APPENDIX G

AIR EMISSIONS MODELING

Appendix G
Air Emissions Modeling

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APPENDIX G1

AIR EMISSIONS MODELING OUTPUT

Air Emissions Modeling Output

1.0 Construction Methodology

In general, construction activities generate short-term criteria pollutant emissions, particularly PM_{10} and NO_X. The potential emissions from the proposed construction were calculated and compared with the emission thresholds presented previously. Emissions from construction can be categorized into three sources:

(1) fugitive dust from earthmoving activities
(2) construction equipment exhaust, and
(3) employee vehicle exhaust

Generally, fugitive dust from earthmoving activities produces the most PM_{10} construction emissions, while exhaust emissions from construction equipment produce the most ROG, NO_X, and CO. Employee vehicle emissions are generally small relative to the other two sources of emissions.

Fugitive dust emissions during grading were estimated using an emission factor of 32.8 lb/day per acre disturbed. This is a worst-case emission factor for fugitive dust emissions (MRI, 1996). The emission factor is also the basis for the worst-case fugitive dust emissions generated by the URBEMIS2002 model (Jones & Stokes Associates, Version 8.7). Exhaust emissions from off-road construction equipment were calculated using URBEMIS2002.

This emission factor was used in conjunction with the following data to estimate worst-case construction emissions:

- Per the applicant, work will start in May 2007

- Construction Equipment and Vehicles

Table 1
Maximum Equipment List – On-Site Construction

Type of Equipment	URBEMIS2002 Construction Equipment Categories	Estimated Maximum Number of Units Working Simultaneously
D10 Bulldozers	Rubber-tired Dozer	6
631 Scrapers	Scraper	12
Water Trucks	Off-Highway Trucks	6
Blades	Graders	5
825 Compactors	Rollers	4

Table 2
Maximum Equipment List – Off-Site Construction

Type of Equipment	URBEMIS2002 Construction Equipment Categories	Estimated Maximum Number of Units Working Simultaneously
Cat 235 Excavators	Excavators	6
Loaders	Rubber-tired Loaders	2
Trucks (material haulers)	Off-Highway Trucks	4
Trucks (pipe layers)	Off-Highway Trucks	2
Compactors	Rollers	2
Road Graders	Graders	2

The tables above indicate the type of construction equipment used and the number of each unit used during the date that the maximum activity is expected at the site. The tables also show the URBEMIS2002 construction equipment categories that the different construction equipment was placed in for modeling purposes. The analysis of construction impacts conservatively assumes that all the off-road equipment listed above is used 8 hours per day simultaneously. The pick-ups used during grading were not modeling because pick-up trucks are not typically considered to be diesel-powered vehicles.

- Maximum area disturbed in one day is 25% of the total area of construction per phase up to a maximum of 10 acres. The 25% of the total is based on the URBEMIS2002 default. The maximum of 10 acres is based on information from the applicant.

- Employee vehicle emissions are based on the maximum number of employees expected to be at the site simultaneously, which is 88 employees. Other values and assumptions used for this calculation are:

    - Number of one way trips is 176 trips

    - The vehicle fleet mix is 50% light duty automobiles (LDA) and 50% light duty trucks (LDT). The emission factors for the LDA and LDT where derived with EMFAC2002 and are presented in Table 3 below.

    - The average distance traveled by each employee is 9.7 miles. This is the URBEMIS default value for the distance from home to work in Placer County.

Several mitigation measures were selected in the URBEMIS2002 model, including:

- Watering exposed surfaces three times daily;

- Cover stockpiles with tarp

- Water unpaved roads three times daily
- Reduce speeds on unpaved roads to less than 15 mph.
- Use of aqueous diesel fuel
- Use diesel particulate filters

These mitigation measures were selected to take into account the effects of the Mitigation Measures 10.1a and 10.1b in Section 10 of this report

The URBEMIS2002 modeling out put for construction calculations and the employee vehicle emission calculations are provided in Appendix G2.

2.0 Regional Emissions

The new trips generated by the project would result in additional criteria pollutant emissions from vehicle exhaust. According to the detailed traffic study performed for the proposed project, the project would generate 9.0 trips for every single family unit, 6.5 trips for every multi-family unit and 30.0 trips for every 1,000 square feet of commercial land developed. These trips consist of work-related trips or shop related trips.

A land use emission model, URBEMIS2002 (Jones & Stokes Associates, Version 8.7), was used to estimate the increase in regional emissions as a result of the proposed project. This model estimates daily winter and summer emissions from both mobile and area sources. For the proposed project, the URBEMIS2002 model was run under conditions for 2010, which is the estimated build-out year.

Mobile sources consist of exhaust emissions from new vehicle trips made by residents, workers, and delivery trucks. Area sources for homes and commercial area include architectural coating activities, consumer product usage, landscaping activities and use of natural gas for space heating of the proposed units. These sources were grouped into the following:

Mobile Sources

URBEMIS has recommended default average mile, vehicle fleet mix, trip characteristics and emission factors for each target year that were used to calculate mobile emissions. The pass-by option in URBEMIS2002 was left off because this is mostly a residential area and the majority of the trips are expected to be primary trips, or for the sole purpose of visiting the residence. The parameters used in the model to estimate vehicle emissions for the completed project in 2010 are summarized in Table 4.

Table 4
URBEMIS Parameters For Estimating Operational Vehicle Emissions

	Parameter	Summer	Winter	Units
A	Single Family Number of Trips	9.0	9.0	Per unit
B	Multi Family Number of Trips	6.5	6.5	Per unit
C	Commercial Number of Trips	30	30	1,000 square ft
D	Fleet Mix (b)			
	LDA	54.4	54.4	%
	LDT1	15.3	15.3	%
	LDT2	16.4	16.4	%
	MDT	7.3	7.3	%
	LHT1	1.1	1.1	%
	LHT2	0.3	0.3	%
	MHT	1	1	%
	HHT	0.8	0.8	%
	Other Classes	3.4	3.4	%
E	Average Speed	35	35	Mph
F	Average Daily Winter/Summer Temperatures	40	85	F

Notes
(a) Total trips per units provided by traffic study
(b) LDA=light duty auto (passenger cars)
LDT1=light duty truck class 1 (0-3750 lb weight class)
LDT2=light duty truck class 2 (3751-5750 lb weight class)
MDT=medium duty truck (5751-8,500 lb weight class)
LHT1= light heavy duty truck (8,500-10,000 lb weight class)
LHT2= light heavy duty truck (10,001-14,000 lb weight class)
MHT= medium heavy duty truck (14,001-33,000 lb weight class)
HHT= heavy heavy duty truck (33,001-60,000 lb weight class)

The data in Table 3 is only for the analysis of 2010. The vehicle fleet mix would be different for the other years analyzed. Moreover, the percentage of heavy duty vehicles is likely higher than expected for a residential area. However, the URBEMIS2002 default fleet mix was used because the project-specific fleet mix is not known and the default mix is likely to be conservative.

Area Sources

For emissions from architectural coating activities, consumer product usage, landscaping activities and heating, the default URBEMIS2002 parameters were used. The only significant change to the default parameters was that all heating appliances were assumed to operate on natural gas. This is in accordance with the PCAPCD regulations and the applicants plans.

The URBEMIS2002 modeling out put for operational emissions calculations are provided in Appendix G3.

3.0 Local CO Concentrations

The proposed project would generate new traffic at nearby intersections and increase local congestion. In such situations, the potential increase in CO concentrations at these intersections is of particular concern. To evaluate the potential effect of the proposed project on local CO concentrations, six nearby intersections were modeled using the California Department of Transportation (Caltrans) CALINE4 roadway dispersion model. The six intersections selected for modeling were:

- Fiddyment and Baseline Avenue
- Locust and Baseline Avenue
- Watt Avenue and Baseline
- Watt Avenue and PFE Road
- Walerga Road and PFE Road
- Walerga Road and Elkhorn

Other intersections that would be potentially impacted by the proposed project are not expected to experience CO concentrations higher than the highest predicted among these six intersections. The existing Level of Service (LOS) at the intersection of Walerga Road and PFE Road is LOS F, which is the worst LOS ranking. The LOS at the other four intersections is expected to drop to LOS F once the project is in place or by 2025. Therefore, one of these intersections is expected to represent the worst-case intersection.

CALINE4 requires as an input emissions factors in terms of gram per mile for free flow travel and grams per hour for vehicles waiting at intersections. To generate these emission factors, California Air Resources Board's (CARB's) EMFAC2002 emission factor model was used. In the past, CT-EMFAC was used to generate emission factors. However, Caltrans now requires the use of EMFAC2002 for their CO roadway modeling efforts. Caltrans' draft guidance for generating emission factors from EMFAC2002 (http://www.dot.ca.gov/hq/env/air/ctemfac.htm) was followed for this analysis. The guidance assumes cold start is not significant for most roadway analyses. The new approach considers emissions from cold starts to occur soon after starting a vehicle. A study prepared for CARB (Study to Define Cold and Hot Start Emissions, Final Investigative Report, April 1997) showed that that the increase in emissions associated with starts are emitted within 100 seconds of starting a vehicle. Therefore, cold starts would be significant for modeling of parking lots and not intersections.

Table 5 summarizes the parameters used in the intersection dispersion modeling analysis. The analysis assumes worst-case wind speeds and uses the January mean minimum temperature. Average free flow speeds are estimated as being 5 mph less than the posted

speed limits. Emission factors were obtained from EMFAC2002. Existing traffic conditions were modeled with emission factors from 2006 and future traffic conditions were modeled with emission factors from 2025. The emission factors used to model the existing conditions are actually conservative because the project is probably not going to be completed until 2010 and the vehicle emissions should be lower at that time. Details on the development of CO emission factors used for the modeling study are included in this appendix. Sensitive receptors were assumed to be present immediately adjacent to the roadway on all sides of the modeled intersections.

Table 5
Parameters Used In Intersection CO Dispersion Modeling Analysis

Parameter	Value/Source
Meteorological/Geographical Data	
aerodynamic roughness length	100cm (suburban default)
Wind speed	0.5 m/s (worst case)
atmospheric stability class	7
Mixing Height	1,000 m (default)
January Mean Minimum Ambient Temperature Measured at N. Sunrise Blvd in Roseville, CA	48.0 F
Traffic Data	
Type of roadway (e.g., at-grade, depressed, bridge)	at-grade
peak traffic volume	from traffic study
signal timing (cycle length, red time)	from traffic study
Saturation flow rate (maximum number of vehicles that can pass through assuming 100% green time)	from traffic study
Parameters for Emission Factors	
average speeds for freeflows	**[Roadway Name = average freeflow speed (posted speed)** Watt = 40 mph (45 mph) Walerga = 40 mph (45 mph) Baseline = 40 mph (45 mph) Fiddyment = 40 mph (45 mph) PFE Road = 35 mph (40 mph) Locust = 40 mph (45 mph) Elkhorn = 20 mph (25 mph)
Approach and Departure Velocity at 4-way stops, stop signs or signaled intersections.	3 mph (lowest value used in the CO Protocol)
vehicle class mix based on weight	EMFAC2002 data for Placer County portion of Sacramento Valley (a)
Analysis Year	2006 and 2025

Notes:
(a) EMFAC2002 uses DMV registration and other data to forecast future year vehicle class mix

CO concentrations predicted by the model from traffic at the six intersections were added to background concentrations to generate total CO concentrations. The background was taken as the average of the maximum reading over the past three years at the Roseville monitoring station as shown in Table 6. Use of this average is conservative since concentrations are expected to improve over the years as cleaner cars enter the vehicle fleet.

Table 6
Background 1-hr Average CO Concentrations

Year	Concentrations at N. Highlands Station (ppm)
2005	8.0
2004	7.3
2003	4.4
Maximum	8.0

A conservative value of 8 ppm was used as the 1-hour background concentration. This is the maximum value recorded over the past three years. A lower background concentration was recorded at the Roseville station but based on conversations with PCAPCD, the higher, more conservative value was used. Using this background 1-hour concentration of 8 ppm, maximum 1-hour average CO concentrations predicted at the six intersections were estimated.

As recommended by the Project-Level Carbon Monoxide Protocol (Caltrans, December 1997), maximum 8-hour concentrations were then calculated by multiplying the maximum 1-hour average concentrations by a persistence factor. The persistence factor is the ratio of the 8-hour monitored concentrations to the 1-hour monitored concentrations. The values from the N. Highlands monitoring station that were used to calculate the persistence factor are presented in Table 7 below. The values used for this calculation were from the days when the ten highest 8-hour concentration values were documented over the past three years.

Table 7
Persistence Factor Calculation

Date	8-hr CO Conc. (ppm)	1-hr CO Conc. (ppm)	1-hr to 8-hr Ratio
1/12/2004	4.05	5.7	0.71
1/13/2004	2.80	7.3	0.38
1/15/2004	2.67	7.31	0.37
12/12/2005	2.86	6.5	0.44
12/14/2005	2.39	5.9	0.41
11/21/2005	2.27	6.2	0.37
12/18/2003	2.07	2.4	0.86
12/13/2005	2.03	5.9	0.34
1/16/2003	1.97	3.2	0.62
11/24/2003	1.96	2.8	0.70
Average Persistence Factor			**0.52**

The calculated 1-hour concentrations were then multiplied by the persistence factor to calculate the predicted 8-hour concentrations. The emission factors used and the outputs from the model are presented in Appendix G4 following this methodology discussion.

APPENDIX G2

URBEMIS2002 EMISSION RESULTS AND EMPLOYEE VEHICLE EMISSIONS CALCULATIONS FOR CONSTRUCTION

Employee Vehicle Trip Emissions During Construciton
Riolo Vineyards

Transportation Information		**Comment**
Maximum Number of Construction Workers = 88		Information Provided By Applicant
Average Miles Per Trip (1-way) = 9.7		URBEMIS default values for Placer County
Trips Per Day Per Worker = 176		Assumes each employee travels twice per day
Total Miles Per Day = 1707.2		Worst-case scenario;each worker drives his own car.
Total Miles Per Day Light Duty Automobiles =	853.6	Fleet Mix is 50% LDA and 50% LDT.
Total Miles Per Day Light Duty Trucks =	853.6	Fleet Mix is 50% LDA and 50% LDT.

