

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... OTERO COUNTY Projected 2006
FARM SIZE..... 320.00 ACRES
IRRIGATION TYPE..... SPRINKLER
NUMBER OF CROPS..... 4

VERSION 1.0

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DISCLAIMER

EQUAL OPPORTUNITY MESSAGE

TABLE 1. Acreage Summary, Otero County,
Projected 2006

| BUDGET AREA..... TULAROSA BASIN, OTERO COUNTY | | | |
|---|---------------------|-------------------|-----------------|
| FARM SIZE..... | 50 ACRES | | |
| IRRIGATION TYPE..... | SPRINKLER | | |
| NUMBER OF CROPS... | 3 | | |
| | WATER USE | | |
| ACREAGE SUMMARY: | LAND USE (ACRES) | AC.IN. PER AC. | TOTAL AC.IN. |
| ALFALFA ESTABLISHMENT | 4.00 * | 8 | 32 |
| ALFALFA HAY | 40.00 | 45 | 1,800 |
| OAT HAY | 5.00 | 18 | 90 |
| SORGHUM/SUDAN | 5.00 * | 16 | 80 |
| ROADS, DITCHES, HOMESTEAD | 5.00 | | |
| TOTAL | 50.00 | | 2,002 |
| ACRE FEET PER ACRE OF WATER RIGHTS | | | 3.34 |

* DOUBLE-CROPPED

TABLE 2. Basic cost information for Tularosa Basin, Otero County,
Projected 2006

| Item | | |
|--|-----------------------------|---|
| Labor Wage Rate: | | |
| Equipment operators | \$/hour | \$6.65 |
| General & Irrigators | \$/hour | \$6.35 |
| Purchased Inputs: | | |
| Fertilizer: | | |
| Nitrogen (N) | \$/pound | \$0.40 |
| Seed: | | |
| Alfalfa | \$/pound | \$2.88 |
| Oats for Hay | \$/pound | \$0.27 |
| Natural Gas (Gas NM) (service charge) | \$/MCF \$/month | \$3.29 \$10.00 |
| Diesel fuel | \$/gallon | \$2.10 |
| Gasoline | \$/gallon | \$2.00 |
| Electricity (Otero Coop) | cents/KwHr | 8.15 |
| Employee Liability Insurance | \$/\$1,000 wages | \$12.00 |
| Employee Benefits | percent/wages | 12.00% |
| Labor Downtime | percent | 25.00% |
| Financial Rates: | | |
| Operating Capital Interest Rate | percent | 7.00% |
| Land Interest Rate | percent | 7.00% |
| Equipment Interest Rate | percent | 7.00% |
| Expected Inflation Rate | percent | 3.00% |
| Land Taxes | \$300.00 /acre (full value) | \$2.99 |
| Personal Property Tax Rate | - NR - R | \$/ \$1,000 (Assessed Value) \$23.77 |
| Supervision Factors | | |
| Field Crop-Irrigation | \$/acre | \$1.00 |
| Field Crop-Equipment & General | \$/acre | \$0.50 |
| Management Rate | percent | 4.00% |

TABLE 3. Overhead cost information for Tularosa Basin, Otero County,
Projected 2006

| Item | | |
|------------------------------------|------------------------|------------------|
| Electricity (Domestic & Shop) | \$66.95 per month | \$803 |
| Telephone | \$72.10 per month | \$865 |
| Accounting & Legal | | \$155 |
| Misc. Supplies & Hand Tools | | \$536 |
| Pickup and Auto | | |
| miles | 5,305 @ | \$0.415 per mile |
| Insurance | | |
| - general liability (non-employee) | | \$247 |
| - fire/theft | | \$165 |
| Property Taxes | | |
| - non-planted land | | \$0 |
| - other than land & machinery | | \$6,010 |
| Building repairs and maintenance | | \$247 |
| Dues, fees, publications | | \$134 |
| Farmstead Equipment | | \$165 |
| | Total | \$11,528 |
| | Total per planted acre | \$256.18 |

TABLE 4. Pumping costs and data for irrigation wells, Tullahoma Basin, Ohio County
Projected 2008

| WELL DATA | | DEPTH CHARACTERISTICS | |
|--------------------------|--------|-----------------------|-----|
| DELIVERY PIP | 40 | STATIC | 145 |
| SPRINKLER | | DRAWDOWN | 76 |
| | | TOTAL HEAD | 180 |
| | | CASING | 275 |
| GALLONS PER MINUTE (GPM) | 300 | | |
| WORK HORSEPOWER | 21 | | |
| EFFICIENCY FACTOR: | | | |
| ELECTRICITY | 0.289 | | |
| NATURAL GAS | 0.151 | | |
| LP GAS | 0.15 | | |
| DIESEL | 0.180 | | |
| FUEL COST PER HOUR: | | | |
| ELECTRICITY | 6.15 | CENTS/KWH | |
| NATURAL GAS | \$3.25 | \$/GAL | |
| LP GAS | \$0.65 | \$/GAL | |
| DIESEL | \$2.10 | \$/GAL | |
| PUMPING COSTS | | | |
| ELECTRICAL WELL | | | |
| COST PER HOUR | \$4.38 | | |
| COST PER ACRE INCH | \$6.57 | | |
| NATURAL GAS WELL | | | |
| COST PER HOUR | \$1.28 | | |
| COST PER ACRE INCH | \$1.94 | | |
| BUTANE WELL | | | |
| COST PER HOUR | \$2.38 | | |
| COST PER ACRE INCH | \$3.59 | | |
| DIESEL WELL | | | |
| COST PER HOUR | \$4.35 | | |
| COST PER ACRE INCH | \$6.56 | | |

