

BOTE-DEES Approval No	Engine Manufacturer	Engine Model Number	Engine Horsepower	Rated Speed	MSHA Cert No	MSHA Vent Rate	PA Vent Rate	Emission Control System	Oxidation Catalyst	Heat Exchanger	DPM Filter	MSHA Efficiency Rating of Filter
109-12	Deutz	BF4M1013FC	173	2,200	07-ENAD40007	7,000	7,000	DST Emission System	M249-210-02 Dry Systems Tech	M115-301-21	M30-411-01R	96%
131-10	Deutz	D2011 L02I	30.2	2,800	07-ENAD40010	2,000	2,000	DST Emission System	M80-233-02	DSTM195-301-01	DSTM70-417-01	96%
48-11	Deutz	627RTMD2011L02I	31	2,800	07-ENAD40010	2,000	2,000	DST Emission System	M80-233-02	DST M195-301-01	DST M70-417-01	96%
131-10	Deutz	D2011L02I	30.2	2,800	07-ENAD40010	2,000	2,000	DST Emission System	M80-233-02	DST M195-301-01	DST M70-417-01	96%
131-10	Deutz	D2011L02I	30.2	2,800	07-ENAD40010-0	2,000	2,000	DST Emissions Control System	M80-233-02	DST M195-301-01	DST M709-417-01	96%
3-99	Caterpillar	3304 PCNA	100	2,200	24/D88 (Part 32)	10,700	4,897	DST Management System M38	NO Info	NO Info	DST M30-411-01R	
001	Caterpillar	3306 PCNA	150	2,200	24/dD 103-0	15,500	7,316	DST Management System	NO Info	NO Info	Fleetguard M30 & DST M30-411-01R	95%
6-03	Cummins	4B 3.3	65	2,600	7E-B093-0 (Part 7)	3,500	4,265	M70 DST Management System	Syncat M241-260-01	Paas Tech. M276-303-01	Fleetguard M70 & DST M30-411-01R	96.23%
6-03	Cummins	4B 3.3	65	2,600	7E-B-093-0 (Part 7)	3,500		M70 DST Management System	Syncat M241-260-01	Paas Tech. M276-303-01	Fleetguard M70	96.90%
2023-04	Cummins	4B TA 3.9C	116	2,500	7E-B084-0 (Part 7)	6,500	6,500	M70 DST Management System	Syncat M241-260-01	Paas Tech. M30-411-01	Fleetguard M30 & DST M30-411-01R	98.50%
2023-04	Cummins	4B TA 3.9C	116	2,500	7E-B084-0 (Part 7)	6,500	6,500	M70 DST Management System	Syncat M241-260-01	Paas Tech. M150-301-01	Fleet Guard M70	96.90%
2023-04	Cummins	4B TA 3.9C	116	2,500	7E-B084-0 (Part 7)	6,500	7,500	M70 DST Management System	Syncat M241-260-01	Paas Tech. M150-301-01	Fleet Guard M70	96.90%
6-03	Cummins	83.3	65	2,600	7E-B093-0 (Part 7)	3,500	4,265	M70 DST Management System	Syncat M241-260-01	Paas Tech. M276-303-01	Fleet Guard M70	96%
36-06	Deutz	BF 4M 2012	100	2,500	07-ENAD40002-0	6,000	6,000	DST Management System	Syncat M113-210-02	Paas Tech. M150-301-01	Fleet Guard M30	96%
36-06	Deutz	BF 4M 2012	100	2,500	07-ENAD40002-0	6,000	6,000	DST Management System	Syncat M113-210-02	Paas Tech. M150-301-01	Fleet Guard M30	96.90%
36-06	Deutz	BF 4M 2012	100	2,500	07-ENAD40002	6,000	6,000	DST M30 Management System	Syncat M113-210-02	Paas Tech. M150-301-01	Fleet Guard M30	97%
36-06	Deutz	BF 4M 2012	100	2,500	07-ENAD40002-0	6,000	6,000	DST M30 Management System	Syncat M113-210-02	Paas Tech. M150-301-01	Fleet Guard M30	96%
55-07	Deutz	BF 4M 2012C	138	2,500	07-ENAD40003	6,000	6,000	DST Management System	Syncat M113-210-02	Paas Tech. M150-301-01	DST M30-411-01R	96%
