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STATE OF COLORADO
DEPARTMENT OF LAW

AGRICULTURAL ENGINEERING STUDY
SOUTHERN UTE & UTE MOUNTAIN
UTE INDIAN RESERVATIONS

MANCOS WATERSHED

TASK D & E
FINAL REPORT

DESIGN & COST ESTIMATE FOR
OFF-FARM IRRIGATION FACILITIES &
PIA DETERMINATION

JUNE 1987

BK-C22-100-04/05

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D.1 GENERAL

The purpose of this task report is to present the methodology for determining practicably irrigable acreage (PIA) for the Mancos River Watershed in the Ute Mountain Ute Reservation and Southern Ute Reservation. The test for PIA requires that the revenues exceed the cost. The land under consideration when cropped and irrigated must return sufficient net positive income to pay for the costs of providing irrigation water to the farm headgate. In order to determine PIA it is necessary to conceptually design an irrigation transmission system to deliver water to the farm headgate for each arable parcel. The annualized cost of the off-farm irrigation water transmission system is compared to the net positive income (payment capacity) of the parcel.

Arable lands were identified by Stoneman and Landers. Potential crops, irrigation water requirements, on-farm irrigation systems cost, and other related agronomic information were prepared by Boyle and presented in Task A and B reports. Economic methodology and net agricultural returns were prepared by Western Research Corporation.

This preliminary PIA analysis compares the preliminary net agricultural return with the cost of water delivery from the primary water source to the parcel headgate. For this preliminary analysis,

the highest net agricultural return for each climatic zone is used. Off-farm irrigation transmission facilities were conceptually designed for those parcels with preliminary payment capacities greater than the off-farm water pumping costs. The pumping cost was re-evaluated, added to the facilities cost, and compared to the preliminary payment capacity.

To complete the PIA analysis, the cropping pattern and payment capacities will be reviewed by the economist taking into account the practicality of the cropping pattern for the particular parcel and any agronomic costs that might be particular to the parcel. Several iterations of this process between the economist and the engineer may be necessary in order to develop the most economical parcel and facilities layout. Those parcels that still exhibit positive residual payment capacity after these further analyses are then determined to be practicably irrigable.

D.2 SELECTION OF PARCELS FOR OFF-FARM DESIGN

Parcels to be considered for PIA analysis were identified in the Task B Report along with on-farm irrigation costs. The Task B report identified irrigation costs for handmove sprinkler, sideroll sprinkler, gravity (furrow or basin), center pivot, and center pivot with sprinkler in the corners. Computer tabulation compared on-farm irrigation costs to the crop payment capacity for corn/soybean and alfalfa/malt barley crop rotations. The tall growth habit of corn rules out the use of surface sprinkler systems such as handmove

and sideroll. As a result, parcels with a corn/soybean rotation were evaluated with gravity and the center pivot system options only.

The first step in making this task analysis was determination of the presently irrigated lands on Southern Ute and Mountain Ute Indian lands. W. W. Wheeler & Associates, Inc., hydrology consultant, identified from aerial photographs and other information available to them the lands presently irrigated and provided to Boyle a marked print of the base map. The amount of irrigated acreage was then planimetered from the base map and tabulated. It should be noted that presently irrigated land covers some land not classified and Class 6 (non-irrigable) soils as determined by Stoneman-Landers, soil consultants.

For the remaining irrigable parcels, an analysis was made to determine the residual water payment capacity when only the off-farm static pumping lift costs where added to the on-farm costs identified in Task B. Based on the elevation of the nearest water supply and the elevation of the highest point in each parcel, the static lift to serve the parcel was calculated using the computer program developed for the Task B report. The power cost to lift the annual water requirement to each field was then calculated assuming a 75 percent pumping plant efficiency, which is a conservatively high assumption, and a field delivery pressure of 60 psi for all but gravity irrigated fields.

It should be noted that the parcel water payment capacity residual analysis (Appendix D) was slightly modified from the analysis presented in the Task B draft report. Land leveling costs for gravity irrigated fields were not included in the Task B on-farm costs. The Task B report, however, estimated land leveling quantities in the range of one foot average cuts at a cost of $0.50 to $1.00 per cubic yard. As a conservatively low estimate, an average 6-inch cut at $0.50 per cubic yard for a total cost of $403 per acre was assumed for this Task D analysis. Amortizing this cost at 8-3/8 percent interest over 50 years gives a cost of $34.40, or in round numbers, $35 per acre. This cost was then included in the on-farm costs for gravity irrigation.

D.3 OFF-FARM IRRIGATION TRANSMISSION SYSTEM COST

D.3.1 General

The off-farm irrigation transmission facilities will generally consist of transmission pipelines, pumping stations, and diversion facilities. Roads for access to pump stations; rights-of-way; and the extension of electrical power services to pumping stations were not included in the cost analysis. Costs for those items included are based on experience with similar facilities. All costs are then amortized using a discount rate of 8-3/8 percent over a 50 year project life.

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D.3.2 Pumping Stations

Pump station costs were estimated using an equation which considers flow and horsepower as variables. The equation is based on Boyle's experience with various size agricultural pump stations which include pump motor, pump structure, valves, surge control, and power panel. The equation is:

$$\text{Cost, \$} = 2441\ (\text{GPM})^{.41} + 150\,(\text{HP})^{1.05}$$

where GPM is the system flow rate in gallons per minute and HP is the gross horsepower.

D.3.3 Pipelines

The cost of pipelines is estimated based on experience in water transmission pipeline work. The least cost type of pipe material for the various diameters is reflected in the estimate. Pipeline costs have been compared with pipeline cost estimates from the United States Bureau of Reclamation (USBR) Dolores Project as well as the Animas-La Plata Definite Plan Report. Installed estimated pipeline costs are shown in Table D.1.

D.3.4 River Diversion Structures

River diversion structures were included for parcels over 30 acres. The diversion structure would be constructed across the river to form a pool of water with sufficient depth for the pump to draw from. A weir type diversion structure consists of a 4 foot high wall with a footing and riprap on each side for stability and protection from ice damage. The estimated cost of the structure is $210 per foot. The

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TABLE D.1
PIPELINE COSTS

Pipe Diamet. (inch)	Installed Cost - $/ft 1/					
	100 psi	150 psi	200 psi	250 psi	300 psi	350 psi
4	10.50	11.00	11.50	12.00	12.50	13.00
6	12.00	12.50	13.00	14.00	14.50	15.00
8	15.50	16.00	17.00	17.50	18.50	20.00
10	20.00	21.00	22.50	23.50	25.00	26.50
12	24.00	26.50	28.50	31.00	33.00	35.00
14	28.50	32.00	35.00	38.00	41.00	44.00
15	31.00	34.50	38.50	42.50	45.50	49.00
16	34.00	37.50	42.00	46.00	50.00	54.00
18	41.00	45.00	50.00	54.00	59.50	65.00
20	48.50	53.00	58.00	63.50	69.00	75.00
21	50.50	55.50	60.50	66.00	71.50	77.00
24	62.00	69.00	75.50	82.00	88.50	95.50
27	75.50	82.00	88.50	96.50	104.00	112.00
30	89.50	96.50	103.00	111.00	120.00	128.50
33	104.50	111.00	116.50	126.50	137.50	148.50
36	115.50	122.00	130.50	142.00	155.00	166.00
48	150.00		164.00			
54	184.00		206.00			
60	222.00		230.00			
66	260.00		304.00			
72	296.00		332.00			
78	335.00		360.00			
102			580.00			

1/ Unit construction cost including 10% allowance for appurtenances.

diversion structures were estimated to be 50 feet long for the Mancos River.

It may not be practical to build a massive diversion to serve a small parcel. A farmer farming a small parcel with low flow requirements would probably have a simple temporary diversion which could be nothing more than a berm graded across the river with a backhoe or dozer to form a shallow pool for his pump to take suction from if flows in the stream are low. If stream flows were too large to allow installation of a temporary diversion, a low flow could most likely be pumped without a diversion.

The berm may require regrading several times during the irrigation season. However, the overall cost of such diversions is minimal. The decision on the type and size of diversion will vary with each parcel and would require extensive review in the field. Therefore, in order to simplify the analysis it is assumed that no special diversion structure will be required for parcels of 30 acres or less.

In cases where several parcels can be served from one diversion and the combined acreage is over 30 acres, the cost of the diversion is divided between the parcels in proportion to parcel acreage. This approach is believed to be conservative (in favor of generating PIA) and realistic for this type of analysis.

D.3.5 Other Costs

Annual maintenance of major facilities including pipelines, pump stations, and river diversions is estimated at 0.5 percent of the initial construction cost.

The cost of electrical energy is assumed to be $0.068605/KWhr for the Southern Ute area and $0.065039/KWhr for the Mountain Ute area. These are commercial user rates being charged during the first half of 1985. A detailed discussion of the power costs was previously provided.

D.3.6 Other Costs not Included

Other known costs which could be considered are costs for access roads to the pump stations, right-of-way costs where pipelines or pump stations may be on non-Indian land, and costs to provide electric power service to the pump station. These costs are either minor and/or difficult to estimate with available information. Therefore, for these preliminary analyses, they have not been considered at this time.

The cost of power line extensions to serve pumping facilities could be quite high, especially if three phase power is required. Three phase power will be required for pump stations over 25 horsepower.

D.4 PRELIMINARY PRACTICABLE IRRIGABLE ACREAGE

D.4.1 Existing Irrigated Lands

Lands currently irrigated are assumed to be PIA requiring no further evaluation. Table D.2 summarizes the currently irrigated acreage in the watershed. The acreage is also identified on maps included as Figure D.1 through D.10.

TABLE D.2
CURRENTLY IRRIGATED ACREAGE

Parcel No.	Currently Irrigated Gross Acres	Non-Irrigated Gross Acres
M116	68	102
M329	37	66
M330	56	9
M331	73	102
Unparcelled	4	—
TOTAL	238	279

D.4.2 Water Supply

An examination of the hydrology data for the Mancos River shows that there is insufficient virgin flow during the summer irrigation period to serve the potential arable lands directly from the river. Therefore, it was necessary to perform operational studies involving storage reservoirs (see D.4.5).

D.4.3 Cropping Pattern

For the preliminary analysis of PIA, a cropping pattern with the highest net agricultural returns was used. Table D.3 identifies this cropping pattern as well as the net agricultural return.

TABLE D.3
PRELIMINARY CROPPING PATTERN

Climatic Zone	Elevation Range, ft.	Crop Mix 1/	Maximum Net Agricultural Return 2/ $/ac/yr
A	<5,000	Corn, Soybeans	375
B	5,000-5,400	Corn, Soybeans	330
C	5,400-5,800	Corn, Soybeans	285
D	5,800-6,200	Alfalfa, Malt Barley	270
E	6,200-6,600	Alfalfa, Malt Barley	240
F	6,600-7,000	Alfalfa, Malt Barley	210
G	7,000-7,400	Alfalfa, Malt Barley	185
H	7,400-7,800	Alfalfa, Malt Barley	160
I	7,800-8,200	Grass Hay, Pasture	85
J	>8,200	Grass Hay, Pasture	70

1/ Cropping mix and maximum net agricultural return provided by Western Research Corporation, April 11, 1986.

2/ Maximum net agricultural returns do not include on-farm irrigation costs.

D.4.4 Preliminary PIA Analysis

A preliminary PIA analysis was performed comparing a parcel's payment capacity with a preliminary estimate of the cost to pump water from the river to the parcel. This preliminary water cost was based on the static pumping lift (the difference in elevation from the water surface in the river to the elevation of the parcel) for gravity irrigated fields or plus a field delivery pressure of 60 psi for sprinkler irrigation. Detailed tabulations of the analysis are shown in Appendix D.1. Table D.4 identifies only those parcels with a positive preliminary residual payment capacity requiring further consideration. A total of 88 parcels covering 4,343 acres showed a positive preliminary residual payment capacity.

An off-farm irrigation transmission system was designed for those parcels near the Mancos River showing a positive preliminary residual payment capacity shown in Table D.4. Those calculations are shown in Appendix D.2 and summarized in Table D.5. Parcels with an initial positive payment capacity after comparing the residual payment capacity to the cost of water were analyzed further for the ability to justify construction of a reservoir for storage of the necessary water supply. A total of 3,385 acres with an on-farm water requirement of 7,700 acre-feet was identified in Table D.5 to have an initial positive payment capacity.

Many parcels in the Navajo Wash area had an initial positive payment capacity even though the distance from the river was considerable.

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TABLE D.4
PARCELS WITH PRELIMINARY RESIDUAL PAYMENT CAPACITY
(Considering pumping only)

Parcel No.	Gross Acres	Prelim. Residual Payment Capacity ($/ac/yr)				
		Hndmve.1/	Sdroll.2/	Grav.3/	Cntrpvt.4/	Cpvt/Hmv.5/
M244	18	213	172	183		
M245	46	221	206	176	75	84
M246A	178	231	214	181	211	198
M246B	5	169	4	150		
M247	10	200	124	170		
M248	11	222	150	193		
M249	39	255	231	214		
M250	234	247	231	198	226	214
M251	16	229	179	200		
M252	43	248	233	205		
M253	78	253	239	205	146	154
M254	14	226	167	197		
M255	6	188	41	169		
M256	11	227	155	199		
M284A	88	160	145	104	70	77
M284B	5	107	-57	82		
M285	31	159	131	116		
M286	15	169	113	135		
M287	60	190	173	139	62	71
M288	9	144	48	116		
M289	20	184	150	151		
M290	58	193	169	134	55	64
M291	24	193	161	157		
M292	9	156	60	129		
M293	11	168	95	135		
M294	11	173	100	140		
M295	11	176	103	142		
M296	10	171	93	137		
M297	9	204	109	182		
M298	7	194	65	175		
M299A	5	182	18	164		
M299B	13	230	166	201		
M300	9	212	117	191		
M301	43	243	228	199		
M302	30	198	169	158		
M303	18	189	146	156		
M304	5	131	-33	108		
M305	8	151	38	125		
M306	10	211	135	182		
M307	21	237	205	208		
M308	31	236	208	199		

Table 1488 continued

Parcel No.	Gross Acres	Prelim. Residual Payment Capacity ($/ac/yr) Hndmve.1/	Sdroll.2/	Grav.3/	Cntrpvt.4/	Cpvt/Hmv.5/
M309	17	227	181	197		
M310	46	217	200	170	69	78
M311	6	151	3	127		
M312	68	212	195	161	92	101
M313	10	183	105	150		
M314	194	191	173	137	166	156
M315	28	211	181	174		
M316	33	218	190	178		
M317	150	191	173	137	166	156
M318	48	188	171	138	44	53
M319	26	191	160	154		
M320	5	146	-19	123		
M321	165	167	149	111	146	135
M322	90	206	191	153	115	122
M323	1152	150	132	93	130	120
M324	20	204	170	171		
M325	138	181	164	127	151	143
M326	6	141	-6	117		
M327	193	210	193	158	186	176
M328	9	168	72	142		
M329	66	213	196	162	91	100
M330	9	170	75	145		
M331	102	210	197	158	135	141
M336	30	64	33	11		
M341	16	54	1	8		
M342	16	58	5	13		
M343	23	78	44	31		
M347	13	63	-2	18		
M348	10	134	57	98		
M349	5	105	-60	79		
M350	17	162	115	127		
M351	8	151	38	125		
M353	31	154	124	108		
M354	19	172	133	135		
M355	30	174	144	130		
M356	25	172	140	132		
M357	7	117	-14	86		
M358	11	151	77	114		
N359	6	117	-31	88		
M360	8	136	22	106		
M361	57	179	160	125	45	55
M362A	6	122	-27	92		
M362B	26	175	143	134		
M363	36	183	155	135		

Table D.4, Continued

Parcel No.	Gross Acres	Prelim. Residual Payment Capacity ($/ac/yr) Hndmve.1/	Sdroll.2/	Grav.3/	Cntrpvt.4/	Cpvt/Hmv.5/
M364	5	114	-52	86		
M365	9	175	80	150		
M366	68	207	190	156	88	97

1/ Hndmve - Handmove sprinkler, on-farm irrigation system.

2/ Sdroll - Sideroll sprinkler, on-farm irrigation system.

3/ Grav - Gravity on-farm irrigation systems.

4/ Cntrpvt - Center pivot sprinkler, on-farm irrigation system.

5/ Cpvt/hmv - Center pivot sprinkler, on-farm irrigation system with hand move in the corners.

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TABLE D.5
SUMMARY OF OFF-FARM IRRIGATION WATER COST
(Pumping and Pipeline Costs)

Parcel No.	Gross Acres	Net Acres 1/	Crop Pay.Cap. $/ac/yr 2/	Water Cost $/ac/yr	Residual Pay.Cap. $/ac/yr 3/
M244	18	18	223	568	-345
M245	46	45.5	222	293	-71
M246A	178	148.2	276	141	135
M246B	5	5	173	731	-558
M247	10	10	202	488	-286
M248	11	11	204	289	-85
M249	39	39	222	144	78
M250	234	194.9	276	117	159
M251	16	16	218	215	3
M252	43	42.5	222	146	76
M253	78	77.2	216	103	113
M254	14	14	212	239	-27
M255	6	6	179	355	-176
M256	11	11	204	244	-40
M284A	88	87.1	174	546	-372
M284B	5	5	131	725	-594
M285	31	31	183	1178	-995
M286	15	15	174	721	-547
M287	60	59.4	178	466	-288
M288	9	9	157	757	-600
M289	20	20	187	486	-299
M290	58	57.4	178	367	-189
M291	24	24	186	386	-200
M292	9	9	157	407	-250
M293	11	11	163	584	-421
M294	11	11	163	326	-163
M295	11	11	163	309	-146
M296	10	10	160	373	-213
M297	9	9	199	312	-113
M298	7	7	186	313	-127
M299A	5	5	173	328	-155
M299B	13	13	210	229	-19
M300	9	9	199	301	-102
M301	43	42.5	222	172	50
M302	30	30	184	209	-25
M303	18	18	182	246	-64
M304	5	5	131	431	-300
M305	8	8	151	394	-242
M306	10	10	202	306	-104
M307	21	21	228	235	-7
M308	31	31	225	208	17

TABLE D.5 (continued)

Parcel No.	Gross Acres	Net Acres 1/	Crop Pay.Cap. $/ac/yr 2/	Water Cost $/ac/yr	Residual Pay.Cap. $/ac/yr 3/
M309	17	17	220	209	11
M310	46	45.5	180	110	70
M311	6	6	138	280	-142
M312	68	67.3	176	99	77
M313	10	10	160	240	-80
M314	194	161.6	231	130	101
M315	28	28	184	121	63
M316	33	33	183	118	65
M317	150	124.9	228	140	88
M318	48	47.5	180	167	13
M319	26	26	185	160	25
M320	5	5	131	308	-177
M321	165	137.4	231	160	71
M322	90	89.1	174	96	78
M323	1152	959.6	231	95	79
M324	20	20	187	151	36
M325	138	136.6	174	152	22
M326	6	6	138	487	-349
M327	193	160.7	231	105	126
M328	9	9	157	619	-462
M329	66	65.3	177	118	59
M330	9	9	157	499	-342
M331	102	100.9	174	83	91
M336	30	30	144	550	-406
M341	16	16	136	654	-518
M312	16	16	136	1083	-947
M343	23	23	146	784	-638
M347	13	13	128	1063	-935
M348	10	10	160	1419	-1259
M349	5	5	131	1131	-1000
M350	17	17	179	804	-625
M351	8	8	151	556	-405
M353	31	31	143	178	-35
M354	19	19	144	181	-37
M355	30	30	144	144	0
M356	25	25	145	157	-12
M357	7	7	103	751	-648
M358	11	11	123	206	-83
M359	6	6	97	291	-194
M360	8	8	110	236	-126

TABLE D.5 (continued)

Parcel No.	Gross Acres	Net Acres 1/	Crop Pay.Cap. $/ac/yr 2/	Water Cost $/ac/yr	Residual Pay.Cap. $/ac/yr 3/
M361	57	56.4	138	111	27
M362A	6	6	97	318	-221
M362B	26	26	145	124	21
M363	36	36	142	136	6
M364	5	5	90	303	-213
M365	9	9	157	226	-69
M366	68	67.3	176	111	65

1/ Net acres for parcel, irrigation system, combination resulting in the highest payment capacity. See Appendix D.1.

2/ Crop payment capacity from Appendix D.2.

3/ Parcels with positive residual payment capacity were further analyzed for reservoir costs.

Instead of designing individual lines of supply to each of these parcels, a single line was sized to serve all the parcels. The per acre cost of this single transmission line was compared to the residual preliminary payment capacity of each parcel.

D.4.5 Adequacy of Streamflows to Supply PIA

One 68-acre parcel (M116) of presently irrigated land is located high up on Navajo Wash just inside the reservation boundary. Except for this parcel, all of the parcels initially identified as potentially irrigable on Table D.5 are located along the mainstem of the Mancos River below the confluence of Navajo Canyon. Figure D-11 shows the relative locations of the identified parcels, the points at which virgin streamflows have been estimated, and the potential reservoir sites which were considered.

The total average annual irrigation water requirement of 8,167 acre-feet (AF) for the initially identified lands with a positive payment capacity, excluding parcel M116 but including the other presently irrigated parcels, would be seasonally distributed as follows:

TABLE D.6

AVERAGE TOTAL IRRIGATION WATER DEMAND
FOR INITIALLY IDENTIFIED PIA LANDS
(values in AF)

May	June	July	August	Sept.	Total
670	1,583	3,344	2,556	14	8,167

The average annual virgin flow of the Mancos River watershed above Navajo Canyon (Point 18 on Figure D-11) estimated by W.W. Wheeler & Associates, Inc., is nearly six times the average annual irrigation water requirement. However, in an average year, the runoff starts in mid-April and is essentially over by the end of June. In most years the late-season streamflows in the Mancos River watershed are inadequate to supply the irrigation water requirements for the initially identified PIA lands. Table D.7 indicates the months (encircled) when the virgin flows during the 30-year historical study period at the confluence with Navajo Canyon would have been insufficient to supply the initially identified PIA. The virgin flows listed in Table D.7 have not been adjusted for the estimated stream losses due to phreatophytes. Considering stream losses, the months of shortages would have been even greater. A full supply for all of the initially identified PIA lands could have been obtained from the river without regulation in only two years, 1957 and 1965. It is apparent that regulation of the natural streamflows of the Mancos River by storage in a reservoir will be necessary to provide a full irrigation supply for the PIA lands. In all but one year (1977) the storage would be required for annual regulation of the runoff, not for long-term carry-over.

D.4.6 Potential Storage Sites

Since the new PIA parcels to be supplied are all located along the mainstem it was assumed the most cost effective arrangement would be to deliver the augmentation supplies from storage via releases to the

TABLE D.7

MONTHS NATURAL STREAMFLOWS INADEQUATE TO SUPPLY INITIALLY IDENTIFIED PIA

(Encircled Amounts Indicated are Less Than Average Irrigation Requirement)

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MANCOS RIVER ABOVE CONFLUENCE WITH NAVAJO CANYON - VIRGIN FLOWS EXCLUDING SHORT-TERM RUNOFF
VALUES IN ACRE-FEET

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1951	359.	518.	641.	1540.	7846.	5567.	(1358.)	(843.)	269.	633.	417.	444.	20435.
1952	591.	702.	1931.	16173.	28849.	22938.	5474.	(1661.)	744.	700.	521.	665.	80949.
1953	660.	650.	1050.	6084.	8975.	8776.	(1735.)	(1777.)	580.	378.	829.	750.	32244.
1954	588.	661.	981.	5100.	8758.	3077.	(2745.)	(1394.)	1371.	1763.	571.	460.	27469.
1955	584.	522.	1062.	3386.	9236.	5671.	(1601.)	4559.	975.	363.	361.	465.	28785.
1956	530.	624.	3611.	4874.	11276.	5245.	(1201.)	(780.)	261.	256.	350.	317.	29325.
1957	439.	1412.	1151.	4726.	15075.	30631.	14541.	6490.	2275.	947.	1228.	1120.	80035.
1958	856.	2101.	2148.	12834.	27576.	12669.	(2071.)	(1659.)	1539.	712.	633.	579.	65377.
1959	457.	469.	657.	2298.	7498.	3739.	(719.)	(1105.)	530.	667.	1006.	790.	19935.
1960	809.	652.	2827.	13039.	14728.	11927.	(2161.)	(761.)	392.	574.	956.	642.	49468.
1961	606.	560.	1227.	7673.	16244.	6402.	(1286.)	(1436.)	1774.	1387.	927.	853.	40375.
1962	813.	1298.	1437.	9390.	11257.	7761.	(2435.)	(568.)	314.	712.	731.	682.	37398.
1963	511.	661.	2438.	6095.	8766.	2214.	(866.)	2607.	2532.	686.	462.	357.	28195.
1964	377.	429.	1077.	2572.	13738.	5221.	(1795.)	6217.	1070.	357.	339.	329.	33521.
1965	450.	762.	1238.	7430.	15802.	20212.	11815.	4016.	3195.	1566.	1152.	1166.	68804.
1966	878.	959.	4229.	8502.	16298.	5577.	(1598.)	(953.)	756.	380.	365.	500.	40995.
1967	443.	778.	2257.	3135.	9738.	5149.	(2116.)	3114.	2240.	663.	404.	397.	30434.
1968	508.	612.	1727.	4157.	14202.	16181.	3403.	3604.	659.	593.	469.	477.	46592.
1969	570.	856.	3045.	12757.	18510.	9815.	6290.	(2015.)	2144.	1953.	1489.	1109.	60553.
1970	718.	753.	1033.	2333.	13108.	6411.	(2238.)	(2157.)	6213.	1099.	1003.	984.	38050.
1971	838.	1378.	2302.	5655.	12136.	7826.	(1939.)	(2213.)	1211.	1219.	1213.	835.	38765.
1972	696.	1314.	3641.	4201.	6160.	3853.	(795.)	(486.)	761.	6218.	2083.	1416.	31624.
1973	1157.	1469.	4366.	13236.	34466.	26243.	9372.	(2530.)	1467.	717.	558.	505.	96086.
1974	479.	645.	1800.	2396.	8834.	2965.	(1527.)	(904.)	338.	552.	843.	642.	21925.
1975	548.	1015.	3343.	6832.	22369.	22901.	12855.	(2419.)	1032.	518.	440.	505.	74777.
1976	457.	1231.	1868.	4768.	11569.	5974.	(1474.)	(893.)	942.	964.	472.	334.	30946.
1977	359.	418.	421.	828.	1642.	(1336.)	(962.)	(1051.)	696.	459.	354.	368.	8894.
1978	472.	460.	3103.	8732.	16162.	14986.	3523.	(1040.)	494.	431.	673.	585.	50661.
1979	570.	1395.	5308.	16152.	33461.	23830.	8371.	(2373.)	878.	507.	521.	494.	93860.
1980	570.	2033.	2833.	15263.	26351.	31866.	8037.	(1865.)	2780.	769.	760.	631.	93758.
AVG.	596.	911.	2158.	7072.	15021.	11232.	3877.	2116.	1348.	958.	738.	647.	46675.

river. Map studies using the published USGS 1:24,000-scale topographic maps were made to locate possible sites for a reservoir having a live capacity of approximately 6,000 AF on the Mancos River and its tributaries upstream of the confluence with Navajo Canyon. Preliminary comparisons were made of eleven locations, four on the main channel and seven on side canyons. Reservoirs on side canyons would be supplied by pumping water from the mainstem or, in one case, by a gravity feeder canal.

Potential locations were not intentionally restricted to sites within the Ute Mountain Ute Reservation. However, no practicable sites were found upstream of the confluence of Weber Canyon at the north boundary of the reservation. It is believed that environmental constraints would be a major consideration in the construction of any reservoir in this area. However, the only environmental constraints considered at this preliminary stage were:

- Reservoir sites which would inundate cliff dwellings or Indian ruins shown on the published maps were avoided, and

- Sites which would encroach on Mesa Verde National Park were not considered.

Based on judgement and using the comparative statistics of dam height, crest length, pump station lift, pump line length, and canal length, three locations were selected as representative of potential

configurations:

- Site 5 - Located on Johnson Canyon just above its mouth. The reservoir would be supplied from the mainstem by a 50 cfs gravity feeder canal approximately 5.6 miles long.

- Site 8 - Located on Lewis Creek just above its mouth. The reservoir would be supplied from the mainstem by a 50 cfs pump station and conduit with a 180-foot lift.

- Site 9 - Located on the mainstem just upstream of the confluence of Whites Canyon.

  These three sites are shown on Figure D-11.

D.4.7 Competency of Sites

Reconnaissance-level evaluations of the three potential sites were made using maps, published reports, and opinions of officials knowledgeable of the area. No field observations or site investigations were made for this initial assessment of the cost of providing storage. Evaluation of the general suitability of the potential sites and the competency of foundations consisted of a review of published literature concerning area geology, engineering properties of bedrock and valley fill materials, landslide hazards, seismicity, faulting, and potential sources of construction materials for a dam.

Bedrock formations in the study area are, in ascending order, the Mancos Shale, the Point Lookout Sandstone, and the Menefee Formation. The Menefee Formation consists of alternating sequences of sandstone and carbonaceous shale with minor amounts of coal. It is slightly friable but well cemented. The Menefee is exposed in the canyon walls. Geologic characteristics of this formation generally make it suitable for dam and reservoir foundations. Localized occurrences of coal and carbonaceous shales may require special treatment during construction, but are unlikely to have a significant effect on dam feasibility. The Point Lookout Sandstone may be exposed locally at the base on the canyon walls. The Mancos Shale probably underlies the entire study area but appears everywhere to be overlain by the Point Lookout Sandstone and therefore should not influence dam siting.

The depth of alluvium in the valley fill is estimated to average about 80 feet. It consists of clays, silts, and some gravels. Because of the apparent depth and composition of the valley fill, it was concluded that only zoned earth embankment or rockfill dams should be considered. At this stage of the investigations, it is not felt the depth and composition of the valley fill would be suitable for a roller compacted concrete dam which would be desirable from the flood capability standpoint.

Published mapping indicates some localized, small-scale landslides. These would not, however, significantly affect dam site feasibility.

The area is relatively stable with respect to recorded seismic events. There have been no recorded epicenters within a 200-mile radius of the study area during the period of seismic record (1870-1979). No significant active faults have been mapped in the vicinity of the dam sites.

The published literature is inadequate to assess the source, quality and availability of riprap materials. Embankment materials should be available in sufficient quantities in the floors of the canyon. The quality of these materials and any needs for processing cannot be determined from the published literature.

D.4.8 Flood Hydrology and Spillway Requirements

Flood capacity and spillway design of the dam and reservoir must meet the requirements of the Colorado State Engineer in effect at the time. The State Engineer presently requires that large dams be designed to withstand the Probable Maximum Flood (PMF) or a lesser Inflow Design Flood (IDF) if a dam break incremental damage analysis shows that the loss of life or property damage would not be greater than if the dam had not been constructed.

It is believed a dam and reservoir of the size and at the locations being considered should not be classified in the high hazard category. The potential for loss of life downstream appears to be related only to the inhabitants of scattered Indian dwellings which

could be relocated. From the map study, it appears the property damage would be principally the Highway 666 bridge which may not be designed for greater than the 100-year flood. Without performing field investigations to determine channel and flood plain characteristics and extent of human habitat and development downstream, sufficient information was not available to establish the hazard classification and perform a flood analysis in accordance with the State Engineer's criteria. Accordingly, the traditional governmental method following the Soil Conservation Service (SCS) TR-60 was used for the flood hydrology analysis.

Using the SCS TR-60 methodology, dams at the potential study sites were assigned a hazard classification of Class B. Two flood hydrographs were developed for a dam at Site 9:

- An Inflow Design Flood (IDF) consisting of the runoff from a 100-year rainfall plus 12 percent of the runoff from the probable maximum storm (PMP) in excess of the 100-year flood; and

- A Freeboard Design Flood (FDF) consisting of the runoff from a 100-year rainfall plus 40 percent of the difference between the PMF and the 100-year flood.

Drainage basin physical characteristics were estimated by delineation of the basin on the USGS 1:100,000 scale topographic map "Cortez, Colo.". The 100-year and PMP rainfall were developed using NOAA Atlas 2, Volume III and the Corps of Engineers (COE)

HydroMeteorological Report No. 49. Preliminary soil information identifying four dominant soil complexes within the basin was obtained from the SCS. Cover characteristics were based on previous field observations by W.W. Wheeler personnel. The rainfall distribution was patterned on the PMP distribution criteria of the COE Southwest Division.

The flood hydrographs were developed by modeling of the drainage basin above the reservoir site using the COE HEC-1 computer program. The peak flow and total flood volume for the estimated flood events derived for Dam Site 9 are as follows:

TABLE D.8

ESTIMATED FLOOD EVENTS AT DAM SITE 9

	100-Year Flood	PMF		IDF	FDF
Peak flow - cfs	14,900	72,500	21,900	38,100	
Total Volume -AF		13,400	80,600	20,400	38,400

D.4.9 Final Site Selection

A conventional zoned earth embankment dam configuration was selected for the preliminary comparison of the cost of the three alternative sites. Based on the limited data available regarding the amounts of sediment carried by the streamflows in the area, dead storage capacities of 200 AF for Sites 5 and 8 and 1000 AF for Site 9 were selected. The dam foundation at all three sites was assumed to include a cutoff trench 80 feet deep to bedrock.

Elevation-capacity-area curves were developed for each of the three sites and preliminary operating studies were performed to determine the total capacity necessary at each site to provide a full irrigation supply for the initially identified PIA parcels. The dam freeboard and spillway size were established by routing of the IDF and FDF through a full reservoir using the HEC-1 Modified Puls flood routing computer program. The selected spillway size was the minimum required to pass either the IDF with one foot of freeboard or the FDF with no freeboard. Floods at Sites 5 and 8 were estimated by extrapolation of the derived floods at Site 9.

Because of the relative large size of spillway required at Site 9 compared to the reservoir size, a larger reservoir (configuration 9B), which would provide greater flood surcharge storage and allow a corresponding smaller spillway, was also analyzed.

Rough estimates were made of the major quantities and appraisal-level cost estimates of the four alternative reservoir configurations were prepared. The comparative results are shown in Table D.9.

It was concluded that Site 9 is the most feasible location and the small reservoir/large spillway configuration is the most economical. This site and configuration were adopted for the final detailed evaluations of the cost of storage. Table D.9 indicates that the cost for storage water from a reservoir at Site 9 is more

TABLE D.9
PRELIMINARY COST COMPARISON OF POTENTIAL STORAGE SITES

	Site & Configuration			
	9A	9B	8	5
Drainage Area - Mi2	225	225	17	17
Inflow Design Flood-cfs	38,000	38,000	12,100	9,300
Total Capacity - AF	7,200	44,300	6,700	6,700
Height of Dam	110'	205'	228'	225'
Spillway Capacity-cfs	37,400	1,700	1,900	2,300
Capital Cost - Million$	$11.2	$16.0	$23.3	$23.6
Annual Capital Cost-1000$	$957	$1,368	$1,985	$2,014
Annual OM&R - 1000$	$56	$80	$226	$118
Total Annual Cost-1000$	$1,013	$1,448	$2,211	$2,132
Annual Cost per AF	$132	$188	$287	$277
Annual Cost per Acre	$338	$438	$738	$711

than 4 times the average residual payment capacity shown in Table D.5 for the initially identified PIA parcels. Further, the spillway cost for configuration 9A is 57 percent of the total reservoir cost which dispels the concern over the spillway requirement being the driving force. The apparent cost of storage exceeds the residual ability to pay even if no spillway were required.

D.4.10 Simulated River Operations

A simple computer simulation model of the Mancos River was prepared and the river was modeled for three scenarios:

- Operation of a reservoir at Site 9 to provide a full irrigation supply to the initially identified PIA lands;

- Operation of a reservoir at Site 9 to provide the minimum irrigation supply which would meet an acceptable irrigation shortage criteria; and

- Operation of the river without storage to determine the amount of new PIA lands that could be supplied with a shorted supply meeting an acceptable irrigation shortage criteria.

The operating simulations of Cases I and II were performed to determine the minimum size of reservoir required to provide a full supply and to provide a lesser supply meeting a minimum acceptable shortage criteria, respectively. The Case III simulations were performed to determine what portion of the initially identified PIA

parcels could be served from the river without storage if an acceptable shortage criteria were considered. All computer operating simulations of the river were run on monthly time increments for a 30-year historical period 1951 through 1980 using the estimated virgin flows developed by W.W. Wheeler & Associates.

The irrigation shortage criteria used by the U.S. Bureau of Reclamation in their planning studies were adopted as the acceptable criteria for this study. These criteria provide that the accumulated shortages in the irrigation supplies delivered shall not exceed the following proportions of the average annual irrigation requirement:

- o 50 percent in any single year,
- o 75 percent in any two consecutive years, or
- o 100 percent in any ten consecutive years.

The simulations for Case I consisted of operating a reservoir at Site 9 using the total virgin flows on the Mancos River below its confluence with Weber Canyon (Point 17 on Figure D-11) adjusted to account for the estimated stream losses above Point 17 due to phreatophytes. No adjustment to the virgin flows at Point 17 on account of the additional drainage area between Point 17 and Site 9 was made since the incremental inflow was estimated to average only 0.5 percent of the flow at Point 17. During the irrigation months, inflows to the reservoir were bypassed through the reservoir to the extent required to meet first, the estimated stream losses due to

phreatophyte consumption for the entire mainstem downstream of the reservoir, and second, the total irrigation demand for all of the initially identified PIA parcels except Parcel M116. Inflows during the irrigation months in excess of the releases required to meet downstream demands and all inflows in the non-irrigation months were stored in the reservoir or spilled. Losses due to evaporation were deducted from reservoir contents.

The computer simulations were iterated, reducing the reservoir capacity 100 AF each run, until the smallest reservoir that did not result in a shortage in supplying the irrigation demand was determined. For Case I, the full-supply condition, the required size of reservoir was 7,200 AF. An annual summary of the final Case I simulation run for the 7,200 AF reservoir is contained in Appendix D.3.

The simulations for Case II were essentially identical to those for Case I, except the reservoir size was decreased until the smallest size was found that did not result in irrigation supply shortages that exceeded the adopted acceptable shortage criteria. For Case II, the acceptable shorted supply condition, the required size of reservoir was 4,400 AF. An annual summary of the final Case II simulation run for the 4,400 AF reservoir is contained in Appendix D.3.

It was presumed that the residual payment capacity of even the best of

the initially identified new PIA parcels would not be sufficient to support the additional off-farm cost for storage of water. Therefore, the Mancos River was operated in Case III to determine if any portion of the new PIA parcels could be supplied from the river without storage and without shortages that exceeded the adopted acceptable shortage criteria. For the Case III simulations, it was assumed that the acres of new PIA lands supplied would be directly proportional to the irrigation demand; i.e. 50 percent of the total irrigation demand used in Cases I and II, would supply 50 percent of the initially identified new PIA lands, etc. The streamflows used for the Case III simulations consisted of the virgin flows excluding short-term runoff on the Mancos River near Highway 666 Gage (Point 19 on Figure D-11). The mainstem of the Mancos River was simulated by subtracting from the virgin flows: first, the estimated stream losses due to phreatophytes for the mainstem above Highway 666; second, the average irrigation requirement for the existing irrigated PIA parcels along the mainstem; and third, the estimated stream losses due to phreatophytes for the mainstem between Highway 666 and Aztec Wash. The remaining streamflows were the flows available to supply the initially identified new PIA parcels. They were subtracted in successive runs from 100, 75, 50, 25, and 5 percent of the average irrigation requirement for the new lands to determine the shortages in supplying those portions of the initially identified new PIA. Annual summaries for the five Case III simulations are contained in Appendix D.3. Not even 5 percent of the new PIA lands can be supplied without exceeding the adopted

acceptable irrigation shortages. Table D.10 indicates the number of instances during the 30-year study period in which the shortage in irrigation supply for the various portions of the new PIA lands exceeded the adopted acceptable shortage criteria.

TABLE D.10

NUMBER OF INSTANCES IRRIGATION SHORTAGES EXCEED ACCEPTABLE IRRIGATION SHORTAGE CRITERIA

Percent of Demand for New PIA Lands	Number of Instances Shortages Exceeded		
	50% of Average Demand in Any Single Year	75% of Average Demand in 2 Consect. Yrs.	100% of Average Demand in 10 Consect.Yrs.
100	14	2	0
75	10	1	0
50	7	1	1
25	4	0	1
5	1	0	1

The number of instances indicated in Table D.10 in which the acceptable shortage criteria were exceeded are mutually exclusive; viz. the instances not met shown in the 75 percent column do not include any of the years included in the instances shown in the 50 percent column, and the instances shown in the 100 percent column do not include any of the years included in the instances shown in either the 50 percent or 75 percent columns.

D.4.11 Water Storage Costs

The additional off-farm costs for water storage were estimated for both a full irrigation supply and the minimum supply for which the shortages do not exceed the acceptable shortage criteria. These consist of the annual costs per acre-foot of average annual

irrigation water requirement for a 7,200 AF reservoir and a 4,400 AF reservoir respectively.

