GE-H GLE

l Inputs for CADNA A

Sources

	ID	Result. PWL Day (dBA)	Result. PWL Evening (dBA)	Result. PWL Night (dBA)	Lw / Li Type	Lw / Li Value	Lw / Li norm. dB(A)	Correction Day dB(A)	Correction Evening dB(A)	Correction Night dB(A)	Sound Reduction R	Sound Reduction Area (m²)	Attenuation	Operating Time Day (min)	Operating Time Special (min)	Operating Time Night (min)	K0 (dB)	Freq. (Hz)	Direct.	Height (m)		Coordinates X (m)	Coordinates Y (m)	Coordinates Z (m)
	dAHU01	86.5	86.5	86.5	Lw	AHU		0	0	0							0		(none)	2	g	228996.44	3803483	24.62
	dAHU2	86.5	86.5	86.5	Lw	AHU		0	0	0							0		(none)	2	g	229015.13	3803470	24.62
	dAHU3	86.5	86.5	86.5	Lw	AHU		0	0	0							0		(none)	2	g	229034.25	3803457	24.62
	dAHU4	86.5	86.5	86.5	Lw	AHU		0	0	0							0		(none)	2	g	229052.32	3803444	24.62
) Tower	dCT1	93.3	93.3	93.3	Lw	CT		0	0	0							0		(none)	4	g	229063.8	3803322	26.62
) Tower	dCT2	93.3	93.3	93.3	Lw	CT		0	0	0							0		(none)	4	g	229070.67	3803333	26.62
er Stack	dstack01	110.2	110.2	110.2	Lw	Exstack		0	0	0							0		(none)	2	g	229074.17	3803351	24.62
umps	dhp1	91.7	91.7	91.7	Lw	HP		0	0	0							0		(none)	2	g	229197.92	3803266	16.55
umps	dhp2	91.7	91.7	91.7	Lw	HP		0	0	0							0		(none)	2	g	229099.43	3803276	14.55
umps	dhp3	91.7	91.7	91.7	Lw	HP		0	0	0							0		(none)	2	g	229100.47	3803146	16.7
ifts	dpls1	93.5	93.5	93.5	Lw	PLS		0	0	0							0		(none)	2	r	229275.47	3803133	9.92
ifts	dpls2	93.5	93.5	93.5	Lw	PLS		0	0	0							0		(none)	2	r	229257.36	3803109	9.92
tion	dess	104.4	104.4	104.4	Lw	SS		0	0	0							0		(none)	2	g	229296.73	3803172	9.78
r Trucks	dvctrucks	111.2	111.2	111.2	Lw	HTrucksfu		0	0	0							0		(none)	2	r	228783.53	3803191	9.54
r Trucks	dvctrucks	111.2	111.2	111.2	Lw	HTrucksfu		0	0	0							0		(none)	2	r	228872.73	3803150	9.69
r Trucks	dvctrucks	111.2	111.2	111.2	Lw	HTrucksfu		0	0	0							0		(none)	2	r	228946.31	3803050	9.91
r Trucks	dvctrucks	111.2	111.2	111.2	Lw	HTrucksfu		0	0	0							0		(none)	2	r	228975.92	3803028	9.95
Dozer	scdozer	112.5	0	0	Lw	dozer		0	-112.5	-112.5							0		(none)	3.66	r	229076.96	3803518	10.98
Dozer	scdozer	112.5	0	0	Lw	dozer		0	-112.5	-112.5							0		(none)	3.66	r	229348.73	3803368	11.58
Dozer	scdozer	112.5	0	0	Lw	dozer		0	-112.5	-112.5							0		(none)	3.66	r	229096.7	3803185	11.31
Dozer	scdozer	112.5	0	0	Lw	dozer		0	-112.5	-112.5							0		(none)	3.66	r	228844.66	3803355	11.11
Loader	scloader	113.8	0	0	Lw	loader		0	-113.8	-113.8							0		(none)	3.66	r	228975.23	3803571	10.98
Loader	scloader	113.8	0	0	Lw	loader		0	-113.8	-113.8							0		(none)	3.66	r	229233.34	3803431	11.58
Loader	scloader	113.8	0	0	Lw	loader		0	-113.8	-113.8							0		(none)	3.66	r	229163.5	3803103	11.34
Loader	scloader	113.8	0	0	Lw	loader		0	-113.8	-113.8							0		(none)	3.66	r	228905.39	3803310	11.19
Grader	scgrader	110.7	0	0	Lw	Grader		0	-110.7	-110.7							0		(none)	3.66	r	229004.08	3803510	10.98
Grader	scgrader	110.7	0	0	Lw	Grader		0	-110.7	-110.7							0		(none)	3.66	r	229275.85	3803328	11.58
Roller	scroller	110.7	0	0	Lw	Roller		0	-110.7	-110.7							0		(none)	3.66	r	229057.22	3803443	10.98
Roller	scroller	110.7	0	0	Lw	Roller		0	-110.7	-110.7							0		(none)	3.66	r	229166.54	3803361	11.04
Excavator	scexcavator	112.9	0	0	Lw	Excavator		0	-112.9	-112.9							0		(none)	3.66	r	229099.73	3803319	11.17