Equipment Description	Vehicle Miles Traveled	Tons Per Day				
		CO	NOx	PM10	SOx	VOC
Light Duty Automobile*	873,088,000	20.87	1.82	0.15	0.02	2.31
Light Duty Trucks*	159,000	0.94	0.36	0	0	0.15

Equipment Description	Pounds per Mile				
	CO	NOx	PM10	SOx	VOC
Light Duty Automobile -Catalyst	0.00005	0.00000	0.00000	0.00000	0.00001
Light Duty Trucks*	0.01182	0.00453	0.00000	0.00000	0.00189

Equipment Description	Pounds Per Day				
	CO	NOx	PM10	SOx	VOC
Light Duty Automobile -Catalyst	0.040808331	0.003559	0.000293	3.91E-05	0.004517
Light Duty Trucks -Catalyst	10.09288	3.86536	0.00000	0.00000	1.61057
Total	10.1	3.9	0.0	0.0	1.6

* Emission factors for on-road vehicles are based on results from Emfac Emissions Model 2002 Version.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Riolo Vineyards Construction.urb
Project Name: Riolo Vineyards Construction
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	141.12	893.55	1,188.71	0.01	416.96	34.90	382.06
TOTALS (lbs/day, mitigated)	141.12	768.62	1,188.71	0.01	59.72	2.62	57.10

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Riolo Vineyards Construction.urb
Project Name: Riolo Vineyards Construction
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: May, 2007
Construction Duration: 2
Total Land Use Area to be Developed: 295.71 acres
Maximum Acreage Disturbed Per Day: 10 acres
Single Family Units: 862 Multi-Family Units: 70
Retail/Office/Institutional/Industrial Square Footage: 88100

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	382.00	-	382.00
Off-Road Diesel	140.11	892.36	1,166.79	-	34.86	34.86	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	1.01	1.19	21.92	0.01	0.10	0.04	0.06
Maximum lbs/day	141.12	893.55	1,188.71	0.01	416.96	34.90	382.06
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	141.12	893.55	1,188.71	0.01	416.96	34.90	382.06

Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: May '07
Phase 2 Duration: 2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
6	Excavators	180	0.580	8.0
7	Graders	174	0.575	8.0
12	Off Highway Trucks	417	0.490	8.0
6	Rollers	114	0.430	8.0
6	Rubber Tired Dozers	352	0.590	8.0
2	Rubber Tired Loaders	165	0.465	8.0
12	Scrapers	313	0.660	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	57.04	-	57.04
Off-Road Diesel	140.11	767.43	1,166.79	-	2.58	2.58	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	1.01	1.19	21.92	0.01	0.10	0.04	0.06
Maximum lbs/day	141.12	768.62	1,188.71	0.01	59.72	2.62	57.10
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	141.12	768.62	1,188.71	0.01	59.72	2.62	57.10

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
Phase 2: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 2: Off-Road Diesel Exhaust: Use diesel particulate filter
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 80.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 3x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: May '07
Phase 2 Duration: 2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
6	Excavators	180	0.580	8.0
7	Graders	174	0.575	8.0
12	Off Highway Trucks	417	0.490	8.0
6	Rollers	114	0.430	8.0
6	Rubber Tired Dozers	352	0.590	8.0
2	Rubber Tired Loaders	165	0.465	8.0
12	Scrapers	313	0.660	8.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/287.33 to 9.0/287.33
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/4.38 to 6.5/4.38

Changes made to the default values for Construction

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2
Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily
has been changed from off to on.
Phase 2 mitigation measure Off-Road Diesel Exhaust: Use aqueous diesel fuel
has been changed from off to on.
Phase 2 mitigation measure Off-Road Diesel Exhaust: Use diesel particulate filter
has been changed from off to on.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

APPENDIX G3

URBEMIS2002 EMISSION RESULTS FOR OPERATION

URBEMIS 2002 For Windows 8.7.0

File Name: X:\x_env_aql\PROJECTS\Riolo Vineyards\URBEMIS\Riolo Vineyards Operational.urb
Project Name: Riolo Vineyards Operational Sources
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	81.80	12.64	33.72	0.17	0.11

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	70.77	79.40	804.63	0.55	94.15

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	152.57	92.04	838.36	0.72	94.26

URBEMIS 2002 For Windows 8.7.0

File Name: X:\x_env_aql\PROJECTS\Riolo Vineyards\URBEMIS\Riolo Vineyards Operational.urb
Project Name: Riolo Vineyards Operational Sources
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	78.69	19.72	8.74	0.05	0.63

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	75.00	119.17	916.67	0.54	94.15

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	153.69	138.89	925.42	0.59	94.78

URBEMIS 2002 For Windows 8.7.0

File Name: X:\x_env_aq1\PROJECTS\Riolo Vineyards\URBEMIS\Riolo Vineyards Operational.urb
Project Name: Riolo Vineyards Operational Sources
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.94	12.18	5.54	0	0.02
Hearth	0.44	7.54	3.21	0.05	0.61
Landscaping - No winter emissions					
Consumer Prdcts	45.60	-	-	-	-
Architectural Coatings	31.72	-	-	-	-
TOTALS(lbs/day,unmitigated)	78.69	19.72	8.74	0.05	0.63

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	54.15	86.37	664.42	0.40	68.56
Apartments low rise	3.18	5.07	38.97	0.02	4.02
City park	0.15	0.24	1.84	0.00	0.19
Strip mall	17.53	27.50	211.45	0.12	21.38
TOTAL EMISSIONS (lbs/day)	75.00	119.17	916.67	0.54	94.15

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	235.20	9.00 trips/dwelling unit	862.00	7,758.00
Apartments low rise	3.30	6.50 trips/dwelling unit	70.00	455.00
City park		2.20 trips/acres	12.00	26.40
Strip mall		35.00 trips/1000 sq. ft.	88.20	3,087.00
		Sum of Total Trips		11,326.40
		Total Vehicle Miles Traveled		62,040.23

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			

% of Trips - Commercial (by land use)

City park	5.0	2.5	92.5
Strip mall	2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/287.33 to 9.0/235.2
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/4.38 to 6.5/3.3

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2010.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter selection item changed from 2 to 1.
The operational summer selection item changed from 7 to 6.

URBEMIS 2002 For Windows 8.7.0

File Name: X:\x_env_aq1\PROJECTS\Riolo Vineyards\URBEMIS\Riolo Vineyards Operational.urb
Project Name: Riolo Vineyards Operational Sources
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.94	12.18	5.54	0	0.02
Hearth - No summer emissions					
Landscaping	3.55	0.46	28.18	0.17	0.09
Consumer Prdcts	45.60	-	-	-	-
Architectural Coatings	31.72	-	-	-	-
TOTALS(lbs/day,unmitigated)	81.80	12.64	33.72	0.17	0.11

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	52.84	57.47	591.22	0.40	68.56
Apartments low rise	3.31	3.37	34.67	0.02	4.02
City park	0.25	0.16	1.55	0.00	0.19
Strip mall	14.37	18.40	177.18	0.12	21.38
TOTAL EMISSIONS (lbs/day)	70.77	79.40	804.63	0.55	94.15

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	235.20	9.00 trips/dwelling unit	862.00	7,758.00
Apartments low rise	3.30	6.50 trips/dwelling unit	70.00	455.00
City park		2.20 trips/acres	12.00	26.40
Strip mall		35.00 trips/1000 sq. ft.	88.20	3,087.00
		Sum of Total Trips		11,326.40
		Total Vehicle Miles Traveled		62,040.23

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/287.33 to 9.0/235.2
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/4.38 to 6.5/3.3

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2010.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter selection item changed from 2 to 1.
The operational summer selection item changed from 7 to 6.

APPENDIX G4

CALINE MODELING RESULTS

EXISTING CONDITIONS

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1            (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
     U=     .5 M/S              Z0= 100. CM            ALT=    16. (M)
   BRG= WORST CASE             VD=   .0 CM/S
  CLAS=     7 (G)              VS=   .0 CM/S
  MIXH= 1000. M               AMB=  8.0 PPM
 SIGTH=    5. DEGREES         TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWBASELINECI	-300	-2	-150	-2	AG	672	4.0	.0	10.6
B. EWBASELINEAI	-150	-2	0	-2	AG	672	10.4	.0	10.6
C. EWBASELINEDO	0	-2	150	-2	AG	931	10.4	.0	10.6
D. EWBASELINECO	150	-2	300	-2	AG	931	4.0	.0	10.6
E. WEBASELINECI	300	2	150	2	AG	336	4.0	.0	10.6
F. WEBASELINEAI	150	2	0	2	AG	336	10.4	.0	10.6
G. WEBASELINEDO	0	2	-150	2	AG	357	10.4	.0	10.6
H. WEBASELINECO	-150	2	-300	2	AG	357	4.0	.0	10.6
I. SNLOCUSTCI	2	-300	2	-150	AG	276	5.6	.0	10.6
J. SNLOCUSTAI	2	-150	2	0	AG	276	10.4	.0	10.6
K. SNLOCUSTDO	2	0	2	150	AG	22	10.4	.0	10.6
L. SNLOCUSTCO	2	150	2	300	AG	22	5.6	.0	10.6
M. NSLOCUSTCI	-2	300	-2	150	AG	55	5.6	.0	10.6
N. NSLOCUSTAI	-2	150	-2	0	AG	55	10.4	.0	10.6
O. NSLOCUSTDO	-2	0	-2	-150	AG	29	10.4	.0	10.6
P. NSLOCUSTCO	-2	-150	-2	-300	AG	29	5.6	.0	10.6

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1            (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

LOCUST AND BASELINE-EXISTING & PROJECT CONDITIONS

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	97.	9.9	.0	.0	1.0	.0	.0	.8	.0	.0
2. Recpt 2	85.	10.6	.0	.0	2.2	.0	.0	.4	.0	.0
3. Recpt 3	96.	10.0	.0	.0	1.0	.0	.0	.7	.1	.0
4. Recpt 4	85.	10.8	.0	.3	1.8	.0	.0	.4	.0	.0
5. Recpt 5	265.	10.1	.0	.4	.6	.0	.0	.8	.2	.0
6. Recpt 6	266.	9.8	.0	.2	.8	.0	.2	.4	.0	.0
7. Recpt 7	274.	10.9	.0	.3	2.0	.0	.0	.2	.3	.0
8. Recpt 8	273.	10.1	.0	.2	.9	.5	.0	.3	.1	.0
9. Recpt 9	94.	10.1	.0	.4	.5	.0	.0	.2	.8	.0
10. Recpt 10	93.	9.7	.0	.5	.3	.0	.0	.1	.4	.2
11. Recpt 11	86.	10.5	.0	1.5	.4	.0	.0	.2	.2	.0
12. Recpt 12	87.	9.9	.4	.7	.2	.0	.0	.1	.3	.0

LOCUST AND BASELINE-EXISTING & PROJECT CONDITIONS

13. Recpt 13 *	182. *	8.6 *	.0	.0	.1	.0	.0	.0	.0	.0
14. Recpt 14 *	182. *	8.5 *	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	176. *	8.7 *	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16 *	177. *	8.5 *	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	356. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	10. *	8.6 *	.0	.0	.2	.0	.0	.0	.0	.0
20. Recpt 20 *	5. *	8.6 *	.0	.0	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3 *	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4 *	.0	.2	.0	.0	.0	.0	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.2	.0	.0	.0	.0	.0	.0
14. Recpt 14 *	.0	.1	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	.0	.2	.0	.0	.0	.2	.0	.0
16. Recpt 16 *	.0	.1	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	.0	.6	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	.2	.3	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	.0	.3	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	.0	.3	.0	.0	.0	.0	.0	.0

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1            (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
     U=     .5 M/S              Z0= 100. CM            ALT=    16. (M)
   BRG= WORST CASE             VD=    .0 CM/S
  CLAS=     7 (G)              VS=    .0 CM/S
  MIXH= 1000. M               AMB=  8.0 PPM
 SIGTH=     5. DEGREES        TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWBASELINECI	*	-300	-2	-150	-2	* AG	660	4.0	.0	10.6
B. EWBASELINEAI	*	-150	-2	0	-2	* AG	660	10.4	.0	10.6
C. EWBASELINEDO	*	0	-2	150	-2	* AG	918	10.4	.0	10.6
D. EWBASELINECO	*	150	-2	300	-2	* AG	918	4.0	.0	10.6
E. WEBASELINECI	*	300	2	150	2	* AG	339	4.0	.0	10.6
F. WEBASELINEAI	*	150	2	0	2	* AG	339	10.4	.0	10.6
G. WEBASELINEDO	*	0	2	-150	2	* AG	359	10.4	.0	10.6
H. WEBASELINECO	*	-150	2	-300	2	* AG	359	4.0	.0	10.6
I. SNLOCUSTCI	*	2	-300	2	-150	* AG	274	5.6	.0	10.6
J. SNLOCUSTAI	*	2	-150	2	0	* AG	274	10.4	.0	10.6
K. SNLOCUSTDO	*	2	0	2	150	* AG	22	10.4	.0	10.6
L. SNLOCUSTCO	*	2	150	2	300	* AG	22	5.6	.0	10.6
M. NSLOCUSTCI	*	-2	300	-2	150	* AG	55	5.6	.0	10.6
N. NSLOCUSTAI	*	-2	150	-2	0	* AG	55	10.4	.0	10.6
O. NSLOCUSTDO	*	-2	0	-2	-150	* AG	29	10.4	.0	10.6
P. NSLOCUSTCO	*	-2	-150	-2	-300	* AG	29	5.6	.0	10.6

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1            (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

