+00	1.49E+00

CARB TOG Speciation Profile Evaporative Losses			Lbs/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
71432	Benzene	3.600E-03	1.24E-02	1.31E-02
100414	Ethylbenzene	1.180E-03	4.06E-03	4.80E-03
110543	Hexane	1.540E-02	5.30E-02	5.61E-02
108883	Toluene	1.700E-02	5.85E-02	6.19E-02
1330207	Xylenes	5.780E-03	1.99E-02	2.11E-02

Vehicle Emissions Travel Summary

Emissions Summary		Source Col		1		2		3		4		5		6		7		8		9		10		11		12		Total Percentage	Total Distance	
		Vehicles		Masa_N		LASSEN		395_S		395_N		MASA_S		0		OUT_W		OUT_E		0		0		0		0				
		Cars		25%		45%		30%		15%		24.56%		0.00%		50.00%		50.00%		0.00%		0.00%		0.00%		0.00%				
		Trucks		0%		50%		75%		25%		25%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%				
		0.00%		0.00%		50.00%		75.00%		25.00%		25.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%				
CAS#	Chemical Name	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	Lbs/Hr	Lbs/Yr	
75070	Acetaldehyde	6.62E-06	1.98E-02	1.65E-06	4.96E-03	2.98E-06	8.93E-03	1.98E-06	5.95E-03	9.92E-07	2.98E-03	1.62E-06	4.87E-03	0.00E+00	0.00E+00	3.31E-06	9.92E-03	3.31E-06	9.92E-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	0.00E+00	1.58E-05	4.75E-02
107028	Acrolein	3.07E-06	9.21E-03	7.68E-07	2.30E-03	1.38E-06	4.15E-03	9.21E-07	2.76E-03	4.61E-07	1.38E-03	7.54E-07	2.26E-03	0.00E+00	0.00E+00	1.54E-06	4.63E-03	1.54E-06	4.63E-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	0.00E+00	7.36E-06	2.21E-02
71432	Benzene	6.69E-05	2.01E-01	1.67E-05	5.01E-02	3.01E-05	9.03E-02	2.01E-05	6.02E-02	1.00E-05	3.01E-02	1.64E-05	4.93E-02	0.00E+00	0.00E+00	3.34E-05	1.00E-01	3.34E-05	1.00E-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	0.00E+00	1.60E-04	4.81E-01
106990	1,3-Butadiene	1.30E-05	3.90E-02	3.25E-06	9.75E-03	5.85E-06	1.75E-02	3.90E-06	1.17E-02	1.95E-06	5.85E-03	3.19E-06	9.57E-03	0.00E+00	0.00E+00	6.50E-06	1.95E-02	6.50E-06	1.95E-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	0.00E+00	3.11E-05	9.34E-02
100414	Ethylbenzene	2.76E-05	8.28E-02	6.90E-06	2.07E-02	1.24E-05	3.73E-02	8.28E-06	2.48E-02	4.14E-06	1.24E-02	6.78E-06	2.03E-02	0.00E+00	0.00E+00	1.38E-05	4.14E-02	1.38E-05	4.14E-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	0.00E+00	6.61E-05	1.98E-01
50000	Formaldehyde	3.73E-05	1.12E-01	9.33E-06	2.80E-02	1.68E-05	5.04E-02	1.12E-05	3.36E-02	5.60E-06	1.68E-02	9.17E-06	2.75E-02	0.00E+00	0.00E+00	1.87E-05	5.60E-02	1.87E-05	5.60E-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	0.00E+00	8.94E-05	2.68E-01
110543	Hexane	7.42E-05	2.23E-01	1.85E-05	5.56E-02	3.34E-05	1.00E-01	2.23E-05	6.68E-02	1.11E-05	3.34E-02	1.82E-05	5.46E-02	0.00E+00	0.00E+00	3.71E-05	1.11E-01	3.71E-05	1.11E-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	0.00E+00	1.78E-04	5.33E-01
67561	Methanol	2.84E-06	8.51E-03	7.09E-07	2.13E-03	1.28E-06	3.83E-03	8.51E-07	2.55E-03	4.25E-07	1.28E-03	6.86E-07	2.09E-03	0.00E+00	0.00E+00	1.42E-06	4.25E-03	1.42E-06	4.25E-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	0.00E+00	6.79E-06	2.04E-02
78933	Methyl Ethyl Ketone	4.73E-07	1.42E-03	1.18E-07	3.54E-04	2.13E-07	6.38E-04	1.42E-07	4.25E-04	7.09E-08	2.13E-04	1.16E-07	3.48E-04	0.00E+00	0.00E+00	2.36E-07	7.09E-04	2.36E-07	7.09E-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	0.00E+00	1.13E-06	3.40E-03
91203	Naphthalene	1.18E-06	3.54E-03	2.95E-07	8.86E-04	5.32E-07	1.59E-03	3.54E-07	1.06E-03	1.77E-07	5.32E-04	2.90E-07	8.70E-04	0.00E+00	0.00E+00	5.91E-07	1.77E-03	5.91E-07	1.77E-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	0.00E+00	2.83E-06	8.49E-03
115071	Propylene	7.23E-05	2.17E-01	1.81E-05	5.42E-02	3.25E-05	9.76E-02	2.17E-05	6.51E-02	3.05E-05	9.25E-02	1.78E-05	5.33E-02	0.00E+00	0.00E+00	3.61E-05	1.08E-01	3.61E-05	1.08E-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	0.00E+00	1.73E-04	5.20E-01
100425	Styrene	2.84E-06	8.51E-03	7.09E-07	2.13E-03	1.28E-06	3.83E-03	8.51E-07	2.55E-03	4.25E-07	1.28E-03	6.86E-07	2.09E-03	0.00E+00	0.00E+00	1.42E-06	4.25E-03	1.42E-06	4.25E-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	0.00E+00	6.79E-06	2.04E-02
100883	Toluene	1.76E-04	5.26E-01	4.41E-05	1.32E-01	7.93E-05	2.38E-01	5.26E-05	1.64E-02	9.33E-05	2.83E-02	4.33E-05	1.32E-02	0.00E+00	0.00E+00	8.81E-05	2.64E-01	8.81E-05	2.64E-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	0.00E+00	4.22E-04	1.27E-01
1330027	Xylenes	1.27E-04	3.81E-01	3.18E-05	9.53E-02	5.72E-05	1.72E-01	3.81E-05	1.14E-01	1.91E-05	5.72E-02	3.12E-05	9.36E-02	0.00E+00	0.00E+00	6.35E-05	1.91E-01	6.35E-05	1.91E-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	0.00E+00	3.04E-04	9.13E-01
9901	Diesel	1.63E-03	4.90E+00	4.09E-04	1.23E-06	7.36E-04	2.21E+00	4.90E-04	1.47E+00	1.95E-04	5.76E-01	4.10E-04	1.20E+00	0.00E+00	0.00E+00	8.17E-04	2.45E+00	8.17E-04	2.45E+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	3.92E-03	1.17E-01

