

JET FIRE REPORT

Study Folder: RDSPoggiofiorito

Unique Audit Number: 3.126

PHAST 6.5



RDSPoggiofiorito

Study

4" D10

Base Case

Data



Weather: Study\Category 2/F

Speed: 2,00 m/s

Stability: F

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Flame Data

User-Defined Quantities

Model Correlation Type	SHELL - Johnson	
Material	METHANE	
Ambient Temperature	25,00	degC
Ambient Relative Humidity	0,75	fraction
Ambient Pressure	1,01	bar
Ambient Wind Speed	2,00	m/s
Maximum Exposure Duration	20,00	s
Elevation	1,00	m
Expanded Temperature	-76,82	degC
Release Rate	1,17	kg/s
Liquid Fraction		fraction
Jet Angle from Horizontal	0,00	deg
Crosswind Angle	0,00	deg

	Input	Output
Flame Emissive Power		142,05 kW/m2
Expanded Radius		0,03 m
Jet Velocity	500,00	m/s
Flame Length		13,18 m
Frustrum Lift Off Distance		3,69 m
Frustrum Length		9,56 m
Frustrum Base Width		0,54 m
Frustrum Tip Width		1,88 m
Flame Length in Still Air		16,20 m
Hole to Flame Angle		12,57 deg
Plane Angular Rotation		0,00 deg

Flame Co-ordinates

X	Z	R	Phi
m	m	m	deg
3,69	1,00	0,00	77,43
3,69	1,00	0,27	77,43
13,02	3,08	0,94	77,43
13,02	3,08	0,00	77,43

Radiation Intensity Ellipse

User-Defined Quantities

Observer Inclination	Variable	deg
Observer Orientation	Variable	deg
Exposure Duration	20,00	s

Calculated Quantities

Incident Radiation Level:	3,00	kW/m2
Lethality Level	0,00	%
View Factor	0,02	
Dose Level	865.118,83	(W/m2)^Probit N.s

Downwind semi-axis (A)	8,89	m
Crosswind semi-axis (B)	11,32	m
Offset Ratio (D)	1,19	
Effect Distance	19,49	m
Area	316,18	m2

Incident Radiation Level:	5,00	kW/m2
Lethality Level	0,00	%
View Factor	0,04	
Dose Level	1.709.490,54	(W/m2)^Probit N.s

Downwind semi-axis (A)	7,70	m
Crosswind semi-axis (B)	8,61	m
Offset Ratio (D)	1,29	
Effect Distance	17,64	m
Area	208,49	m2

Incident Radiation Level:	12,50	kW/m2
Lethality Level	6,53	%
View Factor	0,09	
Dose Level	5.800.161,90	(W/m2)^Probit N.s

Downwind semi-axis (A)	5,86	m
Crosswind semi-axis (B)	4,66	m
Offset Ratio (D)	1,53	
Effect Distance	14,80	m
Area	85,80	m2

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Radiation Distance

User-Defined Quantities

Maximum Distance	26,03	m
Angle from Wind Direction	0,00	deg
Height above Origin	0,00	m
Observer Inclination	Variable	deg
Observer Orientation	Variable	deg

Calculated Quantities

X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level %	View Factor
0,00			0,80		
0,53			1,15		
1,06			1,73		
1,59			2,70		
2,13			4,47		
2,66			7,85		
3,19			14,02		
3,72			19,84		
4,25			29,72		
4,78			34,89		
5,31			36,57		
5,84			37,28		
6,38			37,66		
6,91			37,88		
7,44			38,01		
7,97			38,17		
8,50			38,05		
9,03			37,94		
9,56			37,72		
10,09			37,31		
10,63			36,61		
11,16			35,43		
11,69			33,47		
12,22			30,33		
12,75			25,81		
13,28			20,26		
13,81			16,10		
14,35			14,27		
14,88			12,24		
15,41			10,31		
15,94			8,64		
16,47			7,24		
17,00			6,10		
17,53			5,17		
18,06			4,42		
18,60			3,80		
19,13			3,30		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level %	View Factor
19,66			2,88		
20,19			2,53		
20,72			2,23		
21,25			1,99		
21,78			1,78		
22,32			1,60		
22,85			1,44		
23,38			1,30		
23,91			1,19		
24,44			1,08		
24,97			0,99		
25,50			0,91		
26,03			0,84		

