

Toromont CAT 3131 Hwy. 7, West Concord, ON L4K 1B7

Main: (416) 667 5758 Fax: (416) 667 5514

Date: March 8, 2009

Attention: Operator Company: Ontario Farm

Phone: Email: Toromont CAT can also offer the following upon your request.

- Extended Service Coverage
- Service Maintenance Contracts
- Rentals
- Financing / Leasing

Speak to your Account Manager to obtain pricing for these or other services.

Project Name: Sub-500 kW On-Farm Anaerobic Digester Market

Caterpillar biogas fuelled generator packages

**Quote Number: 090291 - REV 0** 

Number of Pages: 10

Toromont & Caterpillar have carefully analyzed Ontario market requirements for small-scale biogas power generation. This market is characterized by the, often conflicting, demands of low cost, reliability, and serviceability. It's our understanding that bleeding-edge efficiency and emissions are secondary considerations outweighed by the need for continuously rated, highly reliable, conservatively designed generators that <u>make money</u>. Consequently it has taken considerable time to make sure we achieve success.

### **Base Engine Platform**

Caterpillar has continuously produced the 3300 & 3400 family of engines since the 1970's. Furthermore these engines trace their bore & stroke lineage to the D300 family originating in the 1950's. With this long history we have an engine platform that is well known to our technicians, engineers, and operators resulting in a depth of experience unparalleled in the industry. There are literally millions of these engines in service.

From the beginning of the D300 and 3000 series the engines have been designed for spark-ignited combustion of gaseous fuels. In particular the engines operate very well on a wide range of fuels ranging from heavy hydrocarbon gases such as butane & propane to lighter gases all the way to methane, carbon monoxide, and hydrogen.

Turbocharging was introduced on commercial engines in 1950's. Turbochargers dramatically increase the power density of a given engine by allowing power levels to double for a given amount of engine displacement. However turbocharging of a sparkignited gaseous engine requires aftercooling (aka intercooling) of the combustion air and fuel charge to avoid uncontrolled detonation in the cylinders. The combination of turbochargers and aftercoolers increases the complexity of an engine and represent a significant source of ongoing maintenance costs and related downtime.

Accordingly Caterpillar has elected to avoid this complexity and related cost by using big displacement engines that are naturally aspirated much like the engines in most



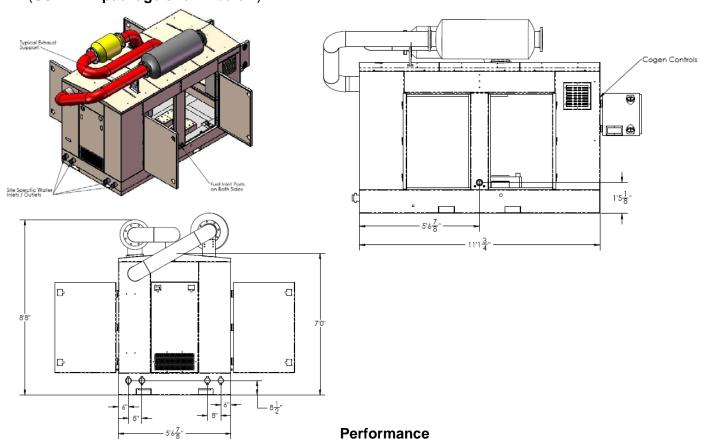
automobiles. This is the equivalent of a pick-up truck being equipped with a big naturally aspirated V-8 engine rather than a turbocharged in-line 4 cylinder. For reliability and long life would you want your heavy farm pickup 4 cylinder or vee-8 powered? When it comes to reliability and durability in a tough application it's hard to beat lots of displacement and natural aspiration as the best answer.

This product offering is based on our Caterpillar G3306 NA, the G3406 NA, and the G3412 NA (NA stands for Natural Aspiration) with output ratings, at 0.8 PF, of 75-90 kWe, 137-145 kWe, & 191-217 kWe respectively using typical anaerobic digester-produced biogas (maximum output is determined by gas quality).

### Design

As noted the engines are all Caterpillar large displacement naturally aspirated machines driving reliable Caterpillar SR4 brushless AC generators mounted on a common base. The engine-generator package is mounted on a common base in a sound-attenuated weather-tight enclosure custom built for us by our packaging partner. Our partner has developed a unique compact enclosure package complete with engine heat recovery and utility paralleling controls/switchgear. This design greatly simplifies installation, startup, and servicing.