LOCUST AND BASELINE-EXISTING CONDITIONS

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	96.	9.9	.0	.0	.9	.0	.0	.8	.0	.0
2. Recpt 2	85.	10.6	.0	.0	2.1	.0	.0	.4	.0	.0
3. Recpt 3	96.	10.0	.0	.0	1.0	.0	.0	.7	.1	.0
4. Recpt 4	85.	10.7	.0	.2	1.8	.0	.0	.4	.0	.0
5. Recpt 5	265.	10.0	.0	.4	.6	.0	.0	.8	.2	.0
6. Recpt 6	266.	9.8	.0	.2	.8	.0	.2	.4	.0	.0
7. Recpt 7	274.	10.9	.0	.3	1.9	.0	.0	.2	.3	.0
8. Recpt 8	273.	10.1	.0	.2	.9	.5	.0	.3	.1	.0
9. Recpt 9	94.	10.1	.0	.4	.5	.0	.0	.2	.8	.0
10. Recpt 10	93.	9.7	.0	.5	.3	.0	.0	.1	.4	.2
11. Recpt 11	86.	10.5	.0	1.4	.4	.0	.0	.2	.2	.0
12. Recpt 12	87.	9.8	.4	.7	.2	.0	.0	.1	.3	.0

LOCUST AND BASELINE-EXISTING CONDITIONS

13. Recpt 13	182.	8.6	.0	.0	.1	.0	.0	.0	.0	.0
14. Recpt 14	182.	8.5	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	8.7	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.5	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	356.	9.0	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	357.	8.8	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	10.	8.6	.0	.0	.2	.0	.0	.0	.0	.0
20. Recpt 20	5.	8.6	.0	.0	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	.0	.2	.0	.0	.0	.0	.0	.0
5. Recpt 5	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	.0	.2	.0	.0	.0	.0	.0	.0
14. Recpt 14	.0	.1	.0	.0	.0	.0	.0	.0
15. Recpt 15	.0	.2	.0	.0	.0	.2	.0	.0
16. Recpt 16	.0	.1	.0	.0	.0	.0	.0	.0
17. Recpt 17	.0	.6	.0	.0	.0	.0	.0	.0
18. Recpt 18	.2	.3	.0	.0	.0	.0	.0	.0
19. Recpt 19	.0	.3	.0	.0	.0	.0	.0	.0
20. Recpt 20	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	16. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	8.0 PPM		
SIGTH=	5. DEGREES	TEMP=	8.9 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	-300	-2	-150	-2	AG	490	4.2	.0	10.6
B. EWPFE	-150	-2	0	-2	AG	490	10.4	.0	10.6
C. EWPFE	0	-2	150	-2	AG	311	10.4	.0	10.6
D. EWPFE	150	-2	300	-2	AG	311	4.2	.0	10.6
E. WEPFE	300	2	150	2	AG	464	4.2	.0	10.6
F. WEPFE	150	2	0	2	AG	464	10.4	.0	10.6
G. WEPFE	0	2	-150	2	AG	333	10.4	.0	10.6
H. WEPFE	-150	2	-300	2	AG	333	4.2	.0	10.6
I. SNWALERGA	2	-300	2	-150	AG	998	4.0	.0	10.6
J. SNWALERGA	2	-150	2	0	AG	998	10.4	.0	10.6
K. SNWALERGA	2	0	2	150	AG	969	10.4	.0	10.6
L. SNWALERGA	2	150	2	300	AG	969	4.0	.0	10.6
M. NSWALERGA	-2	300	-2	150	AG	876	4.0	.0	10.6
N. NSWALERGA	-2	150	-2	0	AG	876	10.4	.0	10.6
O. NSWALERGA	-2	0	-2	-150	AG	1215	10.4	.0	10.6
P. NSWALERGA	-2	-150	-2	-300	AG	1215	4.0	.0	10.6

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

WALERGA AND PFE-EXISTING & PROJECT CONDITIONS

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	186.	12.2	.0	.0	.2	.0	.0	.3	.0	.0
2. Recpt 2	355.	11.8	.0	.0	.2	.0	.0	.3	.0	.0
3. Recpt 3	175.	12.3	.0	.3	.0	.0	.0	.0	.2	.0
4. Recpt 4	6.	11.8	.0	.4	.0	.0	.0	.0	.2	.0
5. Recpt 5	266.	10.2	.0	.3	.2	.0	.0	1.0	.2	.0
6. Recpt 6	267.	9.7	.0	.2	.3	.0	.3	.5	.1	.0
7. Recpt 7	274.	9.9	.0	.3	.7	.0	.0	.3	.2	.0
8. Recpt 8	273.	9.6	.0	.1	.4	.2	.0	.4	.1	.0
9. Recpt 9	94.	9.9	.0	.3	.2	.0	.0	.2	.8	.0
10. Recpt 10	93.	9.6	.0	.4	.1	.0	.0	.1	.4	.2
11. Recpt 11	86.	10.2	.0	1.1	.2	.0	.0	.3	.2	.0
12. Recpt 12	87.	9.7	.3	.5	.1	.0	.0	.2	.3	.0

13. Recpt 13 *	184. *	11.9 *	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14 *	183. *	11.0 *	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	176. *	11.8 *	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16 *	177. *	10.9 *	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	355. *	12.0 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	11.1 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	12.3 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	11.3 *	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	1.9	.4	.0	.0	.0	1.2	.0
2. Recpt 2 *	.0	.4	1.9	.0	.1	.9	.0	.0
3. Recpt 3 *	.1	1.0	.0	.0	.0	.3	2.3	.0
4. Recpt 4 *	.0	.0	1.0	.0	.0	1.7	.5	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.1	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.5	2.0	.0	.0	.5	.7	.0
14. Recpt 14 *	.0	.2	.9	.5	.0	.7	.3	.0
15. Recpt 15 *	.0	.6	.5	.0	.0	1.9	.5	.0
16. Recpt 16 *	.0	.3	.7	.0	.5	.9	.3	.0
17. Recpt 17 *	.0	2.1	.3	.0	.0	.5	.8	.0
18. Recpt 18 *	.6	.9	.2	.0	.0	.3	.9	.0
19. Recpt 19 *	.0	.5	.6	.0	.0	.4	2.5	.0
20. Recpt 20 *	.0	.7	.3	.0	.0	.2	1.1	.7

WALERGA AND PFE-EXISTING CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	16. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	8.0 PPM		
SIGTH=	5. DEGREES	TEMP=	8.9 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	-300	-2	-150	-2	AG	359	4.2	.0	10.6
B. EWPFE	-150	-2	0	-2	AG	359	10.4	.0	10.6
C. EWPFE	0	-2	150	-2	AG	303	10.4	.0	10.6
D. EWPFE	150	-2	300	-2	AG	303	4.2	.0	10.6
E. WEPFE	300	2	150	2	AG	416	4.2	.0	10.6
F. WEPFE	150	2	0	2	AG	416	10.4	.0	10.6
G. WEPFE	0	2	-150	2	AG	207	10.4	.0	10.6
H. WEPFE	-150	2	-300	2	AG	207	4.2	.0	10.6
I. SNWALERGA	2	-300	2	-150	AG	920	4.0	.0	10.6
J. SNWALERGA	2	-150	2	0	AG	920	10.4	.0	10.6
K. SNWALERGA	2	0	2	150	AG	925	10.4	.0	10.6
L. SNWALERGA	2	150	2	300	AG	925	4.0	.0	10.6
M. NSWALERGA	-2	300	-2	150	AG	872	4.0	.0	10.6
N. NSWALERGA	-2	150	-2	0	AG	872	10.4	.0	10.6
O. NSWALERGA	-2	0	-2	-150	AG	1132	10.4	.0	10.6
P. NSWALERGA	-2	-150	-2	-300	AG	1132	4.0	.0	10.6

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

WALERGA AND PFE-EXISTING CONDITIONS

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	186.	11.9	.0	.0	.2	.0	.0	.3	.0	.0
2. Recpt 2	355.	11.6	.0	.0	.2	.0	.0	.2	.0	.0
3. Recpt 3	175.	11.9	.0	.2	.0	.0	.0	.0	.1	.0
4. Recpt 4	5.	11.6	.0	.3	.0	.0	.0	.0	.1	.0
5. Recpt 5	266.	9.9	.0	.3	.2	.0	.0	.9	.1	.0
6. Recpt 6	267.	9.5	.0	.1	.3	.0	.3	.5	.0	.0
7. Recpt 7	274.	9.7	.0	.2	.7	.0	.0	.3	.2	.0
8. Recpt 8	273.	9.4	.0	.1	.4	.2	.0	.4	.0	.0
9. Recpt 9	94.	9.6	.0	.2	.2	.0	.0	.2	.5	.0
10. Recpt 10	93.	9.3	.0	.3	.1	.0	.0	.1	.3	.1
11. Recpt 11	86.	9.8	.0	.8	.2	.0	.0	.3	.1	.0
12. Recpt 12	87.	9.4	.2	.4	.0	.0	.0	.2	.2	.0

WALERGA AND PFE-EXISTING CONDITIONS

13. Recpt 13	* 184.	* 11.8	* .0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	* 183.	* 10.9	* .0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	* 176.	* 11.6	* .0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	* 177.	* 10.8	* .0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	* 356.	* 11.7	* .0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	* 357.	* 11.0	* .0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	* 4.	* 12.0	* .0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	* 3.	* 11.1	* .0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	.0	1.8	.4	.0	.0	.0	1.2	.0
2. Recpt 2	.0	.3	1.8	.0	.1	.9	.0	.0
3. Recpt 3	.1	.9	.0	.0	.0	.3	2.2	.0
4. Recpt 4	.0	.0	.9	.1	.0	1.7	.4	.0
5. Recpt 5	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	.0	.4	2.0	.0	.0	.5	.6	.0
14. Recpt 14	.0	.2	.9	.5	.0	.7	.3	.0
15. Recpt 15	.0	.5	.5	.0	.0	1.9	.5	.0
16. Recpt 16	.0	.3	.7	.0	.5	.8	.3	.0
17. Recpt 17	.0	1.9	.4	.0	.0	.5	.6	.0
18. Recpt 18	.5	.9	.2	.0	.0	.3	.8	.0
19. Recpt 19	.0	.5	.5	.0	.0	.4	2.3	.0
20. Recpt 20	.0	.7	.3	.0	.0	.2	1.0	.6

WATT AND PFE-EXISTING & PROJECT CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 16. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= 8.0 PPM
SIGTH= 5. DEGREES TEMP= 8.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	*	0	-2	150	-2	* AG	366	10.4	.0	10.6
B. EWPFE	*	150	-2	300	-2	* AG	366	4.2	.0	10.6
C. WEPFE	*	300	2	150	2	* AG	271	4.2	.0	10.6
D. WEPFE	*	150	2	0	2	* AG	271	10.4	.0	10.6
E. SNWATT	*	2	-300	2	-150	* AG	750	4.0	.0	10.6
F. SNWATT	*	2	-150	2	0	* AG	750	10.4	.0	10.6
G. SNWATT	*	2	0	2	150	* AG	436	10.4	.0	10.6
H. SNWATT	*	2	150	2	300	* AG	436	4.0	.0	10.6
I. NSWATT	*	-2	300	-2	150	* AG	339	4.0	.0	10.6
J. NSWATT	*	-2	150	-2	0	* AG	339	10.4	.0	10.6
K. NSWATT	*	-2	0	-2	-150	* AG	558	10.4	.0	10.6
L. NSWATT	*	-2	-150	-2	-300	* AG	558	4.0	.0	10.6

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

* COORDINATES (M)

WATT AND PFE-EXISTING & PROJECT CONDITIONS

RECEPTOR	X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	8	108	1.8
10. Recpt 10	8	208	1.8
11. Recpt 11	-8	108	1.8
12. Recpt 12	-8	208	1.8
13. Recpt 13	8	-108	1.8
14. Recpt 14	8	-208	1.8
15. Recpt 15	-8	-108	1.8
16. Recpt 16	-8	-208	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	185.	10.8	.2	.0	.0	.2	.0	1.5	.2	.0
2. Recpt 2	185.	10.5	.0	.0	.0	.0	.0	1.8	.0	.0
3. Recpt 3	175.	10.2	.0	.0	.0	.0	.0	.7	.0	.0
4. Recpt 4	174.	10.2	.0	.0	.0	.0	.0	.8	.0	.0
5. Recpt 5	262.	9.3	.4	.0	.0	.6	.0	.1	.0	.0
6. Recpt 6	265.	9.1	.4	.0	.2	.3	.0	.0	.0	.0
7. Recpt 7	277.	9.3	.8	.0	.0	.3	.0	.0	.0	.0
8. Recpt 8	274.	9.1	.4	.2	.0	.3	.0	.0	.0	.0
9. Recpt 9	183.	10.1	.0	.0	.0	.0	.0	.4	.9	.0
10. Recpt 10	183.	9.5	.0	.0	.0	.0	.0	.2	.5	.3
11. Recpt 11	176.	9.9	.0	.0	.0	.0	.0	.5	.3	.0
12. Recpt 12	177.	9.5	.0	.0	.0	.0	.0	.2	.4	.0
13. Recpt 13	356.	10.5	.0	.0	.0	.0	.0	1.6	.2	.0
14. Recpt 14	357.	10.0	.0	.0	.0	.0	.4	.7	.1	.0
15. Recpt 15	6.	10.3	.0	.0	.0	.0	.0	.6	.2	.0
16. Recpt 16	4.	9.9	.0	.0	.0	.0	.0	.7	.1	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L
1. Recpt 1	.0	.0	.6	.0
2. Recpt 2	.0	.0	.5	.0
3. Recpt 3	.0	.1	1.2	.0
4. Recpt 4	.0	.0	1.3	.0
5. Recpt 5	.0	.0	.0	.0
6. Recpt 6	.0	.0	.0	.0
7. Recpt 7	.0	.0	.0	.0
8. Recpt 8	.0	.0	.0	.0
9. Recpt 9	.0	.2	.4	.0
10. Recpt 10	.0	.3	.2	.0
11. Recpt 11	.0	.8	.3	.0
12. Recpt 12	.2	.4	.2	.0
13. Recpt 13	.0	.2	.3	.0
14. Recpt 14	.0	.1	.5	.0
15. Recpt 15	.0	.1	1.3	.0
16. Recpt 16	.0	.0	.5	.4

