| APPROVAL NUMBER | <u>DATE</u> <u>ISSUED</u> | ENGINE MANUFACTURER | | ENGINE RATING(S) AT 1000 FTELEV. | VENTILATION (CFM) |
|---------------------|------------------------------|--------------------------------------|---------------------------------|--|--|
| 31/D1-1 RETIRED | 07/19/65 | HUPP CORP HERCULES ENGINE DIV. | D00D | 53 bhp @ 2600 RPM 50 bhp @ 2400 RPM | 6,500 5,900 |
| 31/D3 RETIRED | 03/23/64 | HUPP CORP HERCULES ENGINE DIV. | DH3000 | 82 bhp @ 3000 RPM 79 bhp @ 2800 RPM 75 bhp @ 2600 RPM 70 bhp @ 2400 RPM 66 bhp @ 2200 RPM | 13,000 13,000 13,000 13,000 13,000 |
| 31/D5-5 RETIRED | 09/25/68 | HUPP CORP HERCULES ENGINE DIV. | DH30 00-F HORI- ZONTAL | 86 bhp @ 3000 RPM 83 bhp @ 2800 RPM 77 bhp @ 2600 RPM 76 bhp @ 2400 RPM 72 bhp @ 2200 RPM | 10,000 10,000 10,000 10,000 8,700 |
| 31/D7 RETIRED | 08/21/67 | DEUTZ DIESEL | A8L 714 | 156 bhp @ 2200 RPM 154 bhp @ 2150 RPM 152 bhp @ 2100 RPM 147 bhp @ 2000 RPM 135 bhp @ 1800 RPM | 22,000 21,000 19,000 |
| 31/D12-4 RETIRED | 04/27/81 | CATERPILLAR TRACTOR CO. | 3306 PCNA | 146 bhp @ 2200 RPM 138 bhp @ 2000 RPM 127 bhp @ 1800 RPM | 17,000 |
| 31/D15-1 RETIRED | 05/03/71 | CATERPILLAR TRACTOR CO. | 3160 | 180 bhp @ 2800 RPM 175 bhp @ 2600 RPM 169 bhp @ 2400 RPM 158 bhp @ 2200 RPM | 48,000 48,000 |

| APPROVAL NUMBER | DATE ISSUED | ENGINE MANUFACTURER | | ENGINE RATING(S) VEI # AT 1000 FTELEV. | NTILATION (CFM) |
|---------------------|----------------|----------------------------|------------------------------|---|--|
| | | | | 149 bhp @ 2000 RPM 137 bhp @ 1800 RPM 126 bhp @ 1600 RPM | 42,000 34,000 33,000 |
| 31/D16-2 RETIRED | 01/21/71 | FORD MOTOR COMPANY | 401 CID SERIES 8000 | 91 bhp @ 2300 RPM 88 bhp @ 2200 RPM 82 bhp @ 2000 RPM 76 bhp @ 1800 RPM | 23,000 23,000 23,000 23,000 |
| 31/D18 RETIRED | 02/10/71 | FORD MOTOR COMPANY | 201 CID SERIES 4000 | 45 bhp @ 2200 RPM 40.5 bhp @ 2000 RPM 39 bhp @ 1800 RPM | 13,400 12,000 12,000 |
| 31/D21 RETIRED | 08/23/71 | CUMMINS ENGINE CO. | V-504 | 142 bhp @ 3300 RPM 142 bhp @ 3100 RPM 138 bhp @ 2900 RPM 133 bhp @ 2700 RPM 130 bhp @ 2500 RPM 122 bhp @ 2300 RPM 111 bhp @ 2000 RPM 101 bhp @ 1800 RPM 90 bhp @ 1600 RPM | 48,000 48,000 46,000 42,000 41,000 39,000 36,000 34,000 31,000 |
| 31/D23-3 RETIRED | 05/13/74 | CATERPILLAR TRACTOR CO. | D330 C-NA | 82 bhp @ 2200 RPM 81 bhp @ 2000 RPM 76 bhp @ 1800 RPM 73 bhp @ 1600 RPM | 12,000 11,000 10,000 10,000 |
| 31/D26-1 RETIRED | 05/13/74 | CATERPILLAR TRACTOR CO. | D330 C-NA | 94 bhp @ 2200 RPM 88 bhp @ 2000 RPM | 11,500 11,000 |