Moving Point Sources

	ID	Result. PWL Day (dBA)	Result. PWL Evening (dBA)	Result. PWL Night (dBA)	Result. PWL' Day (dBA)	Result. PWL' Evening (dBA)	Result. PWL' Night (dBA)	Lw / Li Type	Lw / Li Value	Lw / Li norm. dB(A)	Correction Day dB(A)	Correction Evening dB(A)	Correction Night dB(A)	Sound Reduction R	Sound Reduction Area (m²)	Attenuation	Operating Time Day (min)	Operating Time Special (min)	Operating Time Night (min)	K0 (dB)	Freq. (Hz)	Direct.	Moving Pt. Src Number Day	Moving Pt. Src Number Evening	Moving Pt. Src Number Night	Speed (km/h)
(const)	rcdozer	109.7	3.7	3.7	88.5	-17.5	-17.5	PWL-Pt	dozer		0	0	0							0		(none)	4	0	0	1
	rcgrader	104.9	1.9	1.9	83.7	-19.3	-19.3	PWL-Pt	grader		0	0	0							0		(none)	2	0	0	1
	rcloader	123.5	17.5	17.5	89.8	-16.2	-16.2	PWL-Pt	loader		0	0	0							0		(none)	4	0	0	1
	rcroller	117.4	14.4	14.4	83.7	-19.3	-19.3	PWL-Pt	roller		0	0	0							0		(none)	2	0	0	1
tor	rcexcavator	116.5	16.5	16.5	82.9	-17.1	-17.1	PWL-Pt	Excavator		0	0	0							0		(none)	1	0	0	1
Truck	rcwatertrucku	110.9	10.9	10.9	77.3	-22.7	-22.7	PWL-Pt	HTruckscu		0	0	0							0		(none)	1	0	0	1
Truck	rcwatertruckl	106.9	6.9	6.9	73.2	-26.8	-26.8	PWL-Pt	HTruckscl		0	0	0							0		(none)	1	0	0	1
(const full throttle upper)	scvhtrucksfu	92.9	-14.1	-14.1	71.7	-35.3	-35.3	PWL-Pt	HTrucksfu		0	0	0							0		(none)	5	0	0	45
(const full throttle lower)	scvhtrucksfl	89.1	-17.9	-17.9	67.9	-39.1	-39.1	PWL-Pt	HTrucksfl		0	0	0							0		(none)	5	0	0	45
(const cruise upper)	scvhtruckscu	101.4	-5.6	-5.6	67.7	-39.3	-39.3	PWL-Pt	HTruckscu		0	0	0							0		(none)	5	0	0	45
(const cruise lower)	scvhtruckscl	97.3	-9.7	-9.7	63.7	-43.3	-43.3	PWL-Pt	HTruckscl		0	0	0							0		(none)	5	0	0	45