WATT AND PFE-EXISTING CONDITIONS

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1            (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=     .5 M/S            Z0= 100. CM          ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	*	0	-2	150	-2	* AG	240	10.4	.0	10.6
B. EWPFE	*	150	-2	300	-2	* AG	240	4.2	.0	10.6
C. WEPFE	*	300	2	150	2	* AG	192	4.2	.0	10.6
D. WEPFE	*	150	2	0	2	* AG	192	10.4	.0	10.6
E. SNWATT	*	2	-300	2	-150	* AG	529	4.0	.0	10.6
F. SNWATT	*	2	-150	2	0	* AG	529	10.4	.0	10.6
G. SNWATT	*	2	0	2	150	* AG	337	10.4	.0	10.6
H. SNWATT	*	2	150	2	300	* AG	337	4.0	.0	10.6
I. NSWATT	*	-2	300	-2	150	* AG	333	4.0	.0	10.6
J. NSWATT	*	-2	150	-2	0	* AG	333	10.4	.0	10.6
K. NSWATT	*	-2	0	-2	-150	* AG	477	10.4	.0	10.6
L. NSWATT	*	-2	-150	-2	-300	* AG	477	4.0	.0	10.6

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1            (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

```
        *    COORDINATES (M)
```

WATT AND PFE-EXISTING CONDITIONS

RECEPTOR	X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	8	108	1.8
10. Recpt 10	8	208	1.8
11. Recpt 11	-8	108	1.8
12. Recpt 12	-8	208	1.8
13. Recpt 13	8	-108	1.8
14. Recpt 14	8	-208	1.8
15. Recpt 15	-8	-108	1.8
16. Recpt 16	-8	-208	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	185.	10.1	.1	.0	.0	.1	.0	1.1	.1	.0
2. Recpt 2	185.	9.9	.0	.0	.0	.0	.0	1.3	.0	.0
3. Recpt 3	175.	9.8	.0	.0	.0	.0	.0	.6	.0	.0
4. Recpt 4	174.	9.8	.0	.0	.0	.0	.0	.6	.0	.0
5. Recpt 5	262.	8.9	.3	.0	.0	.5	.0	.0	.0	.0
6. Recpt 6	265.	8.8	.3	.0	.1	.2	.0	.0	.0	.0
7. Recpt 7	277.	8.9	.6	.0	.0	.2	.0	.0	.0	.0
8. Recpt 8	274.	8.8	.3	.2	.0	.2	.0	.0	.0	.0
9. Recpt 9	184.	9.7	.0	.0	.0	.0	.0	.3	.8	.0
10. Recpt 10	183.	9.3	.0	.0	.0	.0	.0	.1	.4	.2
11. Recpt 11	176.	9.7	.0	.0	.0	.0	.0	.3	.2	.0
12. Recpt 12	177.	9.3	.0	.0	.0	.0	.0	.2	.3	.0
13. Recpt 13	356.	10.0	.0	.0	.0	.0	.0	1.2	.2	.0
14. Recpt 14	357.	9.6	.0	.0	.0	.0	.3	.6	.1	.0
15. Recpt 15	5.	9.9	.0	.0	.0	.0	.0	.4	.2	.0
16. Recpt 16	4.	9.6	.0	.0	.0	.0	.0	.5	.1	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L
1. Recpt 1	.0	.0	.5	.0
2. Recpt 2	.0	.0	.5	.0
3. Recpt 3	.0	.1	1.0	.0
4. Recpt 4	.0	.0	1.2	.0
5. Recpt 5	.0	.0	.0	.0
6. Recpt 6	.0	.0	.0	.0
7. Recpt 7	.0	.0	.0	.0
8. Recpt 8	.0	.0	.0	.0
9. Recpt 9	.0	.2	.3	.0
10. Recpt 10	.0	.3	.2	.0
11. Recpt 11	.0	.8	.3	.0
12. Recpt 12	.2	.4	.1	.0
13. Recpt 13	.0	.2	.3	.0
14. Recpt 14	.0	.1	.4	.0
15. Recpt 15	.0	.1	1.1	.0
16. Recpt 16	.0	.0	.5	.3

CUMULATIVE CONDITIONS

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
   U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
 BRG= WORST CASE           VD=   .0 CM/S
CLAS=     7 (G)            VS=   .0 CM/S
MIXH= 1000. M             AMB=  8.0 PPM
SIGTH=    5. DEGREES     TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	*	-300	-2	-150	-2	* AG	928	.9	.0	10.6
B. EWPFE	*	-150	-2	0	-2	* AG	928	1.7	.0	10.6
C. EWPFE	*	0	-2	150	-2	* AG	834	1.7	.0	10.6
D. EWPFE	*	150	-2	300	-2	* AG	834	.9	.0	10.6
E. WEPFE	*	300	2	150	2	* AG	406	.9	.0	10.6
F. WEPFE	*	150	2	0	2	* AG	406	1.7	.0	10.6
G. WEPFE	*	0	2	-150	2	* AG	174	1.7	.0	10.6
H. WEPFE	*	-150	2	-300	2	* AG	174	.9	.0	10.6
I. SNCOOKRIOLO	*	2	-300	2	-150	* AG	28	.8	.0	10.6
J. SNCOOKRIOLO	*	2	-150	2	0	* AG	28	1.7	.0	10.6
K. SNCOOKRIOLO	*	2	0	2	150	* AG	765	1.7	.0	10.6
L. SNCOOKRIOLO	*	2	150	2	300	* AG	765	.8	.0	10.6
M. NSCOOKRIOLO	*	-2	300	-2	150	* AG	563	.8	.0	10.6
N. NSCOOKRIOLO	*	-2	150	-2	0	* AG	563	1.7	.0	10.6
O. NSCOOKRIOLO	*	-2	0	-2	-150	* AG	152	1.7	.0	10.6
P. NSCOOKRIOLO	*	-2	-150	-2	-300	* AG	152	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	264.	8.4	.0	.2	.0	.0	.0	.0	.0	.0
2. Recpt 2	355.	8.5	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	95.	8.5	.0	.0	.1	.0	.0	.1	.0	.0
4. Recpt 4	5.	8.5	.0	.1	.0	.0	.0	.0	.0	.0
5. Recpt 5	266.	8.4	.0	.0	.0	.0	.0	.2	.0	.0
6. Recpt 6	266.	8.3	.0	.0	.1	.0	.0	.0	.0	.0
7. Recpt 7	274.	8.5	.0	.0	.3	.0	.0	.0	.0	.0
8. Recpt 8	273.	8.4	.0	.0	.1	.1	.0	.0	.0	.0
9. Recpt 9	94.	8.3	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	93.	8.3	.0	.1	.0	.0	.0	.0	.0	.0
11. Recpt 11	86.	8.5	.0	.3	.0	.0	.0	.0	.0	.0
12. Recpt 12	87.	8.4	.1	.1	.0	.0	.0	.0	.0	.0
13. Recpt 13	187.	8.4	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	8.3	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	173.	8.4	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	176.	8.3	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	357. *	8.2 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	358. *	8.1 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	3. *	8.3 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	2. *	8.2 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.3	.0	.0	.0	.0	.0
3. Recpt 3 *	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4 *	.0	.0	.1	.0	.0	.2	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.3	.0	.0	.0	.0	.0
14. Recpt 14 *	.0	.0	.1	.0	.0	.0	.0	.0
15. Recpt 15 *	.0	.0	.1	.0	.0	.2	.0	.0
16. Recpt 16 *	.0	.0	.1	.0	.0	.0	.0	.0
17. Recpt 17 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
   U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
 BRG= WORST CASE           VD=   .0 CM/S
CLAS=     7 (G)            VS=   .0 CM/S
MIXH= 1000. M             AMB=  8.0 PPM
SIGTH=    5. DEGREES     TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	*	-300	-2	-150	-2	* AG	962	.9	.0	10.6
B. EWPFE	*	-150	-2	0	-2	* AG	962	1.7	.0	10.6
C. EWPFE	*	0	-2	150	-2	* AG	844	1.7	.0	10.6
D. EWPFE	*	150	-2	300	-2	* AG	844	.9	.0	10.6
E. WEPFE	*	300	2	150	2	* AG	423	.9	.0	10.6
F. WEPFE	*	150	2	0	2	* AG	423	1.7	.0	10.6
G. WEPFE	*	0	2	-150	2	* AG	171	1.7	.0	10.6
H. WEPFE	*	-150	2	-300	2	* AG	171	.9	.0	10.6
I. SNCOOKRIOLO	*	2	-300	2	-150	* AG	28	.8	.0	10.6
J. SNCOOKRIOLO	*	2	-150	2	0	* AG	28	1.7	.0	10.6
K. SNCOOKRIOLO	*	2	0	2	150	* AG	780	1.7	.0	10.6
L. SNCOOKRIOLO	*	2	150	2	300	* AG	780	.8	.0	10.6
M. NSCOOKRIOLO	*	-2	300	-2	150	* AG	535	.8	.0	10.6
N. NSCOOKRIOLO	*	-2	150	-2	0	* AG	535	1.7	.0	10.6
O. NSCOOKRIOLO	*	-2	0	-2	-150	* AG	153	1.7	.0	10.6
P. NSCOOKRIOLO	*	-2	-150	-2	-300	* AG	153	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	264.	8.4	.0	.2	.0	.0	.0	.0	.0	.0
2. Recpt 2	355.	8.5	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	95.	8.5	.0	.0	.1	.0	.0	.1	.0	.0
4. Recpt 4	5.	8.5	.0	.1	.0	.0	.0	.0	.0	.0
5. Recpt 5	266.	8.4	.0	.0	.0	.0	.0	.2	.0	.0
6. Recpt 6	266.	8.3	.0	.0	.1	.0	.0	.0	.0	.0
7. Recpt 7	274.	8.5	.0	.0	.3	.0	.0	.0	.0	.0
8. Recpt 8	273.	8.4	.0	.0	.1	.1	.0	.0	.0	.0
9. Recpt 9	94.	8.3	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	93.	8.3	.0	.1	.0	.0	.0	.0	.0	.0
11. Recpt 11	86.	8.5	.0	.3	.0	.0	.0	.0	.0	.0
12. Recpt 12	87.	8.4	.1	.2	.0	.0	.0	.0	.0	.0
13. Recpt 13	187.	8.4	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	8.3	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	173.	8.4	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	176.	8.3	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	357. *	8.2 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	358. *	8.1 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	3. *	8.3 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	2. *	8.2 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.3	.0	.0	.0	.0	.0
3. Recpt 3 *	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4 *	.0	.0	.1	.0	.0	.2	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.3	.0	.0	.0	.0	.0
14. Recpt 14 *	.0	.0	.1	.0	.0	.0	.0	.0
15. Recpt 15 *	.0	.0	.1	.0	.0	.2	.0	.0
16. Recpt 16 *	.0	.0	.1	.0	.0	.0	.0	.0
17. Recpt 17 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	.0	.0	.0	.0	.0	.0	.0	.0