TABLE 5. Equipment summary for a 50 acre part-time farm, Tullahoma Basin, Ohio County
Projected 2008

| EQUIPMENT ITEM & SIZE | ANNUAL HOURS OF NUMBER | TOTAL VALUE | VARIABLE COSTS | | | | | FIXED COSTS | | | TOTAL PER HR |
|--------------------------|------------------------------|----------------|-------------------------|------------------|--------------------------------|--------------|--------|-------------|--------|----------|-----------------|
| | | | FUEL, OIL, LUBRICANT | REPAIR PER HR | FUEL, OIL, REPAIR PER HR | DEPRECIATION | TAXES | | | | |
| TRACTOR | 50 HP | 122 | 1 | \$7,000 | \$912 | \$102 | \$7.40 | \$1.08 | \$800 | \$60 | \$8.10 |
| BALEWAGON, PTO | 43 | 1 | \$1,500 | \$65 | \$1.25 | \$65 | \$1.25 | \$600 | \$60 | \$2.46 | |
| BALEWAGON, PTO | 2 W/RC | 43 | 1 | \$1,000 | \$7 | \$0.15 | \$0.15 | \$600 | \$60 | \$0.28 | |
| PLOW | 2 BTM | 4 | 1 | \$250 | \$1 | \$0.31 | \$0.31 | \$33 | \$2 | \$6.53 | |
| FLOAT | 8 FT | 0 | 1 | \$400 | \$0 | \$0.21 | \$0.21 | \$42 | \$2 | \$4.80 | |
| DISC | 8 FT | 12 | 1 | \$700 | \$11 | \$0.67 | \$0.67 | \$55 | \$7 | \$6.04 | |
| SPRINKLER | 3,000 | 1 | \$2,500 | \$0 | \$0.00 | \$0.00 | \$333 | \$25 | \$0.12 | | |
| DRILL | 12 FT | 3 | 1 | \$2,200 | \$3 | \$1.05 | \$1.05 | \$40 | \$2 | \$17.11 | |
| SWATHER | 14 FT | 34 | 1 | \$2,100 | \$10 | \$0.28 | \$0.28 | \$700 | \$70 | \$22.37 | |
| NATURAL GAS WELL | 3,000 | 1 | \$73,025 | \$3,880 | \$0 | \$1.28 | \$0.00 | \$1,042 | \$70 | \$130.43 | |
| | | | \$17,864 | \$4,792 | \$219 | | | \$4,796 | \$466 | | |

| ITEM | NEW VALUE | USED VALUE | YEARS LIFE | EQUIP CODE | MAX HOURS | FUEL LUBE COEF | ACCUM HOURS | INTEREST EXPENSE | USAGE LIST | | | | | | | |
|------------------|--------------|---------------|---------------|---------------|--------------|----------------------|----------------|---------------------|-----------------|----------------|--------------------|------------------------------|-----------|--------|--------|-------|
| | | | | | | | | | ALFALFA EST. | ALFALFA HAY | OATS FOR HAY | SORGHUM SUDAN PER ACRE | | | | |
| TRACTOR | 50 HP | 17095.00 | 7000.00 | 20.00 | 1.00 | 800.00 | 3.40 | 0.10 | 1659.70 | 16.00 | 629.15 | 3.07 | 2.05 | 3.48 | 2.06 | 10.66 |
| BALEWAGON, PTO | 43 | 1500.00 | 1000.00 | 20.00 | 5.00 | 800.00 | 250.00 | 0.00 | 550.00 | 0.00 | 1.00 | 0.27 | 0.4 | 1.4 | 1.60 | |
| BALEWAGON, PTO | 2 W/RC | 7700.00 | 1000.00 | 20.00 | 3.00 | 500.00 | 870.70 | 16.00 | 285.50 | 0.00 | 1.00 | 0.21 | 0.42 | 0.88 | 1.68 | |
| PLOW | 2 BTM | 500.00 | 250.00 | 15.00 | 3.00 | 300.00 | 67.20 | 16.00 | 17.50 | 0.00 | 0.00 | 1.05 | 0.00 | 1.05 | 1.05 | |
| FLOAT | 8 FT | 600.00 | 400.00 | 15.00 | 4.00 | 300.00 | 174.40 | 16.00 | 21.00 | 0.00 | 0.64 | 0.64 | 0.64 | 1.02 | 1.02 | |
| DISC | 8 FT | 1400.00 | 700.00 | 15.00 | 3.00 | 300.00 | 199.88 | 16.00 | 49.00 | 1.17 | 0.00 | 1.17 | 0.39 | 2.73 | 2.73 | |
| SPRINKLER | 3,000 | 4500.00 | 2000.00 | 15.00 | 0.00 | 8750.00 | 4326.26 | 15.00 | 170.00 | 12.07 | 67.89 | 27.15 | 24.138889 | 131.24 | 131.24 | |
| DRILL | 12 FT | 4400.00 | 2000.00 | 10.00 | 8.00 | 100.00 | 38.22 | 13.00 | 154.00 | 0.21 | 0.00 | 0.21 | 0.21 | 0.63 | 0.63 | |
| SWATHER | 14 FT | 14000.00 | 2100.00 | 20.00 | 2.00 | 800.00 | 441.20 | 13.00 | 600.00 | 0.00 | 0.80 | 0.16 | 0.32 | 1.28 | 1.28 | |
| NATURAL GAS WELL | 3,000 | 26000.00 | 13025.00 | 20.00 | 0.00 | 8742.00 | 43305.26 | 15.00 | 911.75 | 12.07 | 67.89 | 27.15 | 24.138889 | 131.24 | 131.24 | |