The enclosure packaging will consist of our purpose-built Environgen© module designed to compactly house the generator set, utility paralleling controls, & heat recovery system. (G3412NA package shown below)





Our small biogas generator set product output range is summarized on the following table. Note that both "with fan" and "without fan" ratings are shown. The fan is the cooling fan for the engine's jacket water cooling circuit which can be unit mounted and mechanically driven off the front crankshaft of the engine. The proposed design uses a remote-mount heat dump radiator with an electrical motor driven fan. The "without fan" ratings are the basis of this proposal.

In addition to the cooling fan qualification the ratings are also based on generator efficiencies at 0.8 PF. Depending on the settings in the paralleling control system it would be possible to operate these generators at 1.0 PF in which case a 1% improvement in output or 1% improvement in fuel consumption can be expected.

Ratings		G3306 NA	l	G3406 NA			G3412 NA		
@ 0.8 PF	Engine	Pac	kage	Engine	Package		age Engine		kage
(continuous)		w/ Fan	w/o Fan		w/ Fan	w/o Fan		w/ Fan	w/o Fan
Typical AD	(kWb)	(kWe)	(kWe)	(kWb)	(kWe)	(kWe)	(kWb)	(kWe)	(kWe)
biogas		` ′	, ,		` '	` ,		` ,	` ,
50 HZ	72-	64-79	66-81	112-	103-116	106-119	183-	163-182	172-191
1500 RPM	87	04-79	00-01	125	103-110	100-119	202	103-102	172-191
60 HZ	82-	72-87	75.00	145-	132-140	137-145	205-	177 202	191-217
1800 RPM	97	12-01	75-90	158	132-140	137-145	231	177-203	191-217

Performance data sheets for the 60 Hz. with fan packages are following.

Toromont Cat will be at the Growing the Margins and the Canadian Farm & Food Biogas Conference & Exhibition in London this week (<a href="http://www.gtmconference.ca/">http://www.gtmconference.ca/</a>) .We look forward to meeting you there.



### G3306 NA

#### GAS ENGINE TECHNICAL DATA

## **CATERPILLAR®**

ENGINE SPEED:	1800		FUEL:		LOW ENERGY
COMPRESSION RATIO:	10.5:1		FUEL SYSTEM:		LPG IMPCO
JACKET WATER - MAX. OUTLET (°F):	210				
COOLING SYSTEM:	JW+OC		FUEL PRESS. RA	NGE (PSIG):	1.5 - 5.0
IGNITION SYSTEM:	MAG		THC:FREE INERT	RATIO	1.9
EXHAUST MANIFOLD:	WC		RATED ALTITUDE	(FT):	500
COMBUSTION:	STANDARD		AT AIR TO TURBO	D. TEMP. (°F):	77
			EXHAUST 02 EM	ISSION LEVEL	2.0 %O2
			FUEL LHV (BTU/S	CF):	593
			APPLICATION:		60 Hz GENSET
DATING AND EFFICIENCY	NOTES	LOAD	100%	75%	500/

RATING AND EFFICIENCY		NOTES	LOAD	100%	75%	50%
ENGINE POWER	(WITHOUT FAN)	(1)	BHP	110	82	55
GENERATOR POWER	(WITH MECH FAN)	(2)	EKW	72	53	35
ENGINE EFFICIENCY	(ISO 3046/1)	(3)	%	28.7	26.4	22.1
ENGINE EFFICIENCY	(NOMINAL)	(3)	%	28.7	26.4	22.1
THERMAL EFFICIENCY	(NOMINAL)	(4)	%	59.7	61.9	66.1
TOTAL EFFICIENCY	(NOMINAL)	(5)	%	88.3	88.3	88.2