36-06	Deutz	BF 4M 2013	100	2,500	07-ENAD40002-0	6,000	6,000	DST M30 Management System	Syncat M113-210-02	Paas Tech. M150-301-01	DST M30	96%
36-06	Deutz	BF 4M2012	100	2,500	7E-ENAD4002-0	6,000	6,000	DST Management System	Syncat M113-210-02	Paas Tech. M150-301-01	DST M30	96%
16-12	Deutz	BF4L2011	78	2,800	07-ENAD40004-1	6,000	6,000	DST Management System M30	Syncat M260-223-02	DST M150-301-01	DST M30 DPM	96%
109-12	Deutz	BF4M1013FC	173	2,300	07-ENAD40007	7,000	7,000	DST M30	DST M249-210-02	DST M115-301-21	DST M30-411-01R	96%
134-08	Deutz	BF4M1013-FC	157	2,200	07-ENAD40007-1	7,000	7,000	DST M30 Management System	Syncat M113-210-02	DST M115-301-21	DST M30-411-01R	96%
36-06	Deutz	BF4M2012	100	2,500	07-ENAD40002-0	6,000	6,000	DST Management System	Syncat M113-210-02	Paas Technologies M150-210-02	Fleet Guard M-30	96.9%
36-06	Deutz	BF4M2012	100	2,500	07-ENAD40002-0	6,000	6,000	DST Management System	Syncat M113-210-02	Paas Tech M150-301-01	Fleet Guard M-30	96.9%
135-06	Deutz	BF4M2013	100	2,500	7E-ENAD4002-0	4,500	4,500	DST M30	Syncat M113-210-02	PaasTech M150-301-01	DST M30	96%
140-16												
50-14	Deutz	BF6M2012C	208	2,500	07-ENAD40008	9,000	9,000	DST Management System	Syncat M357-210-02	DST P/N# M190-301-01	DST P/N# M30-411-01R	99%
50-14	Deutz	BF6M2012C	208	2,500	07-ENAD40008	9,000	9,000	DST Management System	Syncat M357-210-02	DST P/N# M190-301-01	DST P/N# M30-411-01R	99%
05-01	Isuzu	C240 (QD-60)	56	3,000	7E-B038-0	2,500	2,305	DST Management System	Syncat M70-104-01	Paas Tech. M70-105-01	Fleet Guard M70	95.90%
05-01	Isuzu	C240 (QD-60)	56	3,000	7EB038-0	2,500	2,305	M141 DST Management System	Syncat M70-104-01	Paas Tech. M70-105-01	M70 & DST M30-411-01R	95.90%
2-99	Deutz	MWM 916-6	94	2,300	7EB001-0 (Part 7)	4,000	3,868	DST Management System	Syncat M30-221-01	Paas Tech. M150-301	Fleet Guard M30 & DST M30-411-01-R	97.60%
2-99	Deutz	MWM 916-6	94	2,300	24/D97-1 (Part 32), 7EB001-1	4,000	3,868	DST Management System M105 Package	Syncat M30-221-01	Paas Tech. M150-301	Fleet Guard M30 & DST M30-411-01-R	97%
2-99	Deutz	MWM 916-6	94	2,300	7EB001-0 (Part 7)	4,000	3,868	DST Management System	Syncat M30-221-01	Paas Tech. M150-301	Fleet Guard M30 & DST M30-411-01R	97.60%
135-06	Daimler Chrysler	OM 904 LA	100	2,200	7E-B098-0 (Part 7)	4,500	4,500	DST M30 Management System	Syncat M113-210-02	Paas Tech. M150-301-01	DST M30 Particulate Filter	96%
115-09	Daimler Chrysler	OM 904 LA	100	2,500	7E-B098-0 (Part 7)	4,500	4,500	DST Model 30 Exhaust Emission System	Airflow Catalyst CCA-100-MB-C	Paas Tech. M150-301-01	DST M30	96%
137-06	Daimler Chrysler	OM 904-LA	174	2,200	7E-B098	7,500	7,500	DST M30 Management System	Syncat M13-210-02	DST M115-105-01	Fleet Guard M30	98.50%