 **Weather:** Study/Category 5/D
Speed: 5.00 **m/s** **Stability:** D

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Flame Data

User-Defined Quantities

Model Correlation Type	SHELL - Johnson	
Material	METHANE	
Ambient Temperature	25,00	degC
Ambient Relative Humidity	0,75	fraction
Ambient Pressure	1,01	bar
Ambient Wind Speed	5,00	m/s
Maximum Exposure Duration	20,00	s
Elevation	1,00	m
Expanded Temperature	-76,82	degC
Release Rate	1,17	kg/s
Liquid Fraction		fraction
Jet Angle from Horizontal	0,00	deg
Crosswind Angle	0,00	deg

	Input	Output
Flame Emissive Power		137,48 kW/m2
Expanded Radius		0,03 m
Jet Velocity	500,00	m/s
Flame Length		13,74 m
Frustrum Lift Off Distance		3,69 m
Frustrum Length		10,09 m
Frustrum Base Width		0,54 m
Frustrum Tip Width		1,68 m
Flame Length in Still Air		16,20 m
Hole to Flame Angle		9,80 deg
Plane Angular Rotation		0,00 deg

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Flame Co-ordinates

X	Z	R	Phi
m	m	m	deg
3,69	1,00	0,00	80,20
3,69	1,00	0,27	80,20
13,63	2,72	0,84	80,20
13,63	2,72	0,00	80,20

Radiation Intensity Ellipse

User-Defined Quantities

Observer Inclination	Variable	deg
Observer Orientation	Variable	deg
Exposure Duration	20,00	s

Calculated Quantities

Incident Radiation Level:	3,00	kW/m2
Lethality Level	0,00	%
View Factor	0,02	
Dose Level	865.118,83	(W/m2)^Probit N.s
Downwind semi-axis (A)	8,83	m
Crosswind semi-axis (B)	10,95	m
Offset Ratio (D)	1,19	
Effect Distance	19,36	m
Area	303,70	m2
Incident Radiation Level:	5,00	kW/m2
Lethality Level	0,00	%
View Factor	0,04	
Dose Level	1.709.490,54	(W/m2)^Probit N.s
Downwind semi-axis (A)	7,74	m
Crosswind semi-axis (B)	8,26	m
Offset Ratio (D)	1,29	
Effect Distance	17,73	m
Area	200,88	m2
Incident Radiation Level:	12,50	kW/m2
Lethality Level	6,53	%
View Factor	0,09	
Dose Level	5.800.161,90	(W/m2)^Probit N.s
Downwind semi-axis (A)	6,06	m
Crosswind semi-axis (B)	4,36	m
Offset Ratio (D)	1,51	
Effect Distance	15,23	m
Area	82,95	m2

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Radiation Distance

User-Defined Quantities

Maximum Distance	27,27	m
Angle from Wind Direction	0,00	deg
Height above Origin	0,00	m
Observer Inclination	Variable	deg
Observer Orientation	Variable	deg

Calculated Quantities

X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level %	View Factor
0,00			0,87		
0,56			1,24		
1,11			1,85		
1,67			2,91		
2,23			4,90		
2,78			8,82		
3,34			15,62		
3,90			21,62		
4,45			31,93		
5,01			35,09		
5,56			36,21		
6,12			36,77		
6,68			37,13		
7,23			37,36		
7,79			37,53		
8,35			37,63		
8,90			37,68		
9,46			37,66		
10,02			37,55		
10,57			38,34		
11,13			36,75		
11,69			35,74		
12,24			33,89		
12,80			30,59		
13,36			25,42		
13,91			18,74		
14,47			15,51		
15,02			13,40		
15,58			11,00		
16,14			8,92		
16,69			7,24		
17,25			5,91		
17,81			4,87		
18,36			4,06		
18,92			3,41		
19,48			2,90		
20,03			2,49		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level %	View Factor
20,59			2,15		
21,15			1,88		
21,70			1,65		
22,26			1,46		
22,82			1,30		
23,37			1,16		
23,93			1,04		
24,49			0,94		
25,04			0,86		
25,60			0,78		
26,15			0,71		
26,71			0,65		
27,27			0,60		