[illegible]

id1e	8	107	10	12	ID1E_3	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	10	13	ID1E_3	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	10	14	ID1E_3	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	10	15	ID1E_3	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	11	1	ID1E_4	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	11	2	ID1E_4	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	11	3	ID1E_4	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	11	4	ID1E_4	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	11	5	ID1E_4	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	11	6	ID1E_4	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	11	7	ID1E_4	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	11	8	ID1E_4	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	11	9	ID1E_4	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	11	10	ID1E_4	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	11	11	ID1E_4	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	11	12	ID1E_4	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	11	13	ID1E_4	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	11	14	ID1E_4	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	11	15	ID1E_4	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	12	1	ID1E_5	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	12	2	ID1E_5	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	12	3	ID1E_5	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	12	4	ID1E_5	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	12	5	ID1E_5	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	12	6	ID1E_5	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	12	7	ID1E_5	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	12	8	ID1E_5	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	12	9	ID1E_5	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	12	10	ID1E_5	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	12	11	ID1E_5	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	12	12	ID1E_5	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	12	13	ID1E_5	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	12	14	ID1E_5	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	12	15	ID1E_5	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	13	1	ID1E_6	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	13	2	ID1E_6	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	13	3	ID1E_6	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	13	4	ID1E_6	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	13	5	ID1E_6	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	13	6	ID1E_6	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	13	7	ID1E_6	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	13	8	ID1E_6	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	13	9	ID1E_6	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	13	10	ID1E_6	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	13	11	ID1E_6	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	13	12	ID1E_6	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	13	13	ID1E_6	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	13	14	ID1E_6	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	13	15	ID1E_6	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	14	1	ID1E_7	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	14	2	ID1E_7	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	14	3	ID1E_7	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	14	4	ID1E_7	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	14	5	ID1E_7	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	14	6	ID1E_7	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	14	7	ID1E_7	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	14	8	ID1E_7	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	14	9	ID1E_7	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	14	10	ID1E_7	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	14	11	ID1E_7	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	14	12	ID1E_7	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	14	13	ID1E_7	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	14	14	ID1E_7	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	14	15	ID1E_7	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	15	1	ID1E_8	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	15	2	ID1E_8	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	15	3	ID1E_8	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	15	4	ID1E_8	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	15	5	ID1E_8	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	15	6	ID1E_8	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	15	7	ID1E_8	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	15	8	ID1E_8	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	15	9	ID1E_8	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	15	10	ID1E_8	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	15	11	ID1E_8	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	15	12	ID1E_8	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	15	13	ID1E_8	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	15	14	ID1E_8	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	15	15	ID1E_8	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	16	1	ID1E_9	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	16	2	ID1E_9	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	16	3	ID1E_9	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	16	4	ID1E_9	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	16	5	ID1E_9	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	16	6	ID1E_9	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	16	7	ID1E_9	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	16	8	ID1E_9	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	16	9	ID1E_9	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	16	10	ID1E_9	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	16	11	ID1E_9	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	16	12	ID1E_9	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	16	13	ID1E_9	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	16	14	ID1E_9	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	16	15	ID1E_9	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	17	1	ID1E_10	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	17	2	ID1E_10	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
id1e	8	98	17	3	ID1E_10	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
id1e	8	99	17	4	ID1E_10	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
id1e	8	100	17	5	ID1E_10	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
id1e	8	101	17	6	ID1E_10	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	102	17	7	ID1E_10	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
id1e	8	103	17	8	ID1E_10	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
id1e	8	104	17	9	ID1E_10	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
id1e	8	105	17	10	ID1E_10	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
id1e	8	106	17	11	ID1E_10	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
id1e	8	107	17	12	ID1E_10	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
id1e	8	108	17	13	ID1E_10	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
id1e	8	109	17	14	ID1E_10	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
id1e	8	35	17	15	ID1E_10	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
id1e	8	96	18	1	ID1E_11	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
id1e	8	97	18	2	ID1E_11	0	0	107028 Acrolein				