onst full throttle upper)	scvcarsfu	100.6	-25.1	-25.1	79.4	-46.3	-46.3	PWL-Pt	Carsfu		0	0	0							0		(none)	375	0	0	25
onst full throttle lower)	scvcarsfl	95.4	-30.3	-30.3	74.2	-51.5	-51.5	PWL-Pt	Carsfl		0	0	0							0		(none)	375	0	0	25
onst cruise upper)	scvcarscu	105.2	-20.5	-20.5	71.6	-54.2	-54.2	PWL-Pt	Carscu		0	0	0							0		(none)	375	0	0	45
onst cruise lower)	scvcarscl	100.3	-25.5	-25.5	66.6	-59.1	-59.1	PWL-Pt	Carscl		0	0	0							0		(none)	375	0	0	45
Trucks (daily full throttle upper)	dvhtrucksfu	95.7	78.5	78.5	74.5	57.3	57.3	PWL-Pt	HTrucksfu		0	0	0							0		(none)	5.3	0.1	0.1	25
Trucks (daily full throttle lower)	dvhtrucksfl	91.9	74.7	74.7	70.7	53.5	53.5	PWL-Pt	HTrucksfl		0	0	0							0		(none)	5.3	0.1	0.1	25
Trucks (daily cruise upper)	dvhtruckscu	101.8	84.6	84.6	68	50.7	50.7	PWL-Pt	HTruckscu		0	0	0							0		(none)	5.3	0.1	0.1	45
Trucks (daily cruise lower)	dvhtruckscl	97.8	80.5	80.5	63.9	46.7	46.7	PWL-Pt	HTruckscl		0	0	0							0		(none)	5.3	0.1	0.1	45
laily full throttle upper)	dvcarsfu	95.7	95.7	95.7	74.5	74.5	74.5	PWL-Pt	Carsfu		0	0	0							0		(none)	120	120	120	25
laily full throttle lower)	dvcarsfl	90.5	90.5	90.5	69.3	69.3	69.3	PWL-Pt	Carsfl		0	0	0							0		(none)	120	120	120	25
aily cruise upper)	dvcarscu	100.8	100.8	100.8	66.6	66.6	66.6	PWL-Pt	Carscu		0	0	0							0		(none)	120	120	120	45
aily cruise lower)	dvcarscl	95.9	95.9	95.9	61.7	61.7	61.7	PWL-Pt	Carscl		0	0	0							0		(none)	120	120	120	45
Trucks (daily cruise upper western)	dvhtruckscuw	95.6	82.6	82.6	63.7	50.7	50.7	PWL-Pt	HTruckscu		0	0	0							0		(none)	2	0.1	0.1	45
Trucks (daily cruise lower western)	dvhtrucksclw	91.5	78.5	78.5	59.7	46.7	46.7	PWL-Pt	HTruckscl		0	0	0							0		(none)	2	0.1	0.1	45