ENGINE DATA						
FUEL CONSUMPTION	(ISO 3046/1)	(6)	BTU/bhp-hr	8880	9643	11525
FUEL CONSUMPTION	(NOMINAL)	(6)	BTU/bhp-hr	8880	9643	11525
AIR FLOW (77 °F, 14.7 psi)		(7)	SCFM	188	154	125
AIR FLOW		(7)	lb/hr	834	682	554
INLET MAN. PRESSURE		(8)	in. HG (abs)	24.4	21	17.9
INLET MAN. TEMPERATURE	(MEASURED IN PLENUM)	(9)	°F	90	94	98
TIMING		(10)	°BTDC	30	30	30
EXHAUST STACK TEMPERATURE		(11)	°F	1077	1057	1038
EXHAUST GAS FLOW (@ stack temp.)		(12)	CFM	601	485	388
EXHAUST MASS FLOW		(12)	lb/hr	944	771	625

EMISSIONS DATA	[				
NOx (as NO2)	(13)	g/bhp-hr	17.25	17.58	17.87
CO	(14)	g/bhp-hr	3.2	3.22	3.25
THC (molecular weight of 15.84)	(14)	g/bhp-hr	1.93	2.24	2.53
NMHC (molecular weight of 15.84)	(14)	g/bhp-hr	0.29	0.34	0.38
EXHAUST 02	(15)	% DRY	2.0	2.0	2.5
LAMBDA			1.06	1.06	1.09

HEAT BALANCE DATA	1		_		
LHV INPUT	(16)	BTU/min	16275	13255	10561
HEAT REJECTION TO JACKET (JW)	(17) (21)	BTU/min	5620	4887	4303
HEAT REJECTION TO ATMOSPHERE	(18)	BTU/min	651	530	422
HEAT REJECTION TO LUBE OIL (OC)	(19) (21)	BTU/min	889	773	680
HEAT REJECTION TO EXHAUST (LHV to 77°F)	(20)	BTU/min	4452	3567	2824
HEAT REJECTION TO EXHAUST (LHV to 350°F)	(20)	BTU/min	3204	2543	2000

### **CONDITIONS AND DEFINITIONS**

ENGINE RATING OBTAINED AND PRESENTED IN ACCORDANCE WITH ISO 3046/1STD. REF. CONDITIONS OF  $77^{\circ}$ F, 29.6 IN HG BAROMETRIC PRESSURE, 500 FT ALTITUDE). NO OVERLOAD PERMITTED AT RATING SHOWN. CONSULT ALTITUDE CHARTS FOR APPLICATIONS ABOVE MAXIMUM RATED ALTITUDE AND/OR TEMPERATURE.

EMISSION LEVELS ARE BASED ON THE ENGINE OPERATING AT STEADY STATE CONDITIONS. EMISSION TOLERANCES SPECIFIED ARE DEPENDANT UPON FUEL QUALITY. METHANE NUMBER CANNOT VARY MORE THAN  $\pm$  3. PUBLISHED PART LOAD DATA MAY REQUIRE ENGINE ADJUSTMENT.

ENGINE RATING IS WITH 1 ENGINE DRIVEN JACKET WATER PUMP.

FOR NOTES INFORMATION CONSULT PAGE THREE.

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### G3406 NA

#### GAS ENGINE TECHNICAL DATA

## **CATERPILLAR®**

ENGINE SPEED:	1800	FUEL:	LOW ENERGY
COMPRESSION RATIO:	10.3:1	FUEL SYSTEM:	LPG IMPCO
JACKET WATER - MAX. OUTLET (°F):	210		
COOLING SYSTEM:	JW+OC	FUEL PRESS. RANGE (PSIG):	1.5 - 5.0
IGNITION SYSTEM:	CDIS	THC:FREE INERT RATIO	1.9
EXHAUST MANIFOLD:	WC	RATED ALTITUDE (FT):	500
COMBUSTION:	STANDARD	AT AIR TO TURBO. TEMP. (°F):	77
		EXHAUST O2 EMISSION LEVEL	2.0 %O2
		FUEL LHV (BTU/SCF):	593
		APPLICATION:	60 Hz GENSET
_			

RATING AND EFFICIENCY		NOTES	LOAD	100%	75%	50%
ENGINE POWER	(WITHOUT FAN)	(1)	BHP	194	146	97
GENERATOR POWER	(WITH MECH FAN)	(2)	EKW	132	97	64
ENGINE EFFICIENCY	(ISO 3046/1)	(3)	%	29.4	26.7	23.9
ENGINE EFFICIENCY	(NOMINAL)	(3)	%	29.4	26.7	23.9
THERMAL EFFICIENCY	(NOMINAL)	(4)	%	58.4	61.3	63.8
TOTAL EFFICIENCY	(NOMINAL)	(5)	%	87.8	88.0	87.7