idie	8	104	20	9	IDIE_13	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	20	10	IDIE_13	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	20	11	IDIE_13	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	20	12	IDIE_13	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	20	13	IDIE_13	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	20	14	IDIE_13	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	20	15	IDIE_13	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	21	1	IDIE_14	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	21	2	IDIE_14	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	21	3	IDIE_14	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	21	4	IDIE_14	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	21	5	IDIE_14	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	21	6	IDIE_14	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	21	7	IDIE_14	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	21	8	IDIE_14	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	21	9	IDIE_14	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	21	10	IDIE_14	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	21	11	IDIE_14	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	21	12	IDIE_14	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	21	13	IDIE_14	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	21	14	IDIE_14	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	21	15	IDIE_14	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	22	1	IDIE_15	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	22	2	IDIE_15	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	22	3	IDIE_15	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	22	4	IDIE_15	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	22	5	IDIE_15	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	22	6	IDIE_15	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	22	7	IDIE_15	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	22	8	IDIE_15	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	22	9	IDIE_15	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	22	10	IDIE_15	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	22	11	IDIE_15	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	22	12	IDIE_15	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	22	13	IDIE_15	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	22	14	IDIE_15	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	22	15	IDIE_15	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	23	1	IDIE_15	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	23	2	IDIE_15	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	23	3	IDIE_15	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	23	4	IDIE_15	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	23	5	IDIE_15	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	23	6	IDIE_15	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	23	7	IDIE_15	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	23	8	IDIE_15	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	23	9	IDIE_15	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	23	10	IDIE_15	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	23	11	IDIE_15	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	23	12	IDIE_15	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	23	13	IDIE_15	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	23	14	IDIE_15	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	23	15	IDIE_15	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	24	1	IDIE_15	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	24	2	IDIE_15	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	24	3	IDIE_15	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	24	4	IDIE_15	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	24	5	IDIE_15	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	24	6	IDIE_15	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	24	7	IDIE_15	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	24	8	IDIE_15	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	24	9	IDIE_15	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	24	10	IDIE_15	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	24	11	IDIE_15	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	24	12	IDIE_15	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	24	13	IDIE_15	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	24	14	IDIE_15	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	24	15	IDIE_15	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	25	1	IDIE_15	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	25	2	IDIE_15	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	25	3	IDIE_15	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	25	4	IDIE_15	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	25	5	IDIE_15	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	25	6	IDIE_15	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	25	7	IDIE_15	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	25	8	IDIE_15	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	25	9	IDIE_15	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	25	10	IDIE_15	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	25	11	IDIE_15	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	25	12	IDIE_15	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	25	13	IDIE_15	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	25	14	IDIE_15	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	25	15	IDIE_15	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	26	1	IDIE_15	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	26	2	IDIE_15	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	26	3	IDIE_15	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	26	4	IDIE_15	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	26	5	IDIE_15	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	26	6	IDIE_15	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	26	7	IDIE_15	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	26	8	IDIE_15	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	26	9	IDIE_15	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	26	10	IDIE_15	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	26	11	IDIE_15	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	26	12	IDIE_15	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	26	13	IDIE_15	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	26	14	IDIE_15	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	26	15	IDIE_15	0	0	9901 Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	27	1	IDIE_15	0	0	75070 Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	27	2	IDIE_15	0	0	107028 Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	27	3	IDIE_15	0	0	71432 Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	27	4	IDIE_15	0	0	106990 1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	27	5	IDIE_15	0	0	100414 Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	27	6	IDIE_15	0	0	50000 Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	27	7	IDIE_15	0	0	110543 Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	27	8	IDIE_15	0	0	67561 Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	27	9	IDIE_15	0	0	78933 Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	27	10	IDIE_15	0	0	91203 Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	27	11	IDIE_15	0	0	115071 Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	27	12	IDIE_15	0	0	100425 Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	27	13	IDIE_15	0	0	108883 Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	27	14	IDIE_15	0	0	1330207 Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	27	15	IDIE_15	0	0	9901 Diesel	1			