Reconnaissance-level layouts were made of a zoned earth embankment dam with a cutoff trench 80 feet deep to bedrock for each size of reservoir. Both sizes of dam were laid out with a crest width of 25 feet. Freeboards of 19 feet for the 7,200 AF reservoir and 18 feet for the 4,400 AF reservoir above their normal high water surface elevations, resulted in crest elevations of 6,065 feet and 6,044, respectively. Quantities were estimated for dam embankments having 3:1 and 2.5:1 upstream and downstream slopes, respectively. The internal impervious core zone, upstream transition zone, and filter and drain zones were assumed to have upstream and downstream slopes of 1:1 and 0:5.1, respectively, sloped in the upstream direction. Foundation preparation would consist of stripping approximately five feet below the dam footprint, excavation of a cutoff trench to bedrock, grouting both abutments, and constructing a grout curtain below the core zone-rock foundation contact.

The conventional outlet works was oversized to accommodate diversion of the river during construction. It would be located in either the left or right abutment at as low an elevation as practical and would be founded on rock. The portion of the outlet conduit passing under the central core zone would be encased in concrete with cutoff-collars to prevent piping along the conduit surface. The outlet works inlet structure located in the upstream section of the outlet

diversion conduit would have its operating sill at the dead storage pool elevation. The outlet works would include a guard valve, a smaller diameter discharge pipe, and a control structure housing an operating valve to regulate the outlet works discharge.

The design floods described in Section D.4.8 were routed through each size of reservoir using a flood routing computer program to determine the required size of spillway. Table D.11 lists the spillway characteristics for both sizes of reservoirs.

TABLE D.11
SPILLWAY CHARACTERISTICS

Reservoir Size	Spillway Crest Elevation	Spillway Crest Length-Ft.	Peak Discharge cfs	Maximum Flood W.S. Elevation
7,200 AF	6,046	150	37,710	6064.71
4,400 AF	6,026	150	37,766	6043.86

The selected spillway design consists of a concrete ogee crest in an open channel cut through the right abutment and discharging into Whites Canyon. The discharge channel would be concrete lined and have a deflector bucket to reduce erosion of the canyon wall.

Preliminary quantity estimates were made of the major work items which would be required for construction of each size of dam and reservoir. Dam embankment quantities were estimated by the average-end area method for sections perpendicular to the dam axis on 20-foot centers. Spillway and outlet works excavations were

estimated based on average depths of excavation for the respective lengths. Grouting quantities were estimated for holes 10 feet on-center drilled to a depth of 30 feet below the assumed bedrock surface, and using an assumed 0.5 bag of cement per foot for grouting.

Work item unit costs were estimated from an analysis of actual construction costs of ten comparable dams constructed within the last eight years. These included eight embankment dams with various river diversion programs, embankment heights and slopes, grouting programs, foundation preparation programs, and bid item breakdowns. The unit costs were escalated to estimated early-1987 price levels and were adjusted to reflect the effect of the remoteness of the construction site.

Preliminary cost estimates for both sizes of reservoirs are contained in Appendix D.3. The costs of the major work items were calculated as the product of the estimated quantities and unit costs. Twenty-five percent of the total cost of the major work items was added as an allowance for unlisted items and construction contingencies to obtain the estimated Contract Cost. Engineering and construction administration costs of 20 percent of the Contract Cost were then added to obtain the total Construction Cost. To this was added interest at 8 3/8 percent during an assumed 2-year construction period to obtain the total Capital Cost for each reservoir.

Yearly operation, maintenance and replacement (O,M&R) costs of $25,000 for both sizes of reservoir were added to the respective Capital Cost annualized over a 50-year period at 8 3/8 percent to obtain the estimated total Annual Cost for each reservoir. Table D.12 gives the estimated additional off-farm costs of water storage in the Mancos River watershed at present (early 1987) price levels.

TABLE D.12

OFF-FARM COSTS FOR WATER STORAGE RESERVOIRS

Reservoir Size	Total Capital Cost	Total Annual Cost	Annual Water Storage Cost per AF of Irrigation Demand
7,200 AF	$18,693,000	$1,619,000	$198
4,400 AF	$16,475,000	$1,430,000	$175

D.4.12 Preliminary Practicably Irrigable Acreage Determination

Figures D.1 through D.10 identify the potentially practicably irrigable acreage for the Mancos River watershed. Table D.13 is a comparison of these initially identified parcels' crop payment capacity with their total off-farm water costs. As shown, after the reservoir costs are included, all parcels have a negative residual payment capacity. Therefore, the only parcels identified as practicably irrigable in the Mancos Watershed are those that are currently irrigated. These parcels represent 238 acres with an annual estimated water diversion of 625 acre-feet.

MANCOS WATERSHED

TABLE D.13
SUMMARY OF POTENTIAL PIA LANDS

Parcel No.	Gross Acres	Net Acres 1/	Crop Pay.Cap. $/ac/yr	Water Cost 2/ $/ac/yr	Residual Pay.Cap. $/ac/yr	Diversion Required 3/ ac-ft/yr.
New Lands						
M246A	178	174.4	276	316	-40	395
M249	39	39	222	319	-97	120
M250	234	229.3	276	292	-16	519
M251	16	16	218	390	-172	49
M252	43	42.5	222	321	-99	131
M253	78	77.2	216	278	-103	237
M301	43	42.5	222	347	-125	131
M308	31	31	225	383	-158	95
M309	17	17	220	384	-164	52
M310	46	45.5	180	285	-105	126
M312	68	67.3	176	274	-98	186
M314	194	190.1	231	305	-284	386
M315	28	28	184	296	-121	77
M316	33	33	183	293	-118	91
M317	150	148.5	228	315	-87	298
M318	48	47.5	180	342	-162	131
M319	26	26	185	335	-150	72
M321	165	161.7	231	335	-104	328
M322	90	89.1	174	271	-97	246
M323	1152	1117.4	174	270	-96	2293
M324	20	20	187	326	-139	55
M325	138	136.6	174	327	-153	377
M327	193	189.1	231	280	-49	384
M329	66	65.3	177	293	-116	180
M331	102	101	174	258	-84	278
M361	57	56.4	138	286	-148	132
M362B	26	26	145	299	-154	61
M363	36	36	142	311	-169	84
M366	68	67.3	176	286	-110	186
Total	3,385	3,320.7				7,700

Table D.13, continued

Parcel No.	Gross Acres	Net Acres 1/	Crop Pay.Cap. $/ac/yr	Water Cost 2/ $/ac/yr	Residual Pay.Cap. $/ac/yr	Diversion Required 3/ ac-ft/yr.
Currently Irrigated						
M116	68	67.3				158
M329	37	37				102
M330	56	55.4				153
M331	73	72.2				201
Unparcelled	4	4				11
TOTAL	238	235.9				625

1/ Currently irrigated land net acres estimated based on criteria in Boyle's Task A report.

2/ Includes cost of water storage for 4,400 A-F reservoir and other off-farm water costs (see Table D.5).

3/ Currently irrigated land diversion requirements are based on highest water requirements for the climatic zone (gravity irrigation) and cropping pattern with the highest net agricultural return.

LEGEND

Parcel I.D.: M04-M-01, "M04" = Sheet 4; "M" = Mancos Watershed; "01" = parcel number.

Field Size: Gross size of parcel in acres.

Reduction Factor: Acreage reduction factor discussed in Task A Report

Net Acreage: The product of field size times reduction factor.

Elevation High and Low: The maximum and minimum elevation within the parcel.

Climatic Zone: Discussed in Task A Report and determined by the parcel's elevation.

Irrigation System Type: Type of on-farm irrigation system.

HNDMVE - Handmove sprinkler
SDROLL - Side roll sprinkler
GRAV - Gravity
CNTRPVT- Center pivot sprinkler
CPVT/HMV- Center pivot with handmove

Net Feet: The unit net average irrigation water requirement for the parcel in acre-feet per acre.

Irrigation Efficiency: Irrigation efficiency discussed in Task A Report.

Applied: The unit gross on-farm average irrigation water requirement in acre-feet per acre.

Preliminary Net Ag Return: The preliminary net agricultural return not including the on-farm irrigation system or off-farm irrigation water transmission/distribution system.

Capital: The amortized capital cost per acre per year for the on-farm irrigation system (at 8 3/8% for 50 years) from Task B Report.

Maintenance: The per acre per year maintenance cost of the on-farm irrigation system from the Task B Report.

Labor: The per acre per year labor cost for operation of the on-farm irrigation system from the Task B Report.

Pumping: The per acre per year cost of providing additional on-farm pumping to meet the higher pressure requirements of the center pivot irrigation system.

Preliminary Payment Capacity: The preliminary net ag. returns minus the on-farm irrigation capital, maintenance, labor, and pumping cost in dollars per acre.

Water Source Elevation: The water source diversion point nominal elevation.

Static Lift: The difference in elevation of the parcel's high elevation and and water source elevation in feet.

Annual Power Cost/Acre: The cost of electrical energy per acre per year to serve the parcel considering only the static lift in the case of gravity irrigation or the static lift plus 139 ft. (60 psi) for all types of sprinkler irrigation.

Residual Preliminary Payment Capacity: The result of the preliminary payment capacity minus the annual power cost for pumping at the water supply source in dollars per acre.

APPENDIX D.1

PRELIMINARY PIA ANALYSIS

PRELIMINARY PIA ANALYSIS

MANCOS WATERSHED

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M13-M-387	13	1	13	6700	6650	F	HNDMVE	1.56	.7	2.22	$ 210	$ 55	$ 0	$ 28	$ 0	$ 118	5680	1020	$ 241	$-123
M13-M-387	13	1	13	6700	6650	F	SDROLL	1.56	.7	2 22	$ 210	$ 104	$ 33	$ 19	$ 0	$ 52	5680	1020	$ 241	$-189
M13-M-387	13	1	13	6700	6650	F	GRAV	1.56	.65	2.4	$ 210	$ 120	$ 8	$ 27	$ 0	$ 53	5680	1020	$ 229	$-176
S2-M-001	29	1	29	7615	7540	H	HNDMVE	1.17	.7	1.68	$ 160	$ 37	$ 4	$ 21	$ 0	$ 96	6000	1615	$ 276	$-180
S2-M-001	29	1	29	7615	7540	H	SDROLL	1.17	.7	1.68	$ 160	$ 63	$ 10	$ 15	$ 0	$ 63	6000	1615	$ 276	$-213
S2-M-001	29	1	29	7615	7540	H	GRAV	1.17	.65	1.81	$ 160	$ 107	$ 5	$ 21	$ 0	$ 25	6000	1615	$ 274	$-248
S2-M-002	224	.98	219.5	7570	7100	G	HNDMVE	1.35	.7	1.92	$ 185	$ 35	$ 4	$ 23	$ 0	$ 121	6000	1570	$ 308	$-187
S2-M-002	224	.98	219.5	7570	7100	G	SDROLL	1.35	.7	1.92	$ 185	$ 58	$ 16	$ 11	$ 0	$ 99	6000	1570	$ 308	$-209
S2-M-002	224	.98	219.5	7570	7100	G	GRAV	1.35	.65	2.07	$ 185	$ 118	$ 6	$ 23	$ 0	$ 37	6000	1570	$ 305	$-268
S2-M-002	224	.83	186.5	7570	7100	G	CNTRPVT	1.35	.75	1.8	$ 185	$ 63	$ 24	$ 2	$ 8	$ 87	6000	1570	$ 288	$-200
S2-M-002	224	.98	220.1	7570	7100	G	CPVT/HMV	1.35	.74	1.81	$ 185	$ 59	$ 21	$ 5	$ 15	$ 84	6000	1570	$ 291	$-206
S2-M-003	15	1	15	7390	7320	G	HNDMVE	1.35	.7	1.92	$ 185	$ 51	$ 7	$ 24	$ 0	$ 102	6000	1390	$ 276	$-173
S2-M-003	15	1	15	7390	7320	G	SDROLL	1.35	.7	1.92	$ 185	$ 94	$ 29	$ 17	$ 0	$ 44	6000	1390	$ 276	$-231
S2-M-003	15	1	15	7390	7320	G	GRAV	1.35	.65	2.07	$ 185	$ 116	$ 7	$ 24	$ 0	$ 37	6000	1390	$ 270	$-233
S2-M-004	23	1	23	7300	7200	G	HNDMVE	1.35	.7	1.92	$ 185	$ 39	$ 5	$ 24	$ 0	$ 116	6000	1300	$ 259	$-143
S2-M-004	23	1	23	7300	7200	G	SDROLL	1.35	.7	1.92	$ 185	$ 67	$ 19	$ 17	$ 0	$ 81	6000	1300	$ 259	$-178
S2-M-004	23	1	23	7300	7200	G	GRAV	1.35	.65	2.07	$ 185	$ 105	$ 5	$ 24	$ 0	$ 49	6000	1300	$ 252	$-203

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
52-M-005	9	1	9	7150	7100	G	HMDHVE	1.35	.7	1.92	$ 185	$ 48	$ 10	$ 26	$ 0	$ 79	6000	1150	$ 232	$-152
52-M-005	9	1	9	7150	7100	G	SDROLL	1.35	.7	1.92	$ 185	$ 137	$ 45	$ 19	$ 0	$-17	6000	1150	$ 232	$-250
52-M-005	9	1	9	7150	7100	G	GRAV	1.35	.65	2.07	$ 185	$ 133	$ 10	$ 21	$ 0	$ 20	6000	1150	$ 223	$-203
52-M-006	70	.99	69.3	7030	6930	F	HMDHVE	1.56	.7	2.22	$ 210	$ 84	$ 4	$ 26	$ 0	$ 144	6000	1030	$ 243	$-99
52-M-006	70	.99	69.3	7030	6930	F	SDROLL	1.56	.7	2.22	$ 210	$ 55	$ 16	$ 12	$ 0	$ 125	6000	1030	$ 243	$-118
52-M-006	70	.99	69.3	7030	6930	F	GRAV	1.56	.65	2.4	$ 210	$ 115	$ 6	$ 27	$ 0	$ 60	6000	1030	$ 231	$-176
52-M-006	70	.83	58.3	7030	6930	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 114	$ 45	$ 5	$ 21	$ 23	6000	1030	$ 227	$-203
52-M-006	70	.98	68.8	7030	6930	F	CPVT/HMV	1.56	.74	2.1	$ 210	$ 105	$ 40	$ 8	$ 21	$ 33	6000	1030	$ 230	$-196
52-M-007	7	1	7	7365	7320	G	HMDHVE	1.35	.7	1.92	$ 185	$ 80	$ 12	$ 26	$ 0	$ 65	6000	1365	$ 271	$-206
52-M-007	7	1	7	7365	7320	G	SDROLL	1.35	.7	1.92	$ 185	$ 172	$ 60	$ 19	$ 0	$-67	6000	1365	$ 271	$-339
52-M-007	7	1	7	7365	7320	G	GRAV	1.35	.65	2.07	$ 185	$ 144	$ 12	$ 21	$ 0	$ 6	6000	1365	$ 265	$-258
52-M-008	75	.99	74.2	7350	7200	G	HMDHVE	1.35	.7	1.92	$ 185	$ 84	$ 4	$ 23	$ 0	$ 122	6000	1350	$ 248	$-146
52-M-008	75	.99	74.2	7350	7200	G	SDROLL	1.35	.7	1.92	$ 185	$ 53	$ 16	$ 11	$ 0	$ 102	6000	1350	$ 248	$-166
52-M-008	75	.99	74.2	7350	7200	G	GRAV	1.35	.65	2.07	$ 185	$ 115	$ 7	$ 23	$ 0	$ 38	6000	1350	$ 262	$-224
52-M-008	75	.83	62.4	7350	7200	G	CNTRPVT	1.35	.75	1.8	$ 185	$ 110	$ 43	$ 4	$ 17	$ 8	6000	1350	$ 250	$-242
52-M-008	75	.98	73.7	7350	7200	G	CPVT/HMV	1.35	.74	1.81	$ 185	$ 102	$ 38	$ 7	$ 17	$ 18	6000	1350	$ 253	$-235

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PARCEL I.D.	ACREAGE FIELD SIZE (ACRES)	ACREAGE REDUCTION FACTOR	ACREAGE NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE NET FEET	IRRIG. EFF.	WATER REQUIREMENTS PER ACRE APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS CAPITAL	ON-FARM IRRIG. COSTS MAINT.	ON-FARM IRRIG. COSTS LABOR	ON-FARM IRRIG. COSTS PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M04-M-101	10	1	10	6175	6125	D	HNDHVE	1.94	.7	2.77	$ 270	$ 62	$ 9	$ 34	$ 0	$ 162	5200	975	$ 289	$-126
M04-M-101	10	1	10	6175	6125	D	SDROLL	1.94	.7	2.77	$ 270	$ 119	$ 38	$ 24	$ 0	$ 87	5200	975	$ 289	$-201
M04-M-101	10	1	10	6175	6125	D	GRAV	1.94	.65	2.98	$ 270	$ 127	$ 9	$ 34	$ 0	$ 98	5200	975	$ 272	$-174
M04-M-102	415	.98	406.7	6455	6160	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5200	1255	$ 328	$-158
M04-M-102	415	.98	406.7	6455	6160	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5200	1255	$ 328	$-176
M04-M-102	415	.98	406.7	6455	6160	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 4	$ 30	$ 0	$ 84	5200	1255	$ 318	$-233
M04-M-102	415	.83	345.6	6455	6160	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 0	$ 141	5200	1255	$ 304	$-164
M04-M-102	415	.98	407.9	6455	6160	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 58	$ 21	$ 6	$ 19	$ 133	5200	1255	$ 309	$-176
M04-M-103	9	1	9	6175	6140	D	HNDHVE	1.94	.7	2.77	$ 270	$ 68	$ 10	$ 37	$ 0	$ 153	5200	975	$ 289	$-135
M04-M-103	9	1	9	6175	6140	D	SDROLL	1.94	.7	2.77	$ 270	$ 137	$ 45	$ 28	$ 0	$ 58	5200	975	$ 289	$-230
M04-M-103	9	1	9	6175	6140	D	GRAV	1.94	.65	2.98	$ 270	$ 133	$ 10	$ 30	$ 0	$ 95	5200	975	$ 272	$-176
M04-M-104	66	.99	65.3	6310	6180	E	HNDHVE	1.76	.7	2.51	$ 240	$ 34	$ 4	$ 30	$ 0	$ 170	5200	1110	$ 293	$-123
M04-M-104	66	.99	65.3	6310	6180	E	SDROLL	1.76	.7	2.51	$ 240	$ 55	$ 16	$ 14	$ 0	$ 153	5200	1110	$ 293	$-140
M04-M-104	66	.99	65.3	6310	6180	E	GRAV	1.76	.65	2.7	$ 240	$ 114	$ 4	$ 30	$ 0	$ 87	5200	1110	$ 281	$-193
M04-M-104	66	.83	54.9	6310	6180	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 117	$ 46	$ 6	$ 24	$ 45	5200	1110	$ 274	$-229
M04-M-104	66	.98	64.8	6310	6180	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 108	$ 41	$ 10	$ 24	$ 55	5200	1110	$ 277	$-222
M04-M-105	215	.98	210.7	6445	6160	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5200	1245	$ 325	$-156
M04-M-105	215	.98	210.7	6445	6160	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5200	1245	$ 325	$-174
M04-M-105	215	.98	210.7	6445	6160	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 4	$ 30	$ 0	$ 84	5200	1245	$ 315	$-230
M04-M-105	215	.83	179	6445	6160	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 0	$ 141	5200	1245	$ 304	$-162
M04-M-105	215	.98	211.3	6445	6160	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 59	$ 21	$ 7	$ 19	$ 132	5200	1245	$ 307	$-174

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PARCEL I.D.	ACREAGE FIELD SIZE (ACRES)	ACREAGE REDUCTION FACTOR	ACREAGE NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE IRRIG. SYSTEM TYPE	WET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE PRELIMINARY WET AG. RETURN	ON-FARM IRRIG. COSTS CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M04-M-105	46	.99	45.5	6400	6160	E	HNDMVE	1.76	.7	2.51	$ 240	$ 33	$ 4	$ 30	$ 0	$ 171	5200	1200	$ 315	$-144
M04-M-106	46	.99	45.5	6400	6160	E	SDROLL	1.76	.7	2.51	$ 240	$ 55	$ 16	$ 14	$ 0	$ 153	5200	1200	$ 315	$-161
M04-M-106	46	.99	45.5	6400	6160	E	GRAV	1.76	.65	2.7	$ 240	$ 111	$ 6	$ 30	$ 0	$ 91	5200	1200	$ 304	$-212
M04-M-106	46	.83	38.3	6400	6160	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 131	$ 53	$ 7	$ 26	$ 20	5200	1200	$ 294	$-274
M04-M-106	46	.98	45.2	6400	6160	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 124	$ 47	$ 11	$ 26	$ 29	5200	1200	$ 297	$-267
M04-M-107	408	.98	399.8	6650	6240	E	HNDMVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5200	1450	$ 374	$-204
M04-M-107	408	.98	399.8	6650	6240	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5200	1450	$ 374	$-222
M04-M-107	408	.98	399.8	6650	6240	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 6	$ 30	$ 0	$ 84	5200	1450	$ 367	$-282
M04-M-107	408	.83	339.8	6650	6240	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 8	$ 141	5200	1450	$ 349	$-207
M04-M-107	408	.98	400.4	6650	6240	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 58	$ 21	$ 6	$ 19	$ 133	5200	1450	$ 352	$-219
M04-M-108	24	1	24	6215	6130	D	HNDMVE	1.94	.7	2.77	$ 270	$ 39	$ 5	$ 34	$ 0	$ 190	5200	1015	$ 299	$-108
M04-M-108	24	1	24	6215	6130	D	SDROLL	1.94	.7	2.77	$ 270	$ 66	$ 19	$ 24	$ 0	$ 159	5200	1015	$ 299	$-139
M04-M-108	24	1	24	6215	6130	D	GRAV	1.94	.65	2.98	$ 270	$ 105	$ 5	$ 34	$ 0	$ 123	5200	1015	$ 283	$-160
M04-M-109	49	.99	48.5	5770	5700	C	HNDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	570	$ 145	$ 74
M04-M-109	49	.99	48.5	5770	5700	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	570	$ 145	$ 55
M04-M-109	49	.99	48.5	5770	5700	C	GRAV	1.53	.65	2.35	$ 285	$ 112	$ 6	$ 26	$ 0	$ 139	5200	570	$ 125	$ 14
M04-M-109	49	.83	40.8	5770	5700	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 129	$ 52	$ 6	$ 23	$ 73	5200	570	$ 135	$-62
M04-M-109	49	.98	48.1	5770	5700	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 121	$ 46	$ 10	$ 23	$ 83	5200	570	$ 136	$-53
M04-M-110	204	.98	199.9	5630	5520	C	HNDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	430	$ 116	$ 101
M04-M-110	204	.98	199.9	5630	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	430	$ 116	$ 81
M04-M-110	204	.98	199.9	5630	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	430	$ 94	$ 39
M04-M-110	204	.83	169.9	5630	5520	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	430	$ 108	$ 78
M04-M-110	204	.98	200.5	5630	5520	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 181	5200	430	$ 109	$ 71

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PARCEL I.D.	ACREAGE FIELD SIZE (ACRES)	ACREAGE REDUCTION FACTOR	ACREAGE NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M04-M-111	171	.98	167.5	5455	5290	B	HNDHVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5200	255	$ 94	$ 163
M04-M-111	171	.98	167.5	5455	5290	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5200	255	$ 94	$ 146
M04-M-111	171	.98	167.5	5455	5290	B	GRAV	1.8	.65	2.76	$ 330	$ 118	$ 6	$ 31	$ 0	$ 174	5200	255	$ 66	$ 108
M04-M-111	171	.83	142.4	5455	5290	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 8	$ 231	5200	255	$ 88	$ 143
M04-M-111	171	.98	168	5455	5290	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 59	$ 21	$ 7	$ 20	$ 221	5200	255	$ 89	$ 132
M06-M-112	87	.99	86.1	5382	5290	B	HNDHVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 259	5200	182	$ 77	$ 182
M06-M-112	87	.99	86.1	5382	5290	B	SDROLL	1.8	.7	2.57	$ 330	$ 54	$ 16	$ 14	$ 0	$ 244	5200	182	$ 77	$ 166
M06-M-112	87	.99	86.1	5382	5290	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 31	$ 0	$ 174	5200	182	$ 47	$ 127
M06-M-112	87	.83	72.4	5382	5290	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 101	$ 40	$ 5	$ 21	$ 161	5200	182	$ 72	$ 89
M06-M-112	87	.98	85.5	5382	5290	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 94	$ 35	$ 9	$ 21	$ 168	5200	182	$ 72	$ 96
M07-M-113	16	1	16	5900	5820	D	HNDHVE	1.94	.7	2.77	$ 270	$ 49	$ 6	$ 34	$ 0	$ 179	5200	700	$ 217	$-98
M07-M-113	16	1	16	5900	5820	D	SDROLL	1.94	.7	2.77	$ 270	$ 89	$ 27	$ 24	$ 0	$ 128	5200	700	$ 217	$-89
M07-M-113	16	1	16	5900	5820	D	GRAV	1.94	.65	2.98	$ 270	$ 113	$ 7	$ 34	$ 0	$ 114	5200	700	$ 195	$-81
M07-M-114	48	.99	47.5	5880	5770	D	HNDHVE	1.94	.7	2.77	$ 270	$ 34	$ 4	$ 33	$ 0	$ 197	5200	680	$ 212	$-14
M07-M-114	48	.99	47.5	5880	5770	D	SDROLL	1.94	.7	2.77	$ 270	$ 55	$ 16	$ 16	$ 0	$ 182	5200	680	$ 212	$-30
M07-M-114	48	.99	47.5	5880	5770	D	GRAV	1.94	.65	2.98	$ 270	$ 111	$ 6	$ 33	$ 0	$ 117	5200	680	$ 190	$-72
M07-M-114	48	.83	39.9	5880	5770	D	CNTRPVT	1.94	.75	2.58	$ 270	$ 130	$ 52	$ 8	$ 29	$ 49	5200	680	$ 198	$-149
M07-M-114	48	.98	47.1	5880	5770	D	CPVT/HNV	1.94	.74	2.61	$ 270	$ 122	$ 46	$ 12	$ 29	$ 58	5200	680	$ 200	$-141
M07-M-115	173	.98	169.5	5810	5600	C	HNDHVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	610	$ 153	$ 65
M07-M-115	173	.98	169.5	5810	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	610	$ 153	$ 44
M07-M-115	173	.98	169.5	5810	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	610	$ 134	$ 0
M07-M-115	173	.83	144.1	5810	5600	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	610	$ 143	$ 43
M07-M-115	173	.98	170	5810	5600	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 181	5200	610	$ 144	$ 36

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	**** WATER REQUIREMENTS PER ACRE **** IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG. COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-130	161	.98	157.7	5800	5610	C	HWDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	600	$ 151	$ 67
M07-M-130	161	.98	157.7	5800	5610	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	600	$ 151	$ 46
M07-M-130	161	.98	157.7	5800	5610	C	GRAV	1.53	.65	2.35	$ 285	$ 117	$ 6	$ 26	$ 0	$ 133	5200	600	$ 132	$ 1
M07-M-130	161	.83	134.1	5800	5610	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 184	5200	600	$ 141	$ 45
M07-M-130	161	.98	158.2	5800	5610	C	CPVT/HWV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 180	5200	600	$ 142	$ 38
M07-M-131	255	.98	249.9	5750	5550	C	HWDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	550	$ 140	$ 77
M07-M-131	255	.98	249.9	5750	5550	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	550	$ 140	$ 57
M07-M-131	255	.98	249.9	5750	5550	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	550	$ 121	$ 12
M07-M-131	255	.83	212.4	5750	5550	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 184	5200	550	$ 131	$ 53
M07-M-131	255	.98	250.6	5750	5550	C	CPVT/HWV	1.53	.74	2.06	$ 285	$ 58	$ 21	$ 6	$ 17	$ 181	5200	550	$ 132	$ 48
M07-M-132	224	.98	219.5	5610	5480	C	HWDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	410	$ 112	$ 106
M07-M-132	224	.98	219.5	5610	5480	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	410	$ 112	$ 85
M07-M-132	224	.98	219.5	5610	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	410	$ 90	$ 43
M07-M-132	224	.83	186.5	5610	5480	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 184	5200	410	$ 104	$ 82
M07-M-132	224	.98	220.1	5610	5480	C	CPVT/HWV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 181	5200	410	$ 105	$ 75
M07-M-133	10	1	10	5540	5510	C	HWDMVE	1.53	.7	2.18	$ 285	$ 62	$ 9	$ 27	$ 0	$ 185	5520	20	$ 32	$ 153
M07-M-133	10	1	10	5540	5510	C	SDROLL	1.53	.7	2.18	$ 285	$ 119	$ 38	$ 19	$ 0	$ 107	5520	20	$ 32	$ 74
M07-M-133	10	1	10	5540	5510	C	GRAV	1.53	.65	2.35	$ 285	$ 127	$ 9	$ 27	$ 0	$ 120	5520	20	$ 4	$ 116
M07-M-134	38	1	38	5800	5680	C	HWDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 27	$ 0	$ 218	5200	600	$ 151	$ 67
M07-M-134	38	1	38	5800	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 57	$ 16	$ 19	$ 0	$ 191	5200	600	$ 151	$ 40
M07-M-134	38	1	38	5800	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 110	$ 6	$ 27	$ 0	$ 141	5200	600	$ 132	$ 9

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	**** WATER REQUIREMENTS PER ACRE **** IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG. COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-116	102	.99	100.9	5740	5620	C	HNDHVE	1.53	.7	2.18	$ 285	$ 36	$ 4	$ 26	$ 0	$ 218	5200	540	$ 138	$ 79
M07-M-116	102	.99	100.9	5740	5620	C	SDROLL	1.53	.7	2.18	$ 285	$ 53	$ 14	$ 12	$ 0	$ 202	5200	540	$ 138	$ 63
M07-M-116	102	.99	100.9	5740	5620	C	GRAV	1.53	.65	2.35	$ 285	$ 117	$ 6	$ 26	$ 0	$ 134	5200	540	$ 119	$ 15
M07-M-116	102	.83	84.9	5740	5620	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 90	$ 35	$ 9	$ 14	$ 138	5200	540	$ 129	$ 9
M07-M-116	102	.98	100.2	5740	5620	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 84	$ 30	$ 7	$ 16	$ 145	5200	540	$ 131	$ 14
M07-M-117	5	1	5	5760	5720	C	HNDHVE	1.53	.7	2.18	$ 285	$ 92	$ 15	$ 29	$ 0	$ 147	5200	560	$ 142	$ 4
M07-M-117	5	1	5	5760	5720	C	SDROLL	1.53	.7	2.18	$ 285	$ 208	$ 74	$ 22	$ 0	$-19	5200	560	$ 142	$-162
M07-M-117	5	1	5	5760	5720	C	GRAV	1.53	.65	2.35	$ 285	$ 155	$ 14	$ 24	$ 0	$ 90	5200	560	$ 123	$-32
M07-M-118	15	1	15	5760	5710	C	HNDHVE	1.53	.7	2.18	$ 285	$ 51	$ 7	$ 27	$ 0	$ 198	5200	560	$ 142	$ 55
M07-M-118	15	1	15	5760	5710	C	SDROLL	1.53	.7	2.18	$ 285	$ 94	$ 29	$ 19	$ 0	$ 141	5200	560	$ 142	$-1
M07-M-118	15	1	15	5760	5710	C	GRAV	1.53	.65	2.35	$ 285	$ 116	$ 7	$ 27	$ 0	$ 133	5200	560	$ 123	$ 10
M07-M-119	50	.99	49.5	5760	5690	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	560	$ 142	$ 74
M07-M-119	50	.99	49.5	5760	5690	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 14	$ 12	$ 0	$ 200	5200	560	$ 142	$ 57
M07-M-119	50	.99	49.5	5760	5690	C	GRAV	1.53	.65	2.35	$ 285	$ 112	$ 6	$ 26	$ 0	$ 139	5200	560	$ 123	$ 16
M07-M-119	50	.83	41.4	5760	5690	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 128	$ 52	$ 6	$ 22	$ 74	5200	560	$ 133	$-58
M07-M-119	50	.98	49.1	5760	5690	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 121	$ 46	$ 10	$ 22	$ 84	5200	560	$ 134	$-49
M07-M-120	44	.99	43.8	5685	5600	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	485	$ 127	$ 92
M07-M-120	44	.99	43.8	5685	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 14	$ 12	$ 0	$ 200	5200	485	$ 127	$ 73
M07-M-120	44	.99	43.8	5685	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 114	$ 6	$ 26	$ 0	$ 137	5200	485	$ 104	$ 30
M07-M-120	44	.83	33.9	5685	5600	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 110	$ 47	$ 5	$ 21	$ 91	5200	485	$ 119	$-27
M07-M-120	44	.98	42.9	5685	5600	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 110	$ 41	$ 9	$ 21	$ 102	5200	485	$ 120	$-18

OUTPUT F: .\UTE\NANCOS.OUT

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-121	103	.99	101.9	5800	5655	C	HNDHVE	1.53	.7	2.18	$ 285	$ 96	$ 4	$ 26	$ 0	$ 218	5200	600	$ 151	$ 67
M07-M-121	103	.99	101.9	5800	5655	C	SDROLL	1.53	.7	2.18	$ 285	$ 53	$ 16	$ 12	$ 0	$ 202	5200	600	$ 151	$ 51
M07-M-121	103	.99	101.9	5800	5655	C	GRAV	1.53	.65	2.35	$ 285	$ 117	$ 4	$ 26	$ 0	$ 134	5200	600	$ 132	$ 1
M07-M-121	103	.83	85.7	5800	5655	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 89	$ 34	$ 5	$ 16	$ 140	5200	600	$ 141	$ 0
M07-M-121	103	.98	101.2	5800	5655	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 83	$ 30	$ 7	$ 16	$ 146	5200	600	$ 142	$ 4
M07-M-122	20	1	20	5660	5620	C	HNDHVE	1.53	.7	2.18	$ 285	$ 40	$ 5	$ 27	$ 0	$ 211	5200	460	$ 122	$ 89
M07-M-122	20	1	20	5660	5620	C	SDROLL	1.53	.7	2.18	$ 285	$ 69	$ 19	$ 19	$ 0	$ 174	5200	460	$ 128	$ 58
M07-M-122	20	1	20	5660	5620	C	GRAV	1.53	.65	2.35	$ 285	$ 104	$ 5	$ 27	$ 0	$ 147	5200	460	$ 101	$ 45
M07-M-123A	70	.99	69.3	5780	5620	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	580	$ 147	$ 72
M07-M-123A	70	.99	69.3	5780	5620	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	580	$ 147	$ 53
M07-M-123A	70	.99	69.3	5780	5620	C	GRAV	1.53	.65	2.35	$ 285	$ 115	$ 6	$ 26	$ 0	$ 136	5200	580	$ 127	$ 8
M07-M-123A	70	.83	58.3	5780	5620	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 114	$ 45	$ 5	$ 20	$ 99	5200	580	$ 137	$-37
M07-M-123A	70	.98	68.8	5780	5620	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 105	$ 40	$ 8	$ 20	$ 109	5200	580	$ 138	$-29
M07-M-123B	9	1	9	5645	5610	C	HNDHVE	1.53	.7	2.18	$ 285	$ 68	$ 10	$ 29	$ 0	$ 176	5200	445	$ 119	$ 56
M07-M-123B	9	1	9	5645	5610	C	SDROLL	1.53	.7	2.18	$ 285	$ 137	$ 45	$ 22	$ 0	$ 79	5200	445	$ 119	$-39
M07-M-123B	9	1	9	5645	5610	C	GRAV	1.53	.65	2.35	$ 285	$ 133	$ 10	$ 24	$ 0	$ 117	5200	445	$ 98	$ 19
M07-M-124	11	1	11	5740	5680	C	HNDHVE	1.53	.7	2.18	$ 285	$ 59	$ 9	$ 27	$ 0	$ 189	5200	540	$ 138	$ 49
M07-M-124	11	1	11	5740	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 114	$ 36	$ 19	$ 0	$ 114	5200	540	$ 138	$-24
M07-M-124	11	1	11	5740	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 125	$ 9	$ 27	$ 0	$ 123	5200	540	$ 119	$ 4

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
NANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-125	91	1	91	5700	5630	C	HNDMVE	1.53	.7	2.18	$ 285	$ 96	$ 4	$ 27	$ 0	$ 215	5200	500	$ 130	$ 85
M07-M-125	91	1	91	5700	5630	C	SDROLL	1.53	.7	2.18	$ 285	$ 61	$ 17	$ 19	$ 0	$ 185	5200	500	$ 130	$ 55
M07-M-125	91	1	91	5700	5630	C	GRAV	1.53	.65	2.35	$ 285	$ 108	$ 5	$ 27	$ 0	$ 143	5200	500	$ 110	$ 33
M07-M-126	144	.98	140.7	5670	5510	C	HNDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	470	$ 124	$ 93
M07-M-126	144	.98	140.7	5670	5510	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	470	$ 124	$ 73
M07-M-126	144	.98	140.7	5670	5510	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 4	$ 26	$ 0	$ 133	5200	470	$ 103	$ 30
M07-M-126	144	.83	134.4	5670	5510	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	470	$ 116	$ 70
M07-M-126	144	.98	141.2	5670	5510	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 180	5200	470	$ 117	$ 63
M07-M-127	26	1	26	5770	5680	C	HNDMVE	1.53	.7	2.18	$ 285	$ 38	$ 5	$ 27	$ 0	$ 213	5200	570	$ 145	$ 68
M07-M-127	26	1	26	5770	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 65	$ 18	$ 19	$ 0	$ 181	5200	570	$ 145	$ 36
M07-M-127	26	1	26	5770	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 5	$ 27	$ 0	$ 145	5200	570	$ 125	$ 19
M07-M-128	526	.97	510.2	5940	5600	C	HNDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	740	$ 179	$ 38
M07-M-128	526	.97	510.2	5940	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	740	$ 179	$ 18
M07-M-128	526	.97	510.2	5940	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 4	$ 26	$ 0	$ 133	5200	740	$ 163	$-29
M07-M-128	526	.83	438.1	5940	5600	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	740	$ 167	$ 19
M07-M-128	526	.98	514.2	5940	5600	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 38	$ 21	$ 5	$ 17	$ 181	5200	740	$ 169	$ 12
M07-M-129	58	.99	57.4	5650	5570	C	HNDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	450	$ 120	$ 99
M07-M-129	58	.99	57.4	5650	5570	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	450	$ 120	$ 80
M07-M-129	58	.99	57.4	5650	5570	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 138	5200	450	$ 99	$ 39
M07-M-129	58	.83	48.3	5650	5570	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 123	$ 49	$ 6	$ 22	$ 84	5200	450	$ 112	$-27
M07-M-129	58	.98	57	5650	5570	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 114	$ 43	$ 9	$ 22	$ 94	5200	450	$ 113	$-18

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-135	7	1	7	5710	5670	C	HMDMVE	1.53	.7	2.18	$ 285	$ 88	$ 12	$ 29	$ 0	$ 161	5200	510	$ 132	$ 29
M07-M-135	7	1	7	5710	5670	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 60	$ 22	$ 0	$ 29	5200	510	$ 132	$-102
M07-M-135	7	1	7	5710	5670	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	510	$ 112	$-8
M07-M-136A	26	1	26	5840	5720	C	HMDMVE	1.53	.7	2.18	$ 285	$ 38	$ 5	$ 27	$ 0	$ 213	5200	640	$ 159	$ 54
M07-M-136A	26	1	26	5840	5720	C	SDROLL	1.53	.7	2.18	$ 285	$ 45	$ 18	$ 19	$ 0	$ 181	5200	640	$ 159	$ 22
M07-M-136A	26	1	26	5840	5720	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 5	$ 27	$ 0	$ 145	5200	640	$ 141	$ 4
M07-M-136B	6	1	6	5840	5800	D	HMDMVE	1.94	.7	2.77	$ 270	$ 86	$ 14	$ 37	$ 0	$ 131	5200	640	$ 202	$-70
M07-M-136B	6	1	6	5840	5800	D	SDROLL	1.94	.7	2.77	$ 270	$ 190	$ 67	$ 28	$ 0	$-16	5200	640	$ 202	$-218
M07-M-136B	6	1	6	5840	5800	D	GRAV	1.94	.65	2.98	$ 270	$ 150	$ 13	$ 30	$ 0	$ 75	5200	640	$ 178	$-102
M07-M-137	19	1	19	5730	5680	C	HMDMVE	1.53	.7	2.18	$ 285	$ 42	$ 5	$ 27	$ 0	$ 209	5200	530	$ 136	$ 72
M07-M-137	19	1	19	5730	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 74	$ 21	$ 19	$ 0	$ 169	5200	530	$ 136	$ 32
M07-M-137	19	1	19	5730	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 6	$ 27	$ 0	$ 144	5200	530	$ 116	$ 27
M07-M-138	12	1	12	5650	5610	C	HMDMVE	1.53	.7	2.18	$ 285	$ 57	$ 8	$ 27	$ 0	$ 191	5200	450	$ 120	$ 70
M07-M-138	12	1	12	5650	5610	C	SDROLL	1.53	.7	2.18	$ 285	$ 109	$ 35	$ 19	$ 0	$ 121	5200	450	$ 120	$ 0
M07-M-138	12	1	12	5650	5610	C	GRAV	1.53	.65	2.35	$ 285	$ 123	$ 8	$ 27	$ 0	$ 126	5200	450	$ 99	$ 26