♀◘

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. WEBASELINE	*	-300	-4	-150	-4	* AG	2486	.8	.0	10.6
B. WEBASELINE	*	-150	-4	0	-4	* AG	2273	1.7	.0	10.6
C. WEBASELINE	*	0	-4	150	-4	* AG	3401	1.7	.0	10.6
D. WEBASELINE	*	150	-4	300	-4	* AG	3401	.8	.0	10.6
E. EWBASELINE	*	300	4	150	4	* AG	1791	.8	.0	10.6
F. EWBASELINE	*	150	4	0	4	* AG	1582	1.7	.0	10.6
G. EWBASELINE	*	0	4	-150	4	* AG	2084	1.7	.0	10.6
H. EWBASELINE	*	-150	4	-300	4	* AG	2084	.8	.0	10.6
I. LEFTEWBASELI	*	150	4	0	0	* AG	209	1.7	.0	10.6
J. LEFTWEBASELI	*	-150	-4	0	0	* AG	213	1.7	.0	10.6
K. SNFIDDY	*	4	-300	4	-150	* AG	1906	.8	.0	10.6
L. SNFIDDY	*	4	-150	4	0	* AG	1895	1.7	.0	10.6
M. SNFIDDY	*	4	0	4	150	* AG	1761	1.7	.0	10.6
N. SNFIDDY	*	4	150	4	300	* AG	1761	.8	.0	10.6
O. NSFIDDY	*	-4	300	-4	150	* AG	2499	.8	.0	10.6
P. NSFIDDY	*	-4	150	-4	0	* AG	2479	1.7	.0	10.6
Q. NSFIDDY	*	-4	0	-4	-150	* AG	1436	1.7	.0	10.6
R. NSFIDDY	*	-4	-150	-4	-300	* AG	1436	.8	.0	10.6
S. LEFTSNFIDDY	*	4	-150	0	0	* AG	11	1.7	.0	10.6
T. LEFTNSFIDDY	*	-4	150	0	0	* AG	503	1.7	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
                            Page 1
```

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	9	9	1.8
2. Recpt 2	9	-9	1.8
3. Recpt 3	-9	9	1.8
4. Recpt 4	-9	-9	1.8
5. Recpt 5	109	9	1.8
6. Recpt 6	209	9	1.8
7. Recpt 7	109	-9	1.8
8. Recpt 8	209	-9	1.8
9. Recpt 9	-109	9	1.8
10. Recpt 10	-209	9	1.8
11. Recpt 11	-109	-9	1.8
12. Recpt 12	-209	-9	1.8
13. Recpt 13	9	109	1.8
14. Recpt 14	9	209	1.8
15. Recpt 15	-9	109	1.8
16. Recpt 16	-9	209	1.8
17. Recpt 17	9	-109	1.8
18. Recpt 18	9	-209	1.8
19. Recpt 19	-9	-109	1.8
20. Recpt 20	-9	-209	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	264.	9.4	.0	.2	.0	.0	.0	.1	.5	.0
2. Recpt 2	353.	9.5	.0	.0	.4	.0	.0	.1	.0	.0
3. Recpt 3	97.	9.5	.0	.0	.3	.0	.0	.4	.2	.0
4. Recpt 4	85.	9.6	.0	.2	.9	.0	.0	.1	.0	.0
5. Recpt 5	265.	9.1	.0	.2	.1	.0	.0	.5	.0	.0
6. Recpt 6	266.	8.9	.0	.0	.2	.0	.2	.2	.0	.0
7. Recpt 7	275.	9.6	.0	.0	1.1	.0	.0	.0	.2	.0
8. Recpt 8	274.	9.1	.0	.0	.4	.4	.0	.1	.0	.0
9. Recpt 9	95.	9.2	.0	.0	.2	.0	.0	.0	.7	.0
10. Recpt 10	94.	8.9	.0	.2	.1	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.3	.0	.7	.2	.0	.0	.1	.0	.0
12. Recpt 12	86.	9.0	.3	.3	.0	.0	.0	.0	.2	.0

13. Recpt 13 *	185. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14 *	184. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	175. *	9.3 *	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16 *	176. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	356. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1 *	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.0	.2	.5	.0	.0	.2	.0	.0	.0	.1
3. Recpt 3 *	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
4. Recpt 4 *	.0	.0	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.0	.0	.6	.0	.0	.0	.1	.0	.0	.0
14. Recpt 14 *	.0	.0	.0	.0	.2	.2	.0	.2	.0	.0	.0	.0
15. Recpt 15 *	.0	.0	.0	.1	.0	.0	.0	.8	.0	.0	.0	.1
16. Recpt 16 *	.0	.0	.0	.0	.1	.0	.3	.3	.0	.0	.0	.0
17. Recpt 17 *	.0	.0	.0	.6	.1	.0	.0	.2	.0	.0	.0	.0
18. Recpt 18 *	.0	.0	.2	.2	.0	.0	.0	.0	.1	.0	.0	.0
19. Recpt 19 *	.0	.0	.0	.0	.1	.0	.0	.1	.5	.0	.0	.0
20. Recpt 20 *	.0	.0	.0	.1	.0	.0	.0	.0	.2	.2	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. WEBASELINE	*	-300	-4	-150	-4	* AG	2500	.8	.0	10.6
B. WEBASELINE	*	-150	-4	0	-4	* AG	2271	1.7	.0	10.6
C. WEBASELINE	*	0	-4	150	-4	* AG	3430	1.7	.0	10.6
D. WEBASELINE	*	150	-4	300	-4	* AG	3430	.8	.0	10.6
E. EWBASELINE	*	300	4	150	4	* AG	1792	.8	.0	10.6
F. EWBASELINE	*	150	4	0	4	* AG	1588	1.7	.0	10.6
G. EWBASELINE	*	0	4	-150	4	* AG	2102	1.7	.0	10.6
H. EWBASELINE	*	-150	4	-300	4	* AG	2102	.8	.0	10.6
I. LEFTEWBASELI	*	150	4	0	0	* AG	204	1.7	.0	10.6
J. LEFTWEBASELI	*	-150	-4	0	0	* AG	229	1.7	.0	10.6
K. SNFIDDY	*	4	-300	4	-150	* AG	1909	.8	.0	10.6
L. SNFIDDY	*	4	-150	4	0	* AG	1898	1.7	.0	10.6
M. SNFIDDY	*	4	0	4	150	* AG	1793	1.7	.0	10.6
N. SNFIDDY	*	4	150	4	300	* AG	1793	.8	.0	10.6
O. NSFIDDY	*	-4	300	-4	150	* AG	2517	.8	.0	10.6
P. NSFIDDY	*	-4	150	-4	0	* AG	1966	1.7	.0	10.6
Q. NSFIDDY	*	-4	0	-4	-150	* AG	1393	1.7	.0	10.6
R. NSFIDDY	*	-4	-150	-4	-300	* AG	1393	.8	.0	10.6
S. LEFTSNFIDDY	*	4	-150	0	0	* AG	11	1.7	.0	10.6
T. LEFTNSFIDDY	*	-4	150	0	0	* AG	551	1.7	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
                            Page 1
```

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	9	9	1.8
2. Recpt 2	9	-9	1.8
3. Recpt 3	-9	9	1.8
4. Recpt 4	-9	-9	1.8
5. Recpt 5	109	9	1.8
6. Recpt 6	209	9	1.8
7. Recpt 7	109	-9	1.8
8. Recpt 8	209	-9	1.8
9. Recpt 9	-109	9	1.8
10. Recpt 10	-209	9	1.8
11. Recpt 11	-109	-9	1.8
12. Recpt 12	-209	-9	1.8
13. Recpt 13	9	109	1.8
14. Recpt 14	9	209	1.8
15. Recpt 15	-9	109	1.8
16. Recpt 16	-9	209	1.8
17. Recpt 17	9	-109	1.8
18. Recpt 18	9	-209	1.8
19. Recpt 19	-9	-109	1.8
20. Recpt 20	-9	-209	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	264.	9.4	.0	.2	.0	.0	.0	.1	.6	.0
2. Recpt 2	353.	9.5	.0	.0	.4	.0	.0	.1	.0	.0
3. Recpt 3	97.	9.4	.0	.0	.3	.0	.0	.4	.2	.0
4. Recpt 4	85.	9.6	.0	.2	.9	.0	.0	.1	.0	.0
5. Recpt 5	265.	9.1	.0	.2	.1	.0	.0	.5	.0	.0
6. Recpt 6	266.	8.9	.0	.0	.2	.0	.2	.2	.0	.0
7. Recpt 7	275.	9.6	.0	.0	1.1	.0	.0	.0	.2	.0
8. Recpt 8	274.	9.2	.0	.0	.4	.4	.0	.1	.0	.0
9. Recpt 9	95.	9.3	.0	.0	.2	.0	.0	.0	.7	.0
10. Recpt 10	94.	9.0	.0	.2	.1	.0	.0	.0	.2	.3
11. Recpt 11	86.	9.3	.0	.7	.2	.0	.0	.1	.0	.0
12. Recpt 12	86.	9.0	.3	.3	.0	.0	.0	.0	.2	.0

13. Recpt 13 *	185. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14 *	184. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	174. *	9.2 *	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16 *	176. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	356. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	4. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1 *	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.0	.2	.5	.0	.0	.2	.0	.0	.0	.1
3. Recpt 3 *	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
4. Recpt 4 *	.0	.0	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.0	.0	.6	.0	.0	.0	.1	.0	.0	.0
14. Recpt 14 *	.0	.0	.0	.0	.2	.2	.0	.2	.0	.0	.0	.0
15. Recpt 15 *	.0	.0	.0	.1	.1	.0	.0	.7	.0	.0	.0	.1
16. Recpt 16 *	.0	.0	.0	.0	.1	.0	.3	.2	.0	.0	.0	.0
17. Recpt 17 *	.0	.0	.0	.6	.1	.0	.0	.1	.0	.0	.0	.0
18. Recpt 18 *	.0	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	.0	.0	.0	.0	.1	.0	.0	.1	.5	.0	.0	.0
20. Recpt 20 *	.0	.0	.0	.2	.0	.0	.0	.0	.2	.2	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. WEBASELINE	-300	-4	-150	-4	AG	1389	.8	.0	10.6
B. WEBASELINE	-150	-4	0	-4	AG	1349	1.7	.0	10.6
C. WEBASELINE	0	-4	150	-4	AG	1692	1.7	.0	10.6
D. WEBASELINE	150	-4	300	-4	AG	1692	.8	.0	10.6
E. EWBASELINE	300	4	150	4	AG	1604	.8	.0	10.6
F. EWBASELINE	150	4	0	4	AG	1539	1.7	.0	10.6
G. EWBASELINE	0	4	-150	4	AG	1560	1.7	.0	10.6
H. EWBASELINE	-150	4	-300	4	AG	1560	.8	.0	10.6
I. LEFTEWBASELI	150	4	0	0	AG	65	1.7	.0	10.6
J. LEFTWEBASELI	-150	-4	0	0	AG	40	1.7	.0	10.6
K. SNFIDDY	4	-300	4	-150	AG	1013	.8	.0	10.6
L. SNFIDDY	4	-150	4	0	AG	821	1.7	.0	10.6
M. SNFIDDY	4	0	4	150	AG	1057	1.7	.0	10.6
N. SNFIDDY	4	150	4	300	AG	1057	.8	.0	10.6
O. NSFIDDY	-4	300	-4	150	AG	1743	.8	.0	10.6
P. NSFIDDY	-4	150	-4	0	AG	1501	1.7	.0	10.6
Q. NSFIDDY	-4	0	-4	-150	AG	1440	1.7	.0	10.6
R. NSFIDDY	-4	-150	-4	-300	AG	1440	.8	.0	10.6
S. LEFTSNFIDDY	4	-150	0	0	AG	192	1.7	.0	10.6
T. LEFTNSFIDDY	-4	150	0	0	AG	242	1.7	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
```

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	9	9	1.8
2. Recpt 2	9	-9	1.8
3. Recpt 3	-9	9	1.8
4. Recpt 4	-9	-9	1.8
5. Recpt 5	109	9	1.8
6. Recpt 6	209	9	1.8
7. Recpt 7	109	-9	1.8
8. Recpt 8	209	-9	1.8
9. Recpt 9	-109	9	1.8
10. Recpt 10	-209	9	1.8
11. Recpt 11	-109	-9	1.8
12. Recpt 12	-209	-9	1.8
13. Recpt 13	9	109	1.8
14. Recpt 14	9	209	1.8
15. Recpt 15	-9	109	1.8
16. Recpt 16	-9	209	1.8
17. Recpt 17	9	-109	1.8
18. Recpt 18	9	-209	1.8
19. Recpt 19	-9	-109	1.8
20. Recpt 20	-9	-209	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	265.	9.0	.0	.1	.0	.0	.0	.1	.4	.0
2. Recpt 2	354.	8.9	.0	.0	.2	.0	.0	.1	.0	.0
3. Recpt 3	96.	9.1	.0	.0	.2	.0	.0	.4	.1	.0
4. Recpt 4	85.	9.0	.0	.1	.5	.0	.0	.1	.0	.0
5. Recpt 5	265.	8.9	.0	.1	.0	.0	.0	.5	.0	.0
6. Recpt 6	266.	8.7	.0	.0	.1	.0	.2	.2	.0	.0
7. Recpt 7	275.	8.9	.0	.0	.6	.0	.0	.0	.1	.0
8. Recpt 8	274.	8.7	.0	.0	.2	.2	.0	.1	.0	.0
9. Recpt 9	94.	8.9	.0	.0	.1	.0	.0	.1	.5	.0
10. Recpt 10	94.	8.7	.0	.1	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	8.9	.0	.5	.1	.0	.0	.1	.0	.0
12. Recpt 12	86.	8.7	.2	.2	.0	.0	.0	.0	.1	.0

13. Recpt 13 *	185. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14 *	184. *	8.6 *	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	175. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16 *	177. *	8.7 *	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	355. *	8.7 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	8.6 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	8.7 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1 *	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
3. Recpt 3 *	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
4. Recpt 4 *	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.0	.0	.4	.0	.0	.0	.1	.0	.0	.0
14. Recpt 14 *	.0	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0
15. Recpt 15 *	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0
16. Recpt 16 *	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0
17. Recpt 17 *	.0	.0	.0	.3	.0	.0	.0	.1	.0	.0	.0	.0
18. Recpt 18 *	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0
19. Recpt 19 *	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
20. Recpt 20 *	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
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I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. WEBASELINE	-300	-4	-150	-4	AG	1391	.8	.0	10.6
B. WEBASELINE	-150	-4	0	-4	AG	1342	1.7	.0	10.6
C. WEBASELINE	0	-4	150	-4	AG	1699	1.7	.0	10.6
D. WEBASELINE	150	-4	300	-4	AG	1699	.8	.0	10.6
E. EWBASELINE	300	4	150	4	AG	1533	.8	.0	10.6
F. EWBASELINE	150	4	0	4	AG	1500	1.7	.0	10.6
G. EWBASELINE	0	4	-150	4	AG	1527	1.7	.0	10.6
H. EWBASELINE	-150	4	-300	4	AG	1527	.8	.0	10.6
I. LEFTEWBASELI	150	4	0	0	AG	33	1.7	.0	10.6
J. LEFTWEBASELI	-150	-4	0	0	AG	49	1.7	.0	10.6
K. SNFIDDY	4	-300	4	-150	AG	997	.8	.0	10.6
L. SNFIDDY	4	-150	4	0	AG	815	1.7	.0	10.6
M. SNFIDDY	4	0	4	150	AG	1074	1.7	.0	10.6
N. SNFIDDY	4	150	4	300	AG	1074	.8	.0	10.6
O. NSFIDDY	-4	300	-4	150	AG	1751	.8	.0	10.6
P. NSFIDDY	-4	150	-4	0	AG	1487	1.7	.0	10.6
Q. NSFIDDY	-4	0	-4	-150	AG	1372	1.7	.0	10.6
R. NSFIDDY	-4	-150	-4	-300	AG	1372	.8	.0	10.6
S. LEFTSNFIDDY	4	-150	0	0	AG	182	1.7	.0	10.6
T. LEFTNSFIDDY	-4	150	0	0	AG	264	1.7	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

    JOB: Riolo Vineyards
    RUN: Hour 1           (WORST CASE ANGLE)
                            Page 1
```

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	9	9	1.8
2. Recpt 2	9	-9	1.8
3. Recpt 3	-9	9	1.8
4. Recpt 4	-9	-9	1.8
5. Recpt 5	109	9	1.8
6. Recpt 6	209	9	1.8
7. Recpt 7	109	-9	1.8
8. Recpt 8	209	-9	1.8
9. Recpt 9	-109	9	1.8
10. Recpt 10	-209	9	1.8
11. Recpt 11	-109	-9	1.8
12. Recpt 12	-209	-9	1.8
13. Recpt 13	9	109	1.8
14. Recpt 14	9	209	1.8
15. Recpt 15	-9	109	1.8
16. Recpt 16	-9	209	1.8
17. Recpt 17	9	-109	1.8
18. Recpt 18	9	-209	1.8
19. Recpt 19	-9	-109	1.8
20. Recpt 20	-9	-209	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	265.	9.0	.0	.1	.0	.0	.0	.1	.4	.0
2. Recpt 2	354.	8.9	.0	.0	.2	.0	.0	.1	.0	.0
3. Recpt 3	96.	9.1	.0	.0	.2	.0	.0	.4	.1	.0
4. Recpt 4	85.	9.0	.0	.1	.5	.0	.0	.1	.0	.0
5. Recpt 5	265.	8.9	.0	.1	.0	.0	.0	.5	.0	.0
6. Recpt 6	266.	8.7	.0	.0	.1	.0	.2	.2	.0	.0
7. Recpt 7	275.	8.9	.0	.0	.6	.0	.0	.0	.1	.0
8. Recpt 8	274.	8.7	.0	.0	.2	.2	.0	.1	.0	.0
9. Recpt 9	94.	8.9	.0	.0	.1	.0	.0	.0	.5	.0
10. Recpt 10	94.	8.7	.0	.1	.0	.0	.0	.0	.2	.2
11. Recpt 11	85.	8.9	.0	.5	.0	.0	.0	.1	.0	.0
12. Recpt 12	86.	8.7	.2	.2	.0	.0	.0	.0	.1	.0