Sound Levels

	ID	Type	Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	Source
				Oktave Spectrum (dB)											
ork AHU-2000	AHU	Lw (c)		92.5	92.3	90.6	84.5	82.9	82.3	78.4	70.8	64.8	86.5	97.3	Site 3 GNF sound survey
) (5dB added to account for whole face)	CT	Lw (c)		99.5	104.9	97.4	97.6	90.1	86.6	78.5	75.9	73.2	93.3	107.2	Site 11 GNF sound survey
urn0556	Exstack	Lw (c)		107	105	112	103	109	105	102	98	85	110.2	115.9	Site 4 GNF sound survey
mps, group of 5 (subtract 5dB for 1 unit)	HP	Lw (c)		85.7	93.5	90.2	90.7	88.7	86.9	84.3	77	70.1	91.7	98.1	Site 2, GNF sound survey
nd Lift Station	PLS	Lw (c)		83	84	85	87	87	90	87	83	77	93.5	95.4	GE descr and H&K table (1600-1800 RPM at 25HP)
ion	SS	Lw		104	107	109	104	104	98	93	88	81	104.4	113.3	NEMA estimates
Trucks full throttle upper	HTrucksfu	Lw (c)		34.5	108.5	112.5	115.5	105.5	105.5	101.5	97.5	91.5	111.2	118.4	FHWA data
Trucks full throttle lower	HTrucksfl	Lw (c)		34.5	107.5	108.5	105.5	105.5	103.5	97.5	90.5	85.5	107.4	113.6	FHWA data
	dozer	Lw		110	112	118	111	110	108	103	97	92	112.5	120.8	Benchmark Landfill Measurements
	Loader	Lw		110	113	121	113	109	109	106	99	92	113.8	122.9	Benchmark Landfill Measurements
13-16ft 176-350hp	Grader	Lw (c)		34.5	108.5	113.5	115.5	104.5	104.5	100.5	96.5	91.5	110.7	118.6	Hoover & Keith Guidebook
2-24 ton 90-110 hp	Roller	Lw (c)		34.5	108.5	113.5	115.5	104.5	104.5	100.5	96.5	91.5	110.7	118.6	Hoover & Keith Guidebook
or	Excavator	Lw		109	109	120	111	111	107	104	98	90	112.9	121.7	Benchmark Landfill Measurements
Trucks cruising upper	HTruckscu	Lw (c)		34.5	106.5	108.5	111.5	101.5	101.5	97.5	93.5	89.5	107.3	114.7	FHWA data
Trucks cruising lower	HTruckscl	Lw (c)		34.5	105.5	104.5	102.5	101.5	98.5	93.5	87.5	83.5	103.2	110.3	FHWA data