OUTPUT F? :\UTE\MANC2.OUT

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-139	56	.99	55.4	5600	5520	C	HNDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	400	$ 110	$ 109
M07-M-139	56	.99	55.4	5600	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	400	$ 110	$ 90
M07-M-139	56	.99	55.4	5600	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 138	5200	400	$ 88	$ 50
M07-M-139	56	.83	46.6	5600	5520	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 124	$ 50	$ 6	$ 22	$ 81	5200	400	$ 102	$-20
M07-M-139	56	.98	55	5600	5520	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 116	$ 44	$ 9	$ 22	$ 92	5200	400	$ 104	$-11
M07-M-140	8	1	8	5525	5485	C	HNDMVE	1.53	.7	2.18	$ 285	$ 74	$ 11	$ 29	$ 0	$ 149	5200	325	$ 94	$ 74
M07-M-140	8	1	8	5525	5485	C	SDROLL	1.53	.7	2.18	$ 285	$ 154	$ 58	$ 22	$ 0	$ 54	5200	325	$ 94	$-48
M07-M-140	8	1	8	5525	5485	C	GRAV	1.53	.65	2.35	$ 285	$ 138	$ 11	$ 24	$ 0	$ 110	5200	325	$ 71	$ 38
M07-M-141	25	1	25	5490	5480	C	HNDMVE	1.53	.7	2.18	$ 285	$ 38	$ 5	$ 27	$ 0	$ 213	5200	290	$ 87	$ 125
M07-M-141	25	1	25	5490	5480	C	SDROLL	1.53	.7	2.18	$ 285	$ 65	$ 18	$ 19	$ 0	$ 180	5200	290	$ 87	$ 93
M07-M-141	25	1	25	5490	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 5	$ 27	$ 0	$ 145	5200	290	$ 69	$ 81
M07-M-142	46	.99	45.5	5530	5480	C	HNDMVE	1.53	.7	2.18	$ 285	$ 33	$ 4	$ 26	$ 0	$ 219	5200	330	$ 95	$ 124
M07-M-142	46	.99	45.5	5530	5480	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 14	$ 12	$ 0	$ 200	5200	330	$ 95	$ 104
M07-M-142	46	.99	45.5	5530	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 111	$ 6	$ 26	$ 0	$ 140	5200	330	$ 72	$ 47
M07-M-142	46	.83	38.3	5530	5480	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 131	$ 53	$ 6	$ 23	$ 69	5200	330	$ 89	$-19
M07-M-142	46	.98	45.2	5530	5480	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 124	$ 47	$ 10	$ 23	$ 80	5200	330	$ 90	$-10
M07-M-143	105	.99	103.9	5680	5540	C	HNDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 218	5200	480	$ 126	$ 91
M07-M-143	105	.99	103.9	5680	5540	C	SDROLL	1.53	.7	2.18	$ 285	$ 53	$ 14	$ 12	$ 0	$ 202	5200	480	$ 126	$ 75
M07-M-143	105	.99	103.9	5680	5540	C	GRAV	1.53	.65	2.35	$ 285	$ 117	$ 6	$ 26	$ 0	$ 134	5200	480	$ 105	$ 28
M07-M-143	105	.83	87.4	5680	5540	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 87	$ 34	$ 3	$ 14	$ 142	5200	480	$ 118	$ 24
M07-M-143	105	.98	103.2	5680	5540	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 82	$ 30	$ 7	$ 14	$ 148	5200	480	$ 119	$ 29

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-144	375	.98	367.5	5880	5620	C	HNDAVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	480	$ 147	$ 30
M07-M-144	375	.98	367.5	5880	5620	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	480	$ 147	$ 30
M07-M-144	375	.98	367.5	5880	5620	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	480	$ 149	$-15
M07-M-144	375	.83	312.8	5880	5620	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	480	$ 156	$ 30
M07-M-144	375	.98	368	5880	5620	C	CPVT/HHV	1.53	.74	2.06	$ 285	$ 58	$ 21	$ 5	$ 17	$ 181	5200	480	$ 158	$ 23
M07-M-145	39	1	39	5470	5400	C	HNDAVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 27	$ 0	$ 218	5200	270	$ 83	$ 134
M07-M-145	39	1	39	5470	5400	C	SDROLL	1.53	.7	2.18	$ 285	$ 56	$ 16	$ 19	$ 0	$ 192	5200	270	$ 83	$ 109
M07-M-145	39	1	39	5470	5400	C	GRAV	1.53	.65	2.35	$ 285	$ 110	$ 6	$ 27	$ 0	$ 141	5200	270	$ 59	$ 81
M07-M-146	33	1	33	5480	5440	C	HNDAVE	1.53	.7	2.18	$ 285	$ 36	$ 4	$ 27	$ 0	$ 214	5200	280	$ 85	$ 130
M07-M-146	33	1	33	5480	5440	C	SDROLL	1.53	.7	2.18	$ 285	$ 60	$ 17	$ 19	$ 0	$ 187	5200	280	$ 85	$ 101
M07-M-146	33	1	33	5480	5440	C	GRAV	1.53	.65	2.35	$ 285	$ 108	$ 5	$ 27	$ 0	$ 143	5200	280	$ 61	$ 81
M07-M-147	51	.99	50.4	5630	5520	C	HNDAVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	430	$ 116	$ 103
M07-M-147	51	.99	50.4	5630	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	430	$ 116	$ 84
M07-M-147	51	.99	50.4	5630	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 112	$ 6	$ 26	$ 0	$ 139	5200	430	$ 94	$ 44
M07-M-147	51	.83	42.4	5630	5520	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 120	$ 51	$ 6	$ 22	$ 75	5200	430	$ 108	$-32
M07-M-147	51	.98	50.1	5630	5520	C	CPVT/HHV	1.53	.74	2.06	$ 285	$ 120	$ 45	$ 9	$ 22	$ 86	5200	430	$ 109	$-23
M07-M-148	22	1	22	5660	5640	C	HNDAVE	1.53	.7	2.18	$ 285	$ 39	$ 5	$ 27	$ 0	$ 212	5200	460	$ 122	$ 89
M07-M-148	22	1	22	5660	5640	C	SDROLL	1.53	.7	2.18	$ 285	$ 67	$ 19	$ 19	$ 0	$ 178	5200	460	$ 122	$ 55
M07-M-148	22	1	22	5660	5640	C	GRAV	1.53	.65	2.35	$ 285	$ 105	$ 5	$ 27	$ 0	$ 146	5200	460	$ 101	$ 45

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM PAYMENT CAPACITY
M07-M-149	12	1	12	5760	5680	C	HNDHVE	1.53	.7	2.18	$ 285	$ 57	$ 8	$ 27	$ 0	$ 191	5200	560	$ 142	$ 48
M07-M-149	12	1	12	5760	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 109	$ 35	$ 19	$ 0	$ 121	5200	560	$ 142	$-21
M07-M-149	12	1	12	5760	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 123	$ 8	$ 27	$ 0	$ 126	5200	560	$ 123	$ 2
M07-M-150	7	1	7	5750	5680	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	550	$ 140	$ 20
M07-M-150	7	1	7	5750	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 40	$ 22	$ 0	$ 29	5200	550	$ 140	$-111
M07-M-150	7	1	7	5750	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	550	$ 121	$-17
M07-M-151	92	.99	91	5760	5600	C	HNDHVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	560	$ 142	$ 75
M07-M-151	92	.99	91	5760	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 54	$ 16	$ 12	$ 0	$ 201	5200	560	$ 142	$ 58
M07-M-151	92	.99	91	5760	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 114	$ 7	$ 26	$ 0	$ 134	5200	560	$ 123	$ 10
M07-M-151	92	.83	76.6	5760	5600	C	CMTRPVT	1.53	.75	2.04	$ 285	$ 97	$ 38	$ 4	$ 18	$ 126	5200	560	$ 133	$-6
M07-M-151	92	.98	90.4	5760	5600	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 98	$ 33	$ 7	$ 18	$ 134	5200	560	$ 134	$ 0
M07-M-152	28	1	28	5630	5560	C	HNDHVE	1.53	.7	2.18	$ 285	$ 37	$ 5	$ 27	$ 0	$ 214	5200	430	$ 116	$ 98
M07-M-152	28	1	28	5630	5560	C	SDROLL	1.53	.7	2.18	$ 285	$ 63	$ 18	$ 19	$ 0	$ 183	5200	430	$ 116	$ 66
M07-M-152	28	1	28	5630	5560	C	GRAV	1.53	.65	2.35	$ 285	$ 107	$ 5	$ 27	$ 0	$ 144	5200	430	$ 94	$ 49
M07-M-153	5	1	5	5730	5710	C	HNDHVE	1.53	.7	2.18	$ 285	$ 92	$ 15	$ 29	$ 0	$ 147	5200	530	$ 136	$ 10
M07-M-153	5	1	5	5730	5710	C	SDROLL	1.53	.7	2.18	$ 285	$ 208	$ 74	$ 22	$ 0	$-19	5200	530	$ 136	$-154
M07-M-153	5	1	5	5730	5710	C	GRAV	1.53	.65	2.35	$ 285	$ 155	$ 14	$ 24	$ 0	$ 90	5200	530	$ 116	$-26

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
KANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-154	5	1	5	5720	5680	C	HNDHVE	1.53	.7	2.18	$ 285	$ 92	$ 15	$ 29	$ 0	$ 147	5200	520	$ 134	$ 12
M07-M-154	5	1	5	5720	5680	C	SDROLL	1.53	.7	2.18	$ 285	$ 208	$ 74	$ 22	$ 0	$-19	5200	520	$ 134	$-154
M07-M-154	5	1	5	5720	5680	C	GRAV	1.53	.65	2.35	$ 285	$ 155	$ 14	$ 24	$ 0	$ 90	5200	520	$ 114	$-23
M07-M-155	13	1	13	5690	5640	C	HNDHVE	1.53	.7	2.18	$ 285	$ 55	$ 8	$ 27	$ 0	$ 193	5200	490	$ 128	$ 65
M07-M-155	13	1	13	5690	5640	C	SDROLL	1.53	.7	2.18	$ 285	$ 104	$ 33	$ 19	$ 0	$ 128	5200	490	$ 128	$ 0
M07-M-155	13	1	13	5690	5640	C	GRAV	1.53	.65	2.35	$ 285	$ 128	$ 8	$ 27	$ 0	$ 128	5200	490	$ 108	$ 20
M07-M-156	7	1	7	5720	5690	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	520	$ 134	$ 27
M07-M-156	7	1	7	5720	5690	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 60	$ 22	$ 0	$ 29	5200	520	$ 134	$-104
M07-M-156	7	1	7	5720	5690	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	520	$ 114	$-10
M07-M-157	7	1	7	5635	5600	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	435	$ 117	$ 44
M07-M-157	7	1	7	5635	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 60	$ 22	$ 0	$ 29	5200	435	$ 117	$-87
M07-M-157	7	1	7	5635	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	435	$ 95	$ 8
M07-M-158	7	1	7	5590	5560	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	390	$ 108	$ 53
M07-M-158	7	1	7	5590	5560	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 60	$ 22	$ 0	$ 29	5200	390	$ 108	$-78
M07-M-158	7	1	7	5590	5560	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	390	$ 85	$ 18

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
NANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-159	12	1	12	5640	5580	C	HNDMVE	1.53	.7	2.18	$ 285	$ 57	$ 8	$ 27	$ 0	$ 191	5200	440	$ 118	$ 72
M07-M-159	12	1	12	5640	5580	C	SDROLL	1.53	.7	2.18	$ 285	$ 109	$ 35	$ 19	$ 0	$ 121	5200	440	$ 118	$ 2
M07-M-159	12	1	12	5640	5580	C	GRAV	1.53	.65	2.35	$ 285	$ 123	$ 8	$ 27	$ 0	$ 126	5200	440	$ 96	$ 29
M07-M-160	46	.99	45.5	5660	5520	C	HNDMVE	1.53	.7	2.18	$ 285	$ 33	$ 4	$ 26	$ 0	$ 219	5200	460	$ 122	$ 97
M07-M-160	46	.99	45.5	5660	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	460	$ 122	$ 78
M07-M-160	46	.99	45.5	5660	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 111	$ 6	$ 26	$ 0	$ 140	5200	460	$ 101	$ 38
M07-M-160	46	.83	38 3	5660	5520	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 131	$ 53	$ 6	$ 23	$ 69	5200	460	$ 114	$-44
M07-M-160	46	.98	45.2	5660	5520	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 124	$ 47	$ 10	$ 23	$ 80	5200	460	$ 115	$-35
M07-M-161	48	.99	47.3	5650	5480	C	HNDMVE	1 53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	450	$ 120	$ 99
M07-M-161	48	.99	47.3	5650	5480	C	SDROLL	1.53	.7	2 18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	450	$ 120	$ 80
M07-M-161	48	.99	47.3	5650	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 114	$ 6	$ 26	$ 0	$ 134	5200	450	$ 99	$ 37
M07-M-161	48	.83	56.6	5650	5480	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 115	$ 46	$ 5	$ 20	$ 96	5200	450	$ 112	$-15
M07-M-161	48	.98	46.8	5650	5480	C	CPVT/HNV	1.53	.74	2 06	$ 285	$ 107	$ 40	$ 8	$ 20	$ 107	5200	450	$ 113	$-6
M07-M-162	19	1	19	5550	5480	C	HNDMVE	1.53	.7	2.18	$ 285	$ 42	$ 5	$ 27	$ 0	$ 209	5200	350	$ 100	$ 109
M07-M-162	19	1	19	5550	5480	C	SDROLL	1.53	.7	2.18	$ 285	$ 74	$ 21	$ 19	$ 0	$ 169	5200	350	$ 100	$ 69
M07-M-162	19	1	19	5550	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 6	$ 27	$ 0	$ 144	5200	350	$ 77	$ 67
M07-M-163	32	1	32	5500	5440	C	HNDMVE	1.53	.7	2 18	$ 285	$ 36	$ 4	$ 27	$ 0	$ 216	5200	300	$ 89	$ 126
M07-M-163	32	1	32	5500	5440	C	SDROLL	1.53	.7	2.18	$ 285	$ 61	$ 17	$ 19	$ 0	$ 186	5200	300	$ 89	$ 96
M07-M-163	32	1	32	5500	5440	C	GRAV	1.53	.65	2.35	$ 285	$ 108	$ 5	$ 27	$ 0	$ 143	5200	300	$ 66	$ 77

[redacted] PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-164	19	1	19	5450	5430	C	HNDMVE	1.53	.7	2.18	$ 285	$ 42	$ 5	$ 27	$ 0	$ 209	5200	250	$ 79	$ 129
M07-M-164	19	1	19	5450	5430	C	SDROLL	1.53	.7	2.18	$ 285	$ 74	$ 21	$ 19	$ 0	$ 169	5200	250	$ 79	$ 90
M07-M-164	19	1	19	5450	5430	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 6	$ 27	$ 0	$ 144	5200	250	$ 55	$ 89
M07-M-165	36	1	36	5460	5400	C	HNDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 27	$ 0	$ 217	5200	260	$ 81	$ 135
M07-M-165	36	1	36	5460	5400	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 14	$ 19	$ 0	$ 190	5200	260	$ 81	$ 108
M07-M-165	36	1	36	5460	5400	C	GRAV	1.53	.65	2.35	$ 285	$ 109	$ 5	$ 27	$ 0	$ 142	5200	260	$ 57	$ 84
M07-M-166	62	.99	61.3	5420	5390	C	HNDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	220	$ 73	$ 146
M07-M-166	62	.99	61.3	5420	5390	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 14	$ 12	$ 0	$ 200	5200	220	$ 73	$ 127
M07-M-166	62	.99	61.3	5420	5390	C	GRAV	1.53	.65	2.35	$ 285	$ 114	$ 6	$ 26	$ 0	$ 137	5200	220	$ 48	$ 89
M07-M-166	62	.83	51.4	5420	5390	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 120	$ 48	$ 5	$ 21	$ 89	5200	220	$ 48	$ 20
M07-M-166	62	.98	60.9	5420	5390	C	CPVT/HKV	1.53	.74	2.06	$ 285	$ 111	$ 42	$ 9	$ 21	$ 99	5200	220	$ 69	$ 30
M07-M-167	11	1	11	5415	5360	B	HNDMVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	5200	215	$ 85	$ 143
M07-M-167	11	1	11	5415	5360	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	5200	215	$ 85	$ 70
M07-M-167	11	1	11	5415	5360	B	GRAV	1.8	.65	2.76	$ 330	$ 125	$ 9	$ 32	$ 0	$ 163	5200	215	$ 55	$ 107
M07-M-168	10	1	10	5400	5360	B	HNDMVE	1.8	.7	2.57	$ 330	$ 62	$ 9	$ 32	$ 0	$ 226	5200	200	$ 81	$ 144
M07-M-168	10	1	10	5400	5360	B	SDROLL	1.8	.7	2.57	$ 330	$ 119	$ 38	$ 22	$ 0	$ 148	5200	200	$ 81	$ 67
M07-M-168	10	1	10	5400	5360	B	GRAV	1.8	.65	2.76	$ 330	$ 127	$ 9	$ 32	$ 0	$ 160	5200	200	$ 51	$ 109

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-169	7	1	7	5510	5480	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	310	$ 91	$ 69
M07-M-169	7	1	7	5510	5480	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 40	$ 22	$ 0	$ 29	5200	310	$ 91	$-61
M07-M-169	7	1	7	5510	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	310	$ 68	$ 35
M07-M-170	21	1	21	5600	5520	C	HNDHVE	1.53	.7	2.18	$ 285	$ 40	$ 5	$ 27	$ 0	$ 212	5200	400	$ 110	$ 101
M07-M-170	21	1	21	5600	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 68	$ 19	$ 19	$ 0	$ 177	5200	400	$ 110	$ 67
M07-M-170	21	1	21	5600	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 104	$ 5	$ 27	$ 0	$ 146	5200	400	$ 88	$ 58
M07-M-171	7	1	7	5540	5510	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	340	$ 97	$ 63
M07-M-171	7	1	7	5540	5510	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 40	$ 22	$ 0	$ 29	5200	340	$ 97	$-68
M07-M-171	7	1	7	5540	5510	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	340	$ 74	$ 29
M07-M-172	20	1	20	5450	5410	C	HNDHVE	1.53	.7	2.18	$ 285	$ 40	$ 5	$ 27	$ 0	$ 211	5200	250	$ 79	$ 132
M07-M-172	20	1	20	5450	5410	C	SDROLL	1.53	.7	2.18	$ 285	$ 69	$ 19	$ 19	$ 0	$ 176	5200	250	$ 79	$ 96
M07-M-172	20	1	20	5450	5410	C	GRAV	1.53	.65	2.35	$ 285	$ 104	$ 5	$ 27	$ 0	$ 147	5200	250	$ 55	$ 92
M07-M-173	18	1	18	5380	5360	B	HNDHVE	1.8	.7	2.57	$ 330	$ 44	$ 6	$ 32	$ 0	$ 246	5200	180	$ 76	$ 170
M07-M-173	18	1	18	5380	5360	B	SDROLL	1.8	.7	2.57	$ 330	$ 79	$ 23	$ 22	$ 0	$ 204	5200	180	$ 76	$ 127
M07-M-173	18	1	18	5380	5360	B	GRAV	1.8	.65	2.76	$ 330	$ 189	$ 6	$ 32	$ 0	$ 102	5200	180	$ 46	$ 135

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM PAYMENT CAPACITY
M07-M-174	39	1	39	5400	5320	B	HWDHVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 32	$ 0	$ 258	5200	200	$ 81	$ 177
M07-M-174	39	1	39	5400	5320	B	SDROLL	1.8	.7	2.57	$ 330	$ 56	$ 16	$ 22	$ 0	$ 234	5200	200	$ 81	$ 152
M07-M-174	39	1	39	5400	5320	B	GRAV	1.8	.65	2.74	$ 330	$ 110	$ 6	$ 32	$ 0	$ 181	5200	200	$ 51	$ 129
M07-M-175	18	1	18	5330	5320	B	HWDHVE	1.8	.7	2.57	$ 330	$ 44	$ 6	$ 32	$ 0	$ 246	5200	130	$ 64	$ 182
M07-M-175	18	1	18	5330	5320	B	SDROLL	1.8	.7	2.57	$ 330	$ 79	$ 23	$ 22	$ 0	$ 204	5200	130	$ 64	$ 139
M07-M-175	18	1	18	5330	5320	B	GRAV	1.8	.65	2.74	$ 330	$ 109	$ 6	$ 32	$ 0	$ 182	5200	130	$ 33	$ 148
M07-M-176	11	1	11	5340	5320	B	HWDHVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	5200	140	$ 67	$ 161
M07-M-176	11	1	11	5340	5320	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	5200	140	$ 67	$ 88
M07-M-176	11	1	11	5340	5320	B	GRAV	1.8	.65	2.74	$ 330	$ 125	$ 9	$ 32	$ 0	$ 143	5200	140	$ 36	$ 127
M07-M-177	20	1	20	5320	5310	B	HWDHVE	1.8	.7	2.57	$ 330	$ 40	$ 5	$ 32	$ 0	$ 251	5200	120	$ 62	$ 189
M07-M-177	20	1	20	5320	5310	B	SDROLL	1.8	.7	2.57	$ 330	$ 69	$ 19	$ 22	$ 0	$ 218	5200	120	$ 62	$ 155
M07-M-177	20	1	20	5320	5310	B	GRAV	1.8	.65	2.74	$ 330	$ 104	$ 5	$ 32	$ 0	$ 187	5200	120	$ 31	$ 156
M07-M-178	9	1	9	5310	5285	B	HWDHVE	1.8	.7	2.57	$ 330	$ 48	$ 10	$ 35	$ 0	$ 216	5200	110	$ 59	$ 156
M07-M-178	9	1	9	5310	5285	B	SDROLL	1.8	.7	2.57	$ 330	$ 137	$ 45	$ 26	$ 0	$ 120	5200	110	$ 59	$ 60
M07-M-178	9	1	9	5310	5285	B	GRAV	1.8	.65	2.74	$ 330	$ 133	$ 10	$ 28	$ 0	$ 157	5200	110	$ 28	$ 129

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-179	53	.99	52.4	5275	5240	B	HNDHVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 260	5200	75	$ 51	$ 208
M07-M-179	53	.99	52.4	5275	5240	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 14	$ 14	$ 0	$ 243	5200	75	$ 51	$ 191
M07-M-179	53	.99	52.4	5275	5240	B	GRAV	1.8	.65	2.76	$ 330	$ 112	$ 6	$ 31	$ 0	$ 179	5200	75	$ 19	$ 159
M07-M-179	53	.83	44.1	5275	5240	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 126	$ 51	$ 7	$ 26	$ 118	5200	75	$ 48	$ 70
M07-M-179	53	.98	52	5275	5240	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 118	$ 45	$ 11	$ 26	$ 127	5200	75	$ 48	$ 79
M07-M-180	7	1	7	5450	5430	C	HNDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 161	5200	250	$ 79	$ 82
M07-M-180	7	1	7	5450	5430	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 60	$ 22	$ 0	$ 29	5200	250	$ 79	$-49
M07-M-180	7	1	7	5450	5430	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	250	$ 55	$ 48
M07-M-181	6	1	6	5455	5445	C	HNDHVE	1.53	.7	2.18	$ 285	$ 86	$ 14	$ 29	$ 0	$ 154	5200	255	$ 80	$ 73
M07-M-181	6	1	6	5455	5445	C	SDROLL	1.53	.7	2.18	$ 285	$ 190	$ 67	$ 22	$ 0	$ 4	5200	255	$ 80	$-75
M07-M-181	6	1	6	5455	5445	C	GRAV	1.53	.65	2.35	$ 285	$ 150	$ 13	$ 24	$ 0	$ 97	5200	255	$ 56	$ 41
M07-M-182	5	1	5	5440	5420	C	HNDHVE	1.53	.7	2.18	$ 285	$ 92	$ 15	$ 29	$ 0	$ 147	5200	240	$ 77	$ 69
M07-M-182	5	1	5	5440	5420	C	SDROLL	1.53	.7	2.18	$ 285	$ 208	$ 74	$ 22	$ 0	$-19	5200	240	$ 77	$-97
M07-M-182	5	1	5	5440	5420	C	GRAV	1.53	.65	2.35	$ 285	$ 155	$ 14	$ 24	$ 0	$ 90	5200	240	$ 52	$ 37
M07-M-183	22	1	22	5455	5400	C	HNDHVE	1.53	.7	2.18	$ 285	$ 39	$ 5	$ 27	$ 0	$ 212	5200	255	$ 80	$ 131
M07-M-183	22	1	22	5455	5400	C	SDROLL	1.53	.7	2.18	$ 285	$ 67	$ 19	$ 19	$ 0	$ 178	5200	255	$ 80	$ 97
M07-M-183	22	1	22	5455	5400	C	GRAV	1.53	.65	2.35	$ 285	$ 105	$ 5	$ 27	$ 0	$ 144	5200	255	$ 56	$ 90

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-184	19	1	19	5470	5420	C	HNDHVE	1.53	.7	2.18	$ 285	$ 42	$ 5	$ 27	$ 0	$ 209	5200	270	$ 83	$ 125
M07-M-184	19	1	19	5470	5420	C	SDROLL	1.53	.7	2.18	$ 285	$ 74	$ 21	$ 19	$ 0	$ 169	5200	270	$ 83	$ 85
M07-M-184	19	1	19	5470	5420	C	GRAV	1.53	.65	2.35	$ 285	$ 104	$ 6	$ 27	$ 0	$ 144	5200	270	$ 59	$ 85
M07-M-185	9	1	9	5540	5530	C	HNDHVE	1.53	.7	2.18	$ 285	$ 68	$ 10	$ 29	$ 0	$ 176	5200	340	$ 97	$ 78
M07-M-185	9	1	9	5540	5530	C	SDROLL	1.53	.7	2.18	$ 285	$ 137	$ 43	$ 22	$ 0	$ 79	5200	340	$ 97	$-18
M07-M-185	9	1	9	5540	5530	C	GRAV	1.53	.65	2.35	$ 285	$ 133	$ 10	$ 24	$ 0	$ 117	5200	340	$ 74	$ 42
M07-M-186	58	.99	57.4	5860	5730	C,D	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	660	$ 163	$ 56
M07-M-186	58	.99	57.4	5860	5730	C,D	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	660	$ 163	$ 37
M07-M-186	58	.99	57.4	5860	5730	C,D	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 138	5200	660	$ 145	$-7
M07-M-186	58	.83	48.3	5860	5730	C,D	CNTRPVT	1.53	.75	2.04	$ 285	$ 123	$ 49	$ 6	$ 22	$ 84	5200	660	$ 152	$-68
M07-M-186	58	.98	57	5860	5730	C,D	CPVT/HNV	1.53	.74	2.06	$ 285	$ 114	$ 43	$ 9	$ 22	$ 94	5200	660	$ 134	$-59
M07-M-187	57	.99	56.4	5685	5590	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	485	$ 127	$ 92
M07-M-187	57	.99	56.4	5685	5590	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	485	$ 127	$ 73
M07-M-187	57	.99	56.4	5685	5590	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 138	5200	485	$ 106	$ 31
M07-M-187	57	.83	47.4	5685	5590	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 123	$ 49	$ 6	$ 22	$ 83	5200	485	$ 119	$-35
M07-M-187	57	.98	56	5685	5590	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 115	$ 43	$ 9	$ 22	$ 93	5200	485	$ 120	$-26
M07-M-188	57	.99	56.4	5700	5560	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	500	$ 130	$ 89
M07-M-188	57	.99	56.4	5700	5560	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	500	$ 130	$ 69
M07-M-188	57	.99	56.4	5700	5560	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 138	5200	500	$ 110	$ 28
M07-M-188	57	.83	47.4	5700	5560	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 123	$ 49	$ 6	$ 22	$ 83	5200	500	$ 121	$-38
M07-M-188	57	.98	56	5700	5560	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 115	$ 43	$ 9	$ 22	$ 93	5200	500	$ 123	$-29

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-189	10	1	10	5650	5600	C	HWDMVE	1.53	.7	2.18	$ 285	$ 62	$ 9	$ 27	$ 0	$ 185	5200	450	$ 120	$ 65
M07-M-189	10	1	10	5650	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 119	$ 38	$ 19	$ 0	$ 107	5200	450	$ 120	$-13
M07-M-189	10	1	10	5650	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 127	$ 9	$ 27	$ 0	$ 120	5200	450	$ 99	$ 21
M07-M-190	520	.97	504.4	5670	5280	C	HWDMVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 24	$ 0	$ 218	5200	470	$ 124	$ 93
M07-M-190	520	.97	504.4	5670	5280	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	470	$ 124	$ 73
M07-M-190	520	.97	504.4	5670	5280	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 24	$ 0	$ 133	5200	470	$ 103	$ 30
M07-M-190	520	.83	433.1	5670	5280	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 69	$ 24	$ 8	$ 8	$ 184	5200	470	$ 114	$ 70
M07-M-190	520	.98	510.3	5670	5280	C	CPVT/HMV	1.53	.74	2.06	$ 285	$ 58	$ 21	$ 5	$ 17	$ 181	5200	470	$ 117	$ 64
M07-M-191	14	1	14	5760	5700	C	HWDMVE	1.53	.7	2.18	$ 285	$ 53	$ 7	$ 27	$ 0	$ 196	5200	540	$ 142	$ 53
M07-M-191	14	1	14	5760	5700	C	SDROLL	1.53	.7	2.18	$ 285	$ 99	$ 31	$ 19	$ 0	$ 135	5200	540	$ 142	$-7
M07-M-191	14	1	14	5760	5700	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 7	$ 27	$ 0	$ 131	5200	540	$ 123	$ 7
M07-M-192	44	.99	43.5	5700	5615	C	HWDMVE	1.53	.7	2.18	$ 285	$ 33	$ 4	$ 26	$ 0	$ 220	5200	500	$ 130	$ 89
M07-M-192	44	.99	43.5	5700	5615	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	500	$ 130	$ 69
M07-M-192	44	.99	43.5	5700	5615	C	GRAV	1.53	.65	2.35	$ 285	$ 111	$ 6	$ 26	$ 0	$ 140	5200	500	$ 110	$ 30
M07-M-192	44	.83	36.6	5700	5615	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 133	$ 54	$ 6	$ 23	$ 67	5200	500	$ 121	$-54
M07-M-192	44	.98	43.2	5700	5615	C	CPVT/HMV	1.53	.74	2.06	$ 285	$ 125	$ 47	$ 10	$ 23	$ 77	5200	500	$ 123	$-45
M07-M-193	6	1	6	5730	5720	C	HWDMVE	1.53	.7	2.18	$ 285	$ 86	$ 14	$ 29	$ 0	$ 154	5200	530	$ 134	$ 17
M07-M-193	6	1	6	5730	5720	C	SDROLL	1.53	.7	2.18	$ 285	$ 190	$ 67	$ 22	$ 0	$ 4	5200	530	$ 136	$-131
M07-M-193	6	1	6	5730	5720	C	GRAV	1.53	.65	2.35	$ 285	$ 136	$ 13	$ 24	$ 0	$ 97	5200	530	$ 114	$-19

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PRELIMINARY PIA ANALYSIS
RANCOS WATERSHED

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	**** WATER REQUIREMENTS PER ACRE **** IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG. COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-194	83	.99	82.1	5620	5520	C	HMDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	420	$ 114	$ 104
M07-M-194	83	.99	82.1	5620	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 201	5200	420	$ 114	$ 86
M07-M-194	83	.99	82.1	5620	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 116	$ 7	$ 26	$ 0	$ 134	5200	420	$ 92	$ 41
M07-M-194	83	.83	69.1	5620	5520	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 104	$ 41	$ 4	$ 19	$ 115	5200	420	$ 104	$ 8
M07-M-194	83	.98	81.5	5620	5520	C	CPVT/HMV	1.53	.74	2.06	$ 285	$ 97	$ 36	$ 8	$ 19	$ 124	5200	420	$ 107	$ 16
M07-M-195	8	1	8	5590	5550	C	HMDHVE	1.53	.7	2.18	$ 285	$ 74	$ 11	$ 29	$ 0	$ 169	5200	390	$ 108	$ 60
M07-M-195	8	1	8	5590	5550	C	SDROLL	1.53	.7	2.18	$ 285	$ 154	$ 53	$ 22	$ 0	$ 54	5200	390	$ 108	$-53
M07-M-195	8	1	8	5590	5550	C	GRAV	1.53	.65	2.35	$ 285	$ 138	$ 11	$ 24	$ 0	$ 110	5200	390	$ 85	$ 24
M07-M-196	162	.98	158.7	5685	5515	C	HMDHVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 24	$ 0	$ 218	5200	485	$ 127	$ 90
M07-M-196	162	.98	158.7	5685	5515	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	485	$ 127	$ 70
M07-M-196	162	.98	158.7	5685	5515	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 24	$ 0	$ 139	5200	485	$ 106	$ 27
M07-M-196	162	.83	134.9	5685	5515	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	485	$ 119	$ 67
M07-M-196	162	.98	159.2	5685	5515	C	CPVT/HMV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 180	5200	485	$ 120	$ 60
M07-M-197	43	.99	42.5	5690	5600	C	HMDHVE	1.53	.7	2.18	$ 285	$ 33	$ 4	$ 26	$ 0	$ 220	5200	490	$ 128	$ 91
M07-M-197	43	.99	42.5	5690	5600	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	490	$ 128	$ 71
M07-M-197	43	.99	42.5	5690	5600	C	GRAV	1.53	.65	2.35	$ 285	$ 111	$ 6	$ 26	$ 0	$ 140	5200	490	$ 108	$ 32
M07-M-198	5	1	5	5485	5465	C	HMDHVE	1.53	.7	2.18	$ 285	$ 92	$ 15	$ 29	$ 0	$ 147	5200	285	$ 84	$ 60
M07-M-198	5	1	5	5485	5465	C	SDROLL	1.53	.7	2.18	$ 285	$ 208	$ 74	$ 22	$ 0	$-19	5200	285	$ 84	$-104
M07-M-198	5	1	5	5485	5465	C	GRAV	1.53	.65	2.35	$ 285	$ 155	$ 14	$ 24	$ 0	$ 90	5200	285	$ 62	$ 27

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-199	6	1	6	5490	5480	C	HNDMVE	1.53	.7	2.18	$ 285	$ 84	$ 14	$ 29	$ 0	$ 154	5200	290	$ 87	$ 66
M07-M-199	6	1	6	5490	5480	C	SDROLL	1.53	.7	2.18	$ 285	$ 198	$ 47	$ 22	$ 0	$ 4	5200	290	$ 87	$-82
M07-M-199	6	1	6	5490	5480	C	GRAV	1.53	.65	2.35	$ 285	$ 150	$ 13	$ 24	$ 0	$ 97	5200	290	$ 63	$ 33
M07-M-200	18	1	18	5480	5440	C	HNDMVE	1.53	.7	2.18	$ 285	$ 44	$ 6	$ 27	$ 0	$ 206	5200	280	$ 85	$ 120
M07-M-200	18	1	18	5480	5440	C	SDROLL	1.53	.7	2.18	$ 285	$ 79	$ 23	$ 19	$ 0	$ 162	5200	280	$ 85	$ 77
M07-M-200	18	1	18	5480	5440	C	GRAV	1.53	.65	2.35	$ 285	$ 109	$ 6	$ 27	$ 0	$ 141	5200	280	$ 61	$ 80
M07-M-201	9	1	9	5470	5400	C	HNDMVE	1.53	.7	2.18	$ 285	$ 68	$ 10	$ 29	$ 0	$ 174	5200	270	$ 89	$ 92
M07-M-201	9	1	9	5470	5400	C	SDROLL	1.53	.7	2.18	$ 285	$ 137	$ 45	$ 22	$ 0	$ 79	5200	270	$ 89	$-4
M07-M-201	9	1	9	5470	5400	C	GRAV	1.53	.65	2.35	$ 285	$ 133	$ 10	$ 24	$ 0	$ 117	5200	270	$ 59	$ 57
M07-M-202	6	1	6	5320	5300	B	HNDMVE	1.8	.7	2.57	$ 330	$ 84	$ 14	$ 35	$ 0	$ 194	5200	120	$ 62	$ 131
M07-M-202	6	1	6	5320	5300	B	SDROLL	1.8	.7	2.57	$ 330	$ 190	$ 47	$ 24	$ 0	$ 46	5200	120	$ 62	$-14
M07-M-202	6	1	6	5320	5300	B	GRAV	1.8	.65	2.76	$ 330	$ 150	$ 13	$ 28	$ 0	$ 138	5200	120	$ 31	$ 106
M07-M-203	5	1	5	5320	5300	B	HNDMVE	1.8	.7	2.57	$ 330	$ 92	$ 15	$ 35	$ 0	$ 186	5200	120	$ 62	$ 124
M07-M-203	5	1	5	5320	5300	B	SDROLL	1.8	.7	2.57	$ 330	$ 208	$ 74	$ 26	$ 0	$ 21	5200	120	$ 62	$-41
M07-M-203	5	1	5	5320	5300	B	GRAV	1.8	.65	2.76	$ 330	$ 155	$ 14	$ 28	$ 0	$ 131	5200	120	$ 31	$ 100

COLORADO DITCH AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	**** WATER REQUIREMENTS PER ACRE **** NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG. COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-204	193	.98	189.1	5580	5460	C	HNDMVE	1.53	.7	2.18	$ 285	$ 93	$ 4	$ 26	$ 0	$ 218	5200	380	$ 104	$ 112
M07-M-204	193	.98	189.1	5580	5460	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	380	$ 104	$ 91
M07-M-204	193	.98	189.1	5580	5460	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	380	$ 83	$ 50
M07-M-204	193	.83	160.7	5580	5460	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 0	$ 196	5200	380	$ 99	$ 87
M07-M-204	193	.98	189.7	5580	5460	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 59	$ 21	$ 6	$ 17	$ 181	5200	380	$ 100	$ 81
M07-M-205	67	.99	66.3	5460	5400	C	HNDMVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	260	$ 81	$ 138
M07-M-205	67	.99	66.3	5460	5400	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	260	$ 81	$ 119
M07-M-205	67	.99	66.3	5460	5400	C	GRAV	1.53	.65	2.35	$ 285	$ 114	$ 6	$ 26	$ 0	$ 136	5200	260	$ 57	$ 79
M07-M-205	67	.83	55 8	5460	5400	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 116	$ 46	$ 5	$ 20	$ 95	5200	260	$ 76	$ 19
M07-M-205	67	.98	65.8	5460	5400	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 107	$ 40	$ 8	$ 26	$ 106	5200	260	$ 76	$ 29
M07-M-206	515	.97	499.5	5520	5300	B,C	HNDMVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5200	320	$ 110	$ 148
M07-M-206	515	.97	499.5	5520	5300	B,C	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5200	320	$ 110	$ 130
M07-M-206	515	.97	499.5	5520	5300	B,C	GRAV	1.8	.65	2.76	$ 330	$ 118	$ 6	$ 31	$ 0	$ 174	5200	320	$ 82	$ 91
M07-M-206	515	.83	428.9	5520	5300	B,C	CNTRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 8	$ 231	5200	320	$ 103	$ 128
M07-M-206	515	.98	505.4	5520	5300	B,C	CPVT/HNV	1.8	.74	2.42	$ 330	$ 58	$ 21	$ 6	$ 20	$ 222	5200	320	$ 104	$ 118
M07-M-207	33	1	33	5375	5325	B	HNDMVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 32	$ 0	$ 256	5200	175	$ 75	$ 181
M07-M-207	33	1	33	5375	5325	B	SDROLL	1.8	.7	2.57	$ 330	$ 60	$ 17	$ 22	$ 0	$ 229	5200	175	$ 75	$ 153
M07-M-207	33	1	33	5375	5325	B	GRAV	1.8	.65	2.76	$ 330	$ 108	$ 5	$ 32	$ 0	$ 183	5200	175	$ 45	$ 137
M07-M-208	5	1	5	5325	5300	B	HNDMVE	1.8	.7	2.57	$ 330	$ 92	$ 13	$ 33	$ 0	$ 186	5200	125	$ 43	$ 123
M07-M-208	5	1	5	5325	5300	B	SDROLL	1.8	.7	2.57	$ 330	$ 208	$ 74	$ 26	$ 0	$ 21	5200	125	$ 63	$-42
M07-M-208	5	1	5	5325	5300	B	GRAV	1.8	.65	2.76	$ 330	$ 155	$ 14	$ 28	$ 8	$ 131	5200	125	$ 32	$ 99