| APPROVAL NUMBER | <u>DATE</u> ISSUED | ENGINE MANUFACTURER | | ENGINE RATING(S) AT 1000 FTELEV. | VENTILATION (CFM) |
|---------------------|-----------------------|----------------------------|-------|---|---|
| | | | 3304 | 85 bhp @ 1800 RPM 78 bhp @ 1600 RPM | 9,000 8,000 |
| 31/D28-1 RETIRED | 05/13/74 | CATERPILLAR TRACTOR CO. | 3304 | 95 bhp @ 2200 RPM 91 bhp @ 2000 RPM 85 bhp @ 1800 RPM | 10,500 10,000 9,000 |
| 31/D30-1 RETIRED | 07/03/73 | PERKINS ENGINES,INC | 4.236 | 55 bhp @ 2400 RPM 51 bhp @ 2200 RPM 48 bhp @ 2000 RPM 46 bhp @ 1800 RPM 43 bhp @ 1600 RPM | 20,000 19,000 16,000 14,000 14,000 |
| 31/D32-2 | 01/14/82 | PERKINS ENGINES,INC | 4.108 | 35 bhp @ 3000 RPM 33 bhp @ 2800 RPM 30 bhp @ 2600 RPM 28 bhp @ 2400 RPM 26 bhp @ 2200 RPM 24 bhp @ 2000 RPM 21 bhp @ 1800 RPM | 3,400 3,100 2,800 2,600 2,400 2,200 1,800 |
| 31/D34-1 RETIRED | 01/13/74 | CATERPILLAR TRACTOR CO. | 3304 | 96 bhp @ 2200 RPM 93 bhp @ 2000 RPM 86 bhp @ 1800 RPM 79 bhp @ 1600 RPM | 12,000 10,500 9,000 8,000 |
| 31/D38 | 04/08/75 | PERKINS ENGINES,INC | 4.154 | 62 bhp @ 3000 RPM 55 bhp @ 2600 RPM | 6,000 4,800 |

| APPROVAL NUMBER | DATE ISSUED | ENGINE MANUFACTURER | | ENGINE RATING(S) AT 1000 FTELEV. | VENTILATION (CFM) |
|---------------------|----------------|---|----------------|--|----------------------------------|
| | | | | 52 bhp @ 2500 RPM 50 bhp @ 2300 RPM 46 bhp @ 2000 RPM 41 bhp @ 1800 RPM | 4,500 4,500 3,600 3,500 |
| 31/D39 RETIRED | 07/07/75 | CATERPILLAR TRACTOR CO. | 3208 | 173 bhp @ 2800 RPM 169 bhp @ 2500 RPM 162 bhp @ 2300 RPM 139 bhp @ 1800 RPM | 31,400 29,600 |
| 31/D41 RETIRED | 04/26/76 | ELMAC CORP (FORD MOTOR COMPANY) | 401 CID | 105 bhp @ 2300 RPM 94 bhp @ 2000 RPM 78 bhp @ 1600 RPM | 14,600 14,600 14,600 |
| 31/D42 RETIRED | 04/28/76 | CATERPILLAR TRACTOR CO. | 3304 LAYDOW | 97 bhp @ 2200 RPM N | 12,000 |
| 31/D44 RETIRED | 05/28/76 | MOTOREN-WERKE HANNHEIM | F4M 212 | 65 bhp @ 2300 RPM | 5,600 |
| 31/D45 RETIRED | 05/28/76 | MOTOREN-WERKE HANNHEIM | F6M 212 | 100 bhp @ 2300 RPM | 8,700 |
| 31/D46-1 RETIRED | 01/14/82 | CATERPILLAR TRACTOR CO. STA COMPRESSION | | 100 bhp @ 2200 RPM 95 bhp @ 2000 RPM 87 bhp @ 1800 RPM | 13,000 11,500 10,500 |