| ITEM | NEW VALUE | USED VALUE | YEARS LIFE | EQUIP CODE | MAX HOURS | FUEL LUBE COEF | ACCUM HOURS | INTEREST EXPENSE | ALFALFA ESTABLISHMENT | | | | |
|---------------|--------------|---------------|---------------|---------------|--------------|----------------------|----------------|---------------------|-----------------------|---------------|---------------|-------------------------------------|----------|
| | | | | | | | | | MACHINE | POWER UNIT | TIMES OVER | ACCOMPLISHMENT RATE TOTAL CUSTOM | |
| DISC | 50 HP | 1.00 | 0.39 | 0.39 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| PLOW | 50 HP | 1.00 | 1.05 | 1.05 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 | |
| DISC (2X) | 50 HP | 2.00 | 0.39 | 0.78 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000920 | 0.000480 | 0.000400 | |
| FLOAT (2X) | 50 HP | 2.00 | 0.32 | 0.64 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000880 | 0.000480 | 0.000400 | |
| DRILL | 50 HP | 1.00 | 0.21 | 0.21 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 | |
| IRRIGATE (4X) | 50 HP | 4.00 | 1.51 | 12.07 | 0.000000 | 0.000080 | 0.000080 | 0.000080 | 0.000560 | 0.001840 | 0.000960 | 0.000800 | |

| ITEM | NEW VALUE | USED VALUE | YEARS LIFE | EQUIP CODE | MAX HOURS | FUEL LUBE COEF | ACCUM HOURS | INTEREST EXPENSE | ALFALFA HAY | | | |
|---------------------|--------------|---------------|---------------|---------------|--------------|----------------------|----------------|---------------------|-------------|---------------|---------------|-------------------------------------|
| | | | | | | | | | MACHINE | POWER UNIT | TIMES OVER | ACCOMPLISHMENT RATE TOTAL CUSTOM |
| IRRIGATE (11X) | 50 HP | 11.00 | 1.51 | 67.69 | 0.000000 | 0.000110 | 0.000110 | 0.000110 | 0.000770 | 0.002470 | 0.001280 | 0.001100 |
| SWATHER (5X) | 14 FT | 5.00 | 0.16 | 0.80 | 0.000000 | 0.000050 | 0.000050 | 0.000050 | 0.000350 | 0.001100 | 0.000550 | 0.000450 |
| BALEWAGON, PTO (5X) | 50 HP | 5.00 | 0.21 | 1.05 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| BALEWAGON, PTO (5X) | 50 HP | 5.00 | 0.20 | 1.00 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |

| ITEM | NEW VALUE | USED VALUE | YEARS LIFE | EQUIP CODE | MAX HOURS | FUEL LUBE COEF | ACCUM HOURS | INTEREST EXPENSE | OATS FOR HAY | | | |
|----------------|--------------|---------------|---------------|---------------|--------------|----------------------|----------------|---------------------|--------------|---------------|---------------|-------------------------------------|
| | | | | | | | | | MACHINE | POWER UNIT | TIMES OVER | ACCOMPLISHMENT RATE TOTAL CUSTOM |
| DISC | 50 HP | 1.00 | 0.39 | 0.39 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| PLOW | 50 HP | 1.00 | 1.05 | 1.05 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| DISC (2X) | 50 HP | 2.00 | 0.39 | 0.78 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000920 | 0.000480 | 0.000400 |
| FLOAT (2X) | 50 HP | 2.00 | 0.32 | 0.64 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000880 | 0.000480 | 0.000400 |
| DRILL | 50 HP | 1.00 | 0.21 | 0.21 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| IRRIGATE (4X) | 50 HP | 4.00 | 1.51 | 27.15 | 0.000000 | 0.000080 | 0.000080 | 0.000080 | 0.000560 | 0.001840 | 0.000960 | 0.000800 |
| SWATHER | 14 FT | 1.00 | 0.16 | 0.16 | 0.000000 | 0.000050 | 0.000050 | 0.000050 | 0.000350 | 0.001100 | 0.000550 | 0.000450 |
| BALEWAGON, PTO | 50 HP | 1.00 | 0.21 | 0.21 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| BALE WAGON | 50 HP | 1.00 | 0.20 | 0.20 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |

| ITEM | NEW VALUE | USED VALUE | YEARS LIFE | EQUIP CODE | MAX HOURS | FUEL LUBE COEF | ACCUM HOURS | INTEREST EXPENSE | SUDAN HAY | | | |
|----------------|--------------|---------------|---------------|---------------|--------------|----------------------|----------------|---------------------|-----------|---------------|---------------|-------------------------------------|
| | | | | | | | | | MACHINE | POWER UNIT | TIMES OVER | ACCOMPLISHMENT RATE TOTAL CUSTOM |
| DISC | 50 HP | 1.00 | 0.39 | 0.39 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| FLOAT (2X) | 50 HP | 2.00 | 0.32 | 0.64 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000880 | 0.000480 | 0.000400 |
| DRILL | 50 HP | 1.00 | 0.21 | 0.21 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| IRRIGATE (4X) | 50 HP | 4.00 | 1.51 | 24.14 | 0.000000 | 0.000080 | 0.000080 | 0.000080 | 0.000560 | 0.001840 | 0.000960 | 0.000800 |
| SWATHER | 14 FT | 2.00 | 0.16 | 0.32 | 0.000000 | 0.000050 | 0.000050 | 0.000050 | 0.000350 | 0.001100 | 0.000550 | 0.000450 |
| BALEWAGON, PTO | 50 HP | 2.00 | 0.21 | 0.42 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000880 | 0.000480 | 0.000400 |
| BALE WAGON | 50 HP | 2.00 | 0.20 | 0.40 | 0.000000 | 0.000040 | 0.000040 | 0.000040 | 0.000280 | 0.000880 | 0.000480 | 0.000400 |

| Hours of Use | ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE | | | | | | | | |
|--------------|---|----------|----------|----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| 50 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000460 | 0.000240 | 0.000200 |
| 100 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000220 | 0.000100 | 0.000380 | 0.000200 |
| 200 | 0.000000 | 0.000020 | 0.000020 | 0.000020 | 0.000140 | 0.000180 | 0.000060 | 0.000110 | 0.000200 |
| 300 | 0.000020 | 0.000050 | 0.000030 | 0.000060 | 0.000230 | 0.000310 | 0.000140 | 0.000630 | 0.000440 |
| 400 | 0.000020 | 0.000060 | 0.000070 | 0.000090 | 0.000260 | 0.000340 | 0.000170 | 0.000710 | 0.000440 |
| 500 | 0.000020 | 0.000070 | 0.000080 | 0.000100 | 0.000280 | 0.000370 | 0.000190 | 0.000800 | 0.000530 |
| 600 | 0.000020 | 0.000080 | 0.000090 | 0.000120 | 0.000310 | 0.000400 | 0.000210 | 0.000900 | 0.000600 |
| 700 | 0.000020 | 0.000100 | 0.000140 | 0.000190 | 0.000330 | 0.000430 | 0.000230 | 0.001000 | 0.000690 |
| 800 | 0.000020 | 0.000110 | 0.000160 | 0.000210 | 0.000360 | 0.000460 | 0.000250 | 0.001100 | 0.000790 |
| 900 | 0.000020 | 0.000120 | 0.000180 | 0.000240 | 0.000390 | 0.000490 | 0.000270 | 0.001200 | 0.000890 |
| 1000 | 0.000040 | 0.000140 | 0.000200 | 0.000270 | 0.000420 | 0.000520 | 0.000290 | 0.001300 | 0.000990 |
| 1400 | 0.00048 | 0.000710 | 0.000300 | 0.000320 | 0.000435 | 0.000510 | 0.000410 | 0.001200 | 0.000785 |
| 1800 | 0.000190 | 0.000190 | 0.000285 | 0.000295 | 0.000465 | 0.000525 | 0.000430 | 0.001200 | 0.000885 |
| 1800 | 0.000190 | 0.000190 | 0.000285 | 0.000295 | 0.000465 | 0.000525 | 0.000430 | 0.001200 | |

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2006
Planting dates: September 1 - November 1

| ITEM | PRICE | QUANTITY | PURCHASED INPUTS | | | | | | TOTAL |
|---------------------------------|---------------|------------------------|---------------------|---------|----------------|---------|---------------|----------|---------|
| <u>PURCHASED INPUTS</u> | | | | | | | | | |
| ALFALFA SEED | \$2.88 | 30 LBS | \$86.40 | | | | | | \$86.40 |
| PUMP WATER* | | 8 AC. IN. | | | | | | | |
| SUBTOTAL | | | \$86.40 | | | | | | \$86.40 |
| <u>PREHARVEST OPERATIONS</u> | | | | | | | | | |
| | POWER UNIT | ACCOMPLISHMENT RATE | PURCHASED INPUTS | LABOR | FUEL & LUBE | REPAIRS | FIXED COST | TOTAL | |
| DISC | 50 HP | 0.39 HR | | \$2.59 | \$2.92 | \$0.42 | \$3.21 | \$9.14 | |
| PLOW | 50 HP | 1.05 HR | | \$6.98 | \$7.85 | \$1.46 | \$17.46 | \$33.76 | |
| DISC (2X) | 50 HP | 0.78 HR | | \$5.19 | \$5.83 | \$1.52 | \$12.59 | \$25.13 | |
| FLOAT (2X) | 50 HP | 0.64 HR | | \$4.26 | \$4.79 | \$0.70 | \$8.26 | \$18.00 | |
| DRILL | 50 HP | 0.21 HR | | \$1.40 | \$1.57 | \$0.45 | \$34.69 | \$38.11 | |
| IRRIGATE (4X) | | 2.00 HR | | \$12.70 | \$15.50 | \$0.00 | \$6.59 | \$34.79 | |
| SUBTOTAL | | 5.07 HR | | \$33.12 | \$38.47 | \$4.54 | \$82.80 | \$158.92 | |
| <u>OVERHEAD EXPENSES</u> | | | | | | | | | |
| DOWNTIME | | 0.77 HR | | \$5.10 | | | | | \$5.10 |
| EMPLOYEE BENEFITS | | | | \$3.97 | | | | | \$3.97 |
| FARM INSURANCE | | | \$0.40 | | | | | \$0.40 | |
| SUPERVISION AND MANAGEMENT | | | | \$13.35 | | | | | \$13.35 |
| SUBTOTAL | | 0.77 HR | \$0.40 | \$22.43 | | | | | \$22.82 |
| <u>TOTAL OPERATING EXPENSES</u> | | 5.84 HR | \$86.80 | \$55.54 | \$38.47 | \$4.54 | \$82.80 | \$268.14 | |