l throttle upper	Carsfu	Lw (c)		34.5	96.5	94.5	93.5	98.5	92.5	82.5	73.5	66.5	97.7	102.7	FHWA data
l throttle lower	Carsfl	Lw (c)		34.5	96.5	94.5	90.5	90.5	89.5	78.5	66.5	60.5	92.5	100.2	FHWA data
ising upper	Carscu	Lw (c)		34.5	90.5	89.5	88.5	93.5	86.5	77.5	67.5	61.5	92.4	97.4	FHWA data
ising lower	Carscl	Lw (c)		34.5	90.5	89.5	84.5	85.5	84.5	73.5	61.5	55.5	87.4	94.7	FHWA data

RTI - GE-H GLE

Model Output from CADNA A for Position A

Road Construction

		Daytime Octave Spectrum (dB)										Nighttime Octave Spectrum (dB)										LDN Octave Spectrum (dB)									
Name	**ID**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**
Dozer (const)	rcdozer	33.7	3.2	18.3	20	19	27.3	31.3	22.9	-3.5	-83	-72.4		-87.7	-86.1	-87	-78.8	-74.7	-83.2			31 1	0.6	15.7	17.4	16.4	24.7	28.7	20.3	-6.1	-86
Excavator	rcexcavator	22.9	-75.3	11.8	10.8	14.2	4.5	19.5	17	-7.4	-87	-80.1						-83.5	-86			20.3	-77.9	9.2	8.3	11.6	1.9	16.9	14.4	-10	
Grader	rcgrader	63.8	26.1	42.3	54.2	48.8	53.8	60.2	58.3	48.9	33.4	-42.2	-79.9	-63.8	-51.8	-57.3	-52.3	-45.8	-47.7	-57 1	-73	61.2	23.5	39.7	51.6	46.2	51.2	57.6	55.7	46.3	30.8
Loader	rcloader	54.1	-51.4	35.8	45.3	43.5	35.3	48.8	49.8	43.4	29.9	-48.9		-67.2	-57.7	-59.5	-67.7	-54.3	-53.3	-59.6	-73	51.5	-54	33.2	42.7	40.9	32.7	46.2	47.2	40.8	27.3
Roller	rcroller	54.4	20.1	33.3	48.8	36	38.7	48.2	50.2	41.9	25.4	-45.6	-79.9	-66.7	-51.2	-64	-61.3	-51.8	-49.8	-58.1	-75	51.8	17.5	30.7	46.2	33.4	36.1	45.6	47.6	39.3	22.8
Water Truck	rcwatertruckl	47 7	-54.5	30.7	37.3	36.4	29.2	42.7	43.7	37.4	24.9	-52.3		-69.3	-62.7	-63.6	-70.8	-57.3	-56.3	-62.6	-75	45.1	-57 1	28.1	34.7	33.8	26.6	40.1	41 1	34.8	22.3
Water Truck	rcwatertrucku	43.8	-54.8	29.4	33.2	27.3	29.1	39.5	39.6	31.3	18.9	-56.2		-70.6	-66.8	-72.7	-70.9	-60.5	-60.4	-68.7	-81	41.2	-57.4	26.8	30.6	24.7	26.5	36.9	37	28.7	16.3