135-06	Daimler Chrysler	OM 904-LA	100	2,200	7E-B098-0 (Part 7)	4,500	4,500	DST M30 Management System	Syncat M113-210-02	Paas Tech. M150-301-01	DST M30	96%
137-06	Daimler Chrysler	OM904LA	174	2,200	7E-B098	7,500	7,500	DST M30 Management System	Syncat M113-210-02	Paas Tech M115-105-01	Fleet Guard M30	98.5%
7-08	Cummins	QSB 6.7	215	2,500	07-ENAD60010 (Part 7)	8,500	8,500	M267 DST Total System	Syncat M30-221-02	Paas Tech. M90-301-01	Fleet Guard M30	97%
7-08	Cummins	QSB 6.7	215	2,500	07-ENAD60010 (Part 7)	8,500	8,500	M267 DST Total System	Syncat M30-221-02	Paas Tech. M90-301-01	Fleet Guard M30	97%
7-08	Cummins	QSB 6.7	193	2,200	07-ENAD60010 (Part 7)	8,500	8,500	M267 DST Total System	DST M295-22-02	DST M90-301-01	DST M30-411-01R	96%
12-09	Cummins	QSB4.5	110	2,500	07-ENAD40006	4,500	4,500	M30 DST Management System	Syncat M241-260-01	Paas Tech. M30-411-01	Fleet Guard M30	98.50%
12-09	Cummins	QSB4.5	130	2,500	07-ENAD40006	4,500	4,500	M30 DST Management System	DST M113-210-02	DST M150-301-01	DST M30	98.50%
8-08	Deutz	BF 4M 1013 FC	157	2,200	07-ENAD40007-1	6,500	6,500	Engine Control System Model S-18	ECS AZ29	DBT P/A 350177	ECS S18 Silicon Carbide	85%
64-09	Deutz	BF4L2011	78 (derated)	2,800	07-ENAD40004	6,000	6,000	DBT Management System	ECS	Bucyrus Cool System 399823	FS&T (pn) 607513	95%
152-11	Cummins	C3.3	85	2,600	07-ENAD40017	4,500	4,500	DST Management System	Evapar AZ29	Bucyrus Cool System 399823	FS&T (pn) 607513	95%
BFE-DEES 99-12	Deutz	1013FC	150	2,200	07-EPA080001	7,500	8,000	Caterpillar	ESW Evarpar A-27WJGP (MCAT-model name)	Bucyrus	FST-115-26N	95%
BFE-DEES 99-12	Deutz	1013FC	150	2,200	07-EPA080001	7,500	8,000	Caterpillar	ESW Evarpar A-27WJGP (MCAT)	Bucyrus	FST-115-26N	95%
100-12	Deutz	BF4L2011	78	2,800	07-ENAD40004-1	6,000	6,000	DBT Management System	AZ27	Bucyrus P/N 399823	FST-115-26	95%
BFE-DEES 99-12	Deutz	BF4M1013FC	150	2,200	07-EPA080001	7,500	8,000	Caterpillar	ESW Evarpar A-27WJGP (MCAT model name)	Bucyrus	FST-115-26N	95%
53-09	Deutz	BF4M 2011	74 (derated)	2,800	07-ENAD40004	6,000	6,000	ECS Non-Catalyzed - Off Board Regeneration	ECS AZ 27	Air to Air BDPA	ESC S/9 Silicon Carbide	87%
BFE-DEES 131-12	Cummins	6CTAA8.3	185 (derated)	2,200	07-EPA120001	13,500	19,000	DST M250	DST M90-218-02	DST M90-301-11	DST M194	96%
1-97	Caterpillar	3306 PCNA	150	2,200	7E-B003	7,500	7,500	DST Management System	M30	Paas Tech. 301-1	Fleet Guard M30	97.60%
7-08	Cummins	QSB6.7	193	2,200	07-ENAD60010	8,500	8,500	DST M30 Management System	DST p/n M295-225-02	DST p/n M90-301-01	DST M30 p/n M30-411-01R	96%
58-14	Deutz	BF 4L2011	79	2,800	07-ENAD40004-1	6,000	6,000	Clean diesel Technologies	Clean diesel Technologies	NETT Technologies	Clean diesel Technologies Passive Cermic	85%
12-09	Cummins	QSB 4.5	100 (derated)	2,500	07-ENAD70006	6,000	6,000	DST M30 Management System	DST M113-210-02	DST M150-301-01	DST M30	96%