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2006
Harvesting dates: May 10 - October 15

| ITEM | PRICE | YIELD | | | | | | TOTAL |
|----------------------------------|------------|---------------------|------------------|-----------------|-----------------|----------------|-----------------|-----------------|
| GROSS RETURNS | | | | | | | | |
| ALFALFA HAY | \$130.00 | 6.00 TONS (STACKED) | | | | | | \$780.00 |
| TOTAL | | | | | | | \$780.00 | |
| PURCHASED INPUTS | | | | | | | | |
| | PRICE | QUANTITY | PURCHASED INPUTS | | | | FIXED COST | TOTAL |
| FERT. (ALFALFA MIX) | \$0.16 | 250 LBS | \$40.00 | | | | | \$40.00 |
| INSECTICIDE | \$23.97 | 1 ACRE | \$23.97 | | | | | \$23.97 |
| WIRE | \$0.36 | 56 LBS | \$20.16 | | | | | \$20.16 |
| ESTABLISHMENT: Principal | | 10 YEARS | | | | \$26.81 | | \$26.81 |
| : Interest | | | | | | \$7.85 | | \$7.85 |
| PUMP WATER* | | 45 AC. IN. | | | | | | |
| SUBTOTAL | | | \$84.13 | | | \$34.67 | | \$118.80 |
| PREHARVEST OPERATIONS | | | | | | | | |
| | POWER UNIT | ACCOMPLISHMENT RATE | PURCHASED INPUTS | LABOR | FUEL & LUBE | REPAIRS | FIXED COST | TOTAL |
| IRRIGATE (11X) | | 5.50 HR | | \$34.93 | \$87.20 | \$0.00 | \$37.08 | \$159.20 |
| SUBTOTAL | | 5.50 HR | | \$34.93 | \$87.20 | \$0.00 | \$37.08 | \$159.20 |
| HARVEST OPERATIONS | | | | | | | | |
| SWATHER (5X) | 14 FT | 0.80 HR | | \$5.32 | \$0.00 | \$0.22 | \$17.90 | \$23.44 |
| BALER, PTO (5X) | 50 HP | 1.05 HR | | \$6.98 | \$7.85 | \$1.29 | \$18.35 | \$34.48 |
| BALEWAGON, PTO (5X) | 50 HP | 1.00 HR | | \$6.65 | \$7.48 | \$2.36 | \$28.56 | \$45.05 |
| SUBTOTAL | | 2.85 HR | | \$18.95 | \$15.33 | \$3.88 | \$64.81 | \$102.97 |
| OVERHEAD EXPENSES | | | | | | | | |
| DOWNTIME | | 0.71 HR | | \$4.74 | | | | \$4.74 |
| EMPLOYEE BENEFITS | | | | \$6.47 | | | | \$6.47 |
| FARM INSURANCE | | | \$0.65 | | | | | \$0.65 |
| LAND TAXES | | | | | | \$2.99 | | \$2.99 |
| SUPERVISION AND MANAGEMENT | | | | \$38.13 | | | | \$38.13 |
| OTHER EXPENSES | | | \$256.18 | | | | | \$256.18 |
| SUBTOTAL | | 0.71 HR | \$256.82 | \$49.33 | | | \$2.99 | \$309.14 |
| TOTAL OPERATING EXPENSES | | 9.06 HR | \$340.96 | \$103.21 | \$102.53 | \$3.88 | \$139.54 | \$690.11 |
| NET OPERATING PROFIT | | | | | | | \$89.89 | |
| INTEREST ON OPERATING CAPITAL | | (\$65.47 @ 7.00% | | | | | \$4.58 | |
| INTEREST ON EQUIPMENT INVESTMENT | | | | | | | \$65.68 | |
| RETURN TO LAND AND RISK | | | | | | | \$19.62 | |

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

| | | | |
|-------------------------------|----------|----------|--|
| GROSS RETURN | | \$780.00 | |
| VARIABLE OPERATING EXPENSES | \$451.95 | | |
| RETURN OVER VARIABLE EXPENSES | \$328.05 | | (GROSS MARGINS) |
| FIXED EXPENSES | \$139.54 | | |
| NET FARM INCOME | \$188.51 | | (RETURNS TO CAPITAL, LABOR, LAND & RISK) |
| LABOR AND MANAGEMENT COST | \$103.21 | | |
| NET OPERATING PROFIT | \$85.31 | | (RETURNS TO CAPITAL, LAND & RISK) |
| CAPITAL COSTS | \$65.68 | | |
| RETURN TO LAND AND RISK | \$19.62 | | |