Site Construction

		Daytime Octave Spectrum (dB)										Nighttime Octave Spectrum (dB)										LDN Octave Spectrum (dB)									
Name	**ID**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**
Const. Dozer	scdozer	29.4	1.3	16.4	16.8	16.2	23.8	26.6	14	-28.5		-83.1						-85.9				26.8	-1.3	13.8	14.2	13.6	21.2	24	11.4	-31 1	
Const. Dozer	scdozer	32.1	3.1	18.2	18.9	18.4	26.3	29.6	18.9	-16.6		-80.4					-86.2	-82.9				29.6	0.5	15.6	16.3	15.8	23.7	27	16.3	-19.2	
Const. Dozer	scdozer	29	-8	7 1	18.1	17.5	25.3	25	13.6	-22.7		-83.5					-87.2	-87.5				26.4	-10.6	4.5	15.5	14.9	22.7	22.4	11	-25.3	
Const. Dozer	scdozer	26.6	-9.7	5.3	16.2	15.5	23	22.2	9	-34.2		-85.9										24	-12.3	2.7	13.6	12.9	20.4	19.6	6.4	-36.8	
Const. Excavator	scexcavator	29.2	0.7	16.8	19.2	17.5	22	26.6	15.3	-30.9		-84.6						-87.2				26.6	-1.9	14.2	16.6	14.9	19.4	24	12.7	-33.5	
Const. Grader	scgrader	31.7	2.3	18.4	21	19.4	24.2	29.3	19.8	-19.7		-82.1						-84.5				29.2	-0.3	15.8	18.4	16.8	21.6	26.7	17.2	-22.3	
Const. Grader	scgrader	30.5	-7.4	8.7	21.8	20.3	25.1	26.8	17.9	-17.5		-83.3						-87				27.9	-10	6.1	19.2	17.7	22.5	24.3	15.3	-20.1	
Const. Loader	scloader	27.8	-9.3	6.7	19.6	18	22.6	23.8	13.1	-29.4		-86										25.2	-11.9	4.1	17	15.4	20	21.2	10.5	-32	
Const. Loader	scloader	26	-74.5	12.6	12	20.4	17.9	22.7	10.7	-31 1		-84.7										23.4	-77 1	10	9.4	17.8	15.3	20.1	8.1	-33.7	
Const. Loader	scloader	28.9	-72.6	14.5	14.2	22.7	20.5	25.8	15.8	-18.5		-81.8						-84.9				26.3	-75.2	11.9	11.6	20.1	17.9	23.2	13.2	-21	
Const. Loader	scloader	26.7	-74	13	12.5	20.9	18.5	23.4	12	-28		-84						-87.3				24.1	-76.6	10.4	9.9	18.3	15.9	20.8	9.4	-30.6	
Const. Roller	scroller	27.9	-73.3	13.8	13.4	21.9	19.6	24.7	14.1	-22.7		-82.8						-86				25.3	-75.8	11.2	10.8	19.3	17	22.1	11.5	-25.3	
Const. Roller	scroller	30.4	1	14.1	19.7	17 1	25.8	26.9	17	-22.5		-82.5					-87 1	-86				27.8	-1.6	11.5	17 1	14.5	23.2	24.3	14.4	-25.1	
Cars (const cruise lower)	scvcarscl	15.8	-87.8	-0.7	-1 1	8	7.2	13.2	5.8	-18.6												13.2		-3.3	-3.7	5.4	4.6	10.6	3.2	-21.2	
Cars (const cruise upper)	scvcarscu	8.4	-87.6	-1.5	-6.5	-8.1	-6.8	6.2	1.7	-25.7												5.8		-4.1	-9.1	-10.7	-9.4	3.6	-0.9	-28.3	
Cars (const full throttle lower)	scvcarsfl	40.7	-65	20.2	26.2	31.7	30.7	37.2	34.2	27.9	15.4	-66.3		-86.8	-80.8	-75.3	-76.3	-69.8	-72.7	-79.1		38.1	-67.6	17.6	23.6	29.1	28.1	34.6	31.7	25.3	
Cars (const full throttle upper)	scvcarsfu	34.4	-64	20.2	23.8	17.9	19.7	30.2	30.2	21.8	9.4	-72.6		-86.8	-83.2		-87.3	-76.8	-76.8	-85.1		31.8	-66.6	17.6	21.2	15.3	17 1	27.6	27.6	19.3	
Trucks (const cruise lower)	scvhtrucksc1	21	-76.6	-1.5	1.5	3	16.7	18.5	5.6	-21 1												18.4	-79.2	-4.1	-1 1	0.4	14.1	15.9	3	-23.7	
Trucks (const cruise upper)	scvhtrucksc1u	15.7	-66.1	9	1 1	-1.6	-0.3	13.7	4.2	-28.2												13.1	-68.7	6.4	-1.5	-4.2	-2.9	11 1	1.6	-30.8	
Trucks (const full throttle lower)	scvhtrucksfl	42.8	-52.2	17.2	25.3	23.9	37.5	40.3	33	20.6	6.1	-82.9						-85.4				40.2	-54.8	14.6	22.7	21.3	34.9	37.7	30.4	18	
Trucks (const full throttle upper)	scvhtrucksfu	37	-45.2	24	27.5	18.7	22.4	34.9	28.9	14.6	0.1											34.4	-47.8	21.4	24.9	16.1	19.9	32.3	26.4	12	