9-12	Cummins	QSB 4.5	130	2,500	07-ENAD70006	6,000	6,000	DST M30 Management System	DST M113-210-02	DST M150-301-01	DST M30	96%
12-09	Cummins	QSB 4.5	110 (derated)	4,500	07-ENAD70006	4,500	4,500	DST M30 Management System	DST M113-210-02	DST M150-301-01	DST M30	96%
7-13	Deutz	D 2011LO3I	49	2,800	07-ENAD40011-0	2,000	2,000	DST Management System	dst Mod # M260-223-02	DST M-184-301-01	DST M-70-417-01	96%
51-12	Cummins	QSB 4.5	130	2,500	07-ENAD70006	6,000	6,000	DST M183	DST M281-210-02	DST M150	DST M83	96%

BOTE-D Approval No	Equipment Manufacturer	Equipment Model No	Equipment Description	Remarks
110-12	Airtek Inc.	IC100TDD	Diesel Driven Rotary Screw Air Compressor	
73-12	AL Lee	RMDHPP-1	Diesel Power Pack	
145-10	AL Lee	828 RM-D2011L02I	Diesel Rockduster	
130-10	AL Lee	628 RM	Diesel Rockduster	
1770-99	Brookville	18M100D	18 Man Personnel Carrier	
1677-97	Brookville	BCC-15UP	20 Ton Diesel Locomotive	
1953-03	Brookville	10M65D	5-10 Man Diesel Personnel Carrier	
1907-02	Brookville	10M56D	10 Man Diesel Personnel Carrier	
2036-04	Brookville	18M116D	9 Ton Diesel 18 Man Personnel Carrier	
15-06	Brookville	6M116DMV-RB	6 Man Diesel Maintenance Vehicle	Equipped with Roof Bolter
7-03	Brookville	CMHC-D	Diesel Power Manhole Cutter	
61-07	Brookville	4M100DMV	4 Man Diesel Maintenance Vehicle	
32-06	Brookville	1044TC	10 Ton Rubber Tired Tractor	
153-07	Brookville	18M100D	18 Man Personnel Carrier	
139-06	Brookville	ULPC	9 Ton Diesel Locomotive	15 Man Personnel Carrier
1881-02	Brookville	15S	Rubber Tired Tractor	
139-06	Brookville	ULPC	9 Ton Diesel Locomotive 15 Man Personnel Carrier	
5-07	Brookville	7M100D	8 Ton Diesel Locomotive 7 Man Personnel Carrier	
15-12	Brookville	10M78D-1	10 Man Diesel Personnel Carrier	
140-06	Brookville	25T174D	25 Ton Locomotive	Mod replaces M113-210-02 with M249-210-02 catalyst
140-06	Brookville	25T174D	25 Ton Locomotive	
40-12	Brookville	200FB1000	8 Man Diesel Maintenance Vehicle	Modification to BOTE-D 40-12
97-12	Brookville	8M100DMV	8 Man Diesel Maintenance Vehicle	
40-12	Brookville	200FB1000	Self-Propelled Diesel Fuel Buffalo	
				New engine package for Brookville 25 T174D
140-06	Brookville	25T174D	25 Ton Diesel Locomotive	Replaced engine package with BOTE-DEES 50-14
1907-02	Brookville	10M56D	10 Man Diesel Personnel Carrier	
1833-01	Brookville	5M56MA	5 Man Diesel Jitney	
1872-02	Brookville	D1344C	13 Man Personnel Carrier	
1769-99	Brookville	1044TC	10 Ton Mne Tractor	
1881-02	Brookville	15S	15 Ton Diesel Scoop	
139-06	Brookville	ULPC	9 Ton Diesel Locomotive/15 Man Personnel Carrier	
5-07	Brookville	7M100D	8 Ton Diesel Locomotive/7 Man Personnel Carrier	A