ENGINE DATA				_		
FUEL CONSUMPTION	(ISO 3046/1)	(6)	BTU/bhp-hr	8653	9547	10637
FUEL CONSUMPTION	(NOMINAL)	(6)	BTU/bhp-hr	8653	9547	10637
AIR FLOW (77 °F, 14.7 psi)		(7)	SCFM	311	255	198
AIR FLOW		(7)	lb/hr	1378	1128	875
INLET MAN. PRESSURE		(8)	in. HG (abs)	27.4	23	17.9
INLET MAN. TEMPERATURE	(MEASURED IN PLENUM)	(9)	°F	89	89	90
TIMING		(10)	°BTDC	26	26	26
EXHAUST STACK TEMPERATURE		(11)	°F	1137	1099	1060
EXHAUST GAS FLOW (@ stack temp.)		(12)	CFM	1035	829	624
EXHAUST MASS FLOW		(12)	lb/hr	1567	1285	992

EMISSIONS DATA		_	_		
NOx (as NO2)	(13)	g/bhp-hr	20.47	20.64	21.14
co	(14)	g/bhp-hr	3.88	3.99	4.41
THC (molecular weight of 15.84)	(14)	g/bhp-hr	4.18	4.3	4.84
NMHC (molecular weight of 15.84)	(14)	g/bhp-hr	0.63	0.65	0.73
EXHAUST 02	(15)	% DRY	2.0	2.0	2.0
LAMBDA			1.02	1.01	1.05

HEAT BALANCE DATA	Ī		_		
LHV INPUT	(16)	BTU/min	28040	23204	17236
HEAT REJECTION TO JACKET (JW)	(17) (21)	BTU/min	9134	8379	6655
HEAT REJECTION TO ATMOSPHERE	(18)	BTU/min	1122	928	689
HEAT REJECTION TO LUBE OIL (OC)	(19) (21)	BTU/min	1444	1325	1052
HEAT REJECTION TO EXHAUST (LHV to 77°F)	(20)	BTU/min	8094	6388	4715
HEAT REJECTION TO EXHAUST (LHV to 350°F)	(20)	BTU/min	5796	4521	3286

### **CONDITIONS AND DEFINITIONS**

ENGINE RATING OBTAINED AND PRESENTED IN ACCORDANCE WITH ISO 3046/1STD. REF. CONDITIONS OF 77°F, 29.6 IN HG BAROMETRIC PRESSURE, 500 FT ALTITUDE). NO OVERLOAD PERMITTED AT RATING SHOWN. CONSULT ALTITUDE CHARTS FOR APPLICATIONS ABOVE MAXIMUM RATED ALTITUDE AND/OR TEMPERATURE.

EMISSION LEVELS ARE BASED ON THE ENGINE OPERATING AT STEADY STATE CONDITIONS. EMISSION TOLERANCES SPECIFIED ARE DEPENDANT UPON FUEL QUALITY. METHANE NUMBER CANNOT VARY MORE THAN  $\pm$  3. PUBLISHED PART LOAD DATA MAY REQUIRE ENGINE ADJUSTMENT.

ENGINE RATING IS WITH 1 ENGINE DRIVEN JACKET WATER PUMP.

FOR NOTES INFORMATION CONSULT PAGE THREE.