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-209	28	1	28	5845	5720	C	HNDHVE	1.53	.7	2.18	$ 285	$ 37	$ 5	$ 27	$ 0	$ 214	5200	645	$ 160	$ 54
M07-M-209	28	1	28	5845	5720	C	SDROLL	1.53	.7	2.18	$ 285	$ 63	$ 18	$ 19	$ 0	$ 183	5200	645	$ 160	$ 22
M07-M-209	28	1	28	5845	5720	C	GRAV	1.53	.65	2.35	$ 285	$ 107	$ 5	$ 27	$ 0	$ 144	5200	645	$ 142	$ 2
M07-M-210	31	1	31	5630	5560	C	HNDHVE	1.53	.7	2.18	$ 285	$ 36	$ 4	$ 27	$ 0	$ 215	5200	430	$ 116	$ 99
M07-M-210	31	1	31	5630	5560	C	SDROLL	1.53	.7	2.18	$ 285	$ 61	$ 17	$ 19	$ 0	$ 185	5200	430	$ 116	$ 69
M07-M-210	31	1	31	5630	5560	C	GRAV	1.53	.65	2.35	$ 285	$ 108	$ 5	$ 27	$ 0	$ 143	5200	430	$ 94	$ 48
M07-M-211	4	1	4	5560	5525	C	HNDHVE	1.53	.7	2.18	$ 285	$ 86	$ 14	$ 29	$ 0	$ 154	5200	360	$ 102	$ 52
M07-M-211	4	1	4	5560	5525	C	SDROLL	1.53	.7	2.18	$ 285	$ 190	$ 47	$ 22	$ 0	$ 4	5200	360	$ 102	$-97
M07-M-211	4	1	4	5560	5525	C	GRAV	1.53	.65	2.35	$ 285	$ 150	$ 13	$ 24	$ 0	$ 97	5200	360	$ 79	$ 18
M07-M-212	13	1	13	5560	5520	C	HNDHVE	1.53	.7	2.18	$ 285	$ 55	$ 8	$ 27	$ 0	$ 193	5200	360	$ 102	$ 91
M07-M-212	13	1	13	5560	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 104	$ 33	$ 19	$ 0	$ 128	5200	360	$ 102	$ 26
M07-M-212	13	1	13	5560	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 120	$ 8	$ 27	$ 0	$ 128	5200	360	$ 79	$ 49
M07-M-213	4	1	4	5520	5490	C	HNDHVE	1.53	.7	2.18	$ 285	$ 86	$ 14	$ 29	$ 0	$ 154	5200	320	$ 93	$ 60
M07-M-213	4	1	4	5520	5490	C	SDROLL	1.53	.7	2.18	$ 285	$ 190	$ 47	$ 22	$ 0	$ 4	5200	320	$ 93	$-88
M07-M-213	4	1	4	5520	5490	C	GRAV	1.53	.65	2.35	$ 285	$ 150	$ 13	$ 24	$ 0	$ 97	5200	320	$ 70	$ 26

PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AC. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M07-M-214	7	1	7	5470	5440	C	HHDHVE	1.53	.7	2.18	$ 285	$ 80	$ 12	$ 29	$ 0	$ 141	5200	270	$ 83	$ 78
M07-M-214	7	1	7	5470	5440	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 40	$ 22	$ 0	$ 29	5200	270	$ 83	$-53
M07-M-214	7	1	7	5470	5440	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5200	270	$ 59	$ 44
M07-M-215	7	1	7	5400	5399	B	HHDHVE	1.8	.7	2.57	$ 330	$ 80	$ 12	$ 35	$ 0	$ 201	5200	200	$ 81	$ 120
M07-M-215	7	1	7	5400	5399	B	SDROLL	1.8	.7	2.57	$ 330	$ 172	$ 40	$ 26	$ 0	$ 70	5200	200	$ 81	$-10
M07-M-215	7	1	7	5400	5399	B	GRAV	1.8	.65	2.74	$ 330	$ 144	$ 12	$ 28	$ 0	$ 144	5200	200	$ 51	$ 92
M07-M-216	501	.97	485.9	5480	5340	C	HHDHVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 26	$ 0	$ 218	5200	280	$ 85	$ 132
M07-M-216	501	.97	485.9	5480	5340	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 12	$ 0	$ 198	5200	280	$ 85	$ 112
M07-M-216	501	.97	485.9	5480	5340	C	GRAV	1.53	.65	2.35	$ 285	$ 118	$ 6	$ 26	$ 0	$ 133	5200	280	$ 61	$ 72
M07-M-216	501	.83	417.3	5480	5340	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 63	$ 24	$ 2	$ 8	$ 186	5200	280	$ 79	$ 107
M07-M-216	501	.98	491.7	5480	5340	C	CPVT/HHV	1.53	.74	2.06	$ 285	$ 58	$ 21	$ 5	$ 17	$ 181	5200	280	$ 84	$ 106
M07-M-217	61	.99	60.8	5460	5380	C	HHDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5200	260	$ 81	$ 138
M07-M-217	61	.99	60.8	5460	5380	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5200	260	$ 81	$ 119
M07-M-217	61	.99	60.8	5460	5380	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 137	5200	260	$ 57	$ 80
M07-M-217	61	.83	50.8	5460	5380	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 120	$ 48	$ 5	$ 21	$ 88	5200	260	$ 76	$ 12
M07-M-217	61	.98	59.9	5460	5388	C	CPVT/HHV	1.53	.74	2.06	$ 285	$ 112	$ 42	$ 9	$ 21	$ 98	5200	260	$ 76	$ 21
M07-M-218	9	1	9	5310	5300	B	HHDHVE	1.8	.7	2.57	$ 330	$ 68	$ 10	$ 35	$ 0	$ 216	5200	110	$ 59	$ 136
M07-M-218	9	1	9	5310	5300	B	SDROLL	1.8	.7	2.57	$ 330	$ 137	$ 45	$ 26	$ 0	$ 120	5200	110	$ 59	$ 60
M07-M-218	9	1	9	5310	5300	B	GRAV	1.8	.65	2.74	$ 330	$ 133	$ 10	$ 28	$ 0	$ 157	5200	110	$ 28	$ 129

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PTA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M08-M-219	27	1	27	7470	7400	M	HMDMVE	1.17	.7	1.68	$ 160	$ 38	$ 5	$ 21	$ 0	$ 95	5920	1550	$ 244	$-178
M08-M-219	27	1	27	7470	7400	M	SDROLL	1.17	.7	1.68	$ 160	$ 64	$ 18	$ 15	$ 0	$ 61	5920	1550	$ 266	$-204
M08-M-219	27	1	27	7470	7400	M	GRAV	1.17	.65	1.81	$ 160	$ 106	$ 5	$ 21	$ 0	$ 26	5920	1550	$ 263	$-237
M08-M-220A	54	.99	53.4	7500	7400	M	HMDMVE	1.17	.7	1.68	$ 160	$ 34	$ 4	$ 20	$ 0	$ 100	5920	1580	$ 271	$-170
M08-M-220A	54	.99	53.4	7500	7400	M	SDROLL	1.17	.7	1.68	$ 160	$ 55	$ 16	$ 9	$ 0	$ 78	5920	1580	$ 271	$-192
M08-M-220A	54	.99	53.4	7500	7400	M	GRAV	1.17	.65	1.81	$ 160	$ 112	$ 6	$ 20	$ 0	$ 20	5920	1580	$ 268	$-248
M08-M-220A	54	.88	44.9	7500	7400	M	CNTRPVT	1.17	.75	1.57	$ 160	$ 185	$ 58	$ 4	$ 17	$-98	5920	1580	$ 253	$-292
M08-M-220A	54	.98	53	7500	7400	M	CPVT/HMV	1.17	.74	1.59	$ 160	$ 118	$ 44	$ 7	$ 17	$-27	5920	1580	$ 255	$-283
M08-M-220B	12	1	12	7340	7270	C	HMDMVE	1.35	.7	1.92	$ 185	$ 57	$ 8	$ 24	$ 0	$ 94	5920	1420	$ 281	$-187
M08-M-220B	12	1	12	7340	7270	C	SDROLL	1.35	.7	1.92	$ 185	$ 109	$ 35	$ 17	$ 0	$ 23	5920	1420	$ 281	$-258
M08-M-220B	12	1	12	7340	7270	C	GRAV	1.35	.65	2.07	$ 185	$ 123	$ 8	$ 24	$ 0	$ 29	5920	1420	$ 274	$-246
M08-M-220C	6	1	6	7245	7200	C	HMDMVE	1.35	.7	1.92	$ 185	$ 86	$ 14	$ 24	$ 0	$ 58	5920	1325	$ 264	$-206
M08-M-220C	6	1	6	7245	7200	C	SDROLL	1.35	.7	1.92	$ 185	$ 190	$ 67	$ 19	$ 0	$-92	5920	1325	$ 264	$-356
M08-M-220C	6	1	6	7245	7200	C	GRAV	1.35	.65	2.07	$ 185	$ 150	$ 13	$ 21	$ 0	$ 0	5920	1325	$ 257	$-257
M08-M-221	21	1	21	7220	7170	C	HMDMVE	1.35	.7	1.92	$ 185	$ 40	$ 5	$ 24	$ 0	$ 115	5920	1300	$ 259	$-144
M08-M-221	21	1	21	7220	7170	C	SDROLL	1.35	.7	1.92	$ 185	$ 68	$ 19	$ 17	$ 0	$ 79	5920	1300	$ 259	$-180
M08-M-221	21	1	21	7220	7170	C	GRAV	1.35	.65	2.07	$ 185	$ 104	$ 5	$ 24	$ 0	$ 50	5920	1300	$ 252	$-202

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PRELIMINARY PIA ANALYSIS

NAMCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M08-M-222	14	1	14	7160	7120	G	MNDRVE	1.35	.7	1.92	$ 185	$ 53	$ 7	$ 24	$ 0	$ 99	5920	1240	$ 248	$-149
M08-M-222	14	1	14	7160	7120	G	SDROLL	1.35	.7	1.92	$ 185	$ 99	$ 31	$ 17	$ 4	$ 37	5920	1240	$ 248	$-211
M08-M-222	14	1	14	7160	7120	G	GRAV	1.35	.65	2.07	$ 185	$ 118	$ 7	$ 24	$ 0	$ 34	5920	1240	$ 241	$-206
M08-M-223	25	1	25	7100	7030	G	MNDRVE	1.35	.7	1.92	$ 185	$ 38	$ 5	$ 24	$ 0	$ 116	5920	1180	$ 238	$-121
M08-M-223	25	1	25	7100	7030	G	SDROLL	1.35	.7	1.92	$ 185	$ 65	$ 18	$ 17	$ 4	$ 83	5920	1180	$ 238	$-155
M08-M-223	25	1	25	7100	7030	G	GRAV	1.35	.65	2.07	$ 185	$ 106	$ 5	$ 24	$ 0	$ 48	5920	1180	$ 229	$-180
M08-M-224	85	.99	84.1	6910	6800	F	MNDRVE	1.56	.7	2.22	$ 210	$ 34	$ 4	$ 24	$ 0	$ 148	5760	1150	$ 268	$-125
M08-M-224	85	.99	84.1	6910	6800	F	SDROLL	1.56	.7	2.22	$ 210	$ 55	$ 16	$ 12	$ 0	$ 125	5760	1150	$ 268	$-142
M08-M-224	85	.99	84.1	6910	6800	F	GRAV	1.56	.65	2.4	$ 210	$ 116	$ 7	$ 27	$ 0	$ 58	5760	1150	$ 258	$-199
M08-M-224	85	.83	70.8	6910	6800	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 102	$ 40	$ 4	$ 19	$ 42	5760	1150	$ 258	$-208
M08-M-224	85	.98	83.5	6910	6800	F	CPVT/MNV	1.56	.74	2.1	$ 210	$ 95	$ 35	$ 8	$ 19	$ 50	5760	1150	$ 253	$-202
M08-M-225	205	.98	200.9	6870	6720	F	MNDRVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5760	1110	$ 260	$-117
M08-M-225	205	.98	200.9	6870	6720	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5760	1110	$ 260	$-137
M08-M-225	205	.98	200.9	6870	6720	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5760	1110	$ 249	$-191
M08-M-225	205	.83	170.7	6870	6720	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 43	$ 24	$ 2	$ 8	$ 111	5760	1110	$ 243	$-131
M08-M-225	205	.98	201.5	6870	6720	F	CPVT/MNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 105	5760	1110	$ 245	$-140
M08-M-226	25	1	25	6840	6760	F	MNDRVE	1.56	.7	2.22	$ 210	$ 38	$ 5	$ 28	$ 0	$ 138	5760	1040	$ 245	$-107
M08-M-226	25	1	25	6800	6760	F	SDROLL	1.56	.7	2.22	$ 210	$ 65	$ 18	$ 19	$ 0	$ 105	5760	1040	$ 245	$-140
M08-M-226	25	1	25	6800	6760	F	GRAV	1.56	65	2.4	$ 210	$ 106	$ 5	$ 27	$ 0	$ 70	5760	1040	$ 233	$-163

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M08-M-227	21	1	21	6725	6680	F	HNDHVE	1.56	.7	2.22	$ 210	$ 48	$ 5	$ 28	$ 0	$ 136	5840	885	$ 213	$-76
M08-M-227	21	1	21	6725	6680	F	SDROLL	1.56	.7	2.22	$ 210	$ 68	$ 19	$ 19	$ 0	$ 101	5840	885	$ 213	$-111
M08-M-227	21	1	21	6725	6680	F	GRAV	1.56	.65	2.4	$ 210	$ 104	$ 5	$ 27	$ 0	$ 71	5840	885	$ 198	$-127
M08-M-228	857	.97	831.2	6767	6600	F	HNDHVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5840	927	$ 222	$-79
M08-M-228	857	.97	831.2	6767	6600	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5840	927	$ 222	$-99
M08-M-228	857	.97	831.2	6767	6600	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5840	927	$ 208	$-149
M08-M-228	857	.83	719.8	6767	6600	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5840	927	$ 207	$-95
M08-M-228	857	.98	841.1	6767	6600	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	5840	927	$ 209	$-103
M09-M-229A	9	1	9	7500	7460	H	HNDHVE	1.17	.7	1.68	$ 160	$ 48	$ 10	$ 23	$ 8	$ 58	6120	1380	$ 239	$-181
M09-M-229A	9	1	9	7500	7460	H	SDROLL	1.17	.7	1.68	$ 160	$ 137	$ 45	$ 17	$ 0	$-40	6120	1380	$ 239	$-280
M09-M-229A	9	1	9	7500	7460	H	GRAV	1.17	.65	1.81	$ 160	$ 133	$ 10	$ 18	$ 0	$-2	6120	1380	$ 234	$-236
M09-M-229B	17	1	17	7500	7440	H	HNDHVE	1.17	.7	1.68	$ 160	$ 46	$ 6	$ 21	$ 0	$ 85	6120	1380	$ 239	$-154
M09-M-229B	17	1	17	7500	7440	H	SDROLL	1.17	.7	1.68	$ 160	$ 84	$ 25	$ 15	$ 0	$ 35	6120	1380	$ 239	$-204
M09-M-229B	17	1	17	7500	7440	H	GRAV	1.17	.65	1.81	$ 160	$ 111	$ 6	$ 21	$ 0	$ 20	6120	1380	$ 234	$-214
M09-M-230	13	1	13	7530	7460	H	HNDHVE	1.17	.7	1.68	$ 160	$ 55	$ 8	$ 21	$ 0	$ 75	6120	1410	$ 244	$-169
M09-M-230	13	1	13	7530	7460	H	SDROLL	1.17	.7	1.68	$ 160	$ 104	$ 33	$ 15	$ 0	$ 7	6120	1410	$ 244	$-236
M09-M-230	13	1	13	7530	7460	H	GRAV	1.17	.65	1.81	$ 160	$ 120	$ 8	$ 21	$ 0	$ 9	6120	1410	$ 239	$-229

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M09-M-231	21	1	21	7220	7155	G	HWDMVE	1.35	.7	1.92	$ 185	$ 40	$ 5	$ 24	$ 0	$ 115	6000	1220	$ 243	$-129
M09-M-231	21	1	21	7220	7155	G	SDROLL	1.35	.7	1.92	$ 185	$ 68	$ 19	$ 17	$ 0	$ 79	6000	1220	$ 243	$-165
M09-M-231	21	1	21	7220	7155	G	GRAV	1.35	.65	2.07	$ 185	$ 104	$ 5	$ 24	$ 0	$ 50	6000	1220	$ 237	$-187
M09-M-232A	1900	.97	1843	7325	6760	G	HWDMVE	1.35	.7	1.92	$ 185	$ 35	$ 4	$ 23	$ 0	$ 121	6000	1325	$ 264	$-142
M09-M-232A	1900	.97	1843	7325	6760	G	SDROLL	1.35	.7	1.92	$ 185	$ 58	$ 16	$ 11	$ 0	$ 99	6000	1325	$ 264	$-164
M09-M-232A	1900	.97	1843	7325	6760	G	GRAV	1.35	.65	2.07	$ 185	$ 118	$ 6	$ 23	$ 0	$ 37	6000	1325	$ 257	$-220
M09-M-232A	1900	.83	1582.7	7325	6760	G	CNTRPVT	1.35	.75	1.8	$ 185	$ 63	$ 24	$ 2	$ 8	$ 87	6000	1325	$ 246	$-159
M09-M-232A	1900	.98	1862	7325	6760	G	CPVT/HMV	1.35	.74	1.81	$ 185	$ 59	$ 21	$ 5	$ 15	$ 84	6000	1325	$ 249	$-165
M09-M-232B	920	.97	892.4	7080	6840	F	HWDMVE	1.56	.7	2.22	$ 210	$ 95	$ 4	$ 26	$ 0	$ 142	6000	1080	$ 254	$-111
M09-M-232B	920	.97	892.4	7080	6840	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	6000	1080	$ 254	$-131
M09-M-232B	920	.97	892.4	7080	6840	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	6000	1080	$ 242	$-184
M09-M-232B	920	.83	766.3	7080	6840	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	6000	1080	$ 237	$-125
M09-M-232B	920	.98	902.9	7080	6840	F	CPVT/HMV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	6000	1080	$ 239	$-133
M09-M-233	12	1	12	6840	6830	F	HWDMVE	1.56	.7	2.22	$ 210	$ 57	$ 8	$ 28	$ 0	$ 115	6000	840	$ 204	$-88
M09-M-233	12	1	12	6840	6830	F	SDROLL	1.56	.7	2.22	$ 210	$ 109	$ 35	$ 19	$ 0	$ 45	6000	840	$ 204	$-158
M09-M-233	12	1	12	6840	6830	F	GRAV	1.56	.65	2.4	$ 210	$ 123	$ 8	$ 27	$ 0	$ 50	6000	840	$ 188	$-138
M09-M-234	45	.99	44.5	6840	6800	F	HWDMVE	1.56	.7	2.22	$ 210	$ 93	$ 4	$ 26	$ 0	$ 144	6000	840	$ 204	$-59
M09-M-234	45	.99	44.5	6840	6800	F	SDROLL	1.56	.7	2.22	$ 210	$ 55	$ 16	$ 12	$ 0	$ 125	6000	840	$ 204	$-78
M09-M-234	45	.99	44.5	6840	6800	F	GRAV	1.56	.65	2.4	$ 210	$ 111	$ 6	$ 27	$ 0	$ 65	6000	840	$ 188	$-123
M09-M-234	45	.83	37.4	6840	6800	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 132	$ 53	$ 6	$ 23	$-7	6000	840	$ 190	$-197
M09-M-234	45	.98	44.2	6840	6800	F	CPVT/HMV	1.56	.74	2.1	$ 210	$ 124	$ 47	$ 10	$ 23	$ 3	6000	840	$ 192	$-189

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
RANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M09-M-235	11	1	11	6770	6760	F	HNDMVE	1.56	.7	2.22	$ 210	$ 59	$ 9	$ 28	$ 0	$ 113	6000	770	$ 189	$-76
M09-M-235	11	1	11	6770	6760	F	SDROLL	1.56	.7	2.22	$ 210	$ 114	$ 36	$ 19	$ 0	$ 38	6000	770	$ 189	$-150
M09-M-235	11	1	11	6770	6760	F	GRAV	1.56	.65	2.4	$ 210	$ 125	$ 9	$ 27	$ 0	$ 47	6000	770	$ 173	$-125
M09-M-236A	669	.97	648.9	6850	6720	F	HNDMVE	1.56	.7	2.22	$ 210	$ 95	$ 4	$ 26	$ 0	$ 142	6000	850	$ 206	$-63
M09-M-236A	669	.97	648.9	6850	6720	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	6000	850	$ 206	$-83
M09-M-236A	669	.97	648.9	6850	6720	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	6000	850	$ 191	$-132
M09-M-236A	669	.83	557.2	6850	6720	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	6000	850	$ 192	$-88
M09-M-236A	669	.98	656.6	6850	6720	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	6000	850	$ 194	$-88
M09-M-236B	1088	.97	1055.3	6920	6720	F	HNDMVE	1.56	.7	2.22	$ 210	$ 95	$ 4	$ 26	$ 0	$ 142	6000	920	$ 220	$-78
M09-M-236B	1088	.97	1055.3	6920	6720	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	6000	920	$ 220	$-98
M09-M-236B	1088	.97	1055.3	6920	6720	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	6000	920	$ 206	$-148
M09-M-236B	1088	.83	906.8	6920	6720	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	6000	920	$ 206	$-94
M09-M-236B	1088	.98	1066.2	6920	6720	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	6000	920	$ 208	$-102
M09-M-236C	708	.97	686.7	6830	6700	F	HNDMVE	1.56	.7	2.22	$ 210	$ 95	$ 4	$ 26	$ 0	$ 142	6000	830	$ 202	$-59
M09-M-236C	708	.97	686.7	6830	6700	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	6000	830	$ 202	$-79
M09-M-236C	708	.97	686.7	6830	6700	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	6000	830	$ 186	$-128
M09-M-236C	708	.83	589.7	6830	6700	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	6000	830	$ 188	$-74
M09-M-236C	708	.98	694.9	6830	6700	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	6000	830	$ 190	$-84
M09-M-237	7	1	7	6825	6790	F	HNDMVE	1.56	.7	2.22	$ 210	$ 80	$ 12	$ 30	$ 0	$ 86	6000	825	$ 201	$-114
M09-M-237	7	1	7	6825	6790	F	SDROLL	1.56	.7	2.22	$ 210	$ 172	$ 60	$ 22	$ 0	$-45	6000	825	$ 201	$-246
M09-M-237	7	1	7	6825	6790	F	GRAV	1.56	.65	2.4	$ 210	$ 144	$ 12	$ 24	$ 0	$ 28	6000	825	$ 185	$-156

[redacted] PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M09-M-238	128	.99	126.7	6960	6900	F	HNDMVE	1.56	.7	2.22	$ 210	$ 36	$ 4	$ 26	$ 0	$ 141	6000	960	$ 229	$-87
M09-M-238	128	.99	126.7	6960	6900	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	6000	960	$ 229	$-106
M09-M-238	128	.99	126.7	6960	6900	F	GRAV	1.56	.65	2.4	$ 210	$ 117	$ 6	$ 27	$ 0	$ 58	6000	960	$ 215	$-157
M09-M-238	128	.83	106.6	6960	6900	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 72	$ 27	$ 2	$ 7	$ 99	6000	960	$ 213	$-114
M09-M-238	128	.98	125.8	6960	6900	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 68	$ 24	$ 6	$ 1634	$-1523	6000	960	$ 216	$-1739
M09-M-239	7	1	7	6770	6760	F	HNDMVE	1.56	.7	2.22	$ 210	$ 80	$ 12	$ 30	$ 0	$ 86	6000	770	$ 189	$-103
M09-M-239	7	1	7	6770	6760	F	SDROLL	1.56	.7	2.22	$ 210	$ 172	$ 60	$ 22	$ 0	$-45	6000	770	$ 189	$-235
M09-M-239	7	1	7	6770	6760	F	GRAV	1.56	.65	2.4	$ 210	$ 144	$ 12	$ 24	$ 0	$ 28	6000	770	$ 173	$-144
M09-M-240	18	1	18	6770	6740	F	HNDMVE	1.56	.7	2.22	$ 210	$ 44	$ 6	$ 28	$ 0	$ 131	6000	770	$ 189	$-58
M09-M-240	18	1	18	6770	6740	F	SDROLL	1.56	.7	2.22	$ 210	$ 79	$ 23	$ 19	$ 0	$ 87	6000	770	$ 189	$-102
M09-M-240	18	1	18	6770	6740	F	GRAV	1.56	.65	2.4	$ 210	$ 169	$ 6	$ 27	$ 0	$ 66	6000	770	$ 173	$-106
M09-M-241	125	.99	123.7	6770	6720	F	HNDMVE	1.56	.7	2.22	$ 210	$ 37	$ 4	$ 26	$ 0	$ 141	6000	770	$ 189	$-47
M09-M-241	125	.99	123.7	6770	6720	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	6000	770	$ 189	$-66
M09-M-241	125	.99	123.7	6770	6720	F	GRAV	1.56	.65	2.4	$ 210	$ 117	$ 6	$ 27	$ 0	$ 58	6000	770	$ 173	$-114
M09-M-241	125	.83	104.1	6770	6720	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 73	$ 28	$ 2	$ 7	$ 97	6000	770	$ 176	$-79
M09-M-241	125	.98	122.8	6770	6720	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 69	$ 24	$ 6	$ 1570	$-1460	6000	770	$ 178	$-1439
M10-M-242	54	.99	53.4	5310	5220	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 260	5200	110	$ 59	$ 200
M10-M-242	54	.99	53.4	5310	5220	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5200	110	$ 59	$ 183
M10-M-242	54	.99	53.4	5310	5220	B	GRAV	1.8	.65	2.76	$ 330	$ 112	$ 6	$ 31	$ 0	$ 179	5200	110	$ 29	$ 150
M10-M-242	54	.83	44.9	5310	5220	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 125	$ 50	$ 7	$ 26	$ 119	5200	110	$ 55	$ 63
M10-M-242	54	.98	53	5310	5220	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 118	$ 44	$ 11	$ 26	$ 129	5200	110	$ 56	$ 72

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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MANCOS WATERSHED

PARCEL I.D.	ACREAGE FIELD SIZE (ACRES)	ACREAGE REDUCTION FACTOR	ACREAGE NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M10-M-243	10	1	10	5300	5280	B	HNDHVE	1.8	.7	2.57	$ 330	$ 42	$ 9	$ 32	$ 0	$ 226	5200	100	$ 37	$ 168
M10-M-243	10	1	10	5300	5280	B	SDROLL	1.8	.7	2.57	$ 330	$ 119	$ 38	$ 22	$ 0	$ 148	5200	100	$ 37	$ 91
M10-M-243	10	1	10	5300	5280	B	GRAV	1.8	.65	2.76	$ 330	$ 127	$ 9	$ 32	$ 0	$ 160	5200	100	$ 25	$ 134
M10-M-244	18	1	18	4880	4840	A	HNDHVE	2	.7	2.85	$ 375	$ 44	$ 6	$ 36	$ 0	$ 288	4740	140	$ 74	$ 213
M10-M-244	18	1	18	4880	4840	A	SDROLL	2	.7	2.85	$ 375	$ 79	$ 23	$ 25	$ 0	$ 246	4740	140	$ 74	$ 172
M10-M-244	18	1	18	4880	4840	A	GRAV	2	.65	3.07	$ 375	$ 109	$ 6	$ 35	$ 0	$ 223	4740	140	$ 40	$ 183
M10-M-245	46	.99	45.5	4900	4840	A	HNDHVE	2	.7	2.85	$ 375	$ 33	$ 4	$ 34	$ 0	$ 301	4740	160	$ 79	$ 221
M10-M-245	46	.99	45.5	4900	4840	A	SDROLL	2	.7	2.85	$ 375	$ 55	$ 16	$ 16	$ 0	$ 286	4740	160	$ 79	$ 206
M10-M-245	46	.99	45.5	4900	4840	A	GRAV	2	.65	3.07	$ 375	$ 111	$ 6	$ 34	$ 0	$ 222	4740	160	$ 46	$ 176
M10-M-245	46	.83	38.9	4900	4840	A	CNTRPVT	2	.75	2.66	$ 375	$ 131	$ 53	$ 8	$ 30	$ 150	4740	160	$ 74	$ 75
M10-M-245	46	.98	45.2	4900	4840	A	CPVT/HNV	2	.74	2.69	$ 375	$ 124	$ 47	$ 13	$ 30	$ 159	4740	160	$ 75	$ 84
M10-M-246A	178	.98	174.4	4860	4800	A	HNDHVE	2	.7	2.85	$ 375	$ 35	$ 4	$ 34	$ 0	$ 300	4740	120	$ 69	$ 231
M10-M-246A	178	.98	174.4	4860	4800	A	SDROLL	2	.7	2.85	$ 375	$ 58	$ 16	$ 16	$ 0	$ 284	4740	120	$ 69	$ 214
M10-M-246A	178	.98	174.4	4860	4800	A	GRAV	2	.65	3.07	$ 375	$ 118	$ 6	$ 34	$ 0	$ 215	4740	120	$ 34	$ 181
M10-M-246A	178	.83	148.2	4860	4800	A	CNTRPVT	2	.75	2.66	$ 375	$ 63	$ 24	$ 3	$ 8	$ 274	4740	120	$ 64	$ 211
M10-M-246A	178	.98	174.9	4860	4800	A	CPVT/HNV	2	.74	2.69	$ 375	$ 59	$ 21	$ 8	$ 22	$ 263	4740	120	$ 65	$ 198
M10-M-246B	5	1	5	4840	4800	A	HNDHVE	2	.7	2.85	$ 375	$ 92	$ 15	$ 39	$ 0	$ 228	4760	80	$ 58	$ 169
M10-M-246B	5	1	5	4840	4800	A	SDROLL	2	.7	2.85	$ 375	$ 208	$ 74	$ 29	$ 0	$ 63	4760	80	$ 58	$ 4
M10-M-246B	5	1	5	4840	4800	A	GRAV	2	.65	3.07	$ 375	$ 155	$ 14	$ 31	$ 0	$ 173	4760	80	$ 23	$ 150

PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M10-M-247	10	1	10	4880	4840	A	HNDHVE	2	.7	2.85	$ 375	$ 62	$ 9	$ 36	$ 0	$ 267	4770	110	$ 46	$ 200
M10-M-247	10	1	10	4880	4840	A	SDROLL	2	.7	2.85	$ 375	$ 119	$ 38	$ 25	$ 0	$ 191	4770	110	$ 46	$ 124
M10-M-247	10	1	10	4880	4840	A	GRAV	2	.65	3.07	$ 375	$ 127	$ 9	$ 33	$ 0	$ 202	4770	110	$ 31	$ 170
M10-M-248	11	1	11	4840	4810	A	HNDHVE	2	.7	2.85	$ 375	$ 59	$ 9	$ 36	$ 0	$ 270	4800	40	$ 47	$ 222
M10-M-248	11	1	11	4840	4810	A	SDROLL	2	.7	2.85	$ 375	$ 114	$ 36	$ 25	$ 0	$ 198	4800	40	$ 47	$ 150
M10-M-248	11	1	11	4840	4810	A	GRAV	2	.65	3.07	$ 375	$ 125	$ 9	$ 35	$ 0	$ 204	4800	40	$ 11	$ 193
M10-M-249	39	1	39	4840	4820	A	HNDHVE	2	.7	2.85	$ 375	$ 34	$ 4	$ 36	$ 0	$ 300	4810	30	$ 45	$ 235
M10-M-249	39	1	39	4840	4820	A	SDROLL	2	.7	2.85	$ 375	$ 56	$ 16	$ 25	$ 0	$ 276	4810	30	$ 45	$ 231
M10-M-249	39	1	39	4840	4820	A	GRAV	2	.65	3.07	$ 375	$ 110	$ 6	$ 35	$ 0	$ 222	4810	30	$ 8	$ 214
M10-M-250	234	.98	229.3	4880	4820	A	HNDHVE	2	.7	2.85	$ 375	$ 35	$ 4	$ 34	$ 0	$ 300	4820	60	$ 53	$ 247
M10-M-250	234	.98	229.3	4880	4820	A	SDROLL	2	.7	2.85	$ 375	$ 38	$ 16	$ 16	$ 0	$ 284	4820	60	$ 53	$ 231
M10-M-250	234	.98	229.3	4880	4820	A	GRAV	2	.65	3.07	$ 375	$ 118	$ 6	$ 34	$ 0	$ 215	4820	60	$ 17	$ 198
M10-M-250	234	.83	194.9	4880	4820	A	CNTRPVT	2	.75	2.66	$ 375	$ 63	$ 24	$ 3	$ 8	$ 276	4820	60	$ 49	$ 226
M10-M-250	234	.98	230	4880	4820	A	CPVT/HNV	2	.74	2.69	$ 375	$ 58	$ 21	$ 8	$ 22	$ 264	4820	60	$ 50	$ 214
M10-M-251	16	1	16	4900	4860	A	HNDHVE	2	.7	2.85	$ 375	$ 49	$ 6	$ 36	$ 0	$ 283	4840	60	$ 53	$ 229
M10-M-251	16	1	16	4900	4860	A	SDROLL	2	.7	2.85	$ 375	$ 89	$ 27	$ 25	$ 0	$ 232	4840	60	$ 53	$ 179
M10-M-251	16	1	16	4900	4860	A	GRAV	2	.65	3.07	$ 375	$ 113	$ 7	$ 35	$ 0	$ 218	4840	60	$ 17	$ 200

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M10-M-252	43	.99	42.5	4900	4860	A	HNDMVE	2	.7	2.85	$ 375	$ 33	$ 4	$ 34	$ 0	$ 301	4840	60	$ 53	$ 248
M10-M-252	43	.99	42.5	4900	4860	A	SDROLL	2	.7	2.85	$ 375	$ 55	$ 16	$ 16	$ 0	$ 286	4840	60	$ 53	$ 233
M10-M-252	43	.99	42.5	4900	4860	A	GRAV	2	.65	3.07	$ 375	$ 133	$ 6	$ 34	$ 0	$ 222	4840	60	$ 17	$ 205
M10-M-253	78	.99	77.2	4900	4840	A	HNDMVE	2	.7	2.85	$ 375	$ 34	$ 4	$ 34	$ 0	$ 301	4860	40	$ 47	$ 253
M10-M-253	78	.99	77.2	4900	4860	A	SDROLL	2	.7	2.85	$ 375	$ 55	$ 16	$ 16	$ 0	$ 287	4860	40	$ 47	$ 239
M10-M-253	78	.99	77.2	4900	4860	A	GRAV	2	.65	3.07	$ 375	$ 116	$ 7	$ 34	$ 0	$ 216	4860	40	$ 11	$ 205
M10-M-259	78	.83	64.9	4900	4860	A	CNTRPVT	2	.75	2.66	$ 375	$ 108	$ 43	$ 6	$ 25	$ 191	4860	40	$ 44	$ 146
M10-M-253	78	.98	76.6	4900	4860	A	CPVT/HNV	2	.74	2.69	$ 375	$ 100	$ 37	$ 11	$ 25	$ 199	4860	40	$ 45	$ 154
M10-M-254	14	1	14	4915	4885	A	HNDMVE	2	.7	2.85	$ 375	$ 53	$ 7	$ 96	$ 0	$ 277	4860	55	$ 51	$ 226
M10-M-254	14	1	14	4915	4885	A	SDROLL	2	.7	2.85	$ 375	$ 99	$ 31	$ 25	$ 0	$ 219	4860	55	$ 51	$ 167
M10-M-254	14	1	14	4915	4885	A	GRAV	2	.65	3.07	$ 375	$ 118	$ 7	$ 35	$ 0	$ 212	4860	55	$ 15	$ 197
M10-M-255	6	1	6	4915	4880	A	HNDMVE	2	.7	2.85	$ 375	$ 84	$ 14	$ 39	$ 0	$ 235	4880	35	$ 46	$ 188
M10-M-255	6	1	6	4915	4880	A	SDROLL	2	.7	2.85	$ 375	$ 190	$ 67	$ 29	$ 0	$ 88	4880	35	$ 46	$ 41
M10-M-255	6	1	6	4915	4880	A	GRAV	2	.65	3.07	$ 375	$ 150	$ 13	$ 31	$ 0	$ 179	4880	35	$ 10	$ 169
M10-M-256	11	1	11	4900	4880	A	HNDMVE	2	.7	2.85	$ 375	$ 59	$ 9	$ 36	$ 0	$ 270	4880	20	$ 42	$ 227
M10-M-256	11	1	11	4900	4880	A	SDROLL	2	.7	2.85	$ 375	$ 114	$ 36	$ 25	$ 0	$ 198	4880	20	$ 42	$ 155
M10-M-256	11	1	11	4900	4880	A	GRAV	2	.65	3.07	$ 375	$ 125	$ 9	$ 35	$ 0	$ 204	4880	20	$ 5	$ 199

PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	**** WATER REQUIREMENTS PER ACRE **** IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG. COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-257	115	.99	113.8	5320	5220	B	HNDHVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 31	$ 0	$ 257	5200	120	$ 42	$ 195
M11-M-257	115	.99	113.8	5320	5220	B	SDROLL	1.8	.7	2.57	$ 330	$ 53	$ 16	$ 14	$ 0	$ 245	5200	120	$ 42	$ 183
M11-M-257	115	.99	113.8	5320	5220	B	GRAV	1.8	.65	2.76	$ 330	$ 117	$ 6	$ 31	$ 0	$ 174	5200	120	$ 31	$ 143
M11-M-257	115	.83	95.7	5320	5220	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 80	$ 31	$ 3	$ 18	$ 194	5200	120	$ 58	$ 138
M11-M-257	115	.98	113	5320	5220	B	CPVT/HHV	1.8	.74	2.42	$ 330	$ 75	$ 27	$ 8	$ 18	$ 201	5200	120	$ 58	$ 142
M11-M-258	138	.99	136.6	5320	5210	B	HNDHVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 31	$ 0	$ 258	5200	120	$ 42	$ 195
M11-M-258	138	.99	136.6	5320	5210	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5200	120	$ 42	$ 178
M11-M-258	138	.99	136.6	5320	5210	B	GRAV	1.8	.65	2.76	$ 330	$ 117	$ 6	$ 31	$ 0	$ 174	5200	120	$ 31	$ 143
M11-M-258	138	.83	114.9	5320	5210	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 69	$ 26	$ 2	$ 7	$ 223	5200	120	$ 58	$ 165
M11-M-258	138	.98	135.4	5320	5210	B	CPVT/HHV	1.8	.74	2.42	$ 330	$ 64	$ 23	$ 7	$ 2141	$-1906-	5200	120	$ 58	$-1963-
M11-M-259	7	1	7	5240	5220	B	HNDHVE	1.8	.7	2.57	$ 330	$ 80	$ 12	$ 35	$ 0	$ 201	5200	40	$ 43	$ 158
M11-M-259	7	1	7	5240	5220	B	SDROLL	1.8	.7	2.57	$ 330	$ 172	$ 60	$ 26	$ 0	$ 70	5200	40	$ 43	$ 27
M11-M-259	7	1	7	5240	5220	B	GRAV	1.8	.65	2.76	$ 330	$ 144	$ 12	$ 28	$ 0	$ 144	5200	40	$ 10	$ 134
M11-M-260	103	.99	101.9	5340	5260	B	HNDHVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 31	$ 0	$ 258	5200	140	$ 67	$ 191
M11-M-260	103	.99	101.9	5340	5260	B	SDROLL	1.8	.7	2.57	$ 330	$ 53	$ 16	$ 14	$ 0	$ 245	5200	140	$ 67	$ 177
M11-M-260	103	.99	101.9	5340	5260	B	GRAV	1.8	.65	2.76	$ 330	$ 117	$ 6	$ 31	$ 0	$ 174	5200	140	$ 36	$ 138
M11-M-260	103	.83	85.7	5340	5260	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 89	$ 34	$ 4	$ 19	$ 181	5200	140	$ 62	$ 118
M11-M-260	103	.98	101.2	5340	5260	B	CPVT/HHV	1.8	.74	2.42	$ 330	$ 83	$ 30	$ 8	$ 49	$ 187	5200	140	$ 63	$ 124
M11-M-261A	5	1	5	5270	5260	B	HNDHVE	1.8	.7	2.57	$ 330	$ 92	$ 15	$ 33	$ 0	$ 186	5200	70	$ 50	$ 136
M11-M-261A	5	1	5	5270	5260	B	SDROLL	1.8	.7	2.57	$ 330	$ 208	$ 74	$ 26	$ 0	$ 21	5200	70	$ 50	$-29
M11-M-261A	5	1	5	5270	5260	B	GRAV	1.8	.65	2.76	$ 330	$ 155	$ 14	$ 28	$ 0	$ 131	5200	70	$ 18	$ 113