BOTE-DEES Approval No	Engine Manufacturer	Engine Model Number	Engine Horsepower	Rated Speed	MSHA Cert No	MSHA Vent Rate	PA Vent Rate	Emission Control System	Oxidation Catalyst	Heat Exchanger	DPM Filter	MSHA Efficiency Rating of Filter
185-11	Cummins	4B3.3T	85	2,600	07-ENA040017	4,500	4,500	DST M186 Emission Control System	DST Model M260-223-02	DST M184-301-01	DST M70-417-01	95%
53-09	Deutz	BF 4M 2011	74 (derated)	2,800	07-ENA040004	6,000	6,000	ECS Non-Catalyzed-Off Board Regeneration	ECS AZ 27	Air to Air 8DPA	ECS S/9 Silicon Carbide	87%
53-09	Deutz	BF 4M 2011	74 (derated)	2,800	07-ENA040004	6,000	6,000	ECS Non-Catalyzed-Off Board Regeneration	ECS AZ 27	Air to Air 8DPA	ECS S/9 Silicon Carbide	87%
53-09	Deutz	BF4M 2011	74 (derated)	2,800	07-ENA040004	6,000	6,000	ECS Non-Catalyzed - Off Board Regeneration	ECS AZ 27	Air to Air 8DPA	ESC S/9 Silicon Carbide	87%
53-09	Deutz	BF4M 2011	74 (derated)	2,800	07-ENA040004	6,000	6,000	ECS Non-Catalyzed - Off Board Regeneration	ECS AZ 27	Air to Air 8DPA	ESC S/9 Silicon Carbide	87%
53-09	Deutz	BF4M 2011	74 (derated)	2,800	07-ENA040004	6,000	6,000	ECS Non-Catalyzed - Off Board Regeneration	ECS AZ 27	Air to Air 8DPA	ESC S/9 Silicon Carbide	87%
BFE-DEES 131-12	Cummins	6CTA8.3	185	2,200	07-EPA120001	13,500	19,000	DST Model M250 Exhaust System	DST P/N M90-218-02	DST P/N M90-301-11	DST P/N M30-411-01R	96%
27-14	Detuz	BF 4L2011	78	2,800	07-ENA-040004	6,000	6,000	Rhmac 1202	CleanAIR Assure DOC CWD04668CCN	Protectoseal F674	Clean Air Sys FU4180W4CN	85%
3-18	Detuz	BF 4M 2013 FC	157	2,200	07-ENA-040007-1	6,500	6,500	Rhmac	DCL International,Inc MINE X Cat Converter	Rhmac Inc, PT # 1202	Mine-XAL9-ID-010R-0102	93%
197-11	Detuz	D2011L02i	30.2	2,800	07-ENA040010	1,500	1,500	Rhmac,Inc Model DEC 1402	DCL International- Model A6M2-ID-IR06-21	Rhmac,Inc Model DEC 1402	DCL- MOD # 95QV-SA-5U59-21	92%
197-11	Detuz	D2011L02i	30.2	2,800	07-ENA040010	1,500	1,500	Rhmac,Inc Model DEC 1402	DCL International- Model A6M2-ID-IR06-21	Rhmac,Inc Model DEC 1402	DCL- MOD # 95QV-SA-5U59-21	92%
197-11	Duetz	2011L021	30.2	2,800	07-ENA040010	1,500	1,500	C A S	CWDD466BCCN		FFA060W4CN	89%
195-11	Duetz	2011L031	48	2,800	07-ENA040011	2,000	2,000	Rhmac 2012	D C L International	Rhmac #2012	DCL 95 QT-SA-5U57-21	89%
146-09	Cummins	A1700	37	2,800	07-ENA060011	2,000	2,000	Rohmac PFWC Emission Control System	Clean Air Model CPD-0466-BCCN40MM	0020906130	ENK 25-19175	95%
54-14	Detuz	BF 4M 2012	100	2,500	07-ENA040002	6,000	6,000	Rhmac Model DEC-1202 ECM	DCL International,Inc	Rhmac Inc, PT # 1202	DCL International,Inc	92%
129-10	Deutz	BF3L2011	34.4	2,300	07-ENA040012	4,500	4,500	Rohmac Model 1202 Emission System	Clean Air Sys CPD0700DCCN20	DNA	Ceramic FUA 126W4CN	95%
	Deutz	BF4L 2011	78 (derated)	2,800	07-ENA040004	6,000	6,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD0700BCCN		Clean Air Model FPA108W4CN30	85%