idie	8	101	30	6	IDLE_15	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	30	7	IDLE_15	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	30	8	IDLE_15	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	30	9	IDLE_15	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	30	10	IDLE_15	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	30	11	IDLE_15	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	30	12	IDLE_15	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	30	13	IDLE_15	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	30	14	IDLE_15	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	30	15	IDLE_15	0	0	9901	Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	31	1	IDLE_15	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	31	2	IDLE_15	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	31	3	IDLE_15	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	31	4	IDLE_15	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	31	5	IDLE_15	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	31	6	IDLE_15	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	31	7	IDLE_15	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	31	8	IDLE_15	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	31	9	IDLE_15	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	31	10	IDLE_15	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	31	11	IDLE_15	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	31	12	IDLE_15	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	31	13	IDLE_15	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	31	14	IDLE_15	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	31	15	IDLE_15	0	0	9901	Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	32	1	IDLE_15	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	32	2	IDLE_15	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	32	3	IDLE_15	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	32	4	IDLE_15	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	32	5	IDLE_15	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	32	6	IDLE_15	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	32	7	IDLE_15	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	32	8	IDLE_15	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	32	9	IDLE_15	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	32	10	IDLE_15	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	32	11	IDLE_15	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	32	12	IDLE_15	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	32	13	IDLE_15	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	32	14	IDLE_15	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	32	15	IDLE_15	0	0	9901	Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	33	1	IDLE_15	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	33	2	IDLE_15	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	33	3	IDLE_15	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	33	4	IDLE_15	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	33	5	IDLE_15	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	33	6	IDLE_15	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	33	7	IDLE_15	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	33	8	IDLE_15	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	33	9	IDLE_15	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	33	10	IDLE_15	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	33	11	IDLE_15	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	33	12	IDLE_15	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	33	13	IDLE_15	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	33	14	IDLE_15	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	33	15	IDLE_15	0	0	9901	Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	34	1	IDLE_15	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	34	2	IDLE_15	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	34	3	IDLE_15	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	34	4	IDLE_15	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	34	5	IDLE_15	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	34	6	IDLE_15	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	34	7	IDLE_15	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	34	8	IDLE_15	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	34	9	IDLE_15	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	34	10	IDLE_15	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	34	11	IDLE_15	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	34	12	IDLE_15	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	34	13	IDLE_15	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	34	14	IDLE_15	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	34	15	IDLE_15	0	0	9901	Diesel	1	8.17E-02	0.00E+00	1
idie	8	96	35	1	IDLE_15	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
idie	8	97	35	2	IDLE_15	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
idie	8	98	35	3	IDLE_15	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
idie	8	99	35	4	IDLE_15	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
idie	8	100	35	5	IDLE_15	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
idie	8	101	35	6	IDLE_15	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
idie	8	102	35	7	IDLE_15	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
idie	8	103	35	8	IDLE_15	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
idie	8	104	35	9	IDLE_15	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
idie	8	105	35	10	IDLE_15	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
idie	8	106	35	11	IDLE_15	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
idie	8	107	35	12	IDLE_15	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
idie	8	108	35	13	IDLE_15	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
idie	8	109	35	14	IDLE_15	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
idie	8	35	35	15	IDLE_15	0	0	9901	Diesel	1	8.17E-02	0.00E+00	1