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-261B	24	1	24	5220	5180	B	HNDHVE	1.8	.7	2.57	$ 330	$ 39	$ 5	$ 32	$ 0	$ 253	5200	20	$ 38	$ 215
M11-M-261B	24	1	24	5220	5180	B	SDROLL	1.8	.7	2.57	$ 330	$ 66	$ 19	$ 22	$ 0	$ 221	5200	20	$ 38	$ 183
M11-M-261B	24	1	24	5220	5180	B	GRAV	1.8	.65	2.76	$ 330	$ 105	$ 5	$ 32	$ 0	$ 186	5200	20	$ 5	$ 180
M11-M-262	24	1	24	5240	5200	B	HNDHVE	1.8	.7	2.57	$ 330	$ 39	$ 5	$ 32	$ 0	$ 253	5200	40	$ 43	$ 210
M11-M-262	24	1	24	5240	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 66	$ 19	$ 22	$ 0	$ 221	5200	40	$ 43	$ 178
M11-M-262	24	1	24	5240	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 105	$ 5	$ 32	$ 0	$ 186	5200	40	$ 10	$ 175
M11-M-263	8	1	8	5230	5200	B	HNDHVE	1.8	.7	2.57	$ 330	$ 74	$ 11	$ 35	$ 0	$ 208	5200	30	$ 40	$ 168
M11-M-263	8	1	8	5230	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 154	$ 53	$ 26	$ 0	$ 95	5200	30	$ 40	$ 55
M11-M-263	8	1	8	5230	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 138	$ 11	$ 28	$ 0	$ 151	5200	30	$ 7	$ 143
M11-M-264	8	1	8	5220	5200	B	HNDHVE	1.8	.7	2.57	$ 330	$ 74	$ 11	$ 35	$ 0	$ 208	5200	20	$ 38	$ 170
M11-M-264	8	1	8	5220	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 154	$ 53	$ 26	$ 0	$ 95	5200	20	$ 38	$ 57
M11-M-264	8	1	8	5220	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 138	$ 11	$ 28	$ 0	$ 151	5200	20	$ 5	$ 146
M11-M-265	13	1	13	5200	5170	B	HNDHVE	1.8	.7	2.57	$ 330	$ 55	$ 8	$ 32	$ 0	$ 233	5200	0	$ 33	$ 200
M11-M-265	13	1	13	5200	5170	B	SDROLL	1.8	.7	2.57	$ 330	$ 104	$ 33	$ 22	$ 0	$ 169	5200	0	$ 33	$ 134
M11-M-265	13	1	13	5200	5170	B	GRAV	1.8	.65	2.76	$ 330	$ 120	$ 8	$ 32	$ 0	$ 168	5200	0	$ 0	$ 168

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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	ACREAGE						WATER REQUIREMENTS PER ACRE			PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE						PRELIM. OFF-FARM WATER COST			
PARCEL I.D.	FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	WATER SOURCE ELEV	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-266	81	.99	80.1	5200	5160	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 259	5200	0	$ 33	$ 226
M11-M-266	81	.99	80.1	5200	5160	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 14	$ 14	$ 0	$ 243	5200	0	$ 33	$ 210
M11-M-266	81	.99	80.1	5200	5160	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 31	$ 0	$ 174	5200	0	$ 0	$ 174
M11-M-266	81	.83	67.4	5200	5160	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 165	$ 42	$ 5	$ 22	$ 153	5200	0	$ 31	$ 122
M11-M-266	81	.98	79.6	5200	5160	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 98	$ 36	$ 9	$ 22	$ 162	5200	0	$ 31	$ 130
M11-M-267	16	1	16	5200	5160	B	HNDMVE	1.8	.7	2.57	$ 330	$ 49	$ 6	$ 32	$ 0	$ 241	5200	0	$ 33	$ 208
M11-M-267	16	1	16	5200	5160	B	SDROLL	1.8	.7	2.57	$ 330	$ 89	$ 27	$ 22	$ 0	$ 190	5200	0	$ 33	$ 157
M11-M-267	16	1	16	5200	5160	B	GRAV	1.8	.65	2.76	$ 330	$ 113	$ 7	$ 32	$ 0	$ 174	5200	0	$ 0	$ 174
M11-M-268	11	1	11	5180	5160	B	HNDMVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	5200	-20	$ 28	$ 200
M11-M-268	11	1	11	5180	5160	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	5200	-20	$ 28	$ 127
M11-M-268	11	1	11	5180	5160	B	GRAV	1.8	.65	2.76	$ 330	$ 125	$ 9	$ 32	$ 0	$ 163	5200	-20	$-5	$ 168
M11-M-269	15	1	15	5190	5180	B	HNDMVE	1.8	.7	2.57	$ 330	$ 51	$ 7	$ 32	$ 0	$ 239	5200	-10	$ 30	$ 208
M11-M-269	15	1	15	5190	5180	B	SDROLL	1.8	.7	2.57	$ 330	$ 94	$ 29	$ 22	$ 0	$ 183	5200	-10	$ 30	$ 152
M11-M-269	15	1	15	5190	5180	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 32	$ 0	$ 174	5200	-10	$-2	$ 176
M11-M-270A	32	1	32	5420	5360	B	HNDMVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 32	$ 0	$ 256	5200	220	$ 86	$ 169
M11-M-270A	32	1	32	5420	5360	B	SDROLL	1.8	.7	2.57	$ 330	$ 61	$ 17	$ 22	$ 0	$ 228	5200	220	$ 86	$ 141
M11-M-270A	92	1	92	5420	5360	B	GRAV	1.8	.65	2.76	$ 330	$ 168	$ 5	$ 32	$ 0	$ 183	5200	220	$ 57	$ 126

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	PRELIM. OFF-FARM WATER COST: RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-270B	7	1	7	5360	5330	B	HNDMVE	1.8	.7	2.57	$ 330	$ 80	$ 12	$ 33	$ 0	$ 201	5200	160	$ 71	$ 129
M11-M-270B	7	1	7	5360	5330	B	SDROLL	1.8	.7	2.57	$ 330	$ 172	$ 40	$ 26	$ 0	$ 70	5200	160	$ 71	$-1
M11-M-270B	7	1	7	5360	5330	B	GRAV	1.8	.65	2.76	$ 330	$ 144	$ 12	$ 28	$ 0	$ 144	5200	160	$ 41	$ 103
M11-M-271	15	1	15	5460	5420	C	HNDMVE	1.53	.7	2.18	$ 285	$ 51	$ 7	$ 27	$ 0	$ 198	5200	260	$ 81	$ 117
M11-M-271	15	1	15	5460	5420	C	SDROLL	1.53	.7	2.18	$ 285	$ 94	$ 29	$ 19	$ 0	$ 141	5200	260	$ 81	$ 60
M11-M-271	15	1	15	5460	5420	C	GRAV	1.53	.65	2.35	$ 285	$ 116	$ 7	$ 27	$ 0	$ 133	5200	260	$ 57	$ 76
M11-M-272	54	.99	53.4	5420	5330	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 240	5200	220	$ 86	$ 173
M11-M-272	54	.99	53.4	5420	5330	B	SDROLL	1.8	.7	2.57	$ 330	$ 33	$ 16	$ 14	$ 0	$ 243	5200	220	$ 86	$ 157
M11-M-272	54	.99	53.4	5420	5330	B	GRAV	1.8	.65	2.76	$ 330	$ 112	$ 6	$ 31	$ 0	$ 179	5200	220	$ 57	$ 122
M11-M-272	54	.83	44.9	5420	5330	B	CHIRPVT	1.8	.75	2.39	$ 330	$ 125	$ 50	$ 7	$ 26	$ 119	5200	220	$ 80	$ 98
M11-M-272	54	.98	53	5420	5330	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 118	$ 44	$ 11	$ 26	$ 129	5200	220	$ 81	$ 47
M11-M-273	16	1	16	5310	5280	B	HNDMVE	1.8	.7	2.57	$ 330	$ 49	$ 6	$ 32	$ 0	$ 241	5200	110	$ 59	$ 181
M11-M-273	16	1	16	5310	5280	B	SDROLL	1.8	.7	2.57	$ 330	$ 89	$ 27	$ 22	$ 0	$ 190	5200	110	$ 59	$ 130
M11-M-273	16	1	16	5310	5280	B	GRAV	1.8	.65	2.76	$ 330	$ 113	$ 7	$ 32	$ 0	$ 176	5200	110	$ 28	$ 148
M11-M-274	15	1	15	5360	5340	B	HNDMVE	1.8	.7	2.57	$ 330	$ 51	$ 7	$ 32	$ 0	$ 239	5200	160	$ 71	$ 147
M11-M-274	15	1	15	5360	5340	B	SDROLL	1.8	.7	2.57	$ 330	$ 94	$ 29	$ 22	$ 0	$ 183	5200	160	$ 71	$ 111
M11-M-274	15	1	15	5360	5340	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 32	$ 0	$ 174	5200	160	$ 41	$ 132

[redacted] PRELIMINARY PIA ANALYSIS
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PARCEL I.D.	ACREAGE FIELD SIZE (ACRES)	ACREAGE REDUCTION FACTOR	ACREAGE NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-275	22	1	22	5310	5280	B	HNDHVE	1.8	.7	2.57	$ 330	$ 39	$ 5	$ 32	$ 0	$ 252	5200	110	$ 39	$ 192
M11-M-275	22	1	22	5310	5280	B	SDROLL	1.8	.7	2.57	$ 330	$ 47	$ 19	$ 22	$ 0	$ 219	5200	110	$ 59	$ 159
M11-M-275	22	1	22	5310	5280	B	GRAV	1.8	.65	2.76	$ 330	$ 105	$ 5	$ 32	$ 0	$ 186	5200	110	$ 28	$ 158
M11-M-276	7	1	7	5280	5270	B	HNDHVE	1.8	.7	2.57	$ 330	$ 80	$ 12	$ 35	$ 0	$ 201	5200	80	$ 52	$ 148
M11-M-276	7	1	7	5280	5270	B	SDROLL	1.8	.7	2.57	$ 330	$ 172	$ 60	$ 26	$ 0	$ 70	5200	80	$ 52	$ 18
M11-M-276	7	1	7	5280	5270	B	GRAV	1.8	.65	2.76	$ 330	$ 144	$ 12	$ 28	$ 0	$ 144	5200	80	$ 20	$ 123
M11-M-277	150	.99	148.5	5300	5200	B	HNDHVE	1.8	.7	2.57	$ 330	$ 96	$ 4	$ 31	$ 0	$ 258	5200	100	$ 37	$ 200
M11-M-277	150	.99	148.5	5300	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5200	100	$ 57	$ 183
M11-M-277	150	.99	148.5	5300	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 117	$ 4	$ 31	$ 0	$ 174	5200	100	$ 25	$ 148
M11-M-277	150	.83	124.9	5300	5200	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 0	$ 228	5200	100	$ 53	$ 175
M11-M-277	150	.98	147.4	5300	5200	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 61	$ 21	$ 7	$ 2468	$-2229	5200	100	$ 54	$-2283
M11-M-278	30	1	30	5290	5240	B	HNDHVE	1.8	.7	2.57	$ 330	$ 37	$ 4	$ 32	$ 0	$ 255	5200	90	$ 55	$ 200
M11-M-278	30	1	30	5290	5240	B	SDROLL	1.8	.7	2.57	$ 330	$ 62	$ 18	$ 22	$ 0	$ 226	5200	90	$ 55	$ 171
M11-M-278	30	1	30	5290	5240	B	GRAV	1.8	.65	2.76	$ 330	$ 167	$ 5	$ 32	$ 0	$ 184	5200	90	$ 23	$ 160
M11-M-279	97	.99	96	5200	5160	B	HNDHVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5200	0	$ 33	$ 225
M11-M-279	97	.99	96	5200	5160	B	SDROLL	1.8	.7	2.57	$ 330	$ 54	$ 16	$ 14	$ 0	$ 244	5200	0	$ 33	$ 211
M11-M-279	97	.99	96	5200	5160	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 31	$ 0	$ 174	5200	0	$ 0	$ 174
M11-M-279	97	.83	80.8	5200	5160	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 93	$ 34	$ 4	$ 20	$ 173	5200	0	$ 31	$ 142
M11-M-279	97	.98	95.9	5200	5160	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 87	$ 32	$ 8	$ 20	$ 180	5200	0	$ 31	$ 148

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-280	12	1	12	5140	5120	B	HNDHVE	1.8	.7	2.57	$ 330	$ 57	$ 8	$ 32	$ 0	$ 231	5200	-40	$ 23	$ 207
M11-M-280	12	1	12	5140	5120	B	SDROLL	1.8	.7	2.57	$ 330	$ 109	$ 35	$ 22	$ 0	$ 162	5200	-40	$ 23	$ 138
M11-M-280	12	1	12	5140	5120	B	GRAV	1.8	.65	2.76	$ 330	$ 123	$ 8	$ 32	$ 0	$ 166	5200	-40	$-10	$ 176
M11-M-281	15	1	15	5150	5120	B	HNDHVE	1.8	.7	2.57	$ 330	$ 51	$ 7	$ 32	$ 0	$ 239	5200	-50	$ 21	$ 217
M11-M-281	15	1	15	5150	5120	B	SDROLL	1.8	.7	2.57	$ 330	$ 94	$ 29	$ 22	$ 0	$ 183	5200	-50	$ 21	$ 162
M11-M-281	15	1	15	5150	5120	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 32	$ 0	$ 174	5200	-50	$-12	$ 187
M11-M-282	7	1	7	5120	5100	B	HNDHVE	1.8	.7	2.57	$ 330	$ 80	$ 12	$ 35	$ 0	$ 201	5200	-80	$ 14	$ 187
M11-M-282	7	1	7	5120	5100	B	SDROLL	1.8	.7	2.57	$ 330	$ 172	$ 40	$ 24	$ 0	$ 70	5200	-80	$ 14	$ 56
M11-M-282	7	1	7	5120	5100	B	GRAV	1.8	.65	2.76	$ 330	$ 144	$ 12	$ 28	$ 0	$ 144	5200	-80	$-20	$ 165
M11-M-283	10	1	10	5170	5115	B	HNDHVE	1.8	.7	2.57	$ 330	$ 62	$ 9	$ 32	$ 0	$ 226	5200	-30	$ 26	$ 199
M11-M-283	10	1	10	5170	5115	B	SDROLL	1.8	.7	2.57	$ 330	$ 119	$ 38	$ 22	$ 0	$ 148	5200	-30	$ 26	$ 122
M11-M-283	10	1	10	5170	5115	B	GRAV	1.8	.65	2.76	$ 330	$ 127	$ 9	$ 32	$ 0	$ 160	5200	-30	$-7	$ 168
M11-M-284A	88	.99	87.1	5220	5140	B	HNDHVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 259	4950	270	$ 98	$ 160
M11-M-284A	88	.99	87.1	5220	5140	B	SDROLL	1.8	.7	2.57	$ 330	$ 54	$ 16	$ 14	$ 0	$ 244	4950	270	$ 98	$ 145
M11-M-284A	88	.99	87.1	5220	5140	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 31	$ 0	$ 174	4950	270	$ 70	$ 104
M11-M-284A	88	.83	73.3	5220	5140	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 100	$ 39	$ 5	$ 21	$ 162	4950	270	$ 91	$ 70
M11-M-284A	88	.98	84.5	5220	5140	B	CPVT/HND	1.8	.74	2.42	$ 330	$ 93	$ 34	$ 9	$ 21	$ 170	4950	270	$ 92	$ 77

PARCEL I.D.	SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY NET AG. RETURN	$ $ $ ON-FARM IRRIG. COSTS $ $ $ CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	PRELIM. PAYMENT CAPACITY
M11-M-289	20	1	20	5090	5060	B	HNDMVE	1.8	.7	2.57	$ 330	$ 40	$ 5	$ 32	$ 0	$ 251	4950	140	$ 47	$ 184
M11-M-289	20	1	20	5090	5060	B	SDROLL	1.8	.7	2.57	$ 330	$ 49	$ 19	$ 22	$ 0	$ 218	4950	140	$ 67	$ 150
M11-M-289	20	1	20	5090	5060	B	GRAV	1.8	.65	2.76	$ 330	$ 104	$ 5	$ 32	$ 0	$ 187	4950	140	$ 36	$ 151
M11-M-290	58	.99	57.4	5120	5060	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 260	4950	170	$ 74	$ 185
M11-M-290	58	.99	57.4	5120	5060	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	4950	170	$ 74	$ 169
M11-M-290	58	.99	57.4	5120	5060	B	GRAV	1.8	.65	2.76	$ 330	$ 113	$ 6	$ 31	$ 0	$ 178	4950	170	$ 44	$ 134
M11-M-290	58	.83	48.9	5120	5060	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 123	$ 49	$ 7	$ 25	$ 124	4950	170	$ 69	$ 55
M11-M-290	58	.98	57	5120	5060	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 114	$ 43	$ 11	$ 25	$ 134	4950	170	$ 70	$ 64
M11-M-291	24	1	24	5060	5040	B	HNDMVE	1.8	.7	2.57	$ 330	$ 39	$ 5	$ 32	$ 0	$ 253	4950	110	$ 59	$ 193
M11-M-291	24	1	24	5060	5040	B	SDROLL	1.8	.7	2.57	$ 330	$ 66	$ 19	$ 22	$ 0	$ 221	4950	110	$ 59	$ 161
M11-M-291	24	1	24	5060	5040	B	GRAV	1.8	.65	2.76	$ 330	$ 103	$ 5	$ 32	$ 0	$ 186	4950	110	$ 28	$ 157
M11-M-292	9	1	9	5060	5040	B	HNDMVE	1.8	.7	2.57	$ 330	$ 68	$ 16	$ 35	$ 0	$ 216	4950	110	$ 59	$ 156
M11-M-292	9	1	9	5060	5040	B	SDROLL	1.8	.7	2.57	$ 330	$ 137	$ 45	$ 26	$ 0	$ 120	4950	110	$ 59	$ 60
M11-M-292	9	1	9	5060	5040	B	GRAV	1.8	.65	2.76	$ 330	$ 133	$ 10	$ 28	$ 0	$ 157	4950	110	$ 28	$ 129
M11-M-293	11	1	11	5060	5040	B	HNDMVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	4950	110	$ 59	$ 168
M11-M-293	11	1	11	5060	5040	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	4950	110	$ 59	$ 95
M11-M-293	11	1	11	5060	5040	B	GRAV	1.8	.65	2.76	$ 330	$ 125	$ 9	$ 32	$ 0	$ 163	4950	110	$ 28	$ 135

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-294	11	1	11	5040	5030	B	HNDMVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	4950	90	$ 55	$ 173
M11-M-294	11	1	11	5040	5030	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	4950	90	$ 55	$ 100
M11-M-294	11	1	11	5040	5030	B	GRAV	1.8	.65	2.76	$ 330	$ 125	$ 9	$ 32	$ 0	$ 163	4950	90	$ 23	$ 140
M11-M-295	11	1	11	5030	5000	B	HNDMVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	4950	80	$ 52	$ 176
M11-M-295	11	1	11	5030	5000	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	4950	80	$ 52	$ 103
M11-M-295	11	1	11	5030	5000	B	GRAV	1.8	.65	2.76	$ 330	$ 125	$ 9	$ 32	$ 0	$ 163	4950	80	$ 20	$ 142
M11-M-296	10	1	10	5040	5000	B	HNDMVE	1.8	.7	2.57	$ 330	$ 62	$ 9	$ 32	$ 0	$ 226	4950	90	$ 55	$ 171
M11-M-296	10	1	10	5040	5000	B	SDROLL	1.8	.7	2.57	$ 330	$ 119	$ 38	$ 22	$ 0	$ 148	4950	90	$ 55	$ 93
M11-M-296	10	1	10	5040	5000	B	GRAV	1.8	.65	2.76	$ 330	$ 127	$ 9	$ 32	$ 0	$ 160	4950	90	$ 23	$ 137
M11-M-297	9	1	9	5010	4980	A	HNDMVE	2	.7	2.85	$ 375	$ 68	$ 10	$ 39	$ 0	$ 257	4950	60	$ 53	$ 204
M11-M-297	9	1	9	5010	4980	A	SDROLL	2	.7	2.85	$ 375	$ 137	$ 45	$ 29	$ 0	$ 162	4950	60	$ 53	$ 109
M11-M-297	9	1	9	5010	4980	A	GRAV	2	.65	3.07	$ 375	$ 133	$ 10	$ 31	$ 0	$ 199	4950	60	$ 17	$ 182
M11-M-298	7	1	7	4990	4980	A	HNDMVE	2	.7	2.85	$ 375	$ 80	$ 12	$ 39	$ 0	$ 242	4950	40	$ 47	$ 194
M11-M-298	7	1	7	4990	4980	A	SDROLL	2	.7	2.85	$ 375	$ 172	$ 60	$ 29	$ 0	$ 112	4950	40	$ 47	$ 65
M11-M-298	7	1	7	4990	4980	A	GRAV	2	.65	3.07	$ 375	$ 144	$ 12	$ 31	$ 0	$ 186	4950	40	$ 11	$ 175

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PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-299A	5	1	5	4980	4960	A	HNDHVE	2	.7	2.85	$ 375	$ 92	$ 15	$ 39	$ 0	$ 228	4950	30	$ 45	$ 182
M11-M-299A	5	1	5	4980	4960	A	SDROLL	2	.7	2.85	$ 375	$ 208	$ 74	$ 29	$ 0	$ 63	4950	30	$ 45	$ 18
M11-M-299A	5	1	5	4980	4960	A	GRAV	2	.65	3.07	$ 375	$ 155	$ 14	$ 31	$ 0	$ 173	4950	30	$ 8	$ 164
M11-M-299B	13	1	13	4950	4940	A	HNDHVE	2	.7	2.85	$ 375	$ 55	$ 8	$ 36	$ 0	$ 275	4920	90	$ 45	$ 230
M11-M-299B	13	1	13	4950	4940	A	SDROLL	2	.7	2.85	$ 375	$ 104	$ 33	$ 25	$ 0	$ 212	4920	90	$ 45	$ 144
M11-M-299B	13	1	13	4950	4940	A	GRAV	2	.65	3.07	$ 375	$ 120	$ 8	$ 35	$ 0	$ 210	4920	90	$ 8	$ 201
M11-M-300	9	1	9	4930	4925	A	HNDHVE	2	.7	2.85	$ 375	$ 68	$ 10	$ 39	$ 0	$ 257	4920	30	$ 45	$ 212
M11-M-300	9	1	9	4930	4925	A	SDROLL	2	.7	2.85	$ 375	$ 137	$ 45	$ 29	$ 0	$ 142	4920	30	$ 45	$ 117
M11-M-300	9	1	9	4930	4925	A	GRAV	2	.65	3.07	$ 375	$ 133	$ 10	$ 31	$ 0	$ 199	4920	30	$ 8	$ 191
M11-M-301	43	.99	42.5	5000	4960	A	HNDHVE	2	.7	2.85	$ 375	$ 33	$ 4	$ 34	$ 0	$ 301	4920	80	$ 58	$ 243
M11-M-301	43	.99	42.5	5000	4960	A	SDROLL	2	.7	2.85	$ 375	$ 55	$ 16	$ 16	$ 0	$ 286	4920	80	$ 58	$ 228
M11-M-301	43	.99	42.5	5000	4960	A	GRAV	2	.65	3.07	$ 375	$ 111	$ 6	$ 34	$ 0	$ 222	4920	80	$ 23	$ 199
M11-M-302	30	1	30	5040	5000	B	HNDHVE	1.8	.7	2.57	$ 330	$ 97	$ 4	$ 32	$ 0	$ 255	4940	100	$ 57	$ 198
M11-M-302	30	1	30	5040	5000	B	SDROLL	1.8	.7	2.57	$ 330	$ 62	$ 18	$ 22	$ 0	$ 226	4940	100	$ 57	$ 169
M11-M-302	30	1	30	5040	5000	B	GRAV	1.8	.65	2.74	$ 330	$ 107	$ 3	$ 32	$ 0	$ 184	4940	100	$ 25	$ 158

COLORADO UIE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
NANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-303	18	1	18	5040	5020	B	HNDMVE	1.8	.7	2.57	$ 330	$ 44	$ 6	$ 32	$ 0	$ 246	4960	100	$ 57	$ 189
M11-M-303	18	1	18	5040	5020	B	SDROLL	1.8	.7	2.57	$ 330	$ 79	$ 23	$ 22	$ 0	$ 204	4960	100	$ 57	$ 146
M11-M-303	18	1	18	5040	5020	B	GRAV	1.8	.65	2.76	$ 330	$ 109	$ 6	$ 32	$ 0	$ 182	4960	100	$ 25	$ 156
M11-M-304	5	1	5	5050	5020	B	HNDMVE	1.8	.7	2.57	$ 330	$ 92	$ 15	$ 35	$ 0	$ 186	4960	90	$ 55	$ 131
M11-M-304	5	1	5	5050	5020	B	SDROLL	1.8	.7	2.57	$ 330	$ 208	$ 74	$ 26	$ 0	$ 21	4960	90	$ 55	$-33
M11-M-304	5	1	5	5050	5020	B	GRAV	1.8	.65	2.76	$ 330	$ 155	$ 14	$ 28	$ 0	$ 131	4960	90	$ 23	$ 108
M11-M-305	8	1	8	5040	5040	B	HNDMVE	1.8	.7	2.57	$ 330	$ 74	$ 11	$ 35	$ 0	$ 208	4960	100	$ 57	$ 151
M11-M-305	8	1	8	5040	5040	B	SDROLL	1.8	.7	2.57	$ 330	$ 154	$ 53	$ 26	$ 0	$ 95	4960	100	$ 57	$ 38
M11-M-305	8	1	8	5060	5040	B	GRAV	1.8	.65	2.76	$ 330	$ 138	$ 11	$ 28	$ 0	$ 151	4960	100	$ 25	$ 125
M11-M-306	10	1	10	4990	4960	A	HNDMVE	2	.7	2.85	$ 375	$ 62	$ 9	$ 36	$ 0	$ 267	4920	70	$ 55	$ 211
M11-M-306	10	1	10	4990	4960	A	SDROLL	2	.7	2.85	$ 375	$ 119	$ 38	$ 25	$ 0	$ 191	4920	70	$ 55	$ 135
M11-M-306	10	1	10	4990	4960	A	GRAV	2	.65	3.07	$ 375	$ 127	$ 9	$ 35	$ 0	$ 202	4920	70	$ 20	$ 182
M11-M-307	21	1	21	4990	4960	A	HNDMVE	2	.7	2.85	$ 375	$ 40	$ 5	$ 36	$ 0	$ 293	4920	70	$ 55	$ 237
M11-M-307	21	1	21	4990	4960	A	SDROLL	2	.7	2.85	$ 375	$ 68	$ 19	$ 25	$ 0	$ 261	4920	70	$ 55	$ 205
M11-M-307	21	1	21	4990	4960	A	GRAV	2	.65	3.07	$ 375	$ 104	$ 5	$ 35	$ 0	$ 228	4920	70	$ 20	$ 208

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
NANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-308	91	1	91	4990	4960	A	HNDMVE	2	.7	2.85	$ 375	$ 36	$ 4	$ 36	$ 0	$ 297	4900	90	$ 61	$ 236
M11-M-308	91	1	91	4990	4960	A	SDROLL	2	.7	2.85	$ 375	$ 41	$ 17	$ 25	$ 0	$ 269	4900	90	$ 61	$ 208
M11-M-308	91	1	91	4990	4960	A	GRAV	2	.65	3.07	$ 375	$ 108	$ 5	$ 35	$ 0	$ 225	4900	90	$ 25	$ 199
M11-M-309	17	1	17	4980	4940	A	HNDMVE	2	.7	2.85	$ 375	$ 46	$ 6	$ 36	$ 0	$ 285	4900	80	$ 58	$ 227
M11-M-309	17	1	17	4980	4940	A	SDROLL	2	.7	2.85	$ 375	$ 84	$ 25	$ 25	$ 0	$ 239	4900	80	$ 58	$ 181
M11-M-309	17	1	17	4980	4940	A	GRAV	2	.65	3.07	$ 375	$ 111	$ 6	$ 35	$ 0	$ 220	4900	80	$ 23	$ 197
M11-M-310	46	.99	45.5	5360	5320	B	HNDMVE	1.8	.7	2.57	$ 330	$ 33	$ 4	$ 31	$ 0	$ 268	5320	40	$ 43	$ 217
M11-M-310	46	.99	45.5	5360	5320	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5320	40	$ 43	$ 200
M11-M-310	46	.99	45.5	5360	5320	B	GRAV	1.8	.65	2.76	$ 330	$ 111	$ 6	$ 31	$ 0	$ 180	5320	40	$ 10	$ 170
M11-M-310	46	.83	38.2	5360	5320	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 191	$ 53	$ 7	$ 27	$ 109	5320	40	$ 40	$ 69
M11-M-310	46	.98	45.2	5360	5320	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 124	$ 47	$ 11	$ 27	$ 119	5320	40	$ 40	$ 78
M11-M-311	6	1	6	5360	5320	B	HNDMVE	1.8	.7	2.57	$ 330	$ 86	$ 14	$ 35	$ 0	$ 194	5320	40	$ 43	$ 151
M11-M-311	6	1	6	5360	5320	B	SDROLL	1.8	.7	2.57	$ 330	$ 198	$ 67	$ 26	$ 0	$ 46	5320	40	$ 43	$ 3
M11-M-311	6	1	6	5360	5320	B	GRAV	1.8	.65	2.76	$ 330	$ 150	$ 13	$ 29	$ 0	$ 138	5320	40	$ 10	$ 127
M11-M-312	68	.99	67.3	5340	5280	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 259	5280	40	$ 47	$ 212
M11-M-312	68	.99	67.3	5340	5280	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5280	40	$ 47	$ 195
M11-M-312	68	.99	67.3	5340	5280	B	GRAV	1.8	.65	2.76	$ 330	$ 114	$ 6	$ 31	$ 0	$ 176	5280	40	$ 15	$ 161
M11-M-312	68	.83	56.4	5340	5280	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 115	$ 46	$ 6	$ 24	$ 137	5280	40	$ 44	$ 92
M11-M-312	68	.98	66.8	5340	5280	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 107	$ 40	$ 10	$ 29	$ 147	5280	40	$ 45	$ 101

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COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-313	10	1	10	5320	5290	B	HNDMVE	1.8	.7	2.57	$ 330	$ 62	$ 9	$ 32	$ 0	$ 226	5280	40	$ 43	$ 183
M11-M-313	10	1	10	5320	5290	B	SDROLL	1.8	.7	2.57	$ 330	$ 119	$ 38	$ 22	$ 0	$ 148	5280	40	$ 43	$ 105
M11-M-313	10	1	10	5320	5290	B	GRAV	1.8	.65	2.76	$ 330	$ 127	$ 9	$ 32	$ 0	$ 160	5280	40	$ 10	$ 150
M11-M-314	194	.98	190.1	5380	5250	B	HNDMVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5240	140	$ 67	$ 191
M11-M-314	194	.98	190.1	5380	5250	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5240	140	$ 67	$ 173
M11-M-314	194	.98	190.1	5380	5250	B	GRAV	1.8	.65	2.76	$ 330	$ 118	$ 6	$ 31	$ 0	$ 174	5240	140	$ 36	$ 137
M11-M-314	194	.83	161.6	5380	5250	B	CHIRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 8	$ 231	5240	140	$ 62	$ 168
M11-M-314	194	.98	190.7	5380	5250	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 59	$ 21	$ 7	$ 20	$ 222	5240	140	$ 63	$ 158
M11-M-315	28	1	28	5280	5240	B	HNDMVE	1.8	.7	2.57	$ 330	$ 37	$ 5	$ 32	$ 0	$ 254	5240	40	$ 43	$ 211
M11-M-315	28	1	28	5280	5240	B	SDROLL	1.8	.7	2.57	$ 330	$ 63	$ 18	$ 22	$ 0	$ 224	5240	40	$ 43	$ 181
M11-M-315	28	1	28	5280	5240	B	GRAV	1.8	.65	2.76	$ 330	$ 107	$ 5	$ 32	$ 0	$ 184	5240	40	$ 10	$ 174
M11-M-316	33	1	33	5260	5235	B	HNDMVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 32	$ 0	$ 254	5240	20	$ 38	$ 218
M11-M-316	33	1	33	5260	5235	B	SDROLL	1.8	.7	2.57	$ 330	$ 68	$ 17	$ 22	$ 0	$ 229	5240	20	$ 38	$ 190
M11-M-316	33	1	33	5260	5235	B	GRAV	1.8	.65	2.76	$ 330	$ 108	$ 5	$ 32	$ 0	$ 183	5240	20	$ 5	$ 178
M11-M-317	150	.99	148.5	5360	5220	B	HNDMVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 31	$ 0	$ 258	5220	140	$ 67	$ 191
M11-M-317	150	.99	148.5	5360	5220	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5220	140	$ 67	$ 173
M11-M-317	150	.99	148.5	5360	5220	B	GRAV	1.8	.65	2.76	$ 330	$ 117	$ 6	$ 31	$ 0	$ 174	5220	140	$ 36	$ 137
M11-M-317	150	.83	124.9	5360	5220	B	CHIRPVT	1.8	.75	2.39	$ 330	$ 65	$ 24	$ 2	$ 8	$ 228	5220	140	$ 62	$ 166
M11-M-317	150	.98	147.4	5360	5220	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 41	$ 21	$ 7	~~$ 2468~~ 20	~~$-2229~~ 321	5220	140	$ 63	~~$-2692~~ 158

PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-318	48	.99	47.5	5360	5220	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 260	5200	160	$ 71	$ 188
M11-M-318	48	.99	47.5	5360	5220	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5200	160	$ 71	$ 171
M11-M-318	48	.99	47.5	5360	5220	B	GRAV	1.8	.65	2.76	$ 330	$ 111	$ 6	$ 31	$ 0	$ 180	5200	160	$ 41	$ 138
M11-M-318	48	.83	39.9	5360	5220	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 130	$ 52	$ 7	$ 27	$ 111	5200	160	$ 67	$ 44
M11-M-318	48	.98	47.1	5360	5220	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 122	$ 46	$ 11	$ 27	$ 121	5200	160	$ 67	$ 53
M11-M-319	26	1	26	5320	5200	B	HNDMVE	1.8	.7	2.57	$ 330	$ 98	$ 5	$ 32	$ 0	$ 254	5200	120	$ 62	$ 191
M11-M-319	26	1	26	5320	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 63	$ 18	$ 22	$ 0	$ 223	5200	120	$ 62	$ 160
M11-M-319	26	1	26	5320	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 106	$ 5	$ 32	$ 0	$ 185	5200	120	$ 31	$ 154
M11-M-320	5	1	5	5230	5200	B	HNDMVE	1.8	.7	2.57	$ 330	$ 92	$ 15	$ 35	$ 0	$ 186	5200	30	$ 40	$ 146
M11-M-320	5	1	5	5230	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 208	$ 74	$ 26	$ 0	$ 21	5200	30	$ 40	$-19
M11-M-320	5	1	5	5230	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 155	$ 14	$ 28	$ 0	$ 131	5200	30	$ 7	$ 123
M11-M-321	165	.98	161.7	5400	5200	B	HNDMVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5160	240	$ 91	$ 167
M11-M-321	165	.98	161.7	5400	5200	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5160	240	$ 91	$ 149
M11-M-321	165	.98	161.7	5400	5200	B	GRAV	1.8	.65	2.76	$ 330	$ 118	$ 6	$ 31	$ 0	$ 174	5160	240	$ 62	$ 111
M11-M-321	165	.83	137.4	5400	5200	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 8	$ 231	5160	240	$ 85	$ 146
M11-M-321	165	.98	162.1	5400	5200	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 59	$ 21	$ 7	$ 20	$ 221	5160	240	$ 86	$ 135
M11-M-322	90	.99	89.1	5250	5160	B	HNDMVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 259	5170	80	$ 52	$ 206
M11-M-322	90	.99	89.1	5250	5160	B	SDROLL	1.8	.7	2.57	$ 330	$ 54	$ 16	$ 14	$ 0	$ 244	5170	80	$ 52	$ 191
M11-M-322	90	.99	89.1	5250	5160	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 31	$ 0	$ 174	5170	80	$ 20	$ 153
M11-M-322	90	.83	74.9	5250	5160	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 99	$ 39	$ 5	$ 21	$ 165	5170	80	$ 49	$ 115
M11-M-322	90	.98	88.4	5250	5160	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 92	$ 34	$ 9	$ 21	$ 172	5170	80	$ 49	$ 122

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COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	\$ \$ \$ \$ \$ ACREAGE \$ \$ \$ \$ \$ FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	\$ \$ \$ \$ WATER REQUIREMENTS \$ \$ \$ \$ PER ACRE IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	\$ \$ \$ \$ \$ \$ PRELIMINARY ANNUAL PAYMENT CAPACITY \$ \$ \$ \$ \$ \$ PER ACRE PRELIMINARY NET AC. RETURN	\$ \$ \$ ON-FARM IRRIG. COSTS \$ \$ \$ CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-323	1152	.97	1117.4	5430	5120	B	HNDMVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5120	310	$ 108	$ 150
M11-M-323	1152	.97	1117.4	5430	5120	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 14	$ 14	$ 0	$ 240	5120	310	$ 108	$ 132
M11-M-323	1152	.97	1117.4	5430	5120	B	GRAV	1.8	.65	2.76	$ 330	$ 118	$ 6	$ 31	$ 0	$ 174	5120	310	$ 80	$ 93
M11-M-323	1152	.83	959.6	5430	5120	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 8	$ 231	5120	310	$ 100	$ 130
M11-M-323	1152	.98	1128.9	5430	5120	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 59	$ 21	$ 6	$ 20	$ 222	5120	310	$ 101	$ 120
M11-M-324	20	1	20	5180	5130	B	HNDMVE	1.8	.7	2.57	$ 330	$ 40	$ 5	$ 32	$ 0	$ 251	5120	60	$ 47	$ 204
M11-M-324	20	1	20	5180	5130	B	SDROLL	1.8	.7	2.57	$ 330	$ 69	$ 19	$ 22	$ 0	$ 218	5120	60	$ 47	$ 170
M11-M-324	20	1	20	5180	5130	B	GRAV	1.8	.65	2.76	$ 330	$ 104	$ 5	$ 32	$ 0	$ 187	5120	60	$ 15	$ 171
M11-M-325	138	.99	136.6	5260	5130	B	HNDMVE	1.8	.7	2.57	$ 330	$ 36	$ 4	$ 31	$ 0	$ 258	5080	180	$ 76	$ 181
M11-M-325	138	.99	136.6	5260	5130	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5080	180	$ 76	$ 164
M11-M-325	138	.99	136.6	5260	5130	B	GRAV	1.8	.65	2.76	$ 330	$ 117	$ 6	$ 31	$ 0	$ 174	5080	180	$ 46	$ 127
M11-M-325	138	.83	114.9	5260	5130	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 69	$ 26	$ 2	$ 7	$ 223	5080	180	$ 71	$ 151
M11-M-325	138	.98	135.6	5260	5130	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 64	$ 23	$ 7	~~$ [illegible]~~ 20	~~$ [illegible]~~ 210	5080	180	$ 72	~~$ [illegible]~~ 142
M11-M-326	6	1	6	5160	5150	B	HNDMVE	1.8	.7	2.57	$ 330	$ 86	$ 14	$ 35	$ 0	$ 194	5080	80	$ 52	$ 141
M11-M-326	6	1	6	5160	5150	B	SDROLL	1.8	.7	2.57	$ 330	$ 190	$ 67	$ 26	$ 0	$ 46	5080	80	$ 52	$-6
M11-M-326	6	1	6	5160	5150	B	GRAV	1.8	.65	2.76	$ 330	$ 150	$ 13	$ 28	$ 0	$ 138	5080	80	$ 20	$ 117
M11-M-327	193	.98	189.1	5140	5080	B	HNDMVE	1.8	.7	2.57	$ 330	$ 35	$ 4	$ 31	$ 0	$ 258	5080	60	$ 47	$ 210
M11-M-327	193	.98	189.1	5140	5080	B	SDROLL	1.8	.7	2.57	$ 330	$ 58	$ 16	$ 14	$ 0	$ 240	5080	60	$ 47	$ 193
M11-M-327	193	.98	189.1	5140	5080	B	GRAV	1.8	.65	2.76	$ 330	$ 118	$ 6	$ 31	$ 0	$ 174	5080	60	$ 15	$ 158
M11-M-327	193	.83	160.7	5140	5080	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 63	$ 24	$ 2	$ 8	$ 231	5080	60	$ 44	$ 186
M11-M-327	193	.98	189.7	5140	5080	B	CPVT/HMV	1.8	.74	2.42	$ 330	$ 59	$ 21	$ 7	$ 20	$ 222	5080	60	$ 45	$ 176

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
NANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	PRELIM. OFF-FARM WATER COST: RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-328	9	1	9	5140	5120	B	HNDHVE	1.8	.7	2.57	$ 330	$ 68	$ 10	$ 35	$ 0	$ 216	5080	60	$ 47	$ 168
M11-M-328	9	1	9	5140	5120	B	SDROLL	1.8	.7	2.57	$ 330	$ 137	$ 45	$ 24	$ 0	$ 120	5080	60	$ 47	$ 72
M11-M-328	9	1	9	5140	5120	B	GRAV	1.8	.65	2.76	$ 330	$ 133	$ 10	$ 28	$ 0	$ 157	5080	60	$ 15	$ 142
M11-M-329A	4	1	4	5100	5099	B	HNDHVE	1.8	.7	2.57	$ 330	$ 92	$ 15	$ 35	$ 0	$ 187	5020	80	$ 52	$ 134
M11-M-329A	4	1	4	5100	5099	B	SDROLL	1.8	.7	2.57	$ 330	$ 208	$ 74	$ 24	$ 0	$ 21	5020	80	$ 52	$-31
M11-M-329A	4	1	4	5100	5099	B	GRAV	1.8	.65	2.76	$ 330	$ 155	$ 14	$ 28	$ 0	$ 131	5020	80	$ 20	$ 110
M11-M-329B	62	.99	61.3	5075	5040	B	HNDHVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 240	5020	55	$ 46	$ 213
M11-M-329B	62	.99	61.3	5075	5040	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5020	55	$ 46	$ 196
M11-M-329B	62	.99	61.3	5075	5040	B	GRAV	1.8	.65	2.76	$ 330	$ 114	$ 6	$ 31	$ 0	$ 177	5020	55	$ 14	$ 163
M11-M-329B	62	.83	51.4	5075	5040	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 120	$ 48	$ 6	$ 25	$ 129	5020	55	$ 43	$ 86
M11-M-329B	62	.98	60.9	5075	5040	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 111	$ 42	$ 11	$ 25	$ 139	5020	55	$ 43	$ 95
M11-M-330	9	1	9	5070	5045	B	HNDHVE	1.8	.7	2.57	$ 330	$ 68	$ 10	$ 35	$ 0	$ 216	5020	50	$ 45	$ 170
M11-M-330	9	1	9	5070	5045	B	SDROLL	1.8	.7	2.57	$ 330	$ 137	$ 45	$ 24	$ 0	$ 120	5020	50	$ 45	$ 75
M11-M-330	9	1	9	5070	5045	B	GRAV	1.8	.65	2.76	$ 330	$ 133	$ 10	$ 28	$ 0	$ 157	5020	50	$ 12	$ 145
M11-M-331A	11	1	11	5060	5025	B	HNDHVE	1.8	.7	2.57	$ 330	$ 59	$ 9	$ 32	$ 0	$ 228	5000	60	$ 47	$ 180
M11-M-331A	11	1	11	5060	5025	B	SDROLL	1.8	.7	2.57	$ 330	$ 114	$ 36	$ 22	$ 0	$ 155	5000	60	$ 47	$ 107
M11-M-331A	11	1	11	5060	5025	B	GRAV	1.8	.65	2.76	$ 330	$ 125	$ 9	$ 32	$ 0	$ 163	5000	60	$ 15	$ 147