176-11	Deutz	BF4L2011	78 (derated)	2,800	07-ENA040004	6,000	6,000	DST M186 Emissions Control System	DST M260-233-02	DST M184-301-01	DST M70 Particulate Filter	95%
	Detuz	BF4M 2012 C	138	2,500	07-ENA040003	6,500	6,500	Rhmac	DCL International,Inc MINE X Cat Converter	Rhmac Inc, PT # 1202	DCL International,Inc 950-NC-SA-050U 0652 -01	93%
37-06	Isuzu	C240	52	3,000	7E-B086	3,000	3,000	Rohmac PFWC Emissions Control System	Clean Air Systems CPD 0466 BCCN40MM	002050802	ENK 25-19175-7197	95%
05-01	Isuzu	C240 (QD-60)	56	3,000	7E-B038-0	2,500	2,305	M141 DST Management System	D S T	M231-302-01	M70	95.90%
197-11	Deutz	D2011L02i	30.2	2,800	07-ENA040004	1,500	1,500	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA060224CN	89%
195-11	Deutz	D2011L03i	48	2,800	07-ENA040011	2,000	2,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA108W4CN	89%
195-11	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA108W4CN	92%
195-11	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA108W4CN	92%
195-11	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA108W4CN	92%
144-08	Deutz	F2L 2011	30.2	2,800	07-ENA040010	2,000	1,500	Rohmac ENK 25-19175-7197 Disposable DPM	Clean Air Systems CPD 0466 BCCN175	DNA	ENK 25-19175-7197	95%
144-08	Deutz	F2L 2011	30.2	2,800	07-ENA040010	2,000	1,500	Rohmac ENK 25-19175-7197 Disposable DPM	Clean Air Systems CPD 0466 BCCN175	DNA	ENK 25-19175-7197	95%
43-10	Deutz	F4L 2011	60.8	2,800	07-ENA040012	3,000	3,000	Clean Air Assure	DOC Model CPD0566BCCN	0020910564	ENK-25-19175	95%
4-99	Lister Petter	LPU2	16.2	2,800	7E-B042-0	1,000	1,684	Rohmac DEC after Treatment System	Mine-X DCS8	DNA	Mine-X DCS8	91%
4-99	Lister Petter	LPU2	16.2	2,800	24/D136-0 (Part 32)	2,000	1,684	Rohmac DEC after Treatment System	Mine-X DCS8	DNA	Mine-X DCS8	91%
05-01	Kubota	V2403-M	49	2,700	07-ENA080011	3,000	3,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD0700BCCN30	DNA	CleanAIR FPA108W4CN30	89%
173-11	Kubota	V2403-M	49	2,800	07-ENA060011	3,000	3,000	Rohmac PFWC Emissions Control System	Clean Air CJD0700BCCN30	DNA	Clean Air Model FPA108W4CN30	95%
05-01	Kubota	V2403-M	49	2,700	07-ENA080011	3,000	3,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD0700BCCN30	DNA	CleanAIR FPA108W4CN30	89%
9-12	Cummins	QSB 4.5	130	2,500	07-ENA070006	6,000	6,000	DST M30 Management System	DST M113-210-02	DST M150-301-01	DST M30	96%
51-14	Detuz	BF4L2011	78	2,800	07-ENA-040004	6,000	6,000	Rhmac Model DEC-1202 ECM	CDTI /ECS ModelAZ-27	Rhmac Inc, PT # 1202	DCL- MOD # 950NC-SA-050U-0G52-01	85%
2=20	Deutz	1013FC	173	2,300	07-ENA-040007-1	7,000	7,000	Airflow Catalyst Systems	ACSMNC- M15515	Royal Exhaust Cooler [REC-200]	ACSMNC- M15515	87%
24-17	Detuz	BF 4L2011	78	2,800	07-ENA040004-1	6,000	6,000	Royal Hydraulics	Airflow Catalyst Systems MinNoCat -SM10SS12SOP4P4	Royal Hyd. REC Mod # 100	Airflow Catalyst Systems MinNoCat -SM10SS12SOP4P4	95%