TABLE 8. Oats for hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2006
 Planting dates: September 1 - November 1
 Harvesting dates: April 15 - May 15

| ITEM | PRICE | YIELD | | | | | | | TOTAL |
|----------------------------------|------------|---------------------|------------------|---------|-------------|---------|------------|------------|----------|
| GROSS RETURNS | | | | | | | | | |
| OATS FOR HAY | \$90.00 | 3.00 TONS (STACKED) | | | | | | | \$270.00 |
| TOTAL | | | | | | | | | \$270.00 |
| PURCHASED INPUTS | | | | | | | | | |
| | PRICE | QUANTITY | PURCHASED INPUTS | | | | FIXED COST | TOTAL | |
| OAT SEED | \$0.27 | 100 LBS | \$27.00 | | | | | \$27.00 | |
| NITROGEN (N) | \$0.40 | 100 LBS | \$40.00 | | | | | \$40.00 | |
| PUMP WATER* | | 18 AC. IN. | | | | | | | |
| SUBTOTAL | | | \$67.00 | | | | | \$67.00 | |
| PREHARVEST OPERATIONS | | | | | | | | | |
| | POWER UNIT | ACCOMPLISHMENT RATE | PURCHASED INPUTS | LABOR | FUEL & LUBE | REPAIRS | FIXED COST | TOTAL | |
| DISC | 50 HP | 0.39 HR | | \$2.59 | \$2.92 | \$0.76 | \$6.29 | \$12.56 | |
| PLOW | 50 HP | 1.05 HR | | \$6.98 | \$7.85 | \$1.46 | \$17.46 | \$33.76 | |
| DISC (2X) | 50 HP | 0.78 HR | | \$5.19 | \$5.83 | \$1.52 | \$12.59 | \$25.13 | |
| FLOAT (2X) | 50 HP | 0.64 HR | | \$4.26 | \$4.79 | \$0.70 | \$8.26 | \$18.00 | |
| DRILL | 50 HP | 0.21 HR | | \$1.40 | \$1.57 | \$0.45 | \$34.69 | \$38.11 | |
| IRRIGATE (4X) | | 2.00 HR | | \$12.70 | \$34.88 | \$0.00 | \$14.83 | \$62.41 | |
| SUBTOTAL | | 5.07 HR | | \$33.12 | \$57.84 | \$4.88 | \$94.12 | \$189.96 | |
| HARVEST OPERATIONS | | | | | | | | | |
| SWATHER | 14 FT | 0.16 HR | | \$1.06 | \$0.00 | \$0.04 | \$3.58 | \$4.69 | |
| BALER, PTO | 50 HP | 0.21 HR | | \$1.40 | \$1.57 | \$0.26 | \$3.67 | \$6.90 | |
| BALE WAGON | 50 HP | 0.20 HR | | \$1.33 | \$1.50 | \$0.47 | \$5.71 | \$9.01 | |
| SUBTOTAL | | 0.57 HR | | \$3.79 | \$3.07 | \$0.78 | \$12.96 | \$20.59 | |
| OVERHEAD EXPENSES | | | | | | | | | |
| DOWNTIME | | 0.91 HR | | \$6.05 | | | | \$6.05 | |
| EMPLOYEE BENEFITS | | | | \$4.43 | | | | \$4.43 | |
| FARM INSURANCE | | | \$0.44 | | | | | \$0.44 | |
| LAND TAXES | | | | | | | \$1.49 | \$1.49 | |
| SUPERVISION AND MANAGEMENT | | | | \$14.62 | | | | \$14.62 | |
| OTHER EXPENSES | | | \$128.09 | | | | | \$128.09 | |
| SUBTOTAL | | 0.91 HR | \$128.53 | \$25.10 | | | \$1.49 | \$155.12 | |
| TOTAL OPERATING EXPENSES | | 6.55 HR | \$195.53 | \$62.01 | \$60.91 | \$5.66 | \$108.58 | \$432.68 | |
| NET OPERATING PROFIT | | | | | | | | (\$162.68) | |
| INTEREST ON OPERATING CAPITAL | | (| \$49.50 | @ | 7.00% |) | | \$3.47 | |
| INTEREST ON EQUIPMENT INVESTMENT | | | | | | | | \$50.95 | |
| RETURN TO LAND AND RISK | | | | | | | | (\$217.10) | |

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

| | | | |
|-------------------------------|------------|--|--|
| GROSS RETURN | | \$270.00 | |
| VARIABLE OPERATING EXPENSES | \$265.56 | | |
| RETURN OVER VARIABLE EXPENSES | \$4.44 | (GROSS MARGINS) | |
| FIXED EXPENSES | \$108.58 | | |
| NET FARM INCOME | (\$104.14) | (RETURNS TO CAPITAL, LABOR, LAND & RISK) | |
| LABOR AND MANAGEMENT COST | \$62.01 | | |
| NET OPERATING PROFIT | (\$166.15) | (RETURNS TO CAPITAL, LAND & RISK) | |
| CAPITAL COSTS | \$50.95 | | |
| RETURN TO LAND AND RISK | (\$217.10) | | |