| APPROVAL NUMBER | DATE ISSUED | ENGINE MANUFACTURER | | ENGINE RATING(S) VEI AT 1000 FTELEV. | NTILATION (CFM) |
|--------------------|----------------|--|----------------------------|--|--|
| 31/D56-1 | 08/25/87 | MWM DIESEL | D916-4 | 65 bhp @ 2300 RPM | 5,600 |
| 31/D57-4 | 08/25/87 | MWM DIESEL | D916-4 | 94 bhp @ 2300 RPM | 8,700 |
| 31/D58-4 | 07/07/89 | CATERPILLAR TRACTOR CO. COMPRESSIO | 3306 PCNA HIGH DN | 150 bhp @ 2200 RPM 146 bhp @ 2100 RPM 142 bhp @ 2000 RPM 130 bhp @ 1800 RPM | 17,000 16,500 16,000 16,000 |
| 31/D59 | 12/06/85 | ISUZU DIESEL (Out of Production) | QD145 -306 | 103 bhp @ 2800 RPM | 14,000 |
| 31/D60 RETIRED | 01/15/82 | CATERPILLAR TRACTOR CO. | 3406 DITA | 350 bhp @ 2100 RPM 325 bhp @ 2100 RPM 290 bhp @ 2100 RPM 350 bhp @ 2000 RPM 345 bhp @ 1900 RPM 333 bhp @ 1800 RPM 275 bhp @ 1800 RPM | 73,000 70,000 63,000 72,000 71,000 69,000 60,000 |
| 31/D61-1 | 03/13/85 | ISUZU DIESEL OF NA (Out of Production) | QD60 | 52 SAE bhp @ 3000 RPM 43 SAE bhp @ 2500 RPM | • |
| 31/D62-2 | 09/21/84 | CATERPILLAR TRACTOR CO. | 3304 PCNA HIGH | 100 bhp @ 2200 RPM 95 bhp @ 2000 RPM 87 bhp @ 1800 RPM | 11,500 11,000 11,000 |

| APPROVAL NUMBER | DATE ISSUED | ENGINE MANUFACTURER | | ENGINE RATING(S) VEN # AT 1000 FTELEV. | ITILATION (CFM) | |
|-------------------------------|----------------|--|---------------|--|----------------------------|--|
| COMPRESSION | | | | | | |
| 31/D68-1 RETIRED 31/D68 | 02/08/84 | ISUZU DIESEL OF NA (Out of Production) | QD145 -306 | 115 bhp @ 2800 RPM 108 bhp @ 2400 RPM 103 bhp @ 2800 RPM | 15,000 15,000 14,000 | |
| 31/D71 | 12/15/82 | ISUZU DIESEL OF NA (Out of Production) | QD100 -306 | 70 bhp @ 2800 RPM 66 bhp @ 2400 RPM | 9,500 9,500 | |
| 31/D78 RETIRED | 07/11/85 | CATERPILLAR TRACTOR CO. | 3306 PCTA | 240 bhp @ 2200 RPM 225 bhp @ 2200 RPM 200 bhp @ 2200 RPM | 26,000 26,000 26,000 | |
| 31/D88 | 02/06/85 | CATERPILLAR TRACTOR CO. HORIZONTAL | 3304 PCNA | 90 bhp @ 2200 RPM | 13,500 | |
| 31/D90-1 | 11/25/85 | JOHN DEERE PRODUCT ENG. | 4276 DF | 66 bhp @ 2300 RPM | 10,500 | |
| 31/D103-1 | 08/25/87 | MWM DIESEL | D916-2 | 31 bhp @ 2300 RPM | 3,000 | |
| 31/D104-1 | 08/25/87 | MWM DIESEL | D916-3 | 47 bhp @ 2300 RPM | 4,500 | |
| 31/D112 | 03/09/90 | FORD NEW HOLLAND,INC. | BSD6 66M36 | 88 HP @ 2300 RPM | 21,000 | |

| APPROVAL NUMBER | <u>DATE</u> ISSUED | ENGINE MANUFACTURER | ENGINE MODEL# | ENGINE RATING(S) AT 1000 FTELEV. | VENTILATION (CFM) |
|--------------------|-----------------------|------------------------|------------------|--|-------------------------|
| 31/D115 | 11/07/91 | LISTER PETTER | LPU4G | 31.3 HP @ 3200 RPM 30.3 HP @ 4000 RPM 29.9 HP @ 3500 RPM 27.7 HP @ 3000 RPM 25.4 HP @ 2500 RPM | 4,000 3,500 3,000 |
| | | | | 22.5 HP @ 2000 RPM | • |