24-17	Detuz	BF4L2011	78	2,800	07-ENA040004-1	6,000	6,000	Royal Hydraulics	Airflow Catalyst Systems MinNoCat -SM10SS12SOP4P4	REC-100	Airflow Catalyst Systems MinNoCat -SM10SS12SOP4P4	95%
24-17	Detuz	BF4L2011	78	2,800	07-ENA040004-1	6,000	6,000	Royal Hydraulics	Airflow Catalyst Systems MinNoCat -SM10SS12SOP4P4	REC-100	Airflow Catalyst Systems MinNoCat -SM10SS12SOP4P4	95%
7-11	Deutz	BF4L2012	100	2,500	07-ENA040002	6,000	6,000	DST Management System Model M194	DST -PN# M-260-223-02	DST pt #M289-301-01	DST P/N M70-417-01 (.96% Eff)	96%
8-11	Deutz	BF4M 2012	92	2,500	07-ENA040002	6,000	6,000	DST M194 Emissions Control System	M260-22-02	DST M289-301-01	DST M70-417-01	95%
11-09	Deutz	BF4M 2012	100	2,500	07-ENA040002	6,000	6,000	DST M194 Emissions Control System	M260-223-02	DST M289-301-01	DST M70-417-01	95%
11-09	Deutz	BF4M 2012	100	2,500	07-ENA040002	6,000	6,000	DST M194 Emissions Control System	M260-223-02	DST M289-301-01	DST M70-417-01	95%
55-17	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Royal Exhaust Cooler [REC-50]	Airflow Catalyst Systems MinNoCat -SM10SS12SOP3P7	Royal Exhaust Cooler [REC-50]	Airflow Catalyst Systems MinNoCat -SM10SS12SOP3P7	95%
55-17	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Royal Exhaust Cooler [REC-50]	Airflow Catalyst Systems MinNoCat -SM10SS12SOP3P7	Royal Exhaust Cooler [REC-50]	Airflow Catalyst Systems MinNoCat -SM10SS12SOP3P7	95%
195-11	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA108W4CN	92%
195-11	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Rohmac Model DEC 1202	CleanAIR Assure DOC CWD04668CCN	DNA	CleanAIR FPA108W4CN	92%
55-17	Deutz	D2011L03i	48	2,800	07-ENA-040011	2,000	2,000	Airflow Catalyst Systems	Royal Hyd. Mod REC-50	ACS MinNoCat -SM10SS12SOP3P7	Airflow Cat Sys MinNoCat -SM10SS12SOP3P7	95%
118-13	Kubota	V2303 M DI E3	49	2,700	07-ENA-080011	3,000	3,000	DST M194	M260-223-02	DST M150-301-01	DST Management System M70-417-01	95%
118-13	Kubota	V2403-M	49	2,800	07-ENA060011	3,000	3,000	DST M194	DST M260-223-02	DST M289-301-01	DST -M70-417-01	95%
126-07	Deutz	FM 4M1013FC	157	2,200	07-ENA0400007	6,500	6,500	DCL DPM Filter	Mine X Catalized Cordierite Filter Size 10		Mine X Catalized Cordierite Filter Size 10	85%
BFE-DEES 113.12	Caterpillar	31268B HEUI	225	2,500	07-FA060002 & 07-EPA060001-1	10,000	11,500	Nett Technologies SP3731 SN M09-0138	Model 01-EI-03294-10295-MD	Sandvik Part No. 64558127	Donaldson Fiberglass Filter Model P604516	95%
19-12	Detuz	BF4M2912C	138	2,500	07-ENA040003	6,500	6,500	Rhmac,Inc Model DEC 2012	DCL Mine-X Converter A60L9-ID-010R-0102-01	Rhmac DEC 1202	DCL- MOD # 950NC-SA-050U-0G52-01	93%