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
NANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-331B	6	1	6	5035	5025	B	HNDHVE	1.8	.7	2.57	$ 330	$ 84	$ 14	$ 35	$ 0	$ 194	5000	35	$ 41	$ 152
M11-M-331B	6	1	6	5035	5025	B	SDROLL	1.8	.7	2.57	$ 330	$ 190	$ 67	$ 26	$ 0	$ 46	5000	35	$ 41	$ 4
M11-M-331B	6	1	6	5035	5025	B	GRAV	1.8	.65	2.76	$ 330	$ 150	$ 13	$ 28	$ 0	$ 138	5000	35	$ 9	$ 129
M11-M-331C	85	.99	84.1	5015	4990	B	HNDHVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 259	5000	15	$ 36	$ 222
M11-M-331C	85	.99	84.1	5015	4990	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5000	15	$ 36	$ 206
M11-M-331C	85	.99	84.1	5015	4990	B	GRAV	1.8	.65	2.76	$ 330	$ 116	$ 7	$ 31	$ 0	$ 174	5000	15	$ 3	$ 170
M11-M-331C	85	.83	70.8	5015	4990	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 102	$ 46	$ 5	$ 22	$ 158	5000	15	$ 34	$ 124
M11-M-331C	85	.98	83.5	5015	4990	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 95	$ 35	$ 9	$ 22	$ 166	5000	15	$ 34	$ 131
M11-M-332	46	.99	45.5	5920	5840	D	HNDHVE	1.94	.7	2.77	$ 270	$ 33	$ 4	$ 33	$ 0	$ 197	5220	700	$ 217	$-19
M11-M-332	46	.99	45.5	5920	5840	D	SDROLL	1.94	.7	2.77	$ 270	$ 55	$ 16	$ 16	$ 0	$ 182	5220	700	$ 217	$-35
M11-M-332	46	.99	45.5	5920	5840	D	GRAV	1.94	.65	2.98	$ 270	$ 111	$ 4	$ 33	$ 0	$ 118	5220	700	$ 195	$-77
M11-M-332	46	.83	38.3	5920	5840	D	CNTRPVT	1.94	.75	2.58	$ 270	$ 131	$ 53	$ 8	$ 29	$ 46	5220	700	$ 203	$-156
M11-M-332	46	.98	45.2	5920	5840	D	CPVT/HNV	1.94	.74	2.61	$ 270	$ 124	$ 47	$ 12	$ 29	$ 56	5220	700	$ 205	$-149
M11-M-333	55	.99	54.4	5920	5800	D	HNDHVE	1.94	.7	2.77	$ 270	$ 34	$ 4	$ 33	$ 0	$ 197	5220	700	$ 217	$-19
M11-M-333	55	.99	54.4	5920	5800	D	SDROLL	1.94	.7	2.77	$ 270	$ 55	$ 16	$ 16	$ 0	$ 182	5220	700	$ 217	$-35
M11-M-333	55	.99	54.4	5920	5800	D	GRAV	1.94	.65	2.98	$ 270	$ 112	$ 4	$ 33	$ 0	$ 116	5220	700	$ 195	$-79
M11-M-333	55	.83	45.8	5920	5800	D	CNTRPVT	1.94	.75	2.58	$ 270	$ 125	$ 50	$ 7	$ 28	$ 58	5220	700	$ 203	$-145
M11-M-333	55	.98	54	5920	5800	D	CPVT/HNV	1.94	.74	2.61	$ 270	$ 117	$ 44	$ 12	$ 28	$ 67	5220	700	$ 205	$-137
M11-M-334	9	1	9	5820	5800	D	HNDHVE	1.94	.7	2.77	$ 270	$ 68	$ 10	$ 37	$ 0	$ 153	5220	600	$ 191	$-38
M11-M-334	9	1	9	5820	5800	D	SDROLL	1.94	.7	2.77	$ 270	$ 137	$ 45	$ 28	$ 0	$ 58	5220	600	$ 191	$-133
M11-M-334	9	1	9	5820	5800	D	GRAV	1.94	.65	2.98	$ 270	$ 133	$ 10	$ 30	$ 0	$ 95	5220	600	$ 167	$-71

PARCEL I.D.	ACREAGE FIELD SIZE (ACRES)	ACREAGE REDUCTION FACTOR	ACREAGE NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-335	93	1	93	5880	5840	D	HNDHVE	1.94	.7	2.77	$ 270	$ 36	$ 4	$ 34	$ 0	$ 194	5200	680	$ 212	$-18
M11-M-335	93	1	93	5880	5840	D	SDROLL	1.94	.7	2.77	$ 270	$ 60	$ 17	$ 24	$ 0	$ 167	5200	680	$ 212	$-45
M11-M-335	93	1	93	5880	5840	D	GRAV	1.94	.65	2.98	$ 270	$ 108	$ 5	$ 34	$ 0	$ 120	5200	680	$ 190	$-69
M11-M-336	30	1	30	5800	5740	C	HNDHVE	1.53	.7	2.18	$ 285	$ 37	$ 4	$ 27	$ 0	$ 215	5200	600	$ 151	$ 64
M11-M-336	30	1	30	5800	5740	C	SDROLL	1.53	.7	2.18	$ 285	$ 62	$ 18	$ 19	$ 0	$ 185	5200	600	$ 151	$ 33
M11-M-336	30	1	30	5800	5740	C	GRAV	1.53	.65	2.35	$ 285	$ 107	$ 5	$ 27	$ 0	$ 144	5200	600	$ 132	$ 11
M11-M-337	68	.99	67.3	5840	5750	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 8	$ 219	5200	640	$ 159	$ 60
M11-M-337	68	.99	67.3	5840	5750	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 14	$ 12	$ 0	$ 200	5200	640	$ 159	$ 41
M11-M-337	68	.99	67.3	5840	5750	C	GRAV	1.53	.65	2.35	$ 285	$ 114	$ 6	$ 26	$ 0	$ 136	5200	640	$ 141	$-4
M11-M-337	68	.83	56.6	5840	5750	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 115	$ 46	$ 5	$ 20	$ 96	5200	640	$ 148	$-51
M11-M-337	68	.98	66.8	5840	5750	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 107	$ 40	$ 8	$ 20	$ 107	5200	640	$ 150	$-43
M11-M-338	7	1	7	5940	5939	D	HNDHVE	1.94	.7	2.77	$ 270	$ 80	$ 12	$ 37	$ 0	$ 138	5160	780	$ 238	$-99
M11-M-338	7	1	7	5940	5939	D	SDROLL	1.94	.7	2.77	$ 270	$ 172	$ 40	$ 28	$ 0	$ 8	5160	780	$ 238	$-229
M11-M-338	7	1	7	5940	5939	D	GRAV	1.94	.65	2.98	$ 270	$ 144	$ 12	$ 30	$ 0	$ 82	5160	780	$ 218	$-135
M11-M-339	633	.97	614	5940	5800	D	HNDHVE	1.94	.7	2.77	$ 270	$ 95	$ 4	$ 33	$ 0	$ 196	5160	780	$ 238	$-42
M11-M-339	633	.97	614	5940	5800	D	SDROLL	1.94	.7	2.77	$ 270	$ 58	$ 14	$ 16	$ 0	$ 179	5160	780	$ 238	$-58
M11-M-339	633	.97	614	5940	5800	D	GRAV	1.94	.65	2.98	$ 270	$ 118	$ 6	$ 33	$ 0	$ 111	5160	780	$ 218	$-106
M11-M-339	633	.83	527.2	5940	5800	D	CNTRPVT	1.94	.75	2.58	$ 270	$ 63	$ 24	$ 2	$ 8	$ 171	5160	780	$ 222	$-51
M11-M-339	633	.98	621.2	5940	5800	D	CPVT/HNV	1.94	.74	2.61	$ 270	$ 58	$ 21	$ 7	$ 21	$ 160	5160	780	$ 224	$-64

M11-M-340	42	.99	41.5	5900	5840	D	GRAV	1.94	.65	2.98	$ 270	$ 111	$ 6	$ 93	$ 0	$ 118	3080	820	$ 229	$-110
M11-M-341	16	1	16	5780	5740	C	HNDHVE	1.53	.7	2.18	$ 285	$ 49	$ 6	$ 27	$ 0	$ 201	5200	580	$ 147	$ 54
M11-M-341	16	1	16	5780	5740	C	SDROLL	1.53	.7	2.18	$ 285	$ 89	$ 27	$ 19	$ 0	$ 148	5200	580	$ 147	$ 1
M11-M-341	16	1	16	5780	5740	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 7	$ 27	$ 0	$ 136	5200	580	$ 127	$ 8
M11-M-342	16	1	16	5780	5760	C	HNDHVE	1.53	.7	2.18	$ 285	$ 49	$ 6	$ 27	$ 0	$ 201	5220	560	$ 142	$ 58
M11-M-342	16	1	16	5780	5760	C	SDROLL	1.53	.7	2.18	$ 285	$ 89	$ 27	$ 19	$ 0	$ 148	5220	560	$ 142	$ 5
M11-M-342	16	1	16	5780	5760	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 7	$ 27	$ 0	$ 136	5220	560	$ 123	$ 13
M11-M-343	23	1	23	5740	5720	C	HNDHVE	1.53	.7	2.18	$ 285	$ 39	$ 5	$ 27	$ 0	$ 212	5220	520	$ 134	$ 78
M11-M-343	23	1	23	5740	5720	C	SDROLL	1.53	.7	2.18	$ 285	$ 67	$ 19	$ 19	$ 0	$ 179	5220	520	$ 134	$ 44
M11-M-343	23	1	23	5740	5720	C	GRAV	1.53	.65	2.35	$ 285	$ 103	$ 5	$ 27	$ 0	$ 146	5220	520	$ 114	$ 31
M11-M-344	7	1	7	5720	5700	C	HNDHVE	1.53	.7	2.18	$ 285	$ 86	$ 12	$ 29	$ 0	$ 161	5220	500	$ 130	$ 31
M11-M-344	7	1	7	5720	5700	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 60	$ 22	$ 0	$ 29	5220	500	$ 130	$-100
M11-M-344	7	1	7	5720	5700	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5220	500	$ 110	$-6

	* * * * * ACREAGE * * * * *						* * * * WATER REQUIREMENTS PER ACRE * * * *			* * * * * * PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE * * * * * *						PRELIM. OFF-FARM WATER COST			
PARCEL I.D.	FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY NET AG. RETURN	* * * ON-FARM IRRIG. COSTS * * * CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M11-M-350	17	1	17	5200	5160	B	HNDHVE	1.8	.7	2.57	$ 330	$ 46	$ 6	$ 32	$ 0	$ 244	5000	200	$ 81	$ 162
M11-M-350	17	1	17	5200	5160	B	SDROLL	1.8	.7	2.57	$ 330	$ 84	$ 25	$ 22	$ 0	$ 197	5000	200	$ 81	$ 115
M11-M-350	17	1	17	5200	5160	B	GRAV	1.8	.65	2.76	$ 330	$ 111	$ 6	$ 32	$ 0	$ 179	5000	200	$ 51	$ 127
M11-M-351	8	1	8	5100	5090	B	HNDHVE	1.8	.7	2.57	$ 330	$ 74	$ 11	$ 35	$ 0	$ 208	5000	100	$ 57	$ 151
M11-M-351	8	1	8	5100	5090	B	SDROLL	1.8	.7	2.57	$ 330	$ 154	$ 53	$ 24	$ 0	$ 99	5000	100	$ 57	$ 38
M11-M-351	8	1	8	5100	5090	B	GRAV	1.8	.65	2.76	$ 330	$ 138	$ 11	$ 28	$ 0	$ 151	5000	100	$ 25	$ 125
M12-M-352	872	.97	845.8	6730	6530	F	HNDHVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1050	$ 248	$-105
M12-M-352	872	.97	845.8	6730	6530	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1050	$ 248	$-125
M12-M-352	872	.97	845.8	6730	6530	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1050	$ 235	$-177
M12-M-352	872	.83	726.3	6730	6530	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1050	$ 231	$-119
M12-M-352	872	.98	855.8	6730	6530	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 4	$ 17	$ 104	5680	1050	$ 234	$-127
M12-M-353	31	1	31	5740	5590	C	HNDHVE	1.53	.7	2.18	$ 285	$ 36	$ 4	$ 27	$ 0	$ 215	5580	160	$ 61	$ 154
M12-M-353	31	1	31	5740	5590	C	SDROLL	1.53	.7	2.18	$ 285	$ 61	$ 17	$ 19	$ 0	$ 185	5580	160	$ 61	$ 124
M12-M-353	31	1	31	5740	5590	C	GRAV	1.53	.65	2.35	$ 285	$ 108	$ 5	$ 27	$ 0	$ 143	5580	160	$ 35	$ 108
M12-M-354	19	1	19	5600	5580	C	HNDHVE	1.53	.7	2.18	$ 285	$ 42	$ 5	$ 27	$ 0	$ 209	5560	40	$ 36	$ 172
M12-M-354	19	1	19	5600	5580	C	SDROLL	1.53	.7	2.18	$ 285	$ 74	$ 21	$ 19	$ 0	$ 169	5560	40	$ 36	$ 133
M12-M-354	19	1	19	5600	5580	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 6	$ 27	$ 0	$ 144	5560	40	$ 8	$ 135

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AC. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M12-M-355	30	1	30	5600	5560	C	HNDMVE	1.53	.7	2.18	$ 285	$ 37	$ 4	$ 27	$ 0	$ 215	5540	60	$ 40	$ 174
M12-M-355	30	1	30	5600	5560	C	SDROLL	1.53	.7	2.18	$ 285	$ 62	$ 18	$ 19	$ 0	$ 185	5540	60	$ 40	$ 144
M12-M-355	30	1	30	5600	5560	C	GRAV	1.53	.65	2.35	$ 285	$ 107	$ 5	$ 27	$ 0	$ 144	5540	60	$ 13	$ 130
M12-M-354	25	1	25	5600	5550	C	HNDMVE	1.53	.7	2.18	$ 285	$ 38	$ 5	$ 27	$ 0	$ 213	5540	60	$ 40	$ 172
M12-M-354	25	1	25	5600	5550	C	SDROLL	1.53	.7	2.18	$ 285	$ 65	$ 18	$ 19	$ 0	$ 180	5540	60	$ 40	$ 140
M12-M-354	25	1	25	5600	5550	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 5	$ 27	$ 0	$ 145	5540	60	$ 13	$ 132
M12-M-357	7	1	7	5590	5560	C	HNDMVE	1.53	.7	2.18	$ 285	$ 88	$ 12	$ 29	$ 0	$ 161	5510	80	$ 44	$ 117
M12-M-357	7	1	7	5590	5560	C	SDROLL	1.53	.7	2.18	$ 285	$ 172	$ 40	$ 22	$ 0	$ 29	5510	80	$ 44	$-14
M12-M-357	7	1	7	5590	5560	C	GRAV	1.53	.65	2.35	$ 285	$ 144	$ 12	$ 24	$ 0	$ 103	5510	80	$ 17	$ 84
M12-M-358	11	1	11	5560	5530	C	HNDMVE	1.53	.7	2.18	$ 285	$ 59	$ 9	$ 27	$ 0	$ 188	5520	40	$ 36	$ 151
M12-M-358	11	1	11	5560	5530	C	SDROLL	1.53	.7	2.18	$ 285	$ 114	$ 36	$ 19	$ 0	$ 114	5520	40	$ 36	$ 77
M12-M-358	11	1	11	5560	5530	C	GRAV	1.53	.65	2.35	$ 285	$ 125	$ 9	$ 27	$ 0	$ 123	5520	40	$ 8	$ 114
M12-M-359	6	1	6	5560	5520	C	HNDMVE	1.53	.7	2.18	$ 285	$ 86	$ 14	$ 29	$ 0	$ 134	5520	40	$ 36	$ 117
M12-M-359	6	1	6	5560	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 190	$ 67	$ 22	$ 0	$ 4	5520	40	$ 36	$-31
M12-M-359	6	1	6	5560	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 150	$ 13	$ 24	$ 0	$ 97	5520	40	$ 8	$ 88

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AC. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M12-M-360	8	1	8	5530	5520	C	HNDHVE	1.53	.7	2.18	$ 285	$ 74	$ 11	$ 29	$ 0	$ 169	5510	20	$ 32	$ 134
M12-M-360	8	1	8	5530	5520	C	SDROLL	1.53	.7	2.18	$ 285	$ 154	$ 53	$ 22	$ 0	$ 54	5510	20	$ 32	$ 22
M12-M-360	8	1	8	5530	5520	C	GRAV	1.53	.65	2.35	$ 285	$ 138	$ 51	$ 24	$ 0	$ 118	5510	20	$ 6	$ 106
M12-M-361	57	.99	56.4	5560	5500	C	HNDHVE	1.53	.7	2.18	$ 285	$ 34	$ 4	$ 26	$ 0	$ 219	5500	60	$ 40	$ 179
M12-M-361	57	.99	56.4	5560	5500	C	SDROLL	1.53	.7	2.18	$ 285	$ 55	$ 16	$ 12	$ 0	$ 200	5500	60	$ 40	$ 160
M12-M-361	57	.99	56.4	5560	5500	C	GRAV	1.53	.65	2.35	$ 285	$ 113	$ 6	$ 26	$ 0	$ 138	5500	60	$ 13	$ 125
M12-M-361	57	.83	47.4	5560	5500	C	CNTRPVT	1.53	.75	2.04	$ 285	$ 123	$ 49	$ 6	$ 22	$ 83	5500	60	$ 37	$ 45
M12-M-361	57	.98	56	5560	5500	C	CPVT/HNV	1.53	.74	2.06	$ 285	$ 115	$ 43	$ 9	$ 22	$ 93	5500	60	$ 38	$ 55
M12-M-362A	6	1	6	5470	5450	C	HNDHVE	1.53	.7	2.18	$ 285	$ 86	$ 14	$ 29	$ 0	$ 154	5450	20	$ 32	$ 122
M12-M-362A	6	1	6	5470	5450	C	SDROLL	1.53	.7	2.18	$ 285	$ 190	$ 67	$ 22	$ 0	$ 4	5450	20	$ 32	$-27
M12-M-362A	6	1	6	5470	5450	C	GRAV	1.53	.65	2.35	$ 285	$ 130	$ 13	$ 24	$ 0	$ 97	5450	20	$ 4	$ 92
M12-M-362B	26	1	26	5520	5470	C	HNDHVE	1.53	.7	2.18	$ 285	$ 98	$ 5	$ 27	$ 0	$ 213	5470	50	$ 38	$ 175
M12-M-362B	26	1	26	5520	5470	C	SDROLL	1.53	.7	2.18	$ 285	$ 65	$ 18	$ 19	$ 0	$ 181	5470	50	$ 38	$ 143
M12-M-362B	26	1	26	5520	5470	C	GRAV	1.53	.65	2.35	$ 285	$ 106	$ 5	$ 27	$ 0	$ 145	5470	50	$ 11	$ 134
M12-M-363	36	1	36	5470	5440	C	HNDHVE	1.53	.7	2.18	$ 285	$ 35	$ 4	$ 27	$ 0	$ 217	5440	30	$ 34	$ 183
M12-M-363	36	1	36	5470	5440	C	SDROLL	1.53	.7	2.18	$ 285	$ 58	$ 16	$ 19	$ 0	$ 190	5440	30	$ 34	$ 155
M12-M-363	36	1	36	5470	5440	C	GRAV	1.53	.65	2.35	$ 285	$ 109	$ 5	$ 27	$ 0	$ 142	5440	30	$ 6	$ 135

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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM PAYMENT CAPACITY
M12-M-364	5	1	5	5430	5410	C	HNDMVE	1.53	.7	2.18	$ 285	$ 92	$ 15	$ 29	$ 0	$ 147	5410	20	$ 32	$ 114
M12-M-364	5	1	5	5430	5410	C	SDROLL	1.53	.7	2.18	$ 285	$ 208	$ 74	$ 22	$ 0	$-19	5410	20	$ 32	$-52
M12-M-364	5	1	5	5430	5410	C	GRAV	1.53	.65	2.35	$ 285	$ 155	$ 14	$ 24	$ 0	$ 90	5410	20	$ 4	$ 86
M12-M-365	9	1	9	5390	5360	B	HNDMVE	1.8	.7	2.57	$ 330	$ 68	$ 10	$ 35	$ 0	$ 216	5360	30	$ 40	$ 175
M12-M-365	9	1	9	5390	5360	B	SDROLL	1.8	.7	2.57	$ 330	$ 137	$ 45	$ 26	$ 0	$ 120	5360	30	$ 40	$ 80
M12-M-365	9	1	9	5390	5360	B	GRAV	1.8	.65	2.76	$ 330	$ 133	$ 10	$ 28	$ 0	$ 157	5360	30	$ 7	$ 150
M12-M-366	68	.99	67.3	5400	5320	B	HNDMVE	1.8	.7	2.57	$ 330	$ 34	$ 4	$ 31	$ 0	$ 259	5320	80	$ 52	$ 207
M12-M-366	68	.99	67.3	5400	5320	B	SDROLL	1.8	.7	2.57	$ 330	$ 55	$ 16	$ 14	$ 0	$ 243	5320	80	$ 52	$ 190
M12-M-366	68	.99	67.3	5400	5320	B	GRAV	1.8	.65	2.76	$ 330	$ 114	$ 6	$ 31	$ 0	$ 174	5320	80	$ 20	$ 154
M12-M-366	68	.83	56.6	5400	5320	B	CNTRPVT	1.8	.75	2.39	$ 330	$ 115	$ 44	$ 6	$ 24	$ 137	5320	80	$ 49	$ 88
M12-M-366	68	.98	66.8	5400	5320	B	CPVT/HNV	1.8	.74	2.42	$ 330	$ 107	$ 40	$ 10	$ 24	$ 147	5320	80	$ 49	$ 97
M12-M-367	43	.99	42.5	6415	6400	E	HNDMVE	1.76	.7	2.51	$ 240	$ 93	$ 4	$ 30	$ 0	$ 171	5470	945	$ 255	$-84
M12-M-367	43	.99	42.5	6415	6400	E	SDROLL	1.76	.7	2.51	$ 240	$ 55	$ 16	$ 14	$ 0	$ 153	5470	945	$ 255	$-101
M12-M-367	43	.99	42.5	6415	6400	E	GRAV	1.76	.65	2.7	$ 240	$ 111	$ 6	$ 30	$ 0	$ 91	5470	945	$ 239	$-147
M12-M-368	6	1	6	6365	6355	E	HNDMVE	1.76	.7	2.51	$ 240	$ 86	$ 14	$ 34	$ 0	$ 105	5470	895	$ 243	$-138
M12-M-368	6	1	6	6365	6355	E	SDROLL	1.76	.7	2.51	$ 240	$ 190	$ 67	$ 25	$ 0	$-43	5470	895	$ 243	$-286
M12-M-368	6	1	6	6365	6355	E	GRAV	1.76	.65	2.7	$ 240	$ 150	$ 13	$ 27	$ 0	$ 48	5470	895	$ 226	$-178

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	**** WATER REQUIREMENTS PER ACRE **** IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG. COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M12-M-369	350	.98	343	6400	6320	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5470	930	$ 251	$-82
M12-M-369	350	.98	343	6400	6320	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5470	930	$ 251	$-100
M12-M-369	350	.98	343	6400	6320	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 6	$ 30	$ 0	$ 84	5470	930	$ 235	$-150
M12-M-369	350	.83	291.5	6400	6320	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 8	$ 141	5470	930	$ 234	$-93
M12-M-369	350	.98	343.5	6400	6320	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 58	$ 21	$ 6	$ 19	$ 133	5470	930	$ 237	$-103
M12-M-370	92	.99	91	6330	6280	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5480	850	$ 232	$-62
M12-M-370	92	.99	91	6330	6280	E	SDROLL	1.76	.7	2.51	$ 240	$ 54	$ 16	$ 14	$ 0	$ 154	5480	850	$ 232	$-78
M12-M-370	92	.99	91	6330	6280	E	GRAV	1.76	.65	2.7	$ 240	$ 116	$ 7	$ 30	$ 0	$ 85	5480	850	$ 215	$-130
M12-M-370	92	.83	76.6	6330	6280	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 97	$ 38	$ 4	$ 20	$ 78	5480	850	$ 217	$-139
M12-M-370	92	.98	90.4	6330	6280	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 98	$ 33	$ 9	$ 20	$ 85	5480	850	$ 219	$-134
M12-M-371A	1093	.97	1060.2	6450	6320	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5480	970	$ 261	$-91
M12-M-371A	1093	.97	1060.2	6450	6320	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5480	970	$ 261	$-109
M12-M-371A	1093	.97	1060.2	6450	6320	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 6	$ 30	$ 0	$ 84	5480	970	$ 245	$-161
M12-M-371A	1093	.83	910.4	6450	6320	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 8	$ 141	5480	970	$ 243	$-101
M12-M-371A	1093	.98	1071.1	6450	6320	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 59	$ 21	$ 6	$ 19	$ 133	5480	970	$ 246	$-113
M12-M-371B	960	.97	931.2	6530	6420	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5480	1050	$ 279	$-110
M12-M-371B	960	.97	931.2	6530	6420	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5480	1050	$ 279	$-128
M12-M-371B	960	.97	931.2	6530	6420	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 6	$ 30	$ 0	$ 84	5480	1050	$ 266	$-181
M12-M-371B	960	.83	799.6	6530	6420	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 8	$ 141	5480	1050	$ 261	$-119
M12-M-371B	960	.98	942.2	6530	6420	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 59	$ 21	$ 6	$ 19	$ 133	5480	1050	$ 264	$-130
M12-M-371C	337	.98	330.2	6520	6420	E	HNDHVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 30	$ 0	$ 169	5480	1040	$ 277	$-108
M12-M-371C	337	.98	330.2	6520	6420	E	SDROLL	1.76	.7	2.51	$ 240	$ 58	$ 16	$ 14	$ 0	$ 151	5480	1040	$ 277	$-126
M12-M-371C	337	.98	330.2	6520	6420	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 6	$ 30	$ 0	$ 84	5480	1040	$ 263	$-178
M12-M-371C	337	.83	280.7	6520	6420	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 8	$ 141	5480	1040	$ 259	$-117

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
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PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M12-M-371D	9	1	9	6450	6420	E	HNDMVE	1.76	.7	2.51	$ 240	$ 68	$ 10	$ 34	$ 0	$ 126	5480	970	$ 261	$-134
M12-M-371D	9	1	9	6450	6420	E	SDROLL	1.76	.7	2.51	$ 240	$ 137	$ 45	$ 25	$ 0	$ 31	5480	970	$ 261	$-229
M12-M-371D	9	1	9	6450	6420	E	GRAV	1.76	.65	2.7	$ 240	$ 133	$ 10	$ 27	$ 0	$ 68	5480	970	$ 245	$-177
M12-M-372	6	1	6	6410	6390	E	HNDMVE	1.76	.7	2.51	$ 240	$ 86	$ 14	$ 34	$ 0	$ 105	5480	930	$ 251	$-146
M12-M-372	6	1	6	6410	6390	E	SDROLL	1.76	.7	2.51	$ 240	$ 190	$ 47	$ 25	$ 0	$-43	5480	930	$ 251	$-294
M12-M-372	6	1	6	6410	6390	E	GRAV	1.76	.65	2.7	$ 240	$ 150	$ 13	$ 27	$ 0	$ 48	5480	930	$ 235	$-187
M12-M-373	181	.98	177.3	6600	6520	E	HNDMVE	1.76	.7	2.51	$ 240	$ 35	$ 4	$ 36	$ 0	$ 169	5480	1120	$ 296	$-124
M12-M-373	181	.98	177.3	6600	6520	E	SDROLL	1.76	.7	2.51	$ 240	$ 38	$ 16	$ 14	$ 0	$ 151	5480	1120	$ 296	$-145
M12-M-373	181	.98	177.3	6600	6520	E	GRAV	1.76	.65	2.7	$ 240	$ 118	$ 6	$ 30	$ 0	$ 84	5480	1120	$ 283	$-199
M12-M-373	181	.83	150.7	6600	6520	E	CNTRPVT	1.76	.75	2.34	$ 240	$ 63	$ 24	$ 2	$ 8	$ 141	5480	1120	$ 276	$-134
M12-M-373	181	.98	177.9	6600	6520	E	CPVT/HNV	1.76	.74	2.37	$ 240	$ 59	$ 21	$ 7	$ 19	$ 132	5480	1120	$ 279	$-147
M13-M-374	23	1	23	6800	6760	F	HNDMVE	1.56	.7	2.22	$ 210	$ 39	$ 5	$ 28	$ 0	$ 137	5680	1120	$ 262	$-125
M13-M-374	23	1	23	6800	6760	F	SDROLL	1.56	.7	2.22	$ 210	$ 47	$ 19	$ 19	$ 0	$ 103	5680	1120	$ 262	$-158
M13-M-374	23	1	23	6800	6760	F	GRAV	1.56	.65	2.4	$ 210	$ 103	$ 5	$ 27	$ 0	$ 70	5680	1120	$ 251	$-180
M13-M-375	163	.98	159.7	6920	6760	F	HNDMVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1240	$ 287	$-144
M13-M-375	163	.98	159.7	6920	6760	F	SDROLL	1.56	.7	2.22	$ 210	$ 38	$ 16	$ 12	$ 0	$ 122	5680	1240	$ 287	$-164
M13-M-375	163	.98	159.7	6920	6760	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1240	$ 278	$-220
M13-M-375	163	.83	135.7	6920	6760	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1240	$ 268	$-156
M13-M-375	163	.98	160.2	6920	6760	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 105	5680	1240	$ 271	$-165

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
RANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	MAINT	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M13-M-376	46	.99	45.5	6960	6840	F	HNDMVE	1.56	.7	2.22	$ 210	$ 33	$ 4	$ 26	$ 0	$ 144	5680	1280	$ 296	$-151
M13-M-376	46	.99	45.5	6960	6840	F	SDROLL	1.56	.7	2.22	$ 210	$ 55	$ 16	$ 12	$ 0	$ 125	5680	1280	$ 296	$-170
M13-M-376	46	.99	45.5	6960	6840	F	GRAV	1.56	.65	2.4	$ 210	$ 111	$ 6	$ 27	$ 0	$ 64	5680	1280	$ 287	$-222
M13-M-376	46	.83	38.3	6960	6840	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 131	$ 53	$ 4	$ 23	$-5	5680	1280	$ 276	$-282
M13-M-376	46	.98	45.2	6960	6840	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 124	$ 47	$ 16	$ 23	$ 4	5680	1280	$ 279	$-274
M13-M-377	6	1	6	6940	6920	F	HNDMVE	1.56	.7	2.22	$ 210	$ 86	$ 14	$ 30	$ 0	$ 78	5680	1260	$ 291	$-212
M13-M-377	6	1	6	6940	6920	F	SDROLL	1.56	.7	2.22	$ 210	$ 190	$ 47	$ 22	$ 0	$-70	5680	1260	$ 291	$-362
M13-M-377	6	1	6	6940	6920	F	GRAV	1.56	.65	2.4	$ 210	$ 150	$ 13	$ 24	$ 0	$ 21	5680	1260	$ 283	$-261
M13-M-378A	1202	.97	1165.9	6830	6640	F	HNDMVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1150	$ 268	$-126
M13-M-378A	1202	.97	1165.9	6830	6640	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1150	$ 268	$-144
M13-M-378A	1202	.97	1165.9	6830	6640	F	GRAV	1.56	.65	2.4	$ 210	$ 110	$ 6	$ 27	$ 0	$ 58	5680	1150	$ 258	$-200
M13-M-378A	1202	.83	1001.2	6830	6640	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1150	$ 250	$-139
M13-M-378A	1202	.98	1177.9	6830	6640	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	5680	1150	$ 253	$-147
M13-M-378B	697	.97	676	6960	6720	F	HNDMVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1280	$ 296	$-159
M13-M-378B	697	.97	676	6960	6720	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1280	$ 296	$-173
M13-M-378B	697	.97	676	6960	6720	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1280	$ 287	$-229
M13-M-378B	697	.83	580.6	6960	6720	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1280	$ 276	$-164
M13-M-378B	697	.98	684.1	6960	6720	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	5680	1280	$ 279	$-173
M13-M-378C	320	.98	313.6	6830	6680	F	HNDMVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1150	$ 268	$-126
M13-M-378C	320	.98	313.6	6830	6680	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1150	$ 268	$-144
M13-M-378C	320	.98	313.6	6830	6680	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1150	$ 258	$-200
M13-M-378C	320	.83	266.5	6830	6680	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1150	$ 250	$-139
M13-M-378C	320	.98	314	6830	6680	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 58	$ 21	$ 6	$ 17	$ 106	5680	1150	$ 253	$-147

PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	***** ACREAGE ***** FIELD SIZE (ACRES)	REDUCTION FACTOR	NET ACREAGE	ELEVATION HIGH	ELEVATION LOW	CLIMATIC ZONE	**** WATER REQUIREMENTS PER ACRE **** IRRIG. SYSTEM TYPE	NET FEET	IRRIG. EFF.	APPLIED	****** PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE ****** PRELIMINARY NET AG. RETURN	*** ON-FARM IRRIG COSTS *** CAPITAL	MAINT.	LABOR	PUMPING	PRELIM. PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST WATER SOURCE ELEV.	STATIC LIFT	ANNUAL POWER COST/ACRE	RESIDUAL PRELIM. PAYMENT CAPACITY
M13-M-378D	503	.97	487.9	7000	6680	F	HNDHVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1320	$ 304	$-161
M13-M-378D	503	.97	487.9	7000	6680	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1320	$ 304	$-181
M13-M-378D	503	.97	487.9	7000	6680	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1320	$ 296	$-238
M13-M-378D	503	.83	418.9	7000	6680	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1320	$ 284	$-172
M13-M-378D	503	.98	493.6	7000	6680	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 58	$ 21	$ 6	$ 17	$ 106	5680	1320	$ 287	$-180
M13-M-378E	454	.97	434.3	6920	6630	F	HNDHVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 26	$ 0	$ 142	5680	1240	$ 287	$-144
M13-M-378E	454	.97	434.3	6920	6630	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1240	$ 287	$-164
M13-M-378E	454	.97	434.3	6920	6630	F	GRAV	1.56	.65	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1240	$ 278	$-220
M13-M-378E	454	.83	344.7	6920	6630	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1240	$ 268	$-156
M13-M-378E	454	.98	441.9	6920	6630	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	5680	1240	$ 271	$-165
M13-M-379	6	1	6	6800	6780	F	HNDHVE	1.56	.7	2.22	$ 210	$ 86	$ 14	$ 30	$ 0	$ 78	5680	1120	$ 262	$-183
M13-M-379	6	1	6	6800	6780	F	SDROLL	1.56	.7	2.22	$ 210	$ 190	$ 67	$ 22	$ 0	$-70	5680	1120	$ 262	$-333
M13-M-379	6	1	6	6800	6780	F	GRAV	1.56	.65	2.4	$ 210	$ 150	$ 13	$ 24	$ 0	$ 21	5680	1120	$ 251	$-229
M13-M-380	6	1	6	6720	6680	F	HNDHVE	1.56	.7	2.22	$ 210	$ 86	$ 14	$ 30	$ 0	$ 78	5680	1040	$ 245	$-167
M13-M-380	6	1	6	6720	6680	F	SDROLL	1.56	.7	2.22	$ 210	$ 190	$ 67	$ 22	$ 0	$-70	5680	1040	$ 245	$-316
M13-M-380	6	1	6	6720	6680	F	GRAV	1.56	.65	2.4	$ 210	$ 150	$ 13	$ 24	$ 0	$ 21	5680	1040	$ 233	$-211
M13-M-381	17	1	17	6720	6670	F	HNDHVE	1.56	.7	2.22	$ 210	$ 46	$ 6	$ 28	$ 0	$ 128	5680	1040	$ 245	$-117
M13-M-381	17	1	17	6720	6670	F	SDROLL	1.56	.7	2.22	$ 210	$ 84	$ 25	$ 19	$ 0	$ 80	5680	1040	$ 245	$-165
M13-M-381	17	1	17	6720	6670	F	GRAV	1.56	.65	2.4	$ 210	$ 111	$ 6	$ 27	$ 0	$ 63	5680	1040	$ 233	$-169

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
MANCOS WATERSHED

PARCEL I.D.	ACREAGE: FIELD SIZE (ACRES)	ACREAGE: REDUCTION FACTOR	ACREAGE: NET ACREAGE	ELEVATION: HIGH	ELEVATION: LOW	CLIMATIC ZONE	WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE	WATER REQUIREMENTS PER ACRE: NET FEET	WATER REQUIREMENTS PER ACRE: IRRIG. EFF.	WATER REQUIREMENTS PER ACRE: APPLIED	PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN	ON-FARM IRRIG. COSTS: CAPITAL	ON-FARM IRRIG. COSTS: MAINT.	ON-FARM IRRIG. COSTS: LABOR	ON-FARM IRRIG. COSTS: PUMPING	PRELIM PAYMENT CAPACITY	PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV.	PRELIM. OFF-FARM WATER COST: STATIC LIFT	PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE	RESIDUAL PRELIM PAYMENT CAPACITY
M13-M-382	7	1	7	6720	6700	F	HNDHVE	1.56	.7	2.22	$ 210	$ 80	$ 12	$ 30	$ 0	$ 86	5680	1040	$ 245	$-139
M13-M-382	7	1	7	6720	6700	F	SDROLL	1.56	.7	2.22	$ 210	$ 172	$ 40	$ 22	$ 0	$-45	5680	1040	$ 245	$-291
M13-M-382	7	1	7	6720	6700	F	GRAV	1.56	.45	2.4	$ 210	$ 144	$ 12	$ 24	$ 0	$ 28	5680	1040	$ 233	$-205
M13-M-383	11	1	11	6700	6660	F	HNDHVE	1.56	.7	2.22	$ 210	$ 59	$ 9	$ 28	$ 0	$ 113	5680	1020	$ 241	$-128
M13-M-383	11	1	11	6700	6660	F	SDROLL	1.56	.7	2.22	$ 210	$ 114	$ 36	$ 19	$ 0	$ 38	5680	1020	$ 241	$-202
M13-M-383	11	1	11	6700	6660	F	GRAV	1.56	.45	2.4	$ 210	$ 125	$ 9	$ 27	$ 0	$ 47	5680	1020	$ 229	$-181
M13-M-384	36	1	36	6680	6640	F	HNDHVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 28	$ 0	$ 141	5680	1000	$ 237	$-95
M13-M-384	36	1	36	6680	6640	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 19	$ 0	$ 114	5680	1000	$ 237	$-122
M13-M-384	36	1	36	6680	6640	F	GRAV	1.56	.45	2.4	$ 210	$ 109	$ 5	$ 27	$ 0	$ 46	5680	1000	$ 224	$-158
M13-M-385	1285	.97	1246.4	6880	6640	F	HNDHVE	1.56	.7	2.22	$ 210	$ 35	$ 4	$ 24	$ 0	$ 142	5680	1200	$ 279	$-136
M13-M-385	1285	.97	1246.4	6880	6640	F	SDROLL	1.56	.7	2.22	$ 210	$ 58	$ 16	$ 12	$ 0	$ 122	5680	1200	$ 279	$-156
M13-M-385	1285	.97	1246.4	6880	6640	F	GRAV	1.56	.45	2.4	$ 210	$ 118	$ 6	$ 27	$ 0	$ 58	5680	1200	$ 269	$-211
M13-M-385	1285	.93	1070.4	6880	6640	F	CNTRPVT	1.56	.75	2.08	$ 210	$ 63	$ 24	$ 2	$ 8	$ 111	5680	1200	$ 260	$-148
M13-M-385	1285	.98	1259.3	6880	6640	F	CPVT/HNV	1.56	.74	2.1	$ 210	$ 59	$ 21	$ 6	$ 17	$ 106	5680	1200	$ 263	$-157
M13-M-386	10	1	10	6700	6680	F	HNDHVE	1.56	.7	2.22	$ 210	$ 62	$ 9	$ 28	$ 0	$ 110	5680	1020	$ 241	$-131
M13-M-386	10	1	10	6700	6680	F	SDROLL	1.56	.7	2.22	$ 210	$ 119	$ 38	$ 19	$ 0	$ 31	5680	1020	$ 241	$-209
M13-M-386	10	1	10	6700	6680	F	GRAV	1.56	.65	2.4	$ 210	$ 127	$ 9	$ 27	$ 0	$ 45	5680	1020	$ 229	$-184