TABLE 9. Sorghum-sudan hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2006
 Planting dates: May 1 - June 1
 Harvesting dates: June 1 - August 1

| ITEM | PRICE | YIELD | | | | | | TOTAL |
|----------------------------------|------------|---------------------|------------------|----------------|----------------|---------------|-----------------|-----------------|
| GROSS RETURNS | | | | | | | | |
| SORGHUM/SUDAN HAY | \$110.00 | 5.00 TONS (STACKED) | | | | | | \$550.00 |
| TOTAL | | | | | | | \$550.00 | |
| PURCHASED INPUTS | | | | | | | | |
| PURCHASED INPUTS | PRICE | QUANTITY | PURCHASED INPUTS | | FIXED COST | | TOTAL | |
| SEED | \$1.04 | 50 LBS | \$52.00 | | | | \$52.00 | |
| NITROGEN (N) | \$0.40 | 100 LBS | \$40.00 | | | | \$40.00 | |
| PUMP WATER* | | 16 AC. IN. | | | | | | |
| SUBTOTAL | | | \$92.00 | | | | \$92.00 | |
| PREHARVEST OPERATIONS | | | | | | | | |
| PREHARVEST OPERATIONS | POWER UNIT | ACCOMPLISHMENT RATE | PURCHASED INPUTS | LABOR | FUEL & LUBE | REPAIRS | FIXED COST | TOTAL |
| DISC | 50 HP | 0.39 HR | | \$2.59 | \$2.92 | \$0.76 | \$6.29 | \$12.56 |
| FLOAT (2X) | 50 HP | 0.64 HR | | \$4.26 | \$4.79 | \$0.70 | \$8.26 | \$18.00 |
| DRILL | 50 HP | 0.21 HR | | \$1.40 | \$1.57 | \$0.45 | \$34.69 | \$38.11 |
| IRRIGATE (4X) | | 2.00 HR | | \$12.70 | \$31.00 | \$0.00 | \$13.18 | \$56.89 |
| SUBTOTAL | | 3.24 HR | | \$20.95 | \$40.28 | \$1.91 | \$62.43 | \$125.56 |
| HARVEST OPERATIONS | | | | | | | | |
| SWATHER (2X) | 14 FT | 0.32 HR | | \$2.13 | \$0.00 | \$0.09 | \$7.16 | \$9.38 |
| BALER, PTO (2X) | 50 HP | 0.42 HR | | \$2.79 | \$3.14 | \$0.52 | \$7.34 | \$13.79 |
| BALE WAGON (2X) | 50 HP | 0.40 HR | | \$2.66 | \$2.99 | \$0.94 | \$11.42 | \$18.02 |
| SUBTOTAL | | 1.14 HR | | \$7.58 | \$6.13 | \$1.55 | \$25.92 | \$41.19 |
| OVERHEAD EXPENSES | | | | | | | | |
| DOWNTIME | | 0.60 HR | | \$3.96 | | | | \$3.96 |
| EMPLOYEE BENEFITS | | | | \$3.42 | | | | \$3.42 |
| FARM INSURANCE | | | \$0.34 | | | | | \$0.34 |
| LAND TAXES | | | | | | \$1.49 | | \$1.49 |
| SUPERVISION AND MANAGEMENT | | | | \$25.19 | | | | \$25.19 |
| OTHER EXPENSES | | | \$128.09 | | | | | \$128.09 |
| SUBTOTAL | | 0.60 HR | \$128.43 | \$32.57 | | | \$1.49 | \$162.49 |
| TOTAL OPERATING EXPENSES | | 4.98 HR | \$220.43 | \$61.10 | \$46.41 | \$3.46 | \$89.84 | \$421.24 |
| NET OPERATING PROFIT | | | | | | | \$128.76 | |
| INTEREST ON OPERATING CAPITAL | | (\$57.19 @ 7.00%) | | | | | | \$4.00 |
| INTEREST ON EQUIPMENT INVESTMENT | | | | | | | | \$45.62 |
| RETURN TO LAND AND RISK | | | | | | | \$79.14 | |

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

| | | | |
|-------------------------------|----------|----------|--|
| GROSS RETURN | | \$550.00 | |
| VARIABLE OPERATING EXPENSES | \$274.30 | | |
| RETURN OVER VARIABLE EXPENSES | | \$275.70 | (GROSS MARGINS) |
| FIXED EXPENSES | \$89.84 | | |
| NET FARM INCOME | | \$185.86 | (RETURNS TO CAPITAL, LABOR, LAND & RISK) |
| LABOR AND MANAGEMENT COST | \$61.10 | | |
| NET OPERATING PROFIT | | \$124.76 | (RETURNS TO CAPITAL, LAND & RISK) |
| CAPITAL COSTS | \$45.62 | | |
| RETURN TO LAND AND RISK | | \$79.14 | |