13. Recpt 13 *	185. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14 *	184. *	8.6 *	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15 *	175. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16 *	177. *	8.7 *	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17 *	355. *	8.7 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	8.6 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	8.6 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1 *	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
2. Recpt 2 *	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
3. Recpt 3 *	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
4. Recpt 4 *	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.0	.0	.4	.0	.0	.0	.1	.0	.0	.0
14. Recpt 14 *	.0	.0	.0	.0	.2	.1	.0	.1	.0	.0	.0	.0
15. Recpt 15 *	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0
16. Recpt 16 *	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0
17. Recpt 17 *	.0	.0	.0	.3	.0	.0	.0	.1	.0	.0	.0	.0
18. Recpt 18 *	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0
19. Recpt 19 *	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
20. Recpt 20 *	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWELVERTA	*	-300	-2	-150	-2	* AG	1928	.9	.0	10.6
B. EWELVERTA	*	-150	-2	0	-2	* AG	1928	1.7	.0	10.6
C. EWELVERTA	*	0	-2	150	-2	* AG	2065	1.7	.0	10.6
D. EWELVERTA	*	150	-2	300	-2	* AG	2065	.9	.0	10.6
E. WEELVERTA	*	300	2	150	2	* AG	2143	.9	.0	10.6
F. WEELVERTA	*	150	2	0	2	* AG	2143	1.7	.0	10.6
G. WEELVERTA	*	0	2	-150	2	* AG	1439	1.7	.0	10.6
H. WEELVERTA	*	-150	2	-300	2	* AG	1439	.9	.0	10.6
I. SNWALERGA	*	2	-300	2	-150	* AG	1738	.8	.0	10.6
J. SNWALERGA	*	2	-150	2	0	* AG	1738	1.7	.0	10.6
K. SNWALERGA	*	2	0	2	150	* AG	1619	1.7	.0	10.6
L. SNWALERGA	*	2	150	2	300	* AG	1619	.8	.0	10.6
M. NSWALERGA	*	-2	300	-2	150	* AG	2098	.8	.0	10.6
N. NSWALERGA	*	-2	150	-2	0	* AG	2098	1.7	.0	10.6
O. NSWALERGA	*	-2	0	-2	-150	* AG	2784	1.7	.0	10.6
P. NSWALERGA	*	-2	-150	-2	-300	* AG	2784	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	186.	9.4	.0	.0	.2	.0	.0	.3	.0	.0
2. Recpt 2	275.	9.4	.0	.6	.1	.0	.0	.0	.2	.0
3. Recpt 3	175.	9.5	.0	.2	.0	.0	.0	.0	.2	.0
4. Recpt 4	85.	9.5	.0	.1	.6	.0	.0	.3	.0	.0
5. Recpt 5	265.	9.2	.0	.1	.2	.0	.0	.7	.0	.0
6. Recpt 6	266.	9.0	.0	.0	.2	.0	.3	.3	.0	.0
7. Recpt 7	275.	9.2	.0	.0	.7	.0	.0	.2	.1	.0
8. Recpt 8	274.	9.0	.0	.0	.2	.3	.0	.2	.0	.0
9. Recpt 9	94.	9.0	.0	.1	.2	.0	.0	.1	.5	.0
10. Recpt 10	93.	8.8	.0	.2	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.1	.0	.6	.1	.0	.0	.2	.1	.0
12. Recpt 12	87.	8.9	.2	.2	.0	.0	.0	.0	.2	.0
13. Recpt 13	184.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	183.	8.9	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.9	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	355. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	5. *	9.4 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	4. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

♀◘

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.5	.1	.0	.0	.0	.4	.0
2. Recpt 2 *	.0	.2	.0	.0	.0	.0	.2	.0
3. Recpt 3 *	.0	.2	.0	.0	.0	.1	.7	.0
4. Recpt 4 *	.0	.2	.0	.0	.0	.0	.3	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.1	.5	.0	.0	.2	.2	.0
14. Recpt 14 *	.0	.0	.2	.2	.0	.2	.0	.0
15. Recpt 15 *	.0	.1	.1	.0	.0	.7	.1	.0
16. Recpt 16 *	.0	.0	.2	.0	.2	.3	.0	.0
17. Recpt 17 *	.0	.6	.0	.0	.0	.1	.2	.0
18. Recpt 18 *	.2	.2	.0	.0	.0	.0	.3	.0
19. Recpt 19 *	.0	.2	.1	.0	.0	.0	.9	.0
20. Recpt 20 *	.0	.2	.0	.0	.0	.0	.3	.3

♀◘

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWELVERTA	*	-300	-2	-150	-2	* AG	1927	.9	.0	10.6
B. EWELVERTA	*	-150	-2	0	-2	* AG	1927	1.7	.0	10.6
C. EWELVERTA	*	0	-2	150	-2	* AG	2071	1.7	.0	10.6
D. EWELVERTA	*	150	-2	300	-2	* AG	2071	.9	.0	10.6
E. WEELVERTA	*	300	2	150	2	* AG	2148	.9	.0	10.6
F. WEELVERTA	*	150	2	0	2	* AG	2148	1.7	.0	10.6
G. WEELVERTA	*	0	2	-150	2	* AG	1437	1.7	.0	10.6
H. WEELVERTA	*	-150	2	-300	2	* AG	1437	.9	.0	10.6
I. SNWALERGA	*	2	-300	2	-150	* AG	1738	.8	.0	10.6
J. SNWALERGA	*	2	-150	2	0	* AG	1738	1.7	.0	10.6
K. SNWALERGA	*	2	0	2	150	* AG	1630	1.7	.0	10.6
L. SNWALERGA	*	2	150	2	300	* AG	1630	.8	.0	10.6
M. NSWALERGA	*	-2	300	-2	150	* AG	2128	.8	.0	10.6
N. NSWALERGA	*	-2	150	-2	0	* AG	2128	1.7	.0	10.6
O. NSWALERGA	*	-2	0	-2	-150	* AG	2791	1.7	.0	10.6
P. NSWALERGA	*	-2	-150	-2	-300	* AG	2791	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	186.	9.4	.0	.0	.2	.0	.0	.3	.0	.0
2. Recpt 2	354.	9.4	.0	.0	.2	.0	.0	.2	.0	.0
3. Recpt 3	175.	9.5	.0	.2	.0	.0	.0	.0	.2	.0
4. Recpt 4	85.	9.5	.0	.1	.6	.0	.0	.3	.0	.0
5. Recpt 5	265.	9.2	.0	.1	.2	.0	.0	.7	.0	.0
6. Recpt 6	266.	9.0	.0	.0	.2	.0	.3	.3	.0	.0
7. Recpt 7	275.	9.2	.0	.0	.7	.0	.0	.2	.1	.0
8. Recpt 8	274.	9.0	.0	.0	.2	.3	.0	.2	.0	.0
9. Recpt 9	94.	9.0	.0	.1	.2	.0	.0	.1	.5	.0
10. Recpt 10	93.	8.8	.0	.2	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.1	.0	.6	.1	.0	.0	.2	.1	.0
12. Recpt 12	87.	8.9	.2	.2	.0	.0	.0	.0	.2	.0
13. Recpt 13	184.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	183.	8.9	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.9	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	355. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	5. *	9.4 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	4. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.5	.1	.0	.0	.0	.4	.0
2. Recpt 2 *	.0	.1	.5	.0	.0	.3	.0	.0
3. Recpt 3 *	.0	.2	.0	.0	.0	.1	.7	.0
4. Recpt 4 *	.0	.2	.0	.0	.0	.0	.3	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.1	.5	.0	.0	.2	.2	.0
14. Recpt 14 *	.0	.0	.2	.2	.0	.2	.0	.0
15. Recpt 15 *	.0	.1	.1	.0	.0	.7	.1	.0
16. Recpt 16 *	.0	.0	.2	.0	.2	.3	.0	.0
17. Recpt 17 *	.0	.6	.0	.0	.0	.1	.2	.0
18. Recpt 18 *	.2	.2	.0	.0	.0	.0	.3	.0
19. Recpt 19 *	.0	.2	.1	.0	.0	.0	.9	.0
20. Recpt 20 *	.0	.2	.0	.0	.0	.0	.3	.3

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	*	-300	-2	-150	-2	* AG	729	.9	.0	10.6
B. EWPFE	*	-150	-2	0	-2	* AG	729	1.7	.0	10.6
C. EWPFE	*	0	-2	150	-2	* AG	797	1.7	.0	10.6
D. EWPFE	*	150	-2	300	-2	* AG	797	.9	.0	10.6
E. WEPFE	*	300	2	150	2	* AG	367	.9	.0	10.6
F. WEPFE	*	150	2	0	2	* AG	367	1.7	.0	10.6
G. WEPFE	*	0	2	-150	2	* AG	370	1.7	.0	10.6
H. WEPFE	*	-150	2	-300	2	* AG	370	.9	.0	10.6
I. SNWALERGA	*	2	-300	2	-150	* AG	2511	.8	.0	10.6
J. SNWALERGA	*	2	-150	2	0	* AG	2511	1.7	.0	10.6
K. SNWALERGA	*	2	0	2	150	* AG	2045	1.7	.0	10.6
L. SNWALERGA	*	2	150	2	300	* AG	2045	.8	.0	10.6
M. NSWALERGA	*	-2	300	-2	150	* AG	1809	.8	.0	10.6
N. NSWALERGA	*	-2	150	-2	0	* AG	1809	1.7	.0	10.6
O. NSWALERGA	*	-2	0	-2	-150	* AG	2204	1.7	.0	10.6
P. NSWALERGA	*	-2	-150	-2	-300	* AG	2204	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	185.	9.3	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	355.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	174.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	174.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	265.	8.4	.0	.0	.0	.0	.0	.1	.0	.0
6. Recpt 6	266.	8.4	.0	.0	.1	.0	.0	.0	.0	.0
7. Recpt 7	274.	8.5	.0	.0	.3	.0	.0	.0	.0	.0
8. Recpt 8	273.	8.4	.0	.0	.1	.1	.0	.0	.0	.0
9. Recpt 9	94.	8.4	.0	.0	.0	.0	.0	.0	.1	.0
10. Recpt 10	94.	8.4	.0	.1	.0	.0	.0	.0	.0	.0
11. Recpt 11	86.	8.5	.0	.3	.0	.0	.0	.0	.0	.0
12. Recpt 12	87.	8.4	.0	.1	.0	.0	.0	.0	.0	.0
13. Recpt 13	184.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	183.	8.9	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.9	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	355. *	9.3 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	5. *	9.2 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	4. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.7	.1	.0	.0	.0	.3	.0
2. Recpt 2 *	.0	.2	.6	.0	.0	.2	.0	.0
3. Recpt 3 *	.0	.3	.0	.0	.0	.1	.6	.0
4. Recpt 4 *	.0	.3	.0	.0	.0	.0	.7	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.1	.6	.0	.0	.1	.2	.0
14. Recpt 14 *	.0	.0	.3	.2	.0	.2	.0	.0
15. Recpt 15 *	.0	.2	.2	.0	.0	.6	.1	.0
16. Recpt 16 *	.0	.0	.2	.0	.2	.2	.0	.0
17. Recpt 17 *	.0	.8	.0	.0	.0	.1	.2	.0
18. Recpt 18 *	.3	.3	.0	.0	.0	.0	.2	.0
19. Recpt 19 *	.0	.2	.1	.0	.0	.0	.7	.0
20. Recpt 20 *	.0	.3	.0	.0	.0	.0	.3	.3

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWPFE	*	-300	-2	-150	-2	*	AG	902	.9	.0	10.6
B. EWPFE	*	-150	-2	0	-2	*	AG	902	1.7	.0	10.6
C. EWPFE	*	0	-2	150	-2	*	AG	828	1.7	.0	10.6
D. EWPFE	*	150	-2	300	-2	*	AG	828	.9	.0	10.6
E. WEPFE	*	300	2	150	2	*	AG	361	.9	.0	10.6
F. WEPFE	*	150	2	0	2	*	AG	361	1.7	.0	10.6
G. WEPFE	*	0	2	-150	2	*	AG	468	1.7	.0	10.6
H. WEPFE	*	-150	2	-300	2	*	AG	468	.9	.0	10.6
I. SNWALERGA	*	2	-300	2	-150	*	AG	2521	.8	.0	10.6
J. SNWALERGA	*	2	-150	2	0	*	AG	2521	1.7	.0	10.6
K. SNWALERGA	*	2	0	2	150	*	AG	2030	1.7	.0	10.6
L. SNWALERGA	*	2	150	2	300	*	AG	2030	.8	.0	10.6
M. NSWALERGA	*	-2	300	-2	150	*	AG	1830	.8	.0	10.6
N. NSWALERGA	*	-2	150	-2	0	*	AG	1830	1.7	.0	10.6
O. NSWALERGA	*	-2	0	-2	-150	*	AG	2288	1.7	.0	10.6
P. NSWALERGA	*	-2	-150	-2	-300	*	AG	2288	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	185.	9.3	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	186.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	174.	9.3	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	6.	9.1	.0	.1	.0	.0	.0	.0	.0	.0
5. Recpt 5	266.	8.5	.0	.0	.0	.0	.0	.1	.0	.0
6. Recpt 6	266.	8.4	.0	.0	.1	.0	.0	.0	.0	.0
7. Recpt 7	274.	8.6	.0	.0	.3	.0	.0	.0	.0	.0
8. Recpt 8	273.	8.4	.0	.0	.1	.1	.0	.0	.0	.0
9. Recpt 9	95.	8.5	.0	.1	.0	.0	.0	.0	.2	.0
10. Recpt 10	94.	8.4	.0	.1	.0	.0	.0	.0	.0	.0
11. Recpt 11	86.	8.6	.0	.3	.0	.0	.0	.0	.0	.0
12. Recpt 12	87.	8.5	.1	.1	.0	.0	.0	.0	.0	.0
13. Recpt 13	184.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	183.	8.9	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.9	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	355. *	9.3 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	5. *	9.2 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	4. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.7	.1	.0	.0	.0	.3	.0
2. Recpt 2 *	.0	.8	.0	.0	.0	.0	.3	.0
3. Recpt 3 *	.0	.3	.0	.0	.0	.1	.6	.0
4. Recpt 4 *	.0	.0	.3	.0	.0	.5	.1	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.1	.6	.0	.0	.1	.2	.0
14. Recpt 14 *	.0	.0	.3	.2	.0	.2	.0	.0
15. Recpt 15 *	.0	.2	.2	.0	.0	.6	.1	.0
16. Recpt 16 *	.0	.0	.2	.0	.2	.2	.0	.0
17. Recpt 17 *	.0	.8	.0	.0	.0	.1	.2	.0
18. Recpt 18 *	.3	.3	.0	.0	.0	.0	.2	.0
19. Recpt 19 *	.0	.2	.1	.0	.0	.0	.7	.0
20. Recpt 20 *	.0	.3	.0	.0	.0	.0	.3	.3