DM8659-01 PAGE 1 OF 3 26-Aug-08



### **G3412 NA**

#### GAS ENGINE TECHNICAL DATA

## **CATERPILLAR®**

ENGINE SPEED: COMPRESSION RATIO:	1800 9.7:1 210		FUEL: FUEL SYSTEM:		LOW ENERGY LPG IMPCO
JACKET WATER - MAX. OUTLET (°F): COOLING SYSTEM: IGNITION SYSTEM: EXHAUST MANIFOLD: COMBUSTION: S	JW+OC JW+OC MAG WC TANDARD		FUEL PRESS. R THC:FREE INER RATED ALTITUI AT AIR TO TURI	1.5 - 5.0 1.9 500	
COMBUSTION.	TANDARD		EXHAUST O2 EI FUEL LHV (BTU APPLICATION:	MISSION LÉVÉL	77 2.0 %O2 593 60 Hz GENSET
RATING AND EFFICIENCY	1 NOTES	LOAD	100%	75%	50%
ENGINE POWER (WITHOUT FAN	(1)	BHP	275	206	137
GENERATOR POWER (WITHOUT FAN	1	EKW	191	143	95
ENGINE EFFICIENCY (ISO 3046/1	(3)	%	28.1	25.3	22.9
ENGINE EFFICIENCY (NOMINAL	(3)	%	28.1	25.3	22.9
THERMAL EFFICIENCY (NOMINAL	(4)	%	60.1	63.0	65.1
TOTAL EFFICIENCY (NOMINAL	(5)	%	88.2	88.3	88.1
ENGINE DATA	7				
FUEL CONSUMPTION (ISO 3046/1	(6)	BTU/bhp-hr	9068	10062	11094
FUEL CONSUMPTION (ISO 3046/1	1	BTU/bhp-hr	9068	10062	11094
AIR FLOW (77 °F, 14.7 psi)	(7)	SCFM	482	394	305
AIR FLOW	(7)	lb/hr	2134	1747	1352
INLET MAN. PRESSURE	(8)	in. HG (abs)	24.7	21.2	17.6
INLET MAN. TEMPERATURE (MEASURED IN PLENUM		°F	106	111	117
TIMING	(10)	°BTDC	34	34	34
EXHAUST STACK TEMPERATURE	(11)	°F	1113	1090	1068
EXHAUST GAS FLOW (@ stack temp.)	(12)	CFM	1573	1271	965
EXHAUST MASS FLOW	(12)	lb/hr	2416	1981	1524
EMISSIONS DATA	=				_
NOx (as NO2)	(13)	g/bhp-hr	16.39	16.71	18.15
CO	(14)	g/bhp-hr	3.66	3.63	3.8
THC (molecular weight of 15.84)	(14)	g/bhp-hr	2.47	2.44	2.56
NMHC (molecular weight of 15.84)	(14)	g/bhp-hr	0.38	0.37	0.39
EXHAUST O2	(15)	% DRY	2.0	2.0	2.0
LAMBDA	(,	70 2.11	1.06	1.04	1.10
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HEAT BALANCE DATA	Ļ		14540	0.4570	05440
LHV INPUT	(16)	BTU/min	41548	34576	25413
HEAT REJECTION TO JACKET (JW) HEAT REJECTION TO ATMOSPHERE	(17) (21)	BTU/min BTU/min	14119 1662	12899 1383	9898 1017
HEAT REJECTION TO ATMOSPHERE	(18)	BTU/min BTU/min	2232	2040	1565
HEAT REJECTION TO EXHAUST (LHV to 77°F)	(19) (21) (20)	BTU/min	11876	9511	7105
HEAT REJECTION TO EXHAUST (LHV to 350°F)	(20)	BTU/min	8617	6861	5091
TIENT NEGEOTION TO EXTINOST (ETTV to 350 T)	(20)	DTO/IIIII	0017	0001	3031

### **CONDITIONS AND DEFINITIONS**

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ENGINE RATING IS WITH 1 ENGINE DRIVEN JACKET WATER PUMP.

FOR NOTES INFORMATION CONSULT PAGE THREE.