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County,
Projected 2006

| | ALFALFA ESTABLISHMENT | ALFALFA HAY | OATS FOR HAY | SORGHUM SUDAY HAY |
|----------------------------------|--------------------------|----------------|-----------------|----------------------|
| | | TONS | TONS | TONS |
| PRIMARY YIELD | | 6.00 | 3.00 | 5.00 |
| PRIMARY PRICE | | \$130.00 | \$90.00 | \$110.00 |
| GOVERNMENT PAYMENTS | | \$0.00 | \$0.00 | \$0.00 |
| SECOND INCOME | | \$0.00 | \$0.00 | \$0.00 |
| GROSS RETURN | | \$780.00 | \$270.00 | \$550.00 |
| CASH OPERATING EXPENSES | | | | |
| SEED | \$86.40 | | \$27.00 | \$52.00 |
| FERTILIZER | | \$40.00 | \$40.00 | \$40.00 |
| CHEMICALS | | \$23.97 | | |
| CROP INSURANCE | | | | |
| OTHER PURCHASED INPUTS | | \$20.16 | | |
| CANAL WATER | | | | |
| FUEL, OIL & LUBRICANTS-EQUIPMENT | \$22.96 | \$15.33 | \$26.03 | \$15.41 |
| FUEL-IRRIGATION | \$15.50 | \$87.20 | \$34.88 | \$31.00 |
| REPAIRS | \$4.54 | \$3.88 | \$5.66 | \$3.46 |
| CUSTOM CHARGES | | | | |
| LAND TAXES | | \$2.99 | \$1.49 | \$1.49 |
| OTHER EXPENSES | \$0.40 | \$256.82 | \$128.53 | \$128.43 |
| TOTAL CASH EXPENSES | \$129.81 | \$450.35 | \$263.59 | \$271.79 |
| RETURN OVER CASH EXPENSES | (\$129.81) | \$329.65 | \$6.41 | \$278.21 |
| FIXED EXPENSES | \$82.80 | \$136.56 | \$107.08 | \$88.35 |
| TOTAL EXPENSES | \$212.60 | \$586.91 | \$370.67 | \$360.14 |
| NET FARM INCOME | (\$212.60) | \$193.09 | (\$100.67) | \$189.86 |
| LABOR AND MANAGEMENT COSTS | \$55.54 | \$103.21 | \$62.01 | \$61.10 |
| NET OPERATING PROFIT | (\$268.14) | \$89.89 | (\$162.68) | \$128.76 |
| CAPITAL COSTS | | | | |
| INTEREST ON OPERATING CAPITAL | | \$4.58 | \$3.47 | \$4.00 |
| INTEREST ON EQUIPMENT INVESTMENT | | \$65.68 | \$50.95 | \$45.62 |
| TOTAL CAPITAL COSTS | \$0.00 | \$70.27 | \$54.41 | \$49.62 |
| RETURN TO LAND AND RISK | (\$268.14) | \$19.62 | (\$217.10) | \$79.14 |

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,
Projected 2006

| | | |
|----------------------------------|-------------|-----------------|
| GROSS RETURNS | | |
| ALFALFA HAY | 40.00 ACRES | |
| CROP | | \$31,200 |
| OATS FOR HAY | 5.00 ACRES | |
| CROP | | \$1,350 |
| SORGHUM/SUDAN | 5.00 ACRES | |
| CROP | | \$2,750 |
| GROSS RETURN | | <u>\$35,300</u> |
| CASH OPERATING EXPENSES | | |
| SEED | | \$741 |
| FERTILIZER | | \$2,000 |
| CHEMICALS | | \$959 |
| CROP INSURANCE | | \$0 |
| OTHER PURCHASED INPUTS | | \$806 |
| CANAL WATER | | \$0 |
| FUEL, OIL & LUBRICANTS-EQUIPMENT | | \$912 |
| FUEL-IRRIGATION | | \$3,879 |
| REPAIRS | | \$219 |
| CUSTOM CHARGES | | \$0 |
| LAND TAXES | | \$134 |
| OTHER EXPENSES | | \$11,559 |
| TOTAL CASH EXPENSES | | <u>\$21,210</u> |
| RETURN OVER CASH EXPENSES | | \$14,090 |
| FIXED EXPENSES | | \$5,256 |
| TOTAL EXPENSES | | \$26,466 |
| NET FARM INCOME | | \$8,834 |
| LABOR AND MANAGEMENT COSTS | | \$4,966 |
| NET OPERATING PROFIT | | \$3,868 |
| CAPITAL COSTS | | |
| INTEREST ON OPERATING CAPITAL | | \$221 |
| INTEREST ON EQUIPMENT INVESTMENT | | \$3,110 |
| TOTAL CAPITAL COSTS | | <u>\$3,331</u> |
| RETURN TO LAND AND RISK | | <u>\$537</u> |

| LAND VALUE | RETURNS TO RISK* | RETURN ON INVESTMENT** |
|---------------|------------------|------------------------|
| \$700 /ACRE | (\$513) | 5.78% |
| \$900 /ACRE | (\$813) | 5.03% |
| \$1,100 /ACRE | (\$1,113) | 4.45% |
| \$1,300 /ACRE | (\$1,413) | 3.99% |
| \$1,500 /ACRE | (\$1,713) | 3.62% |
| \$1,700 /ACRE | (\$2,013) | 3.31% |
| \$1,900 /ACRE | (\$2,313) | 3.05% |
| \$2,100 /ACRE | (\$2,613) | 2.83% |

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)