Daily Operations

		Daytime Octave Spectrum (dB)										Nighttime Octave Spectrum (dB)										LDN Octave Spectrum (dB)									
Name	**ID**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**A**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**
AHU	dAHU01	1.2	-26.9	-14	-6.7	-8	-3.6	-3.5	-15.8	-60.8		1.2	-26.9	-14	-6.7	-8	-3.6	-3.5	-15.8	-60.8		8.3	-19.9	-7	0.4	-1	3.5	3.6	-8.8	-53.8	
AHU	dAHU2	1.5	-26.8	-13.9	-6.5	-7.8	-3.4	-3.2	-15.2	-59.5		1.5	-26.8	-13.9	-6.5	-7.8	-3.4	-3.2	-15.2	-59.5		8.5	-19.7	-6.9	0.5	-0.8	3.6	3.9	-8.2	-52.4	
AHU	dAHU3	1.7	-26.6	-13.8	-6.4	-7 7	-3.2	-2.8	-14.5	-57.6		1.7	-26.6	-13.8	-6.4	-7.7	-3.2	-2.8	-14.5	-57.6		8.8	-19.6	-6.7	0.6	-0.7	3.8	4.3	-7.4	-50.6	
AHU	dAHU4	2	-26.5	-13.6	-6.3	-7.5	-3.1	-2.2	-13.4	-54.5		2	-26.5	-13.6	-6.3	-7.5	-3.1	-2.2	-13.4	-54.5		9.1	-19.5	-6.6	0.8	-0.5	4	4.8	-6.4	-47.5	
Cooling Tower	dCT1	11.5	-17.9	2.2	1	6.1	4.7	6.2	-9	-45.9		11.5	-17.9	2.2	1	6.1	4.7	6.2	-9	-45.9		18.5	-10.9	9.2	8	13.1	11.7	13.2	-1.9	-38.9	
Cooling Tower	dCT2	11.5	-17.9	2.2	1	6.1	4.7	6.2	-8.9	-45.9		11.5	-17.9	2.2	1	6.1	4.7	6.2	-8.9	-45.9		18.5	-10.9	9.2	8	13.1	11.7	13.2	-1.9	-38.8	
Substation	dess	21.5	-12.8	3.3	9.6	8.5	18.7	16.6	5.9	-26.2		21.5	-12.8	3.3	9.6	8.5	18.7	16.6	5.9	-26.2		28.6	-5.8	10.3	16.7	15.6	25.7	23.6	12.9	-19.2	
Heat pumps	dhp1	10.5	-31.6	-10.2	-5.6	0.2	4.5	7.9	-0.9	-39.2		10.5	-31.6	-10.2	-5.6	0.2	4.5	7.9	-0.9	-39.2		17.5	-24.5	-3.2	1.4	7.2	11.5	14.9	6.2	-32.1	
Heat pumps	dhp2	7.5	-32.6	-11.7	-7.8	-0.6	3.7	2.9	-7 1	-47.5		7.5	-32.6	-11.7	-7.8	-0.6	3.7	2.9	-7 1	-47.5		14.5	-25.5	-4.7	-0.8	6.5	10.8	9.9	0	-40.4	
Heat pumps	dhp3	10.2	-31.7	-10.3	-5.9	0	4.2	7.6	-1.3	-40.3		10.2	-31.7	-10.3	-5.9	0	4.2	7.6	-1.3	-40.3		17.2	-24.7	-3.3	1 1	7	11.3	14.6	5.7	-33.3	
Pump/lifts	dpls1	9.9	-33.8	-19.7	-14.4	-8.5	1.7	8.6	-0.1	-31.2		9.9	-33.8	-19.7	-14.4	-8.5	1.7	8.6	-0.1	-31.2		17	-26.8	-12.7	-7.4	-1.4	8.7	15.6	7	-24.1	
Pump/lifts	dpls2	9.9	-33.8	-19.7	-14.4	-8.5	1.6	8.5	-0.2	-31.4		9.9	-33.8	-19.7	-14.4	-8.5	1.6	8.5	-0.2	-31.4		16.9	-26.8	-12.7	-7.4	-1.5	8.7	15.5	6.8	-24.4	
Scrubber Stack	dstack01	27.6	-11.5	-0.2	15.5	11.4	23.5	24.5	14.4	-24.1		27.6	-11.5	-0.2	15.5	11.4	23.5	24.5	14.4	-24.1		34.7	-4.4	6.9	22.5	18.4	30.5	31.5	21.4	-17	
Cars (daily cruise lower)	dvcarscl	32.1	-50.1	19.1	22.6	13.8	17.5	30	24	9.6	-4.8	32.1	-50.1	19.1	22.6	13.8	17.5	30	24	9.6	-4.8	39.1	-43.1	26.1	29.6	20.8	24.5	37	31	16.7	2.2