APPENDIX D.2

OFF-FARM WATER COST

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

1563

File Name ----- M244
Parcel No. ---- M10-M-244
Net Acres ----- 18
Crop ---------- CRN/SOY
Water Pay Cap - 223
System Type --- GRAVITY
Water System -- M244,245
Date ---------- 6/ 3/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft)----------									
100	6	3000	12.00			36,000	180		
100	8	1247	15.50			19,329	97		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	14	210				2,940	15		
River Pump f(gpm,TDH,ac ft/yr) ---	212	196	55.26			24,342	122	1,014	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						82,611	413	1,014	
Engineering, Administration, Legal, Contingencies 25% ----------						20,653			
Total ----------						103,264	413	1,014	
Annualized Cost (50 yr @ 8.375%)----------						8,806	413	1,014	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						8,806	413	1,014	10,233
Annual Cost Per Acre ----------						489	23	56	568
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	223
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-345

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M245
Parcel No. ---- M10-M-245
Net Acres ----- 45.5
Crop ---------- CRN/SOY
Water Pay Cap - 222
System Type --- GRAVITY
Water System -- M244,245
Date ---------- 6/ 3/86

Power rate $/kwh --- .068603
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft)----------									
100	8	3153	15.50			48,872	244		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	36	210				7,560	38		
River Pump f(gpm,TDH,ac ft/yr) ----	537	206	139.69			38,823	194	2,693	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	95,254	476	2,693	
Engineering, Administration, Legal, Contingencies 25% ----------	23,814			
Total ----------	119,068	476	2,693	
Annualized Cost (50 yr @ 8.375%)----------	10,154	476	2,693	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	10,154	476	2,693	13,323
Annual Cost Per Acre ----------	223	10	59	293
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	222
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-71

UTE/OFFMAN

1564

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M246a
Parcel No. ----M10-M-246a
Net Acres ----- 148.2
Crop ---------- CRN/SOY
Water Pay Cap - 276
System Type --- CNTRPVT
Water System --M246a,246b
Date ---------- 6/ 3/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft)----------									
100	12	500	24.00			12,000	60		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	48	210				10,080	50		
River Pump f(gpm,TDH,ac ft/yr) ---	1512	271	394.2			75,590	378	9,997	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						97,670	488	9,997	
Engineering, Administration, Legal, Contingencies 25% ----------						24,418			
Total ----------						122,088	488	9,997	
Annualized Cost (50 yr @ 8.375%)----------						10,412	488	9,997	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						10,412	488	9,997	20,897
Annual Cost Per Acre ----------						70	3	67	141
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	276
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	135

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M246b
Parcel No. ----M10-M-246b
Net Acres ----- 5
Crop ---------- CRN/SOY
Water Pay Cap - 173
System Type --- GRAVITY
Water System --M246a,246b
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/Ft)----------									
100	4	1700	10.50			17,850	89		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	2	210				420	2		
River Pump f(gpm,TDH,ac ft/yr) ----	59	94	15.35			13,280	66	135	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						31,550	158	135	
Engineering, Administration, Legal, Contingencies 25% ----------						7,888			
Total ----------						39,438	158	135	
Annualized Cost (50 yr @ 8.375%)----------						3,363	158	135	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,363	158	135	3,656
Annual Cost Per Acre ----------						673	32	27	731
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	173
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-558

TE/OFFMAN 1565

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M247
arcel No. ---- M10-M-247
et Acres ----- 10
Crop ---------- CRN/SOY
ater Pay Cap - 202
ystem Type --- GRAVITY
ater System -- M247
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft)----------									
100	4	2100	10.50			22,050	110		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	118	197	30.7			18,150	91	394	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						40,200	201	394	
Engineering, Administration, Legal, Contingencies 25% ----------						10,050			
Total ----------						50,250	201	394	
Annualized Cost (50 yr @ 8.375%)----------						4,285	201	394	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						4,285	201	394	4,880
Annual Cost Per Acre ----------						429	20	39	488
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	202
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-286

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M248
Parcel No. ---- M10-M-248
Net Acres ----- 11
Crop ---------- CRN/SOY
Water Pay Cap - 204
System Type --- GRAVITY
Water System -- M248,249
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft)----------									
100	4	500	10.50			5,250	26		
100	8	66	15.50			1,023	5		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	11	210				2,310	12		
River Pump f(gpm,TDH,ac ft/yr) ----	130	56	33.77			18,345	92	177	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	26,928	135	177	
Engineering, Administration, Legal, Contingencies 25% ----------	6,732			
Total ----------	33,660	135	177	
Annualized Cost (50 yr @ 8.375%)----------	2,870	135	177	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	2,870	135	177	3,182
Annual Cost Per Acre ----------	261	12	16	289
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	204
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-85

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M249
Parcel No. ---- M10-M-249
Net Acres ----- 39
Crop ---------- CRN/SOY
Water Pay Cap - 222
System Type --- GRAVITY
Water System -- M248,249
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft)----------									
100	8	234	15.50			3,627	18		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	39	210				8,190	41		
River Pump f(gpm,TDH,ac ft/yr) ----	460	42	119.7			31,224	156	470	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						43,041	215	470	
Engineering, Administration, Legal, Contingencies 25% ----------						10,760			
Total ----------						53,802	215	470	
Annualized Cost (50 yr @ 8.375%)----------						4,588	215	470	
Less Increemental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						4,588	215	470	5,274
Annual Cost Per Acre ----------						118	6	12	135
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	222
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	87

N

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

——— M250
—— M10-M-250
————— 194.9
——————— CRN/SOY
Cap — 276
pe —— CNTRPVT
tem — M250-252
——— 6/ 4/86

Power rate $/kwh —— .068605
Interest rate ——— .08375
Project Life ——— 50

ties	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
iiam,Lf,$/ft) ————									
100	14	800	28.50			22,800	114		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
TION:									
f(ft,$/ft) ————	38	210				7,980	40		
p f(gpm,TDH,ac ft/yr) ——	1988	212	518.4			82,218	411	10,284	
f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ADS: f(LF,$/LF)	0	.00				0	0		
E EXT: f(LF,$/LF)	0	.00				0	0		
R/W: f(LF,$/LF)	0	.00				0	0		
R/W: f(acres,$/ac)	0	0				0	0		
———						112,998	565	10,284	
g, Administration, Legal, Contingencies 25% ———						28,249			
———						141,247	565	10,284	
Cost (50 yr @ 8.375%)———						12,045	565	10,284	
mental Water System Cost, Parcel(s) _____									
al Annual Cost ———						12,045	565	10,284	22,895
t Per Acre ———						62	3	53	117
p Payment Capacity (Input negitive numbers with a -) ———						———	———	———	276
Residual Water Payment Capacity ———						———	———	———	159

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M252
Parcel No. ---- M10-M-252
Net Acres ----- 42.5
Crop ---------- CRN/SOY
Water Pay Cap - 222
System Type --- GRAVITY
Water System -- M250-252
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	8	800	15.50			12,400	62		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	8	210				1,680	8		
River Pump f(gpm,TDH,ac ft/yr) ---	502	73	130.5			33,351	167	891	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						47,431	237	891	
Engineering, Administration, Legal, Contingencies 25% ----------						11,858			
Total ----------						59,289	237	891	
Annualized Cost (50 yr @ 8.375%)----------						5,056	237	891	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						5,056	237	891	6,185
Annual Cost Per Acre ----------						119	6	21	146
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	222
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	76

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M253
Parcel No. ---- M10-M-253
Net Acres ----- 77.2
Crop ---------- CRN/SOY
Water Pay Cap - 216
System Type --- GRAVITY
Water System -- M253,254
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	10	400	20.00			8,000	40		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	42	210				8,820	44		
River Pump f(gpm,TDH,ac ft/yr) ----	911	52	237			42,650	213	1,153	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	59,470	297	1,153	
Engineering, Administration, Legal, Contingencies 25% ----------	14,868			
Total ----------	74,338	297	1,153	
Annualized Cost (50 yr @ 8.375%)----------	6,339	297	1,153	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	6,339	297	1,153	7,790
Annual Cost Per Acre ----------	82	4	15	101
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	216
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	115

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M254
Parcel No. ---- M10-M-254
Net Acres ----- 14
Crop ---------- CRN/SOY
Water Pay Cap - 212
System Type --- GRAVITY
Water System -- M253,254
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	500	10.50			5,250	26		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	8	210				1,680	8		
River Pump f(gpm,TDH,ac ft/yr) ---	165	72	43			20,448	102	290	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						27,378	137	290	
Engineering, Administration, Legal, Contingencies 25% ----------						6,844			
Total ----------						34,222	137	290	
Annualized Cost (50 yr @ 8.375%)----------						2,918	137	290	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						2,918	137	290	3,345
Annual Cost Per Acre ----------						208	10	21	239
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	212
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-27

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M255
Parcel No. ---- M10-M-255
Net Acres ----- 6
Crop ---------- CRN/SOY
Water Pay Cap - 179
System Type --- GRAVITY
Water System -- M255,256
Date ---------- 5/27/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	400	10.50			4,200	21		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	71	46	18.4			14,181	71	79	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						18,381	92	79	
Engineering, Administration, Legal, Contingencies 25% ----------						4,595			
Total ----------						22,977	92	79	
Annualized Cost (50 yr @ 8.375%)----------						1,959	92	79	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						1,959	92	79	2,131
Annual Cost Per Acre ----------						327	15	13	355
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	179
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-176

TE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M256
arcel No. ---- M10-M-256
et Acres ----- 11
Crop ---------- CRN/SOY
ater Pay Cap - 204
ystem Type --- GRAVITY
ater System -- M255,256
Date ---------- 5/27/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
IPELINE:									
lass f(diam,LF,$/ft) ----------									
100	4	400	10.50			4,200	21		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
iversion f(ft,$/ft) ----------	0	210				0	0		
iver Pump f(gpm,TDH,ac ft/yr) ---	130	54	33.8			18,330	92	171	
ooster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
CCESS ROADS: f(LF,$/LF)	0	.00				0	0		
OWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
UMP STA R/W: f(acres,$/ac)	0	0				0	0		
ubtotal ----------						22,530	113	171	
ngineering, Administration, Legal, Contingencies 25% ----------						5,633			
otal ----------						28,163	113	171	
nnualized Cost (50 yr @ 8.375%)----------						2,402	113	171	
ess Incremental Water System Cost, Parcel(s) _____----------									
arcel Total Annual Cost ----------						2,402	113	171	2,685
nnual Cost Per Acre ----------						218	10	16	244
arcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	204
et Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-40

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M284A
Parcel No. ----M11-M-284A
Net Acres ----- 87.1
Crop ---------- CRN/SOY
Water Pay Cap - 174
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
100	12	4275	24.00			102,600	513		
200	14	531	35.00			18,585	93		
200	18	2267	50.00			113,350	567		
200	20	1026	58.00			59,508	298		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	13	210				2,730	14		
River Pump f(gpm,TDH,ac ft/yr) ----	967	336.5	240.4			61,674	308	7,570	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						358,447	1,792	7,570	
Engineering, Administration, Legal, Contingencies 25% ----------						89,612			
Total ----------						448,059	1,792	7,570	
Annualized Cost (50 yr @ 8.375%)----------						38,210	1,792	7,570	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						38,210	1,792	7,570	47,572
Annual Cost Per Acre ----------						439	21	87	546
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	174
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-372

UTE/OFFMAN 1570

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M284B
Parcel No. ----M11-M-284B
Net Acres ----- 5
Crop ---------- CRN/SOY
Water Pay Cap - 131
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	12	203	24.00			4,872	24		
200	14	30	35.00			1,050	5		
200	18	130	50.00			6,500	33		
200	20	59	58.00			3,422	17		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	56	253	13.8			13,490	67	327	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						29,544	148	327	
Engineering, Administration, Legal, Contingencies 25% ----------						7,386			
Total ----------						36,930	148	327	
Annualized Cost (50 yr @ 8.375%)----------						3,149	148	327	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,149	148	327	3,624
Annual Cost Per Acre ----------						630	30	65	725
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	131
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-594

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M285
Parcel No. ---- M11-M-285
Net Acres ----- 31
Crop ---------- CRN/SOY
Water Pay Cap - 183
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class #(diam,LF,$/ft) ----------									
100	6	13300	12.00			159,600	798		
100	12	1522	24.00			36,528	183		
200	14	189	35.00			6,615	33		
200	18	807	50.00			40,350	202		
200	20	365	58.00			21,170	106		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ----------	4	210				840	4		
River Pump #(gpm,TDH,ac ft/yr) ----	344	382	85.6			34,788	174	3,060	
Booster #(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		

Subtotal ----------	299,891	1,499	3,060	
Engineering, Administration, Legal, Contingencies 25% ----------	74,973			
Total ----------	374,863	1,499	3,060	
Annualized Cost (50 yr @ 8.375%)----------	31,968	1,499	3,060	
Less Incremental Water System Cost, Parcel(s) _____ ----------				
Parcel Total Annual Cost ----------	31,968	1,499	3,060	36,527
Annual Cost Per Acre ----------	1,031	48	99	1,178
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	183
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-995

TE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M286
arcel No. ---- M11-M-286
et Acres ----- 15
Crop ---------- CRN/SOY
Water Pay Cap - 174
ystem Type --- GRAVITY
ater System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
IPELINE:									
lass f(diam,Lf,$/ft) ----------									
100	4	2100	10.50			22,050	110		
200	10	622	22.50			13,995	70		
200	18	390	50.00			19,500	98		
200	20	177	38.00			10,266	51		
						0	0		
						0	0		
UMP STATION:									
iversion f(ft,$/ft) ----------	2	210				420	2		
iver Pump f(gpm,TDH,ac ft/yr) ----	167	244	41.4			22,249	111	945	
ooster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
CCESS ROADS: f(LF,$/LF)	0	.00				0	0		
OWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
IPELINE R/W: f(LF,$/LF)	0	.00				0	0		
UMP STA R/W: f(acres,$/ac)	0	0				0	0		
ubtotal ----------						88,480	442	945	
ngineering, Administration, Legal, Contingencies 25% ----------						22,120			
otal ----------						110,599	442	945	
nualized Cost (50 yr @ 8.375%)----------						9,432	442	945	
ess Incremental Water System Cost, Parcel(s) _____----------									
rcel Total Annual Cost ----------						9,432	442	945	10,819
nual Cost Per Acre ----------						629	29	63	721
rcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	174
t Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-547

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M287
Parcel No. ---- M11-M-287
Net Acres ----- 59.4
Crop ---------- CRN/SOY
Water Pay Cap - 178
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class #(dia,LF,$/ft) ----------									
200	10	2464	22.50			55,440	277		
200	18	1546	50.00			77,300	387		
200	20	699	58.00			40,542	203		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ----------	8	210				1,680	8		
River Pump #(gpm,TDH,ac ft/yr) ---	639	213	163.9			43,538	218	3,267	
Booster #(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		
Subtotal ----------						218,500	1,092	3,267	
Engineering, Administration, Legal, Contingencies 25% ----------						54,625			
Total ----------						273,125	1,092	3,267	
Annualized Cost (50 yr @ 8.375%)----------						23,292	1,092	3,267	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						23,292	1,092	3,267	27,651
Annual Cost Per Acre ----------						392	18	55	466
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	178
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-288

UTE/OFFMAN 1572

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M288
Parcel No. ---- M11-M-288
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pay Cap - 157
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 5/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
100	4	800	10.50			8400	42		
200	10	252	22.50			5,670	28		
200	18	234	50.00			11,700	59		
200	20	106	58.00			6,148	31		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210	55.2			210	1		
River Pump f(gpm,TDH,ac ft/yr) ----	100	224	24.8			17,380	87	520	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00							
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0								
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0								
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0							
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						49,508	248	520	
Engineering, Administration, Legal, Contingencies 25% ----------						12,377	248	520	
Total ----------						61,885	495	1,040	
Annualized Cost (50 yr @ 8.375%)----------						5,278	495	1,040	
Less Incremental Water System Cost, Parcel(s)									
Parcel Total Annual Cost ----------						5,278	495	1,040	6,812
Annual Cost Per Acre ----------						586	55	116	757
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------									157
Net Parcel Residual Water Payment Capacity ----------									-600

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ------ M289
Parcel No. ---- M11-M-289
Net Acres ----- 20
Crop ---------- CRN/SOY
Water Pay Cap - 187
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
200	10	561	22.50			12,623	63		
200	18	521	30.00			26,050	130		
200	20	236	58.00			13,688	68		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	3	210				630	3		
River Pump f(gpm,TDH,ac ft/yr) ---	222	200	55.2			24,934	125	1,033	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	77,924	390	1,033	
Engineering, Administration, Legal, Contingencies 25% ----------	19,481			
Total ----------	97,405	390	1,033	
Annualized Cost (50 yr @ 8.375%)----------	8,307	390	1,033	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	8,307	390	1,033	9,729
Annual Cost Per Acre ----------	415	19	52	486
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	187
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-299

UTE/OFFMAN 1573

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name -----	M290		
Parcel No. ----	M11-M-290		
Net Acres -----	57.4		
Crop ----------	CRN/SOY		
Water Pay Cap -	178		
System Type ---	GRAVITY	Power rate $/kwh ---	.068605
Water System --	M284-298	Interest rate ------	.08375
Date ----------	6/ 4/86	Project Life -------	50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
200	14	350	35.00			12,250	61		
200	18	1494	50.00			74,700	374		
200	20	676	58.00			39,208	196		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	8	210				1,680	8		
River Pump f(gpm,TDH,ac ft/yr) ---	637	156	158.4			40,440	202	2,312	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						168,278	841	2,312	
Engineering, Administration, Legal, Contingencies 25% ----------						42,070			
Total ----------						210,348	841	2,312	
Annualized Cost (50 yr @ 8.375%)----------						17,938	841	2,312	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						17,938	841	2,312	21,092
Annual Cost Per Acre ----------						313	15	40	367
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	178
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-189

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M291
Parcel No. ——— M11-M-291
Net Acres ——— 24
Crop ——————— CRN/SOY
Water Pay Cap - 186
System Type —— GRAVITY
Water System — M284-298
Date ——————— 6/ 4/86

Power rate $/kwh —— .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class #(diam,LF,$/ft) ———————									
200	18	624	50.00			31,200	156		
200	20	283	58.00			16,414	82		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ———————	3	210				630	3		
River Pump #(gpm,TDH,ac ft/yr) ——	266	152	66.2			26,415	132	942	
Booster #(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		
Subtotal ———————————						74,659	373	942	
Engineering, Administration, Legal, Contingencies 25% ———						18,665			
Total ———————————						93,323	373	942	
Annualized Cost (50 yr @ 8.375%)———						7,959	373	942	
Less Incremental Water System Cost, Parcel(s) _____ ———									
Parcel Total Annual Cost ———————						7,959	373	942	9,273
Annual Cost Per Acre ———————						332	16	39	386
Parcel Crop Payment Capacity (Input negitive numbers with a -) ———						———	———	———	186
Net Parcel Residual Water Payment Capacity ———						———	———	———	-200

UTE/OFFMAN

1574

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M292
Parcel No. ---- M11-M-292
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pay Cap - 157
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh ---. .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
200	18	132	50.00			6,600	33		
200	20	106	58.00			6,148	31		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ----	100	143	24.8			16,910	85	332	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						29,868	149	332	
Engineering, Administration, Legal, Contingencies 25% ----------						7,467			
Total ----------						37,335	149	332	
Annualized Cost (50 yr @ 8.375%)----------						3,184	149	332	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						3,184	149	332	3,665
Annual Cost Per Acre ----------						354	17	37	407
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	157
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-250

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M293
Parcel No. ---- M11-M-293
Net Acres ----- 11
Crop ---------- CRN/SOY
Water Pay Cap - 163
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
200	4	1800	11.50			20,700	104		
200	6	524	13.00			6,812	34		
200	20	130	58.00			7,540	38		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	122.1	149	30.4			18,511	93	424	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						53,773	269	424	
Engineering, Administration, Legal, Contingencies 25% ----------						13,443			
Total ----------						67,216	269	424	
Annualized Cost (50 yr @ 8.375%)----------						5,732	269	424	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						5,732	269	424	6,425
Annual Cost Per Acre ----------						521	24	39	584
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------									163
Net Parcel Residual Water Payment Capacity ----------									-421

UTE/OFFMAN

1575

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M294
Parcel No. ---- M11-M-294
Net Acres ----- 11
Crop ---------- CRN/SOY
Water Pay Cap - 163
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
200	18	109	50.00			5,450	27		
200	20	88	58.00			5,104	26		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	122.1	119	30.4			18,299	91	339	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						29,063	145	339	
Engineering, Administration, Legal, Contingencies 25% ----------						7,266			
Total ----------						36,329	145	339	
Annualized Cost (50 yr @ 8.375%)----------						3,098	145	339	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,098	145	339	3,582
Annual Cost Per Acre ----------						282	13	31	326
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	163
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-163

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M295
Parcel No. ---- M11-M-295
Net Acres ----- 11
Crop ---------- CRN/SOY
Water Pay Cap - 163
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
200	18	38	50.00			1,900	10		
200	20	130	58.00			7,540	38		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	122.1	102	30.4			18,180	91	290	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						27,830	139	290	
Engineering, Administration, Legal, Contingencies 25% ----------						6,958			
Total ----------						34,788	139	290	
Annualized Cost (50 yr @ 8.375%)----------						2,967	139	290	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						2,967	139	290	3,396
Annual Cost Per Acre ----------						270	13	26	309
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	163
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-146

UTE/OFFMAN 1576

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----	M296		
Parcel No. ----	M11-M-296		
Net Acres ----	10		
Crop ----	CRN/SOY		
Water Pay Cap -	160		
System Type ---	GRAVITY	Power rate $/kwh ---	.068605
Water System --	M284-298	Interest rate ----	.08375
Date ----	6/ 4/86	Project Life ----	50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----									
200	6	476	13.00			6,188	31		
200	20	118	58.00			6,844	34		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	111	114	27.6			17,521	88	294	
Booster f(gpm,TDH,ac ft/yr) ----	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----						30,763	154	294	
Engineering, Administration, Legal, Contingencies 25% ----						7,691			
Total ----						38,454	154	294	
Annualized Cost (50 yr @ 8.375%) ----						3,279	154	294	
Less Incremental Water System Cost, Parcel(s) _____ ----									
Parcel Total Annual Cost ----						3,279	154	294	3,728
Annual Cost Per Acre ----						328	15	29	373
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----						-------	-------	-------	160
Net Parcel Residual Water Payment Capacity ----						-------	-------	-------	-213

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ------ M297
Parcel No. ---- M11-M-297
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pay Cap - 199
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
200	20	106	58.00			6,148	31		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	106	80	27.6			16,970	85	207	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						23,328	117	207	
Engineering, Administration, Legal, Contingencies 25% ----------						5,832			
Total ----------						29,160	117	207	
Annualized Cost (50 yr @ 8.375%)----------						2,487	117	207	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,487	117	207	2,810
Annual Cost Per Acre ----------						276	13	23	312
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	199
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-113

UTE/OFFMAN 1577

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M298
Parcel No. ---- M11-M-298
Net Acres ----- 7
Crop ---------- CRN/SOY
Water Pay Cap - 186
System Type --- GRAVITY
Water System -- M284-298
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
200	20	55.9	58.00			3,242	16		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	82.6	57	21.5			15,156	76	115	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						18,608	93	115	
Engineering, Administration, Legal, Contingencies 25% ----------						4,652			
Total ----------						23,260	93	115	
Annualized Cost (50 yr @ 8.375%)----------						1,984	93	115	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						1,984	93	115	2,191
Annual Cost Per Acre ----------						283	13	16	313
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						--------	--------	--------	186
Net Parcel Residual Water Payment Capacity ----------						--------	--------	--------	-127

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M299a
Parcel No. ———M11-M-299a
Net Acres ——— 5
Crop ———— CRN/SOY
Water Pay Cap - 173
System Type ——— GRAVITY
Water System —— M299a
Date ———— 5/27/86

Power rate $/kwh ——— .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ————									
100	4	100	10.50			1,050	5		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ————	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ——	59	40	15.4			13,109	66	58	
Booster f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ————						14,159	71	58	
Engineering, Administration, Legal, Contingencies 25% ————						3,540			
Total ————						17,699	71	58	
Annualized Cost (50 yr @ 8.375%)————						1,509	71	58	
Less Incremental Water System Cost, Parcel(s) _____————									
Parcel Total Annual Cost ————						1,509	71	58	1,638
Annual Cost Per Acre ————						302	14	12	328
Parcel Crop Payment Capacity (Input negitive numbers with a -) ————						———	———	———	173
Net Parcel Residual Water Payment Capacity ————						———	———	———	-155

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M299b
Parcel No. ----M11-M-299b
Net Acres ----- 13
Crop ---------- CRN/SOY
Water Pay Cap - 210
System Type --- GRAVITY
Water System -- M299b,301
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	300	10.50			3,150	16		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	12	210				2,520	13		
River Pump f(gpm,TDH,ac ft/yr) ---	153	44	39.9			19,555	98	164	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						25,225	126	164	
Engineering, Administration, Legal, Contingencies 25% ----------						6,306			
Total ----------						31,531	126	164	
Annualized Cost (50 yr @ 8.375%)----------						2,689	126	164	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,689	126	164	2,979
Annual Cost Per Acre ----------						207	10	13	229
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	210
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-19

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M300
Parcel No. ---- M11-M-300
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pay Cap - 199
System Type --- GRAVITY
Water System --M300,306,7
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	4	400	10.50			4,200	21		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	11	210				2,310	12		
River Pump f(gpm,TDH,ac ft/yr) ----	106.2	43	27.6			16,767	84	111	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						23,277	116	111	
Engineering, Administration, Legal, Contingencies 25% ----------						5,819			
Total ----------						29,096	116	111	
Annualized Cost (50 yr @ 8.375%)----------						2,481	116	111	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						2,481	116	111	2,709
Annual Cost Per Acre ----------						276	13	12	301
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	199
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-102

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M301
Parcel No. ---- M11-M-301
Net Acres ----- 42.5
Crop ---------- CRN/SOY
Water Pay Cap - 222
System Type --- GRAVITY
Water System -- M299b,301
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	8	700	15.50			10,850	54		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	38	210				7,980	40		
River Pump f(gpm,TDH,ac ft/yr) ----	502	93	130.5			33,959	170	1,136	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						52,789	264	1,136	
Engineering, Administration, Legal, Contingencies 25% ----------						13,197			
Total ----------						65,986	264	1,136	
Annualized Cost (50 yr @ 8.375%)----------						5,627	264	1,136	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						5,627	264	1,136	7,027
Annual Cost Per Acre ----------						132	6	27	165
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	222
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	57

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M302
Parcel No. ---- M11-M-302
Net Acres ----- 30
Crop ---------- CRN/SOY
Water Pay Cap - 184
System Type --- GRAVITY
Water System -- M302,303
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	6	1000	12.00			12,000	60		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	31	210				6,510	33		
River Pump f(gpm,TDH,ac ft/yr) ---	333	117	92.1			28,650	143	1,008	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	47,160	236	1,008	
Engineering, Administration, Legal, Contingencies 25% ----------	11,790			
Total ----------	58,950	236	1,008	
Annualized Cost (50 yr @ 8.375%)----------	5,027	236	1,008	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	5,027	236	1,008	6,271
Annual Cost Per Acre ----------	168	8	34	209
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	184
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-25

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M303
Parcel No. ---- M11-M-303
Net Acres ----- 18
Crop ---------- CRN/SOY
Water Pay Cap - 182
System Type --- GRAVITY
Water System -- M302,303
Date ---------- 4/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	6	700	12.00			8,400	42		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	19	210				3,990	20		
River Pump f(gpm,TDH,ac ft/yr) ----	200	112	49.7			22,681	113	521	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						35,071	175	521	
Engineering, Administration, Legal, Contingencies 25% ----------						8,768			
Total ----------						43,839	175	521	
Annualized Cost (50 yr @ 8.375%)----------						3,739	175	521	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,739	175	521	4,435
Annual Cost Per Acre ----------						208	10	29	246
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	182
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-64

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M304
Parcel No. ——— M11-M-304
Net Acres ——— 5
Crop ——— CRN/SOY
Water Pay Cap - 131
System Type ——— GRAVITY
Water System — M304,305
Date ——— 6/ 4/86

Power rate $/kwh ——— .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ———									
100	4	462	10.50			4,851	24		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ———	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ———	55.5	124	19.8			13,032	65	160	
Booster f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ———						17,883	89	160	
Engineering, Administration, Legal, Contingencies 25% ———						4,471			
Total ———						22,354	89	160	
Annualized Cost (50 yr @ 8.375%) ———						1,906	89	160	
Less Incremental Water System Cost, Parcel(s) _____ ———									
Parcel Total Annual Cost ———						1,906	89	160	2,156
Annual Cost Per Acre ———						381	18	32	431
Parcel Crop Payment Capacity (Input negitive numbers with a -) ———						———	———	———	131
Net Parcel Residual Water Payment Capacity ———						———	———	———	-300

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M305
Parcel No. ---- M11-M-305
Net Acres ----- 8
Crop ---------- CRN/SOY
Water Pay Cap - 151
System Type --- GRAVITY
Water System -- M304,305
Date ---------- 7/14/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	4	938	10.50			9,849	49		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	89	125	22.1			15,976	80	259	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	25,825	129	259	
Engineering, Administration, Legal, Contingencies 25% ----------	6,456			
Total ----------	32,282	129	259	
Annualized Cost (50 yr @ 8.375%)----------	2,753	129	259	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	2,753	129	259	3,141
Annual Cost Per Acre ----------	344	16	32	393
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	--------	--------	--------	151
Net Parcel Residual Water Payment Capacity ----------	--------	--------	--------	-242

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M306
Parcel No. ---- M11-M-306
Net Acres ----- 10
Crop ---------- CRN/SOY
Water Pay Cap - 202
System Type --- GRAVITY
Water System --M300,306-7
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	4	300	10.50			3,150	16		
100	6	129	12.00			1,548	8		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	13	210				2,730	14		
River Pump f(gpm,TDH,ac ft/yr) ---	118	85	30.7			17,799	89	244	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						25,227	126	244	
Engineering, Administration, Legal, Contingencies 25% ----------						6,307			
Total ----------						31,534	126	244	
Annualized Cost (50 yr @ 8.375%)----------						2,689	126	244	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						2,689	126	244	3,060
Annual Cost Per Acre ----------						269	13	24	306
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	202
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-104

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M307
Parcel No. ---- M11-M-307
Net Acres ----- .21
Crop ---------- CRN/SOY
Water Pay Cap - 228
System Type --- GRAVITY
Water System --M300,306-7
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	6	271	12.00			3,252	16		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	26	210				5,460	27		
River Pump f(gpm,TDH,ac ft/yr) ---	248	82	64.5			24,536	123	495	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						33,248	166	495	
Engineering, Administration, Legal, Contingencies 25% ----------						8,312			
Total ----------						41,561	166	495	
Annualized Cost (50 yr @ 8.375%)----------						3,544	166	495	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,544	166	495	4,205
Annual Cost Per Acre ----------						169	8	24	200
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	228
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	28

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M308
Parcel No. ---- M11-M-308
Net Acres ----- 31
Crop ---------- CRN/SOY
Water Pay Cap - 225
System Type --- GRAVITY
Water System -- M308,309
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	6	800	12.00			9,600	48		
100	8	194	15.50			3,007	15		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	32	210				6,720	34		
River Pump f(gpm,TDH,ac ft/yr) ----	366	109	95.2			29,749	149	971	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	49,076	245	971	
Engineering, Administration, Legal, Contingencies 25% ----------	12,269			
Total ----------	61,346	245	971	
Annualized Cost (50 yr @ 8.375%)----------	5,231	245	971	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	5,231	245	971	6,448
Annual Cost Per Acre ----------	169	8	31	208
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	225
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	17

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M309
Parcel No. ---- M11-M-309
Net Acres ----- 17
Crop ---------- CRN/SOY
Water Pay Cap - 220
System Type --- GRAVITY
Water System -- M308,309
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	8	106	15.50			1,643	8		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	18	210				3,780	19		
River Pump f(gpm,TDH,ac ft/yr) ---	201	91	52.2			22,485	112	445	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						27,908	140	445	
Engineering, Administration, Legal, Contingencies 25% ----------						6,977			
Total ----------						34,886	140	445	
Annualized Cost (50 yr @ 8.375%)----------						2,975	140	445	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,975	140	445	3,559
Annual Cost Per Acre ----------						175	8	26	209
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	220
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	11

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M310
Parcel No. ---- M11-M-310
Net Acres ----- 45.5
Crop ---------- CRN/SOY
Water Pay Cap - 180
System Type --- GRAVITY
Water System -- M310,312
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	8	150	15.50			2,325	12		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	20	210				4,200	21		
River Pump f(gpm,TDH,ac ft/yr) ----	505	51	125.6			32,778	164	599	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
Subtotal	39,303	197	599	
Engineering, Administration, Legal, Contingencies 25%	9,826			
Total	49,129	197	599	
Annualized Cost (50 yr @ 8.375%)	4,190	197	599	
Less Incremental Water System Cost, Parcel(s) _____				
Parcel Total Annual Cost	4,190	197	599	4,986
Annual Cost Per Acre	92	4	13	110
Parcel Crop Payment Capacity (Input negitive numbers with a -)	-------	-------	-------	180
Net Parcel Residual Water Payment Capacity	-------	-------	-------	70

UTE/OFFMAN

1584

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M311
Parcel No. ---- M11-M-311
Net Acres ----- 6
Crop ---------- CRN/SOY
Water Pay Cap - 138
System Type --- GRAVITY
Water System -- M311
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	4	50	10.50			525	3		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	67	50	16.6			13,857	69	78	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						14,382	72	78	
Engineering, Administration, Legal, Contingencies 25% ----------						3,595			
Total ----------						17,977	72	78	
Annualized Cost (50 yr @ 8.375%)----------						1,533	72	78	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						1,533	72	78	1,683
Annual Cost Per Acre ----------						256	12	13	280
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	138
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-142

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M312
Parcel No. ---- M11-M-312
Net Acres ----- 67.3
Crop ---------- CRN/SOY
Water Pay Cap - 176
System Type --- GRAVITY
Water System -- M310,312
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	8	150	15.50			2,325	12		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	30	210				6,300	32		
River Pump f(gpm,TDH,ac ft/yr) ----	747	71	185.8			39,878	199	1,234	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	48,503	243	1,234	
Engineering, Administration, Legal, Contingencies 25% ----------	12,126			
Total ----------	60,629	243	1,234	
Annualized Cost (50 yr @ 8.375%)----------	5,170	243	1,234	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	5,170	243	1,234	6,647
Annual Cost Per Acre ----------	77	4	18	99
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	176
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	77

UTE/OFFMAN 1585

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M313
Parcel No. ---- M11-M-313
Net Acres ----- 10
Crop ---------- CRN/SOY
Water Pay Cap - 160
System Type --- GRAVITY
Water System -- M313
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	4	300	10.50			3,150	16		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	111	52	27.6			17,135	86	134	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						20,285	101	134	
Engineering, Administration, Legal, Contingencies 25% ----------						5,071			
Total ----------						25,356	101	134	
Annualized Cost (50 yr @ 8.375%)----------						2,162	101	134	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,162	101	134	2,398
Annual Cost Per Acre ----------						216	10	13	240
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	160
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-80

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M314
Parcel No. ---- M11-M-314
Net Acres ----- 161.6
Crop ---------- CRN/SOY
Water Pay Cap - 231
System Type --- CNTRPVT
Water System -- M314
Date ---------- 5/23/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
150	12	200	26.50			5,300	27		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	50	210				10,500	53		
River Pump f(gpm,TDH,ac ft/yr) ----	1551	289	386.2			78,723	394	10,444	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	94,523	473	10,444	
Engineering, Administration, Legal, Contingencies 25% ----------	23,631			
Total ----------	118,154	473	10,444	
Annualized Cost (50 yr @ 8.375%)----------	10,076	473	10,444	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	10,076	473	10,444	20,993
Annual Cost Per Acre ----------	62	3	65	130
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	231
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	101

UTE/OFFMAN

1586

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M315
Parcel No. ---- M11-M-315
Net Acres ----- 28
Crop ---------- CRN/SOY
Water Pay Cap - 184
System Type --- GRAVITY
Water System -- M315
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	6	50	12.00			600	3		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	311	50	77.3			26,535	133	362	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						27,135	136	362	
Engineering, Administration, Legal, Contingencies 25% ----------						6,784			
Total ----------						33,919	136	362	
Annualized Cost (50 yr @ 8.375%)----------						2,893	136	362	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,893	136	362	3,390
Annual Cost Per Acre ----------						103	5	13	121
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						--------	--------	--------	184
Net Parcel Residual Water Payment Capacity ----------						--------	--------	--------	63

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M316
Parcel No. ---- M11-M-316
Net Acres ----- 33
Crop ---------- CRN/SOY
Water Pay Cap - 183
System Type --- GRAVITY
Water System -- M316,317
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	6	200	12.00			2,400	12		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	10	210				2,100	11		
River Pump f(gpm,TDH,ac ft/yr) ----	366	32	91			28,089	140	272	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						32,589	163	272	
Engineering, Administration, Legal, Contingencies 25% ----------						8,147			
Total ----------						40,736	163	272	
Annualized Cost (50 yr @ 8.375%)----------						3,474	163	272	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,474	163	272	3,909
Annual Cost Per Acre ----------						105	5	8	118
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	183
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	65

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M317
Parcel No. ---- M11-M-317
Net Acres ----- 124.9
Crop ---------- CRN/SOY
Water Pay Cap - 228
System Type --- CNTRPVT
Water System -- M316,317
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
150	10	400	21.00			8,400	42		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	40	210				8,400	42		
River Pump f(gpm,TDH,ac ft/yr) ----	1199	292	298.5			67,104	336	8,156	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						83,904	420	8,156	
Engineering, Administration, Legal, Contingencies 25% ----------						20,976			
Total ----------						104,880	420	8,156	
Annualized Cost (50 yr @ 8.375%)----------						8,944	420	8,156	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						8,944	420	8,156	17,520
Annual Cost Per Acre ----------						72	3	65	140
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	228
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	88

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M318
Parcel No. ---- M11-M-318
Net Acres ----- 47.5
Crop ---------- CRN/SOY
Water Pay Cap - 180
System Type --- GRAVITY
Water System -- M318
Date ---------- 5/23/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft). ----------									
100	8	300	15.50			4,650	23		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	50	210				10,500	53		
River Pump f(gpm,TDH,ac ft/yr) ----	527	171	131.1			37,280	186	2,098	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
Subtotal ----------	52,430	262	2,098	
Engineering, Administration, Legal, Contingencies 25% ----------	13,107			
Total ----------	65,537	262	2,098	
Annualized Cost (50 yr @ 8.375%)----------	5,589	262	2,098	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	5,589	262	2,098	7,949
Annual Cost Per Acre ----------	118	6	44	167
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	180
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	13

UTE/OFFMAN **1588**

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M319
Parcel No. ---- M11-M-319
Net Acres ----- 26
Crop ---------- CRN/SOY
Water Pay Cap - 185
System Type --- GRAVITY
Water System -- M319
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
100	6	200	12.00			2,400	12		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	289	131	71.8			27,093	135	880	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						29,493	147	880	
Engineering, Administration, Legal, Contingencies 25% ----------						7,373			
Total ----------						36,866	147	880	
Annualized Cost (50 yr @ 8.375%)----------						3,144	147	880	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,144	147	880	4,171
Annual Cost Per Acre ----------						121	6	34	160
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	185
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	25

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M320
Parcel No. ---- M11-M-320
Net Acres ----- 5
Crop ---------- CRN/SOY
Water Pay Cap - 131
System Type --- GRAVITY
Water System -- M320
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	4	50	10.50			525	3		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	56	40	13.8			12,828	64	52	
Booster f(gpm,TDH,ac ft/yr)-------	0	.0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	13,353	67	52	
Engineering, Administration, Legal, Contingencies 25% ----------	3,338			
Total ----------	16,691	67	52	
Annualized Cost (50 yr @ 8.375%)----------	1,423	67	52	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	1,423	67	52	1,542
Annual Cost Per Acre ----------	285	13	10	308
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	--------	--------	--------	131
Net Parcel Residual Water Payment Capacity ----------	--------	--------	--------	-177