80-13	Deutz	BF 4M 2012	100	2,500	07-ENA040002	6,000	6,000	DST Management System	DST Management System	DST Management System M70-104-01	DST Management System M70-104-01	96%
19-12	Detuz	BF4M2912C	138	2,500	07-ENA040003	6,500	6,500	Rhmac,Inc Model DEC 2012	DCL Mine-X Converter A60L9-ID-010R-0102-01	Rhmac DEC 1202	DCL- MOD # 950NC-SA-050U-0G52-01	93%
50-14	Deutz	BF6M2012C	208	2,500	07-ENA040008	9,000	9,000	DST Management System	Synat M357-210-02	DST P/N# M190-301-01	DST P/N# M30-411-01R	99%
3-18	Deutz	FM 4M1013FC	157	2,200	07-ENA0400007	6,500	6,500	Rhmac,Inc Model DEC 1202	DCL Mine-X Converter A60L9-ID-010R-0102-01	Rhmac,Inc Model DEC 1202	DCL- MOD # 950NC-SA-050U-0G52-01	93%
195-11	Deutz	D2011L03i	48	2,800	07-ENA04011	2,000	2,000	Rhmac,Inc Model DEC 1202	DCL Mine-X Converter A60L9-ID-010R-0102-01	Rhmac DEC 1202	DCL- MOD # 950NC-SA-050U-0G52-01	93%
2023-04	Cummins	QSB 4.5	110	2,500	07-ENA070006	4,500	4,500	M30 DST Management System				

BOTE-D Approval No	Equipment Manufacturer	Equipment Model No	Equipment Description	Remarks
184-11	JH Fletcher & Co.	CMHC-D	Diesel Power Manhole Cutter	
157-10	Johnson Industries	PA-FE	Diesel 3-4 Mantrip	
52-09	Johnson Industries	SS	8-12 Man Diesel Mantrip	
157-10	Johnson Industries	PA-FE	Diesel 3-4 Mantrip	
52-09	Johnson Industries	SS	8-12 Man Personal Carrier	Personal Carrier using a 53-09 Engine Package
				Engine package used on BOTE -D 52-09
BFE-D 144-12	Petito Mine Equipment	2060	Utility Tractor	
115-11	Rhmac	PC 740	7 Man personal Carrier	
3-14	Rhmac	DP50	Power Pack	
67-18	Rhmac	DP-30	Diesel Power Pack	Equipped with BOTE-DEES 197-11
113-14	Rhmac	MT540	Microtraxx Loader	
196-11	Rohmac	MT3434	Crawler Mounted Diesel Loader	
194-11	Rohmac	SL 448	Crawler Mounted Diesel Loader	
136-09	Rohmac	PC732	Mine Rover 7 Man Diesel Personnel Carrier	
53-14	Rohmac	DP 100	Diesel Power Pack	
128-10	Rohmac	RD242	Diesel Rockduster	
115-11	Rohmac	PC740	7 Man Diesel Personnel Carrier	
175-11	Rohmac	75	Diesel Track Cleaner	
12-19	Rohmac	DP-138D	Diesel Power Pack	
33-06	Rohmac	627D	Diesel Powered Rock Duster	
1892-02	Rohmac	UT 742	Mine Rover Utility Tractor	
196-11	Rohmac	MT 3434	Crawler Mounted Track Loader 360 Degree Rotation	
194-11	Rohmac	PC732	Mine Rover Personnel Carrier	
				Package used in 194-11 & 71-15 Bote-D
194-11	Rohmac	PC732	Rhmac Diesel Loader	Rhmac Diesel Loader using a 195-11 Engine Package
41-15	Rohmac	DR002	Rail Mounted POD Duster	
71-15	Rohmac	RD4001900AC48D1	Diesel Engine Package	
142-08	Rohmac	FWC1430D	Diesel Engine Package	
142-08	Rohmac	FWC-1430D	Diesel Fire/Water Car	
42-10	Rohmac	DP-602	Diesel Hydraulic Power Pack	
1873-02	Rohmac	436MD	Micro Traxx Tractor	
1794-00	Rohmac	436 RD	Micro Traxx Tractor	
136-09	Rohmac	PC732	Mine Rover 7 Man Diesel Personnel Carrier	
136-09	Rohmac	PC732	Mine Rover 7 Man Diesel Personnel Carrier	Modification made on 6-15-12.