Cars (daily cruise upper)	dvcarscu	37.9	-57.2	12.2	20.4	19	32.5	35.4	28	15.7	1.2	37.9	-57.2	12.2	20.4	19	32.5	35.4	28	15.7	1.2	44.9	-50.1	19.2	27.4	26	39.6	42.4	35	22.7	8.2
Cars (daily full throttle lower)	dvcarsfl	10.8	-71	4.1	-3.9	-6.5	-5.2	8.8	-0.7	-33.1		10.8	-71	4.1	-3.9	-6.5	-5.2	8.8	-0.7	-33.1		17.8	-64	11 1	3.2	0.5	1.8	15.8	6.3	-26.1	
Cars (daily full throttle upper)	dvcarsfu	16	-81.6	-6.4	-3.5	-2	11.8	13.6	0.7	-26.1		16	-81.6	-6.4	-3.5	-2	11.8	13.6	0.7	-26.1		23.1	-74.5	0.6	3.6	5.1	18.8	20.6	7 7	-19.1	
Cylinder Trucks	dvctrucks	22.8	-85.2	1.9	9.9	16.7	16.4	19.3	6.6	-35.9		22.8	-85.2	1.9	9.9	16.7	16.4	19.3	6.6	-35.9		29.9	-78.1	8.9	17	23.7	23.5	26.3	13.7	-28.8	
Cylinder Trucks	dvctrucks	23.6	-84.6	2.4	10.5	17.3	17 1	20.2	8.2	-32		23.6	-84.6	2.4	10.5	17.3	17 1	20.2	8.2	-32		30.7	-77.6	9.5	17.5	24.3	24.2	27.3	15.2	-24.9	
Cylinder Trucks	dvctrucks	24.5	-84.1	3	11 1	18	17.9	21.2	9.8	-27.8		24.5	-84.1	3	11 1	18	17.9	21.2	9.8	-27.8		31.5	-77	10.1	18.2	25	25	28.3	16.9	-20.8	
Cylinder Trucks	dvctrucks	24.8	-83.8	3.2	11.4	18.2	18.2	21.6	10.4	-26.5		24.8	-83.8	3.2	11.4	18.2	18.2	21.6	10.4	-26.5		31.9	-76.8	10.3	18.4	25.3	25.2	28.6	17.4	-19.4	
Heavy Trucks (daily cruise lower)	dvhtrucksc1	34.7	-63.7	20.5	24	18.2	20	30.5	30.5	22.1	9.6	17.4	-80.9	3.3	6.8	1	2.7	13.2	13.2	4.9	-7.6	32.7	-65.6	18.5	22	16.2	18	28.5	28.5	20.1	7.7
Heavy Trucks (daily cruise lower western)	dvhtrucksc1w	-10.3		-24.4	-22.2	-22.1	-22.4	-11.7	-24.4	-67.8		-23.4		-37.4	-35.2	-35.1	-35.4	-24.7	-37.4	-80.8		-11.5		-25.5	-23.3	-23.2	-23.5	-12.8	-25.5	-68.9	
Heavy Trucks (daily cruise upper)	dvhtrucksc1u	40.9	-64.7	20.5	26.4	32	31	37.4	34.5	28.1	15.6	23.7	-82	3.2	9.2	14.7	13.7	20.2	17.3	10.9	-1.6	39	-66.7	18.5	24.4	30	29	35.5	32.5	26.2	13.7
Heavy Trucks (daily cruise upper western)	dvhtrucksc1uw	1.6		-19	-12	-2.7	-4.2	-3.5	-16.1	-57.6		-11.4		-32	-25.1	-15.7	-17.2	-16.5	-29.1	-70.6		0.5		-20.1	-13.2	-3.8	-5.3	-4.6	-17.2	-58.7	
Heavy Trucks (daily full throttle lower)	dvhtrucksfl	11.4	-84.6	1.5	-3.4	-5.1	-3.8	9.2	4.7	-22.7		-5.8		-15.7	-20.7	-22.3	-21	-8	-12.5	-39.9		9.5	-86.6	-0.5	-5.4	-7 1	-5.7	7.2	2.7	-24.7	
Heavy Trucks (daily full throttle upper)	dvhtrucksfu	18.8	-84.9	2.2	1.9	10.9	10.2	16.2	8.8	-15.6		1.5		-15	-15.4	-6.3	-7 1	-1 1	-8.5	-32.9		16.8	-86.9	0.3	-0.1	9	8.2	14.2	6.8	-17.6	