DM8704-00 PAGE 1 OF 3 23-Oct-08



Toromont Envirogen© 75-85 kWe Biogas Package

Item	Description	Qty	Unit	Ext'd
1.	NEW ORDER - Supply of one new Caterpillar	1	\$ 236,027	\$ 236,027
	G3306 NA agricultural based anaerobic digester		, ,	, ,
	produced biogas fuelled generator set rated 75-			
	85 kWe (106.25 kVA), 120/208 to 347/600 VAC, 3-			
	phase, 60 Hz, 1800 RPM equipped with a			
	Caterpillar G3306 NA spark-ignited engine, a			
	Caterpillar SR4 brushless AC alternator, and a			
	Caterpillar EMCP II+ gen set control panel all			
	mounted in an Evirogen® custom-built sound-			
	attenuated module complete with:			
	<ul> <li>GenView® utility paralleling switchgear and</li> </ul>			
	engine heat recovery system			
	<ul> <li>Controls engine, generator, thermal and paralleling functions</li> </ul>			
	Flat Plate FP Jacket Water Heat Exchanger			
	Elanco E092 Exhaust Heat Exchanger			
	Exhaust and Thermal Hydronic Control			
	3-Way Catalyst with air-fuel ratio control to			
	provide stack-out emissions of:			
	NOx emissions = 1.73 g/BHP-hr			
	CO emissions = 0.32 g/BHP-hr			
	NMHC emissions = 0.03 g/BHP-hr			
	o THC emissions = 0.19 g/BHP-hr			
	Enclosure configured for -30C ambient &			
	ambient & 75 dB(A) @ 7 meters			
	Battery Charger and batteries			
	Fuel Gas Train (does not include gas clean-			
	up)			
	Lube Oil Reservoir & Level Control			
	<ul> <li>Stubbed Connections for client hot water</li> </ul>			
	supply and return			
	Box Duct connection for electrical feeder to	1		
	client	1		
	Motor Control Center for all Cogeneration			
	System pumps & valves	1		
	Electrical panel(s) for interconnect/parallel			
	functions to utility requirements	1		
	Exhaust silencers, critical grade			
	Initial start-up & commissioning			
	Freight to site			
2.	Preventative maintenance service contract		\$ T	o Be Advised
3.	This unit qualifies for Cat Finance conditional		\$ T	o Be Advised
	sale contract (CSC) low interest finance rates:		ŕ	



Toromont Envirogen© 137-145 kWe Biogas Package

Item	Description	Qty	Unit	Ext'd
4.	NEW ORDER - Supply of one new Caterpillar	1	\$ 261,655	\$ 261,655
	G3406 NA agricultural based anaerobic digester	'	¥ =5.,550	<del>+</del>
	produced biogas fuelled generator set rated			
	137-145 kWe (181 kVA), 120/208 to 347/600 VAC,			
	3-phase, 60 Hz, 1800 RPM equipped with a			
	Caterpillar G3406 NA spark-ignited engine, a			
	Caterpillar SR4 brushless AC alternator, and a			
	Caterpillar EMCP II+ gen set control panel all			
	mounted in an Evirogen® custom-built sound-			
	attenuated module complete with:			
	<ul> <li>GenView® utility paralleling switchgear and</li> </ul>			
	engine heat recovery system			
	<ul> <li>Controls engine, generator, thermal and paralleling functions</li> </ul>			
	Flat Plate FP Jacket Water Heat Exchanger			
	Elanco E092 Exhaust Heat Exchanger			
	•			
	<ul> <li>3-Way Catalyst with air-fuel ratio control to provide stack-out emissions of:</li> </ul>			
	NOx emissions = 2.05 g/BHP-hr			
	o CO emissions = 0.39 g/BHP-hr			
	o NMHC emissions = 0.06 g/BHP-hr			
	o THC emissions = 0.42 g/BHP-hr			
	Enclosure configured for -30C ambient &			
	ambient & 75 dB(A) @ 7 meters			
	Battery Charger and batteries			
	Fuel Gas Train (does not include gas clean-			
	up)			
	Lube Oil Reservoir & Level Control			
	Stubbed Connections for client hot water			
	supply and return			
	Box Duct connection for electrical feeder to			
	client			
	Motor Control Center for all Cogeneration			
	System pumps & valves			
	Electrical panel(s) for interconnect/parallel			
	functions to utility requirements			
	Exhaust silencers, critical grade			
	Initial start-up & commissioning			
	Freight to site			
5.	Maintenance service contract		\$ Tc	Be Advised
6.	This unit qualifies for Cat Finance conditional		\$ To	Be Advised
	sale contract (CSC) low interest finance rates:		,	-