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
     U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
   BRG= WORST CASE           VD=   .0 CM/S
  CLAS=     7 (G)            VS=   .0 CM/S
  MIXH= 1000. M             AMB=  8.0 PPM
 SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWBASELINE	*	-300	-2	-150	-2	* AG	2088	.9	.0	10.6
B. EWBASELINE	*	-150	-2	0	-2	* AG	2088	1.7	.0	10.6
C. EWBASELINE	*	0	-2	150	-2	* AG	1998	1.7	.0	10.6
D. EWBASELINE	*	150	-2	300	-2	* AG	1998	.9	.0	10.6
E. WEBASELINE	*	300	2	150	2	* AG	2337	.9	.0	10.6
F. WEBASELINE	*	150	2	0	2	* AG	2337	1.7	.0	10.6
G. WEBASELINE	*	0	2	-150	2	* AG	2716	1.7	.0	10.6
H. WEBASELINE	*	-150	2	-300	2	* AG	2716	.9	.0	10.6
I. SNWATT	*	2	-300	2	-150	* AG	1295	.8	.0	10.6
J. SNWATT	*	2	-150	2	0	* AG	1295	1.7	.0	10.6
K. SNWATT	*	2	0	2	150	* AG	1377	1.7	.0	10.6
L. SNWATT	*	2	150	2	300	* AG	1377	.8	.0	10.6
M. NSWATT	*	-2	300	-2	150	* AG	2142	.8	.0	10.6
N. NSWATT	*	-2	150	-2	0	* AG	2142	1.7	.0	10.6
O. NSWATT	*	-2	0	-2	-150	* AG	1771	1.7	.0	10.6
P. NSWATT	*	-2	-150	-2	-300	* AG	1771	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	265.	9.6	.0	.3	.0	.0	.0	.1	.7	.0
2. Recpt 2	276.	9.4	.0	.6	.1	.0	.0	.0	.4	.0
3. Recpt 3	95.	9.5	.0	.0	.3	.0	.0	.6	.2	.0
4. Recpt 4	5.	9.4	.0	.2	.0	.0	.0	.0	.2	.0
5. Recpt 5	266.	9.3	.0	.2	.2	.0	.0	.7	.1	.0
6. Recpt 6	267.	9.0	.0	.0	.2	.0	.3	.3	.0	.0
7. Recpt 7	274.	9.2	.0	.1	.6	.0	.0	.2	.2	.0
8. Recpt 8	274.	9.0	.0	.0	.2	.3	.0	.2	.0	.0
9. Recpt 9	94.	9.4	.0	.2	.2	.0	.0	.1	.8	.0
10. Recpt 10	94.	9.1	.0	.2	.0	.0	.0	.0	.3	.3
11. Recpt 11	85.	9.3	.0	.7	.0	.0	.0	.2	.2	.0
12. Recpt 12	86.	9.0	.3	.2	.0	.0	.0	.0	.3	.0
13. Recpt 13	185.	9.0	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	8.8	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.9	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	356. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.0	.2	.0	.0	.2	.0	.0
2. Recpt 2 *	.0	.2	.0	.0	.0	.0	.2	.0
3. Recpt 3 *	.0	.0	.1	.0	.0	.3	.0	.0
4. Recpt 4 *	.0	.0	.2	.0	.0	.6	.1	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.5	.0	.0	.2	.1	.0
14. Recpt 14 *	.0	.0	.2	.2	.0	.2	.0	.0
15. Recpt 15 *	.0	.1	.1	.0	.0	.7	.1	.0
16. Recpt 16 *	.0	.0	.2	.0	.2	.3	.0	.0
17. Recpt 17 *	.0	.4	.0	.0	.0	.2	.1	.0
18. Recpt 18 *	.1	.2	.0	.0	.0	.0	.2	.0
19. Recpt 19 *	.0	.1	.1	.0	.0	.1	.6	.0
20. Recpt 20 *	.0	.1	.0	.0	.0	.0	.2	.2

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWBASELINE	*	-300	-2	-150	-2	* AG	2091	.9	.0	10.6
B. EWBASELINE	*	-150	-2	0	-2	* AG	2091	1.7	.0	10.6
C. EWBASELINE	*	0	-2	150	-2	* AG	2022	1.7	.0	10.6
D. EWBASELINE	*	150	-2	300	-2	* AG	2022	.9	.0	10.6
E. WEBASELINE	*	300	2	150	2	* AG	2349	.9	.0	10.6
F. WEBASELINE	*	150	2	0	2	* AG	2349	1.7	.0	10.6
G. WEBASELINE	*	0	2	-150	2	* AG	2738	1.7	.0	10.6
H. WEBASELINE	*	-150	2	-300	2	* AG	2738	.9	.0	10.6
I. SNWATT	*	2	-300	2	-150	* AG	1346	.8	.0	10.6
J. SNWATT	*	2	-150	2	0	* AG	1346	1.7	.0	10.6
K. SNWATT	*	2	0	2	150	* AG	1403	1.7	.0	10.6
L. SNWATT	*	2	150	2	300	* AG	1403	.8	.0	10.6
M. NSWATT	*	-2	300	-2	150	* AG	2176	.8	.0	10.6
N. NSWATT	*	-2	150	-2	0	* AG	2176	1.7	.0	10.6
O. NSWATT	*	-2	0	-2	-150	* AG	1799	1.7	.0	10.6
P. NSWATT	*	-2	-150	-2	-300	* AG	1799	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	265.	9.6	.0	.3	.0	.0	.0	.1	.7	.0
2. Recpt 2	276.	9.4	.0	.6	.1	.0	.0	.0	.4	.0
3. Recpt 3	95.	9.5	.0	.0	.3	.0	.0	.6	.2	.0
4. Recpt 4	5.	9.5	.0	.2	.0	.0	.0	.0	.2	.0
5. Recpt 5	266.	9.3	.0	.2	.2	.0	.0	.7	.1	.0
6. Recpt 6	267.	9.0	.0	.0	.2	.0	.3	.3	.0	.0
7. Recpt 7	274.	9.2	.0	.1	.6	.0	.0	.2	.2	.0
8. Recpt 8	274.	9.0	.0	.0	.2	.3	.0	.2	.0	.0
9. Recpt 9	94.	9.4	.0	.2	.2	.0	.0	.1	.8	.0
10. Recpt 10	94.	9.1	.0	.2	.0	.0	.0	.0	.3	.3
11. Recpt 11	85.	9.3	.0	.7	.0	.0	.0	.2	.2	.0
12. Recpt 12	86.	9.0	.3	.2	.0	.0	.0	.0	.3	.0
13. Recpt 13	185.	9.0	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	8.8	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.2	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	8.9	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	356. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.1 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.0	.2	.0	.0	.2	.0	.0
2. Recpt 2 *	.0	.2	.0	.0	.0	.0	.2	.0
3. Recpt 3 *	.0	.0	.1	.0	.0	.3	.0	.0
4. Recpt 4 *	.0	.0	.2	.0	.0	.6	.1	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.5	.0	.0	.2	.1	.0
14. Recpt 14 *	.0	.0	.2	.2	.0	.2	.0	.0
15. Recpt 15 *	.0	.1	.1	.0	.0	.7	.1	.0
16. Recpt 16 *	.0	.0	.2	.0	.2	.3	.0	.0
17. Recpt 17 *	.0	.4	.0	.0	.0	.2	.1	.0
18. Recpt 18 *	.1	.2	.0	.0	.0	.0	.2	.0
19. Recpt 19 *	.0	.1	.1	.0	.0	.1	.6	.0
20. Recpt 20 *	.0	.2	.0	.0	.0	.0	.2	.2

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWELKHORN	*	-300	-2	-150	-2	* AG	1438	.9	.0	10.6
B. EWELKHORN	*	-150	-2	0	-2	* AG	1438	1.7	.0	10.6
C. EWELKHORN	*	0	-2	150	-2	* AG	1258	1.7	.0	10.6
D. EWELKHORN	*	150	-2	300	-2	* AG	1258	.9	.0	10.6
E. WEELKHORN	*	300	2	150	2	* AG	1659	.9	.0	10.6
F. WEELKHORN	*	150	2	0	2	* AG	1659	1.7	.0	10.6
G. WEELKHORN	*	0	2	-150	2	* AG	1629	1.7	.0	10.6
H. WEELKHORN	*	-150	2	-300	2	* AG	1629	.9	.0	10.6
I. SNWATT	*	2	-300	2	-150	* AG	1310	.8	.0	10.6
J. SNWATT	*	2	-150	2	0	* AG	1310	1.7	.0	10.6
K. SNWATT	*	2	0	2	150	* AG	1560	1.7	.0	10.6
L. SNWATT	*	2	150	2	300	* AG	1560	.8	.0	10.6
M. NSWATT	*	-2	300	-2	150	* AG	2883	.8	.0	10.6
N. NSWATT	*	-2	150	-2	0	* AG	2883	1.7	.0	10.6
O. NSWATT	*	-2	0	-2	-150	* AG	2843	1.7	.0	10.6
P. NSWATT	*	-2	-150	-2	-300	* AG	2843	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	265.	9.3	.0	.2	.0	.0	.0	.1	.5	.0
2. Recpt 2	354.	9.3	.0	.0	.1	.0	.0	.1	.0	.0
3. Recpt 3	175.	9.5	.0	.1	.0	.0	.0	.0	.2	.0
4. Recpt 4	5.	9.5	.0	.2	.0	.0	.0	.0	.1	.0
5. Recpt 5	266.	9.0	.0	.1	.1	.0	.0	.5	.1	.0
6. Recpt 6	267.	8.8	.0	.0	.1	.0	.2	.2	.0	.0
7. Recpt 7	274.	8.9	.0	.0	.4	.0	.0	.1	.1	.0
8. Recpt 8	273.	8.8	.0	.0	.2	.2	.0	.2	.0	.0
9. Recpt 9	94.	9.0	.0	.1	.1	.0	.0	.1	.5	.0
10. Recpt 10	93.	8.8	.0	.2	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.0	.0	.5	.0	.0	.0	.1	.1	.0
12. Recpt 12	86.	8.8	.2	.2	.0	.0	.0	.0	.2	.0
13. Recpt 13	185.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	8.9	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.4	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	9.0	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	355. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.4 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	.0	.0	.2	.0	.0	.2	.0	.0
2. Recpt 2	.0	.0	.5	.0	.0	.4	.0	.0
3. Recpt 3	.0	.2	.0	.0	.0	.2	.8	.0
4. Recpt 4	.0	.0	.2	.0	.0	.8	.2	.0
5. Recpt 5	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	.0	.0	.5	.0	.0	.2	.2	.0
14. Recpt 14	.0	.0	.2	.2	.0	.3	.0	.0
15. Recpt 15	.0	.1	.1	.0	.0	.9	.1	.0
16. Recpt 16	.0	.0	.2	.0	.3	.3	.0	.0
17. Recpt 17	.0	.4	.0	.0	.0	.2	.2	.0
18. Recpt 18	.2	.2	.0	.0	.0	.0	.3	.0
19. Recpt 19	.0	.1	.1	.0	.0	.2	.8	.0
20. Recpt 20	.0	.1	.0	.0	.0	.0	.3	.3