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM2.5_RUNEX	PM10_RUNEX
San Bernardino	2022	HHDT	Aggregate	5	Diesel	0.020429157	0.021352872
San Bernardino	2022	HHDT	Aggregate	10	Diesel	0.017937035	0.018748068
San Bernardino	2022	HHDT	Aggregate	15	Diesel	0.014190418	0.014832046
					Average	0.01751887	0.018310995
San Bernardino	2022	LHDT1	Aggregate	5	Diesel	0.107936201	0.112816598
San Bernardino	2022	LHDT1	Aggregate	10	Diesel	0.087705342	0.091670988
San Bernardino	2022	LHDT1	Aggregate	15	Diesel	0.071815244	0.07506241
San Bernardino	2022	LHDT2	Aggregate	5	Diesel	0.095906288	0.100242745
San Bernardino	2022	LHDT2	Aggregate	10	Diesel	0.079141982	0.082720431
San Bernardino	2022	LHDT2	Aggregate	15	Diesel	0.065527617	0.068490485
					Average	0.084672112	0.08850061
San Bernardino	2022	MHDT	Aggregate	5	Diesel	0.046949656	0.049072511
San Bernardino	2022	MHDT	Aggregate	10	Diesel	0.03850822	0.040249391
San Bernardino	2022	MHDT	Aggregate	15	Diesel	0.025562941	0.026718784
					Average	0.037006939	0.038680229

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	2022	LDA	Aggregate	Aggregate	Gasoline	463697.6817	20177523.72	20177523.72	0%	2161398.571	0.001264754	0.001375515	0.015697317	0.232011161
San Bernardino	2022	LDA	Aggregate	Aggregate	Diesel	1172.820356	43303.28943	43303.28943	69%	5114.15184	0.017497828	0.018289002	0.032724538	0
							20220827.01		69.6%					
San Bernardino	2022	LDT1	Aggregate	Aggregate	Gasoline	42765.01938	1452760.217	1452760.217	0%	184641.9262	0.002388272	0.002597261	0.075696984	0.781848225
San Bernardino	2022	LDT1	Aggregate	Aggregate	Diesel	13.3582483	205.5602126	205.5602126	0.3%	39.65222776	0.234087691	0.244672098	0.345328205	0
San Bernardino	2022	LDT2	Aggregate	Aggregate	Gasoline	182714.019	7373776.877	7373776.877	0%	853745.1306	0.001304258	0.001418474	0.022505126	0.252699919
San Bernardino	2022	LDT2	Aggregate	Aggregate	Diesel	438.7612492	19396.22735	19396.22735	31%	2127.57453	0.006710428	0.007013844	0.017625478	0
							8846138.882		30.4%	62905		Gasoline Avg EF	0.037966476	0.422186435
									Diesel Wt EF	0.015552177				

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	2022	HHDT	Aggregate	Aggregate	Diesel	13282.82344	1689600.976	1689600.976	198392.0541	0.027342701	0.037101273	0.028579017	0.038778828
San Bernardino	2022	MHDT	Aggregate	Aggregate	Diesel	14325.537	629219.7683	629219.7683	175118.571	0.012844897	0.027758816	0.013425686	0.029013946
San Bernardino	2022	LHDT1	Aggregate	Aggregate	Diesel	11264.03172	427434.1155	427434.1155	141687.3489	0.029389198	0.026485892	0.030718047	0.027683466
San Bernardino	2022	LHDT2	Aggregate	Aggregate	Diesel	4650.725827	179535.0505	179535.0505	58500.28029	0.02660112	0.026331486	0.027803905	0.027522079
									Average	0.027995159	0.026408689	0.029260976	0.027602773