Toromont Envirogen© 191-217 kWe Biogas Package

Item	Description	Qty	Unit	Ext'd
7.	NEW ORDER - Supply of one new Caterpillar	1	\$ 415,105	\$ 415,105
	G3412 NA agricultural based anaerobic digester		Ţ,	Ţ,,,,,,
	produced biogas fuelled generator set rated			
	191-217 kWe (271.25 kVA), 120/208 to 347/600			
	VAC, 3-phase, 60 Hz, 1800 RPM equipped with a			
	Caterpillar G3412 NA spark-ignited engine, a			
	Caterpillar SR4 brushless AC alternator, and a			
	Caterpillar EMCP II+ gen set control panel all			
	mounted in an Evirogen® custom-built sound-			
	attenuated module complete with:			
	<ul> <li>GenView® utility paralleling switchgear and</li> </ul>			
	engine heat recovery system			
	<ul> <li>Controls engine, generator, thermal and paralleling functions</li> </ul>			
	Flat Plate FP Jacket Water Heat Exchanger			
	Elanco E092 Exhaust Heat Exchanger			
	l			
	1			
	<ul> <li>3-Way Catalyst with air-fuel ratio control to provide stack-out emissions of:</li> </ul>			
	o NOx emissions = 1.64 g/BHP-hr			
	o CO emissions = 0.37 g/BHP-hr			
	NMHC emissions = 0.04 g/BHP-hr			
	THC emissions = 0.25 g/BHP-hr			
	Enclosure configured for -30C ambient & 75			
	dB(A) @ 7 meters			
	Battery Charger and batteries			
	<ul> <li>Fuel Gas Train (does not include gas clean-</li> </ul>			
	up)			
	<ul> <li>Lube Oil Reservoir &amp; Level Control</li> </ul>			
	<ul> <li>Stubbed Connections for client hot water</li> </ul>			
	supply and return			
	Box Duct connection for electrical feeder to			
	client			
	<ul> <li>Motor Control Center for all Cogeneration</li> </ul>			
	System pumps & valves			
	<ul> <li>Electrical panel(s) for interconnect/parallel</li> </ul>			
	functions to utility requirements			
	<ul> <li>Exhaust silencers, critical grade</li> </ul>			
	Initial start-up & commissioning			
	Freight to site			
8.	Preventative maintenance service contract		\$ To	Be Advised
9.	This unit qualifies for Cat Finance conditional		\$ To	Be Advised
	sale contract (CSC) low interest finance rates:		•	



# The following overview of our detailed terms & conditions of sale apply to this quotation:

### Clarifications and Exceptions to this bid:

- 1. Toromont Scope of Supply is limited to those items expressly outlined in this quotation. Should there be any uncertainty in this scope, please contact Toromont to clarify.
- 2. Ministry of Environment & building permits, applications, or approvals are not included in this bid, unless otherwise stated.
- 3. All fuel for field-testing is by others.

### General

Taxes: All applicable taxes are extra

### Payment Milestones:

 Payment schedule as per Toromont standard terms of sale (10/80/10). The terms and conditions attached hereto or found on the website <u>www.toromontterms.com</u> are hereby incorporated by reference.

**Currency:** Prices are shown in Canadian dollars landed on site (DDP Jobsite). Prices are based on the prevailing exchange rate of USD 1.00 = CAD 1.2895. Fluctuations in this exchange rate in excess of 100 basis points will affect pricing at the time of order. Thereafter final negotiated equipment and commissioning prices are firm.

Validity of quotation: 30 days

### **Estimated Delivery:**

NEW ORDER – 20-32 weeks after order (subject to final review).

Freight to Site: FOB Jobsite, Not Offloaded

**Duty**: All products are sourced within NAFTA and are duty free.

Tender Documents received and considered in this bid are noted below.

None – Toromont Standard Design Specifications

**Warranty Offered**: The equipment quoted is covered solely by the manufacturer's standard warranty of 12 months after commissioning. Copies are available upon request. Caterpillar Limited Warranty is also available at <a href="https://www.toromontwarranty.com">www.toromontwarranty.com</a>. All other warranties, express or implied, are hereby specifically excluded.

**Terms and Conditions**: The terms and conditions attached hereto or found on the website <a href="https://www.toromontterms.com">www.toromontterms.com</a> are hereby incorporated by reference. To the extent there is a conflict between such terms and conditions and specific provisions in this quotation then this quotation shall supersede the terms and conditions. As more specifically provided in Section 3 of the terms and conditions, the terms and conditions of this quotation supersede the terms and conditions of any purchase order unless specifically agreed to in writing by Toromont CAT. By issuing apurchase order based on this quotation, customer hereby acknowledges and agrees to the foregoing provisions notwithstanding the terms and conditions in its purchase order.