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  8.0 PPM
  SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)
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II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWELKHORN	*	-300	-2	-150	-2	* AG	1438	.9	.0	10.6
B. EWELKHORN	*	-150	-2	0	-2	* AG	1438	1.7	.0	10.6
C. EWELKHORN	*	0	-2	150	-2	* AG	1266	1.7	.0	10.6
D. EWELKHORN	*	150	-2	300	-2	* AG	1266	.9	.0	10.6
E. WEELKHORN	*	300	2	150	2	* AG	1623	.9	.0	10.6
F. WEELKHORN	*	150	2	0	2	* AG	1623	1.7	.0	10.6
G. WEELKHORN	*	0	2	-150	2	* AG	1634	1.7	.0	10.6
H. WEELKHORN	*	-150	2	-300	2	* AG	1634	.9	.0	10.6
I. SNWATT	*	2	-300	2	-150	* AG	1318	.8	.0	10.6
J. SNWATT	*	2	-150	2	0	* AG	1318	1.7	.0	10.6
K. SNWATT	*	2	0	2	150	* AG	1540	1.7	.0	10.6
L. SNWATT	*	2	150	2	300	* AG	1540	.8	.0	10.6
M. NSWATT	*	-2	300	-2	150	* AG	2918	.8	.0	10.6
N. NSWATT	*	-2	150	-2	0	* AG	2918	1.7	.0	10.6
O. NSWATT	*	-2	0	-2	-150	* AG	2857	1.7	.0	10.6
P. NSWATT	*	-2	-150	-2	-300	* AG	2857	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	265.	9.3	.0	.2	.0	.0	.0	.1	.5	.0
2. Recpt 2	354.	9.3	.0	.0	.2	.0	.0	.1	.0	.0
3. Recpt 3	175.	9.5	.0	.1	.0	.0	.0	.0	.2	.0
4. Recpt 4	5.	9.5	.0	.2	.0	.0	.0	.0	.1	.0
5. Recpt 5	266.	9.0	.0	.1	.1	.0	.0	.5	.1	.0
6. Recpt 6	267.	8.8	.0	.0	.1	.0	.2	.2	.0	.0
7. Recpt 7	274.	8.9	.0	.0	.4	.0	.0	.1	.1	.0
8. Recpt 8	273.	8.8	.0	.0	.2	.2	.0	.2	.0	.0
9. Recpt 9	94.	9.0	.0	.1	.1	.0	.0	.1	.5	.0
10. Recpt 10	93.	8.8	.0	.2	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.0	.0	.5	.0	.0	.0	.1	.1	.0
12. Recpt 12	86.	8.8	.2	.2	.0	.0	.0	.0	.2	.0
13. Recpt 13	185.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	8.9	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	176.	9.4	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	177.	9.0	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	355. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	356. *	8.8 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.4 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.0	.2	.0	.0	.2	.0	.0
2. Recpt 2 *	.0	.0	.5	.0	.0	.4	.0	.0
3. Recpt 3 *	.0	.2	.0	.0	.0	.2	.8	.0
4. Recpt 4 *	.0	.0	.2	.0	.0	.8	.2	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.5	.0	.0	.2	.2	.0
14. Recpt 14 *	.0	.0	.2	.2	.0	.3	.0	.0
15. Recpt 15 *	.0	.1	.1	.0	.0	.9	.2	.0
16. Recpt 16 *	.0	.0	.2	.0	.3	.3	.0	.0
17. Recpt 17 *	.0	.5	.0	.0	.0	.2	.2	.0
18. Recpt 18 *	.2	.2	.0	.0	.0	.0	.3	.0
19. Recpt 19 *	.0	.1	.1	.0	.0	.2	.9	.0
20. Recpt 20 *	.0	.2	.0	.0	.0	.0	.3	.3

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=    16. (M)
     BRG= WORST CASE            VD=   .0 CM/S
    CLAS=     7 (G)             VS=   .0 CM/S
    MIXH= 1000. M              AMB=  8.0 PPM
   SIGTH=    5. DEGREES       TEMP=  8.9 DEGREE (C)

 II.  LINK VARIABLES

     LINK      *  LINK COORDINATES (M)   *              EF     H     W
  DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. EWELVERTA    *  -300    -2  -150    -2 *  AG   1310    .9     .0  10.6
B. EWELVERTA    *  -150    -2     0    -2 *  AG   1310   1.7     .0  10.6
C. EWELVERTA    *     0    -2   150    -2 *  AG   1401   1.7     .0  10.6
D. EWELVERTA    *   150    -2   300    -2 *  AG   1401    .9     .0  10.6
E. WEELVERTA    *   300     2   150     2 *  AG   2164    .9     .0  10.6
F. WEELVERTA    *   150     2     0     2 *  AG   2164   1.7     .0  10.6
G. WEELVERTA    *     0     2  -150     2 *  AG   1517   1.7     .0  10.6
H. WEELVERTA    *  -150     2  -300     2 *  AG   1517    .9     .0  10.6
I. SNWATT       *     2  -300     2  -150 *  AG   1801    .8     .0  10.6
J. SNWATT       *     2  -150     2     0 *  AG   1801   1.7     .0  10.6
K. SNWATT       *     2     0     2   150 *  AG   2754   1.7     .0  10.6
L. SNWATT       *     2   150     2   300 *  AG   2754    .8     .0  10.6
M. NSWATT       *    -2   300    -2   150 *  AG   2951    .8     .0  10.6
N. NSWATT       *    -2   150    -2     0 *  AG   2951   1.7     .0  10.6
O. NSWATT       *    -2     0    -2  -150 *  AG   2554   1.7     .0  10.6
P. NSWATT       *    -2  -150    -2  -300 *  AG   2554    .8     .0  10.6
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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III.  RECEPTOR LOCATIONS
```

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	186.	9.5	.0	.0	.1	.0	.0	.3	.0	.0
2. Recpt 2	354.	9.6	.0	.0	.2	.0	.0	.2	.0	.0
3. Recpt 3	95.	9.5	.0	.0	.2	.0	.0	.6	.0	.0
4. Recpt 4	6.	9.6	.0	.2	.0	.0	.0	.0	.1	.0
5. Recpt 5	266.	9.1	.0	.1	.1	.0	.0	.7	.1	.0
6. Recpt 6	267.	8.9	.0	.0	.2	.0	.3	.3	.0	.0
7. Recpt 7	275.	9.0	.0	.0	.5	.0	.0	.2	.1	.0
8. Recpt 8	274.	8.8	.0	.0	.2	.2	.0	.2	.0	.0
9. Recpt 9	94.	9.0	.0	.1	.1	.0	.0	.1	.5	.0
10. Recpt 10	93.	8.8	.0	.1	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.0	.0	.4	.0	.0	.0	.2	.1	.0
12. Recpt 12	87.	8.8	.2	.2	.0	.0	.0	.0	.2	.0
13. Recpt 13	185.	9.4	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	175.	9.5	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	176.	9.1	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	356. *	9.2 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.4 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.5	.2	.0	.0	.0	.3	.0
2. Recpt 2 *	.0	.1	.7	.0	.0	.4	.0	.0
3. Recpt 3 *	.0	.0	.2	.0	.0	.3	.0	.0
4. Recpt 4 *	.0	.0	.4	.0	.0	.8	.2	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.8	.0	.0	.3	.2	.0
14. Recpt 14 *	.0	.0	.3	.3	.0	.3	.0	.0
15. Recpt 15 *	.0	.1	.2	.0	.0	.9	.1	.0
16. Recpt 16 *	.0	.0	.3	.0	.3	.3	.0	.0
17. Recpt 17 *	.0	.6	.1	.0	.0	.2	.2	.0
18. Recpt 18 *	.2	.2	.0	.0	.0	.0	.2	.0
19. Recpt 19 *	.0	.1	.2	.0	.0	.2	.8	.0
20. Recpt 20 *	.0	.2	.0	.0	.0	.0	.3	.3

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
   U=    .5 M/S            Z0= 100. CM           ALT=    16. (M)
 BRG= WORST CASE           VD=   .0 CM/S
CLAS=     7 (G)            VS=   .0 CM/S
MIXH= 1000. M             AMB=  8.0 PPM
SIGTH=    5. DEGREES      TEMP=  8.9 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EWELVERTA	*	-300	-2	-150	-2	*	AG	1308	.9	.0	10.6
B. EWELVERTA	*	-150	-2	0	-2	*	AG	1308	1.7	.0	10.6
C. EWELVERTA	*	0	-2	150	-2	*	AG	1379	1.7	.0	10.6
D. EWELVERTA	*	150	-2	300	-2	*	AG	1379	.9	.0	10.6
E. WEELVERTA	*	300	2	150	2	*	AG	2141	.9	.0	10.6
F. WEELVERTA	*	150	2	0	2	*	AG	2141	1.7	.0	10.6
G. WEELVERTA	*	0	2	-150	2	*	AG	1560	1.7	.0	10.6
H. WEELVERTA	*	-150	2	-300	2	*	AG	1560	.9	.0	10.6
I. SNWATT	*	2	-300	2	-150	*	AG	1797	.8	.0	10.6
J. SNWATT	*	2	-150	2	0	*	AG	1797	1.7	.0	10.6
K. SNWATT	*	2	0	2	150	*	AG	2753	1.7	.0	10.6
L. SNWATT	*	2	150	2	300	*	AG	2753	.8	.0	10.6
M. NSWATT	*	-2	300	-2	150	*	AG	3005	.8	.0	10.6
N. NSWATT	*	-2	150	-2	0	*	AG	3005	1.7	.0	10.6
O. NSWATT	*	-2	0	-2	-150	*	AG	2559	1.7	.0	10.6
P. NSWATT	*	-2	-150	-2	-300	*	AG	2559	.8	.0	10.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Riolo Vineyards
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
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III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	8	8	1.8
2. Recpt 2	8	-8	1.8
3. Recpt 3	-8	8	1.8
4. Recpt 4	-8	-8	1.8
5. Recpt 5	108	8	1.8
6. Recpt 6	208	8	1.8
7. Recpt 7	108	-8	1.8
8. Recpt 8	208	-8	1.8
9. Recpt 9	-108	8	1.8
10. Recpt 10	-208	8	1.8
11. Recpt 11	-108	-8	1.8
12. Recpt 12	-208	-8	1.8
13. Recpt 13	8	108	1.8
14. Recpt 14	8	208	1.8
15. Recpt 15	-8	108	1.8
16. Recpt 16	-8	208	1.8
17. Recpt 17	8	-108	1.8
18. Recpt 18	8	-208	1.8
19. Recpt 19	-8	-108	1.8
20. Recpt 20	-8	-208	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	186.	9.5	.0	.0	.1	.0	.0	.3	.0	.0
2. Recpt 2	354.	9.6	.0	.0	.2	.0	.0	.2	.0	.0
3. Recpt 3	95.	9.5	.0	.0	.2	.0	.0	.6	.0	.0
4. Recpt 4	6.	9.6	.0	.2	.0	.0	.0	.0	.1	.0
5. Recpt 5	266.	9.1	.0	.1	.1	.0	.0	.7	.1	.0
6. Recpt 6	267.	8.9	.0	.0	.2	.0	.3	.3	.0	.0
7. Recpt 7	275.	9.0	.0	.0	.5	.0	.0	.2	.1	.0
8. Recpt 8	274.	8.8	.0	.0	.2	.2	.0	.2	.0	.0
9. Recpt 9	94.	9.0	.0	.1	.1	.0	.0	.1	.5	.0
10. Recpt 10	93.	8.8	.0	.1	.0	.0	.0	.0	.2	.2
11. Recpt 11	86.	9.0	.0	.4	.0	.0	.0	.2	.1	.0
12. Recpt 12	87.	8.8	.2	.2	.0	.0	.0	.0	.2	.0
13. Recpt 13	185.	9.4	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	184.	9.1	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	175.	9.5	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	176.	9.1	.0	.0	.0	.0	.0	.0	.0	.0

17. Recpt 17 *	356. *	9.2 *	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18 *	357. *	8.9 *	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19 *	4. *	9.4 *	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20 *	3. *	9.0 *	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Riolo Vineyards
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1 *	.0	.5	.2	.0	.0	.0	.3	.0
2. Recpt 2 *	.0	.1	.7	.0	.0	.4	.0	.0
3. Recpt 3 *	.0	.0	.2	.0	.0	.4	.0	.0
4. Recpt 4 *	.0	.0	.4	.0	.0	.8	.2	.0
5. Recpt 5 *	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6 *	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7 *	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8 *	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9 *	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10 *	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11 *	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12 *	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13 *	.0	.0	.8	.0	.0	.3	.2	.0
14. Recpt 14 *	.0	.0	.3	.3	.0	.3	.0	.0
15. Recpt 15 *	.0	.1	.2	.0	.0	.9	.1	.0
16. Recpt 16 *	.0	.0	.3	.0	.3	.3	.0	.0
17. Recpt 17 *	.0	.6	.1	.0	.0	.2	.2	.0
18. Recpt 18 *	.2	.2	.0	.0	.0	.0	.2	.0
19. Recpt 19 *	.0	.1	.2	.0	.0	.2	.8	.0
20. Recpt 20 *	.0	.2	.0	.0	.0	.0	.3	.3

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EMISSION FACTORS FOR CALINE4

Title : Placer County Subarea 2006 Winter Default Title
Version : Emfac2002 V2.2 Apr 23 2003
Run Date : 06/29/06 15:04:33
Scen Year: 2006 -- Model Years: 1965 to 2006
Season : Winter
Area : Placer (SV)
****

Year:2006 -- Model Years 1965 to 2006 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Apr 23 2003

Placer (SV) Placer (SV) Placer (SV)

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Carbon Monoxide Temperature: 48F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
3	6.324	12.241	10.015	43.627	52.043	50.608	10.405
8	5.393	9.885	8.139	34.075	40.312	44.684	8.519
10	5.091	9.163	7.509	29.211	34.383	41.551	7.849
11	4.952	8.838	7.229	27.132	31.861	40.191	7.551
12	4.821	8.536	6.968	25.255	29.590	38.955	7.274
15	4.466	7.743	6.289	20.631	24.022	35.911	6.557
20	3.980	6.721	5.424	15.370	17.747	32.669	5.648
29	3.342	5.519	4.418	10.347	11.843	31.350	4.602
35	3.039	5.027	4.006	8.747	9.996	33.454	4.179
40	2.844	4.762	3.779	8.063	9.227	37.374	3.951

Title : Placer County Subarea 2006 Winter Default Title
Version : Emfac2002 V2.2 Apr 23 2003
Run Date : 07/05/06 10:55:23
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Winter
Area : Placer (SV)
****

Year:2020 -- Model Years 1975 to 2020 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Apr 23 2003

Placer (SV) Placer (SV) Placer (SV)

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Carbon Monoxide Temperature: 48F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
3	1.409	2.860	3.459	7.111	18.958	30.106	2.385
8	1.266	2.480	2.984	5.582	14.639	26.971	2.066
10	1.215	2.353	2.820	4.799	12.462	25.282	1.947
11	1.190	2.294	2.744	4.463	11.537	24.541	1.892
12	1.167	2.238	2.673	4.160	10.705	23.861	1.841
15	1.100	2.085	2.480	3.409	8.668	22.150	1.702
20	1.002	1.869	2.214	2.549	6.380	20.213	1.514
29	0.858	1.577	1.861	1.719	4.233	18.993	1.268
35	0.780	1.432	1.689	1.449	3.563	19.670	1.150
40	0.723	1.335	1.575	1.329	3.282	21.305	1.073