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	10	240	247	0.4	240	23712	1214.0544
	Tractors/Loaders/Backhoes	4	8	10	320	97	0.37	320	11484.8	588.02176
Grading	Excavators	2	8	30	480	158	0.38	480	28819.2	1475.54304
	Graders	1	8	30	240	187	0.41	240	18400.8	942.12096
	Rubber Tired Dozers	1	8	30	240	247	0.4	240	23712	1214.0544
	Scrapers	2	8	30	480	367	0.48	480	84556.8	4329.30816
	Tractors/Loaders/Backhoes	2	8	30	480	97	0.37	480	17227.2	882.03264
Building Construction	Cranes	1	7	300	2100	231	0.29	2100	140679	7202.7648
	Forklifts	3	8	300	7200	89	0.2	7200	128160	6561.792
	Generator Sets	1	8	300	2400	84	0.74	2400	149184	7638.2208
	Tractors/Loaders/Backhoes	3	7	300	6300	97	0.37	6300	226107	11576.6784
	Welders	1	8	300	2400	46	0.45	2400	49680	2543.616
Paving	Pavers	2	8	20	320	130	0.42	320	17472	894.5664
	Paving Equipment	2	8	20	320	132	0.36	320	15206.4	778.56768
	Rollers	2	8	20	320	80	0.38	320	9728	498.0736
Architectural Coating	Air Compressors	1	6	150	900	78	0.48	900	33696	1725.2352
									Total	50,064.65

Diesel

Construction Truck and Construction Worker Vehicle Fuel Efficiency				
Vehicle Type	Vehicle Class	EMFAC 2021 Outputs		
		Fuel Consumption (1,000 gallons/day)	VMT (miles/day)	Fuel Efficiency (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 Efficiency (miles/gallon)	Fuel Usage (gallons/year)
Building Construction	Vendor	60600	7.3	442380	7.5	58984.0
Total						58984.0

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 Efficiency (miles/gallon)	Fuel Usage (gallons/year)
Site Preparation	18	10	360	10.8	3888	26.3	147.8
Grading	20	30	1200	10.8	12960	26.3	492.8
Building Construction	258	300	154800	10.8	1671840	26.3	63568.1
Paving	15	20	600	10.8	6480	26.3	246.4
Architectural Coating	52	150	15600	10.8	168480	26.3	6406.1
Total							70861.1

Gas

Total Construction Gasoline Usage	70861.1
Total Construction Diesel Usage	109048.7

Proposed Project Operational Trips			
Vehicle Class	CalEEMod	Total Project Trips	Total Trips per Vehicle Class
LDA	0.334283	568	189.9
LDT1	0.056059	568	31.8
LDT2	0.17268	568	98.1
MDV	0.136494	568	77.5
LHD1	0.026304	568	14.9
LHD2	0.007104	568	4.0
MHD	0.055	568	31.2
HHD	0.187	568	106.2
OBUS	0	568	0.0
UBUS	0	568	0.0
MCY	0.025076	568	14.2
SBUS	0	568	0.0
MH	0	568	0.0

Proposed Project Operational Trips – Fuel Efficiency					
Fuel	Vehicle Class	EMFAC2021 Outputs ¹			
		Fleet Mix (%) ²	Consumption (1,000 gallons/day)	VMT (miles/day)	Fuel Efficiency ³ (miles/gallon)
Gas	LDA	54%	1,088.4	32,810,290.0	30.1
	LDT1	4%	97.1	2,409,959.0	24.8
	LDT2	23%	564.2	13,929,503.0	24.7
	MDV	16%	498.7	9,921,873.0	19.9
	LHD1	2%	80.9	1,108,491.0	13.7
	MCY	0%	5.4	226,907.6	41.6
	MH	0%	11.1	53,536.5	4.8
	Fleet Mix	–	–	–	26.7
Diesel	LHD2	6%	21.3	365,990.4	17.2
	MHDT	15%	90.9	820,207.1	9.0
	HHDT	79%	718.8	4,470,291.0	6.2
	Fleet Mix	–	–	–	7.3

16.4
1.0
5.7
3.3
0.3
0.2
0.0
26.7
1.1
1.3
4.9
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 VMT ² (miles/year)	Fuel Type	Portion of Fleet ³ (%)	VMT by Fuel Type (miles/year)	Fleet Mix Efficiency ⁴ (miles/gallon)	Fuel Usage (gallons/year)
Warehouse	2,454,001.00	Gas	75%	1842700	26.7	68980.6
		Diesel	25%	611301	7.3	83332.8
					Total Gasoline/year	68980.6
					Total Diesel/year	83332.8

Notes:

¹ Calculated for operational year 2025 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	948873
City Park	0
Parking Lot	30800
Total	979,673

Natural Gas Usage			
Natural Gas by Land Use	kBTU/year	BTU/year	therms/year
Unrefrigerated Warehouse	822,084	822,084,000	8,223
City Park	0	0	0
Parking Lot	0	0	0
Total	822,084	822,084,000	8,223