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M321
Parcel No. ---- M11-M-321
Net Acres ----- 137.4
Crop ---------- CRN/SOY
Water Pay Cap - 231
System Type --- CNTRPVT
Water System -- M321-323
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
200	12	300	28.50			8,550	43		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	6	210				1,260	6		
River Pump f(gpm,TDH,ac ft/yr) ---	1319	390	328.4			80,059	400	11,985	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						89,869	449	11,985	
Engineering, Administration, Legal, Contingencies 25% ----------						22,467			
Total ----------						112,336	449	11,985	
Annualized Cost (50 yr @ 8.375%)----------						9,580	449	11,985	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						9,580	449	11,985	22,014
Annual Cost Per Acre ----------						70	3	87	160
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	231
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	71

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M322
Parcel No. ---- M11-M-322
Net Acres ----- 89.1
Crop ---------- CRN/SOY
Water Pay Cap - 174
System Type --- GRAVITY
Water System -- M322
Date ---------- 5/23/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	10	50	20.00			1,000	5		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	50	210				10,500	53		
River Pump f(gpm,TDH,ac ft/yr) ---	989	90	245.9			46,598	233	2,071	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						58,098	290	2,071	
Engineering, Administration, Legal, Contingencies 25% ----------						14,524			
Total ----------						72,622	290	2,071	
Annualized Cost (50 yr @ 8.375%)----------						6,193	290	2,071	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						6,193	290	2,071	8,555
Annual Cost Per Acre ----------						70	3	23	96
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------									174
Net Parcel Residual Water Payment Capacity ----------									78

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

1590

File Name -----	M323		
Parcel No. ----	M11-M-323		
Net Acres -----	959.6		
Crop ----------	CRN/SOY		
Water Pay Cap -	231		
System Type ---	CNTRPVT	Power rate $/kwh ---	.068605
Water System --	M321,323	Interest rate ------	.08375
Date ----------	7/14/86	Project Life -------	50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
250	30	50	111.00			5,550	28		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	44	210				9,240	46		
River Pump f(gpm,TDH,ac ft/yr) ----	9212	459	2293.4			410,058	2,050	98,506	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	424,848	2,124	98,506	
Engineering, Administration, Legal, Contingencies 25% ----------	106,212			
Total ----------	531,060	2,124	98,506	
Annualized Cost (50 yr @ 8.375%)----------	45,288	2,124	98,506	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	45,288	2,124	98,506	145,918
Annual Cost Per Acre ----------	47	2	103	152
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	--------	--------	--------	231
Net Parcel Residual Water Payment Capacity ----------	--------	--------	--------	79

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M324
Parcel No. ---- M11-M-324
Net Acres ----- 20
Crop ---------- CRN/SOY
Water Pay Cap - 187
System Type --- GRAVITY
Water System -- M324
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	6	50	12.00			600	3		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion-f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	222	70	55.2			23,219	116	362	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	23,819	119	362	
Engineering, Administration, Legal, Contingencies 25% ----------	5,955			
Total ----------	29,774	119	362	
Annualized Cost (50 yr @ 8.375%)----------	2,539	119	362	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	2,539	119	362	3,020
Annual Cost Per Acre ----------	127	6	18	151
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	187
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	36

UTE/OFFMAN **1591**

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M325
Parcel No. ---- M11-M-325
Net Acres ----- 136.6
Crop ---------- CRN/SOY
Water Pay Cap - 174
System Type --- GRAVITY
Water System -- M325-327
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	12	1724	24.00			41,376	207		
100	16	180	34.00			6,120	31		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	20	210				4,200	21		
River Pump f(gpm,TDH,ac ft/yr) ---	1516	200	377			68,466	342	7,056	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						120,162	601	7,056	
Engineering, Administration, Legal, Contingencies 25% ----------						30,041			
Total ----------						150,203	601	7,056	
Annualized Cost (50 yr @ 8.375%)----------						12,809	601	7,056	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						12,809	601	7,056	20,466
Annual Cost Per Acre ----------						94	4	52	150
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	174
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	24

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M326
Parcel No. ---- M11-M-326
Net Acres ----- 6
Crop ---------- CRN/SOY
Water Pay Cap - 138
System Type --- GRAVITY
Water System -- M325-327
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	800	10.50			8,400	42		
100	12	76	24.00			1,824	9		
100	16	8	34.00			272	1		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion-f(ft,$/ft) ----------	1	210				210	1		
River Pump f(gpm,TDH,ac ft/yr) ---	67	102	16.6			14,046	70	158	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						24,752	124	158	
Engineering, Administration, Legal, Contingencies 25% ----------						6,188			
Total ----------						30,940	124	158	
Annualized Cost (50 yr @ 8.375%)----------						2,639	124	158	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,639	124	158	2,921
Annual Cost Per Acre ----------						440	21	26	487
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	138
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-349

UTE/OFFMAN

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COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M327
Parcel No. ---- M11-M-327
Net Acres ——— 160.7
Crop ---------- CRN/SOY
Water Pay Cap - 231
System Type --- CNTRPVT
Water System -- M325-327
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	16	212	34.00			7,208	36		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	29	210				6,090	30		
River Pump f(gpm,TDH,ac ft/yr) ----	1543	210	384.1			70,218	351	7,548	
Booster f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						83,316	418	7,548	
Engineering, Administration, Legal, Contingencies 25% ----------						20,879			
Total ----------						104,395	418	7,548	
Annualized Cost (50 yr @ 8.375%)----------						8,903	418	7,548	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						8,903	418	7,548	16,868
Annual Cost Per Acre ----------						55	3	47	105
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						———	———	———	231
Net Parcel Residual Water Payment Capacity ----------						———	———	———	126

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M328
Parcel No. ---- M11-M-328
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pag Cap - 157
System Type --- GRAVITY
Water System -- M328
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	3000	10.50			31,500	158		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion-f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	100	87	24.8			16,592	83	202	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						48,092	240	202	
Engineering, Administration, Legal, Contingencies 25% ----------						12,023			
Total ----------						60,115	240	202	
Annualized Cost (50 yr @ 8.375%)----------						5,127	240	202	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						5,127	240	202	5,569
Annual Cost Per Acre ----------						570	27	22	619
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	157
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-462

UTE/OFFMAN

1593

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M329a
Parcel No. ----M11-M-329a
Net Acres ----- 4
Crop ---------- CRN/SOY
Water Pay Cap - 131
System Type --- GRAVITY
Water System --M329a,329b
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	2000	10.50			21,000	105		
100	8	18	15.50			279	1		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	3	210				630	3		
River Pump f(gpm,TDH,ac ft/yr) ---	44	95	11			11,734	59	98	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						33,643	168	98	
Engineering, Administration, Legal, Contingencies 25% ----------						8,411			
Total ----------						42,053	168	98	
Annualized Cost (50 yr @ 8.375%)----------						3,586	168	98	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,586	168	98	3,852
Annual Cost Per Acre ----------						897	42	24	963
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	131
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-832

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M329b
Parcel No. ----M11-M-329b
Net Acres ----- 61.3
Crop ---------- CRN/SOY
Water Pay Cap - 177
System Type --- GRAVITY
Water System --M329a,329b
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	8	282	15.50			4,371	22		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion-f(ft,$/ft)----------	47	210				9,870	49		
River Pump f(gpm,TDH,ac ft/yr) ---	680	67	169			38,031	190	1,060	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						52,272	261	1,060	
Engineering, Administration, Legal, Contingencies 25% ----------						13,068			
Total ----------						65,340	261	1,060	
Annualized Cost (50 yr @ 8.375%)----------						5,572	261	1,060	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						5,572	261	1,060	6,893
Annual Cost Per Acre ----------						91	4	17	112
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						_____	_____	_____	177
Net Parcel Residual Water Payment Capacity ----------						_____	_____	_____	65

UTE/OFFMAN 1594

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M330
Parcel No. ---- M11-M-330
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pay Cap - 157
System Type --- GRAVITY
Water System -- M330,331c
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	4	2000	10.50			21,000	105		
100	10	10	20.00			200	1		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
iversion f(ft,$/ft) ----------	5	210				1,050	5		
iver Pump f(gpm,TDH,ac ft/yr) ---	100	72	24.8			16,509	83	167	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
OWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
UMP STA R/W: f(acres,$/ac)	0	0				0	0		
ibtotal ----------						38,759	194	167	
gineering, Administration, Legal, Contingencies 25% ----------						9,690			
tal ----------						48,448	194	167	
nualized Cost (50 yr @ 8.375%)----------						4,132	194	167	
ss Incremental Water System Cost, Parcel(s) _____----------									
rcel Total Annual Cost ----------						4,132	194	167	4,493
ual Cost Per Acre ----------						459	22	19	499
rcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	157
Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-342

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M331a
Parcel No. ----M11-M-331a
Net Acres ----- 11
Crop ---------- CRN/SOY
Water Pay Cap - 163
System Type --- GRAVITY
Water System --M331a,331b
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	300	10.50			3,150	16		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	122	73	30.4			17,974	90	208	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	21,124	106	208	
Engineering, Administration, Legal, Contingencies 25% ----------	5,281			
Total ----------	26,405	106	208	
Annualized Cost (50 yr @ 8.375%)----------	2,252	106	208	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	2,252	106	208	2,565
Annual Cost Per Acre ----------	205	10	19	233
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	163
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-70

UTE/OFFMAN

1595

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M331b
Parcel No. ----M11-M-331b
Net Acres ----- 6
Crop ---------- CRN/SOY
Water Pay Cap - 138
System Type --- GRAVITY
Water System --M331a,331b
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	500	10.50			5,250	26		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	67	46	16.6			13,842	69	71	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						19,092	95	71	
Engineering, Administration, Legal, Contingencies 25% ----------						4,773			
Total ----------						23,865	95	71	
Annualized Cost (50 yr @ 8.375%)----------						2,035	95	71	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						2,035	95	71	2,202
Annual Cost Per Acre ----------						339	16	12	367
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	138
= Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-229

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M331c
Parcel No. ----M11-M-331c
Net Acres ----- 84.1
Crop ---------- CRN/SOY
Water Pay Cap - 174
System Type --- GRAVITY
Water System -- M330,331c
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	10	90	20.00			1,800	9		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	45	210				9,450	47		
River Pump f(gpm,TDH,ac ft/yr) ----	934	26	232.1			41,675	208	565	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						52,925	265	565	
Engineering, Administration, Legal, Contingencies 25% ----------						13,231			
Total ----------						66,156	265	565	
Annualized Cost (50 yr @ 8.375%)----------						5,642	265	565	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						5,642	265	565	6,471
Annual Cost Per Acre ----------						67	3	7	77
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	174
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	97

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M336
Parcel No. ---- M11-M-336
Net Acres ----- 30
Crop ---------- CRN/SOY
Water Pay Cap - 144
System Type --- GRAVITY
Water System --M336,341-3
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
300	10	2755	25.00			68,875	344		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	15	210				3,150	16		
River Pump f(gpm,TDH,ac ft/yr) ----	300	651	70.5			37,466	187	4,295	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						109,491	547	4,295	
Engineering, Administration, Legal, Contingencies 25% ----------						27,373			
Total ----------						136,863	547	4,295	
Annualized Cost (50 yr @ 8.375%)----------						11,672	547	4,295	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						11,672	547	4,295	16,514
Annual Cost Per Acre ----------						389	18	143	550
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	144
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-406

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M341
Parcel No. ---- M11-M-341
Net Acres ----- 16
Crop ---------- CRN/SOY
Water Pay Cap - 136
System Type --- GRAVITY
Water System --M336,341-3
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	8	588	15.50			9,114	46		
300	10	1469	25.00			36,725	184		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	8	210				1,680	8		
River Pump f(gpm,TDH,ac ft/yr) ----	160	649	37.6			25,821	129	2,284	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	73,340	367	2,284	
Engineering, Administration, Legal, Contingencies 25% ----------	18,335			
Total ----------	91,675	367	2,284	
Annualized Cost (50 yr @ 8.375%)----------	7,818	367	2,284	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	7,818	367	2,284	10,468
Annual Cost Per Acre ----------	489	23	143	654
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	136
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	-518

UTE/OFFMAN

1597

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M342
Parcel No. ---- M11-M-342
Net Acres ----- 16
Crop ---------- CRN/SOY
Water Pay Cap - 136
System Type --- GRAVITY
Water System --M336,341-3
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	3400	10.50			35,700	179		
100	8	2127	15.50			32,969	165		
300	10	1469	25.00			36,725	184		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	8	210				1,680	8		
River Pump f(gpm,TDH,ac ft/yr) ----	160	696	37.6			26,298	131	2,449	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						133,371	667	2,449	
Engineering, Administration, Legal, Contingencies 25% ----------						33,343			
Total ----------						166,714	667	2,449	
Annualized Cost (50 yr @ 8.375%)----------						14,217	667	2,449	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						14,217	667	2,449	17,333
Annual Cost Per Acre ----------						889	42	153	1,083
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	136
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-947

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M343
Parcel No. ——— M11-M-343
Net Acres ——— 23
Crop ——— CRN/SOY
Water Pay Cap - 146
System Type --- GRAVITY
Water System --M336,341-3
Date ——— 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dian,Lf,$/ft) ———									
100	8	3057	15.50			47,384	237		
300	10	2112	25.00			52,800	264		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ———	12	210				2,520	13		
River Pump f(gpm,TDH,ac ft/yr) ---	230	609	54.1			31,271	156	3,083	
Booster f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ———						133,975	670	3,083	
Engineering, Administration, Legal, Contingencies 25% ———						33,494			
Total ———						167,468	670	3,083	
Annualized Cost (50 yr @ 8.375%)———						14,282	670	3,083	
Less Incremental Water System Cost, Parcel(s) _____ ———									
Parcel Total Annual Cost ———						14,282	670	3,083	18,034
Annual Cost Per Acre ———						621	29	134	784
Parcel Crop Payment Capacity (Input negitive numbers with a -) ———						———	———	———	146
Net Parcel Residual Water Payment Capacity ———						———	———	———	-638

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

1598

File Name ——— M347
Parcel No. ——— M11-M-347
Net Acres ——— 13
Crop ——— CRN/SOY
Water Pay Cap - 128
System Type ——— GRAVITY
Water System — M341-3,47
Date ——— 6/ 4/86

Power rate $/kwh ——— .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ———									
100	4	2600	10.50			27,300	137		
100	8	1728	15.50			26,784	134		
300	10	1194	25.00			29,850	149		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ———	7	210				1,470	7		
River Pump f(gpm,TDH,ac ft/yr) ———	130	614	30.6			22,713	114	1,758	
Booster f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ———						108,117	541	1,758	
Engineering, Administration, Legal, Contingencies 25% ———						27,029			
Total ———						135,146	541	1,758	
Annualized Cost (50 yr @ 8.375%) ———						11,525	541	1,758	
Less Incremental Water System Cost, Parcel(s) _____ ———									
Parcel Total Annual Cost ———						11,525	541	1,758	13,824
Annual Cost Per Acre ———						887	42	135	1,063
Parcel Crop Payment Capacity (Input negitive numbers with a -) ———						———	———	———	128
Net Parcel Residual Water Payment Capacity ———						———	———	———	-935

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M348
Parcel No. ---- M11-M-348
Net Acres ----- 10
Crop ---------- CRN/SOY
Water Pay Cap - 160
System Type --- GRAVITY
Water System -- M348-351
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class #(diam,LF,$/ft) ----------									
100	4	4567	10.50			47,954	240		
150	6	1969	12.50			24,613	123		
200	8	1425	.17.00			24,225	121		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ----------	15	210				3,150	16		
River-Pump-#(gpm,TDH,ac ft/yr) ----	111	353	27.6			19,085	95	912	
Booster #(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		
Subtotal ----------						119,026	595	912	
Engineering, Administration, Legal, Contingencies 25% ----------						29,757			
Total ----------						148,783	595	912	
Annualized Cost (50 yr @ 8.375%)----------						12,688	595	912	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						12,688	595	912	14,195
Annual Cost Per Acre ----------						1,269	60	91	1,419
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	160
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-1,259

UTE/OFFMAN

1599

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M349
Parcel No. ---- M11-M-349
Net Acres ----- 5
Crop ---------- CRN/SOY
Water Pay Cap - 131
System Type --- GRAVITY
Water System -- M348-351
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	733	10.50			7,697	38		
150	6	984	12.50			12,300	62		
200	8	713	17.00			12,121	61		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	6	210				1,260	6		
River Pump f(gpm,TDH,ac ft/yr) ---	36	313	13.8			13,684	68	404	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						47,061	235	404	
Engineering, Administration, Legal, Contingencies 25% ----------						11,765			
Total ----------						58,826	235	404	
Annualized Cost (50 yr @ 8.375%)----------						5,017	235	404	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						5,017	235	404	5,656
Annual Cost Per Acre ----------						1,003	47	81	1,131
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	131
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-1,000

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ------ M350
Parcel No. ---- M11-M-350
Net Acres ----- 17
Crop ---------- CRN/SOY
Water Pay Cap - 179
System Type --- GRAVITY
Water System -- M348-351
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
150	6	3347	12.50			41,838	209		
200	8	2423	17.00			41,191	206		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	21	210				4,410	22		
River Pump f(gpm,TDH,ac-ft/yr) ----	189	280	46.9			24,025	120	1,229	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						111,464	557	1,229	
Engineering, Administration, Legal, Contingencies 25% ----------						27,866			
Total ----------						139,330	557	1,229	
Annualized Cost (50 yr @ 8.375%)----------						11,882	557	1,229	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						11,882	557	1,229	13,668
Annual Cost Per Acre ----------						699	33	72	804
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	179
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-625

UTE/OFFMAN 1600

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M351
Parcel No. ---- M11-M-351
Net Acres ----- 8
Crop ---------- CRN/SOY
Water Pay Cap - 151
System Type --- GRAVITY
Water System -- M348-351
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
200	8	1140	17.00			19,380	97		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	10	210				2,100	11		
River Pump f(gpm,TDH,ac ft/gr) ---	89	128	22.1			15,991	80	265	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						37,471	187	265	
Engineering, Administration, Legal, Contingencies 25% ----------						9,368			
Total ----------						46,839	187	265	
Annualized Cost (50 yr @ 8.375%)----------						3,994	187	265	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,994	187	265	4,446
Annual Cost Per Acre ----------						499	23	33	556
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						------	------	------	151
Net Parcel Residual Water Payment Capacity ----------						------	------	------	-405

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M353
Parcel No. ---- M12-M-353
Net Acres ----- 31
Crop ---------- CRN/SOY
Water Pay Cap - 143
System Type --- GRAVITY
Water System -- M353,354
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	6	300	12.00			3,600	18		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	31	210				6,510	33		
River Pump f(gpm,TDH,ac-ft/yr) ---	310	172	72.9			28,759	144	1,173	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						38,869	194	1,173	
Engineering, Administration, Legal, Contingencies 25% ----------						9,717			
Total ----------						48,587	194	1,173	
Annualized Cost (50 yr @ 8.375%)----------						4,143	194	1,173	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						4,143	194	1,173	5,511
Annual Cost Per Acre ----------						134	6	38	178
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	143
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-35

UTE/OFFMAN

1601

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M354
Parcel No. ---- M12-M-354
Net Acres ----- 19
Crop ---------- CRN/SOY
Water Pay Cap - 144
System Type --- GRAVITY
Water System -- M353,354
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	4	300	10.50			3,150	16		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	19	210				3,990	20		
River Pump f(gpm,TDH,ac ft/yr) ---	190	56	44.7			21,557	108	234	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						28,697	143	234	
Engineering, Administration, Legal, Contingencies 25% ----------						7,174			
Total ----------						35,871	143	234	
Annualized Cost (50 yr @ 8.375%)----------						3,059	143	234	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,059	143	234	3,437
Annual Cost Per Acre ----------						161	8	12	181
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	144
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-37

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ------ M355
Parcel No. ---- M12-M-355
Net Acres ------ 30
Crop ---------- CRN/SOY
Water Pay Cap - 144
System Type --- GRAVITY
Water System -- M355,356
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	6	200	12.00			2,400	12		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	27	210				5,670	28		
River-Pump-f(gpm,TDH;ac-ft/yr) ---	300	71	70.5			26,493	132	468	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		

Subtotal ----------	34,563	173	468	
Engineering, Administration, Legal, Contingencies 25% ----------	8,641			
Total ----------	43,203	173	468	
Annualized Cost (50 yr @ 8.375%)----------	3,684	173	468	
Less Incremental Water System Cost, Parcel(s) _____----------				
Parcel Total Annual Cost ----------	3,684	173	468	4,326
Annual Cost Per Acre ----------	123	6	16	144
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	144
Net Parcel Residual Water Payment Capacity ----------	-------	-------	-------	0

UTE/OFFMAN 1602

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M356
Parcel No. ---- M12-M-356
Net Acres ----- 25
Crop ---------- CRN/SOY
Water Pay Cap - 145
System Type --- GRAVITY
Water System -- M355,356
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	6	200	12.00			2,400	12		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	23	210				4,830	24		
River Pump f(gpm,TDH,ac ft/yr) ---	250	71	58.8			24,463	122	391	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						31,693	158	391	
Engineering, Administration, Legal, Contingencies 25% ----------						7,923			
Total ----------						39,617	158	391	
Annualized Cost (50 yr @ 8.375%)----------						3,378	158	391	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						3,378	158	391	3,928
Annual Cost Per Acre ----------						135	6	16	157
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	145
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-12

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M357
Parcel No. ---- M12-M-357
Net Acres ----- 7
Crop ---------- CRN/SOY
Water Pay Cap - 103
System Type --- GRAVITY
Water System --M357,59-61
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class #(diam,LF,$/ft) ----------									
100	4	2700	10.50			28,350	142		
100	8	123	15.50			1,907	10		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ----------	5	210				1,050	5		
River Pump #(gpm,TDH,ac ft/yr) ---	70	107	16.5			14,331	72	165	
Booster #(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		

ototal ----------	45,637	228	165	
ineering, Administration, Legal, Contingencies 25% ----------	11,409			
al ----------	57,046	228	165	
ualized Cost (50 yr @ 8.375%)----------	4,865	228	165	
Incremental Water System Cost, Parcel(s) _____----------				
al Total Annual Cost ----------	4,865	228	165	5,258
al Cost Per Acre ----------	695	33	24	751
al Crop Payment Capacity (Input negitive numbers with a -) ----------	-------	-------	-------	103
arcel Residual Water Payment Capacity ----------	-------	-------	-------	-648

UTE/OFFMAN

1603

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M358
Parcel No. ---- M12-M-358
Net Acres ----- 11
Crop ---------- CRN/SOY
Water Pay Cap - 123
System Type --- GRAVITY
Water System -- M358
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	4	200	10.50			2,100	11		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	110	51	25.9			17,064	85	124	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						19,164	96	124	
Engineering, Administration, Legal, Contingencies 25% ----------						4,791			
Total ----------						23,955	96	124	
Annualized Cost (50 yr @ 8.375%)----------						2,043	96	124	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						2,043	96	124	2,262
Annual Cost Per Acre ----------						186	9	11	206
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	123
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-83

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M359
Parcel No. ---- M12-M-359
Net Acres ----- 6
Crop ---------- CRN/SOY
Water Pay Cap - 97
System Type --- GRAVITY
Water System --M357,59-61
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class #(diam,LF,$/ft) ----------									
100	8	58	15.50			899	4		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ----------	4	210				840	4		
River_Pump #(gpm,TDH,ac ft/yr) ---	60	55	14.1			13,248	66	73	
Booster #(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		
Subtotal ----------						14,987	75	73	
Engineering, Administration, Legal, Contingencies 25% ----------						3,747			
Total ----------						18,734	75	73	
Annualized Cost (50 yr @ 8.375%)----------						1,598	75	73	
Less Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						1,598	75	73	1,745
Annual Cost Per Acre ----------						266	12	12	291
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						--------	--------	--------	97
Net Parcel Residual Water Payment Capacity ----------						--------	--------	--------	-194

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

1604

File Name ----- M3[illegible]
Parcel No. ----- M12-M-360
Net Acres ----- 8
Crop ---------- CRN/SOY
Water Req Cap - 110
System Type --- GRAVITY
Water System --M357,59-61
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,LF,$/ft) ----------									
100	8	31	15.50			481	2		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	5	210				1,050	5		
River Pump f(gpm,TDH,ac ft/yr) ---	80	33	18.8			14,851	74	58	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
MP STA R/W: f(acres,$/ac)	0	0				0	0		
Total ----------						16,382	82	58	
neering, Administration, Legal, Contingencies 25% ----------						4,095			
----------						20,477	82	58	
ized Cost (50 yr @ 8.375%)----------						1,746	82	58	
Incremental Water System Cost, Parcel(s) _____ ----------									
Total Annual Cost ----------						1,746	82	58	1,886
Cost Per Acre ----------						218	10	7	236
Crop Payment Capacity (Input negitive numbers with a -) ----------						--------	--------	--------	110
cel Residual Water Payment Capacity ----------						--------	--------	--------	-126

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M361
Parcel No. ——— M12-M-361
Net Acres ——— 56.4
Crop ——— CRN/SOY
Water Pay Cap - 138
System Type --- GRAVITY
Water System —M357,59-61
Date ——— 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ———									
100	8	988	15.50			15,314	77		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ———	36	210				7,560	38		
River Pump f(gpm,TDH,ac ft/yr) ——	564	78	132.5			35,323	177	967	
Booster f(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ———						58,197	291	967	
Engineering, Administration, Legal, Contingencies 25% ———						14,549			
Total ———						72,747	291	967	
Annualized Cost (50 yr @ 8.375%)———						6,204	291	967	
Less Incremental Water System Cost, Parcel(s) _____ ———									
Parcel Total Annual Cost ———						6,204	291	967	7,462
Annual Cost Per Acre ———						110	5	17	132
Parcel Crop Payment Capacity (Input negitive numbers with a -) ———						———	———	———	138
Net Parcel Residual Water Payment Capacity ———						———	———	———	6

UTE/OFFMAN

1605

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M362a
Parcel No. ----M12-M-362a
Net Acres ----- 6
Crop ---------- CRN/SOY
Water Pay Cap - 97
System Type --- GRAVITY
Water System -- M362a,363
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $ $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	4	200	10.50			2,100	11		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	7	210				1,470	7		
River Pump f(gpm,TDH,ac ft/yr) ----	60	30	14.1			13,170	66	40	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
total ----------						16,740	84	40	
Engineering, Administration, Legal, Contingencies 25% ----------						4,185			
Total ----------						20,924	84	40	
Annualized Cost (50 yr @ 8.375%)----------						1,784	84	40	
Incremental Water System Cost, Parcel(s) _____----------									
Parcel Total Annual Cost ----------						1,784	84	40	1,908
Total Cost Per Acre ----------						297	14	7	318
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	97
Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-221

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M362b
Parcel No. ----M12-M-362b
Net Acres ----- 26
Crop ---------- CRN/SOY
Water Pay Cap - 145
System Type --- GRAVITY
Water System -- M362b
Date ---------- 6/ 4/86

Power rate $/kwh --- .068603
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(diam,Lf,$/ft) ----------									
100	6	100	12.00			1,200	6		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ---	260	60	61.1			24,720	124	343	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
btotal ----------						25,920	130	343	
gineering, Administration, Legal, Contingencies 25% ----------						6,480			
tal ----------						32,400	130	343	
ualized Cost (50 yr @ 8.375%)----------						2,763	130	343	
s Incremental Water System Cost, Parcel(s) _____----------									
cel Total Annual Cost ----------						2,763	130	343	3,236
ual Cost Per Acre ----------						106	5	13	124
cel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	145
Parcel Residual Water Payment Capacity ----------						-------	-------	-------	21

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

1606

File Name ----- M363
Parcel No. ---- M12-N-363
Net Acres ----- 36
Crop ---------- CRN/SOY
Water Pay Cap - 142
System Type --- GRAVITY
Water System -- M362a,363
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,Lf,$/ft) ----------									
100	6	200	12.00			2,400	12		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	43	210				9,030	45		
River Pump f(gpm,TDH,ac ft/yr) ----	360	42	84.6			28,098	140	332	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						39,528	198	332	
Engineering, Administration, Legal, Contingencies 25% ----------						9,882			
----------						49,410	198	332	
Capitalized Cost (50 yr @ 8.375%)----------						4,214	198	332	
Incremental Water System Cost, Parcel(s) _____ ----------									
Total Annual Cost ----------						4,214	198	332	4,744
Total Cost Per Acre ----------						117	5	9	132
Total Crop Payment Capacity (Input negitive numbers with a -) ----------						--------	--------	--------	142
Parcel Residual Water Payment Capacity ----------						--------	--------	--------	10

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M364
Parcel No. ---- M12-M-364
Net Acres ----- 5
Crop ---------- CRN/SOY
Water Pay Cap - 90
System Type --- GRAVITY
Water System -- M364
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
100	4	100	10.50			1,050	5		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	50	30	11.8			12,212	61	33	
Booster f(gpm,TDH,ac ft/yr) ------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
ubtotal ----------						13,262	66	33	
ngineering, Administration, Legal, Contingencies 25% ----------						3,315			
tal ----------						16,577	66	33	
nualized Cost (50 yr @ 8.375%)----------						1,414	66	33	
ss Incremental Water System Cost, Parcel(s) _____----------									
rcel Total Annual Cost ----------						1,414	66	33	1,513
nual Cost Per Acre ----------						283	13	7	303
rcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	90
Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-213

UTE/OFFMAN 1607

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ----- M365
Parcel No. ---- M12-M-365
Net Acres ----- 9
Crop ---------- CRN/SOY
Water Pay Cap - 157
System Type --- GRAVITY
Water System -- M365
Date ---------- 6/ 4/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------ 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class f(dia,LF,$/ft) ----------									
100	4	100	10.50			1,050	5		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion f(ft,$/ft) ----------	0	210				0	0		
River Pump f(gpm,TDH,ac ft/yr) ----	100	41	24.8			16,339	82	95	
Booster f(gpm,TDH,ac ft/yr) -------	0	0	0			0	0	0	
ACCESS ROADS: f(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: f(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: f(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: f(acres,$/ac)	0	0				0	0		
Subtotal ----------						17,389	87	95	
Engineering, Administration, Legal, Contingencies 25% ----------						4,347			
Total ----------						21,736	87	95	
Annualized Cost (50 yr @ 8.375%)----------						1,854	87	95	
Less Incremental Water System Cost, Parcel(s) _____ ----------									
Parcel Total Annual Cost ----------						1,854	87	95	2,036
Annual Cost Per Acre ----------						206	10	11	226
Parcel Crop Payment Capacity (Input negitive numbers with a -) ----------						-------	-------	-------	157
Net Parcel Residual Water Payment Capacity ----------						-------	-------	-------	-69

UTE/OFFMAN

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
MOUNTAIN UTE INDIAN RESERVATION

File Name ——— M366
Parcel No. ——— M12-M-366
Net Acres ——— 67.3
Crop ——— CRN/SOY
Water Pay Cap - 176
System Type ——— GRAVITY
Water System — M366
Date ——— 5/23/86

Power rate $/kwh —— .068605
Interest rate ——— .08375
Project Life ——— 50

Facilities	Column A	Column B	Column C	Column D	Column E	Capital Cost $	O & M Cost $/yr	Power Cost $/yr	Total Cost $
PIPELINE:									
Class #(diam,LF,$/ft) ———									
100	8	100	15.50			1,550	8		
						0	0		
						0	0		
						0	0		
						0	0		
						0	0		
PUMP STATION:									
Diversion #(ft,$/ft) ———	50	210				10,500	53		
River Pump #(gpm,TDH,ac ft/yr) ——	747	91	185.8			40,799	204	1,582	
Booster #(gpm,TDH,ac ft/yr) ———	0	0	0			0	0	0	
ACCESS ROADS: #(LF,$/LF)	0	.00				0	0		
POWER LINE EXT: #(LF,$/LF)	0	.00				0	0		
PIPELINE R/W: #(LF,$/LF)	0	.00				0	0		
PUMP STA R/W: #(acres,$/ac)	0	0				0	0		
Subtotal ———						52,849	264	1,582	
Engineering, Administration, Legal, Contingencies 25% ———						13,212			
Total ———						66,061	264	1,582	
Annualized Cost (50 yr @ 8.375%)———						5,634	264	1,582	
Less Incremental Water System Cost, Parcel(s) _____ ———									
Parcel Total Annual Cost ———						5,634	264	1,582	7,480
Annual Cost Per Acre ———						84	4	24	111
Parcel Crop Payment Capacity (Input negitive numbers with a -) ———						———	———	———	176
Net Parcel Residual Water Payment Capacity ———						———	———	———	65

APPENDIX D.3

RESERVOIR AND RIVER OPERATING SUMMARIES

RESERVOIR COST ESTIMATES

1609

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY
MANCOS RIVER WATERSHED

OPERATION OF RESERVOIR @ SITE NO. 9

CASE II - SHORTED SUPPLY - ANNUAL SUMMARY

MANCOS RESERVOIR MAX. STORAGE: 4400.AF DEAD STORAGE: 1000.AF
AVG. DEMAND: 11477. AF/YR

WATER YEAR	INFLOW	DIV	BYPAS	EVAP	RELS	SPIL	END CONT	MIN CONT	DEM	SHORT
1951	20.8	.0	.0	.1	9.7	10.3	2.7	1.0	11.5	1.7
1952	77.3	.0	.0	.1	11.5	63.9	4.4	2.8	11.5	.0
1953	33.2	.0	.0	.1	11.5	22.3	3.7	1.3	11.5	.0
1954	28.0	.0	.0	.1	11.5	15.7	4.4	1.3	11.5	.0
1955	28.8	.0	.0	.1	11.5	17.2	4.4	1.9	11.5	.0
1956	29.1	.0	.0	.1	9.3	22.3	1.8	1.0	11.5	2.1
1957	80.5	.0	.0	.2	11.5	66.2	4.4	2.2	11.5	.0
1958	62.4	.0	.0	.1	11.3	51.6	3.9	1.0	11.5	.2
1959	20.3	.0	.0	.1	9.6	10.8	3.6	1.0	11.5	1.9
1960	49.1	.0	.0	.1	10.2	39.2	3.1	1.0	11.5	1.2
1961	40.4	.0	.0	.1	10.4	28.5	4.4	1.0	11.5	1.1
1962	37.2	.0	.0	.1	10.4	27.8	3.3	1.0	11.5	1.1
1963	28.4	.0	.0	.1	11.2	16.0	4.4	1.0	11.5	.3
1964	32.5	.0	.0	.1	11.5	20.9	4.4	2.1	11.5	.0
1965	68.6	.0	.0	.2	11.5	57.0	4.4	4.4	11.5	.0
1966	40.0	.0	.0	.1	10.1	31.8	2.4	1.0	11.5	1.4
1967	31.1	.0	.0	.1	11.5	17.5	4.4	2.7	11.5	.0
1968	47.3	.0	.0	.2	11.5	35.7	4.4	4.2	11.5	.0
1969	59.2	.0	.0	.2	11.5	47.5	4.4	3.4	11.5	.0
1970	39.8	.0	.0	.1	11.5	28.2	4.4	2.1	11.5	.0
1971	37.7	.0	.0	.1	11.5	26.1	4.4	2.1	11.5	.0
1972	31.4	.0	.0	.1	8.9	22.4	4.4	1.0	11.5	2.6
1973	84.2	.0	.0	.2	11.5	72.6	4.4	3.6	11.5	.0
1974	21.5	.0	.0	.1	10.0	12.7	3.2	1.0	11.5	1.5
1975	69.4	.0	.0	.2	11.5	56.5	4.4	3.6	11.5	.0
1976	31.1	.0	.0	.1	10.4	21.4	3.6	1.0	11.5	1.1
1977	9.0	.0	.0	.1	8.8	1.3	2.5	1.0	11.5	2.7
1978	47.0	.0	.0	.1	11.5	34.6	3.3	1.6	11.5	.0
1979	82.1	.0	.0	.2	11.5	69.4	4.4	3.5	11.5	.0
1980	84.4	.0	.0	.2	11.5	72.7	4.4	3.0	11.5	.0
AVG	45.1	.0	.0	.1	10.8	34.0	3.9	1.0	11.5	.6

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY
MANCOS RIVER WATERSHED

OPERATION OF RESERVOIR @ SITE NO. 9

CASE III - 5 % NEW PIA DEMAND: 150 ACRES; 385 AFY

SHORTAGES - AF

YEAR	MAY	JUNE	JULY	AUG	SEPT	TOTAL	% OF DEMAND
1951	0	0	0	105	1	106	.28
1952	0	0	0	0	0	0	.00
1953	0	0	0	0	0	0	.00
1954	0	0	0	0	0	0	.00
1955	0	0	0	0	0	0	.00
1956	0	0	0	120	1	121	.31
1957	0	0	0	0	0	0	.00
1958	0	0	0	0	0	0	.00
1959	0	0	158	0	0	158	.41
1960	0	0	0	120	1	121	.31
1961	0	0	0	0	0	0	.00
1962	0	0	0	120	1	121	.31
1963	0	0	158	0	0	158	.41
1964	0	0	0	0	0	0	.00
1965	0	0	0	0	0	0	.00
1966	0	0	0	0	0	0	.00
1967	0	0	0	0	0	0	.00
1968	0	0	0	0	0	0	.00
1969	0	0	0	0	0	0	.00
1970	0	0	0	0	0	0	.00
1971	0	0	0	0	0	0	.00
1972	0	0	158	120	0	278	.72
1973	0	0	0	0	0	0	.00
1974	0	0	0	44	1	45	.12
1975	0	0	0	0	0	0	.00
1976	0	0	0	55	0	55	.14
1977	0	0	86	0	0	86	.22
1978	0	0	0	0	0	0	.00
1979	0	0	0	0	0	0	.00
1980	0	0	0	0	0	0	.00
AVERAGE	0	0	19	23	0	42	.11

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY
MANCOS RIVER WATERSHED

OPERATION OF RESERVOIR @ SITE NO. 9

CASE III - 25 % NEW PIA DEMAND: 749 ACRES; 1925 AFY

SHORTAGES - AF

YEAR	MAY	JUNE	JULY	AUG	SEPT	TOTAL	% OF DEMAND
1951	0	0	320	586	4	910	.47
1952	0	0	0	0	0	0	.00
1953	0	0	0	0	0	0	.00
1954	0	0	0	35	0	35	.02
1955	0	0	57	0	0	57	.03
1956	0	0	457	601	4	1062	.55
1957	0	0	0	0	0	0	.00
1958	0	0	0	0	0	0	.00
1959	0	0	788	324	0	1112	.58
1960	0	0	0	601	4	605	.31
1961	0	0	372	0	0	372	.19
1962	0	0	0	601	4	605	.31
1963	0	0	788	0	0	788	.41
1964	0	0	0	0	0	0	.00
1965	0	0	0	0	0	0	.00
1966	0	0	60	456	0	516	.27
1967	0	0	0	0	0	0	.00
1968	0	0	0	0	0	0	.00
1969	0	0	0	0	0	0	.00
1970	0	0	0	0	0	0	.00
1971	0	0	0	0	0	0	.00
1972	0	0	788	601	0	1389	.72
1973	0	0	0	0	0	0	.00
1974	0	0	151	525	4	680	.35
1975	0	0	0	0	0	0	.00
1976	0	0	204	536	0	740	.38
1977	0	0	716	378	0	1094	.57
1978	0	0	0	349	0	349	.18
1979	0	0	0	0	0	0	.00
1980	0	0	0	0	0	0	.00
AVERAGE	0	0	157	187	1	344	.18

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY
MANCOS RIVER WATERSHED

OPERATION OF RESERVOIR @ SITE NO. 9

CASE III - 50 % NEW PIA DEMAND: 1499 ACRES; 3851 AFY

SHORTAGES - AF

YEAR	MAY	JUNE	JULY	AUG	SEPT	TOTAL	% OF DEMAND
1951	0	0	1108	1188	7	2302	.60
1952	0	0	0	330	0	330	.09
1953	0	0	711	234	0	944	.25
1954	0	0	0	637	0	637	.17
1955	0	0	845	0	0	845	.22
1956	0	0	1245	1203	7	2454	.64
1957	0	0	0	0	0	0	.00
1958	0	0	375	352	0	726	.19
1959	0	0	1576	926	0	2501	.65
1960	0	0	265	1203	7	1474	.38
1961	0	0	1160	575	0	1734	.45
1962	0	0	11	1203	7	1220	.32
1963	0	0	1576	0	0	1576	.41
1964	0	0	651	0	0	651	.17
1965	0	0	0	0	0	0	.00
1966	0	0	848	1058	0	1905	.49
1967	0	0	330	0	0	330	.09
1968	0	0	0	0	0	0	.00
1969	0	0	0	0	0	0	.00
1970	0	0	228	0	0	228	.06
1971	0	0	527	0	0	527	.14
1972	0	0	1576	1203	0	2778	.72
1973	0	0	0	0	0	0	.00
1974	0	0	939	1127	7	2072	.54
1975	0	0	0	0	0	0	.00
1976	0	0	992	1138	0	2129	.55
1977	0	167	1504	980	0	2650	.69
1978	0	0	0	951	0	951	.25
1979	0	0	0	0	0	0	.00
1980	0	0	0	126	0	126	.03
AVERAGE	0	6	549	481	1	1036	.27

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY
MANCOS RIVER WATERSHED

OPERATION OF RESERVOIR @ SITE NO. 9

CASE III - 75 % NEW PIA DEMAND: 2248 ACRES; 5776 AFY

SHORTAGES - AF

YEAR	MAY	JUNE	JULY	AUG	SEPT	TOTAL	% OF DEMAND
1951	0	0	1895	1789	11	3695	.64
1952	0	0	0	931	0	931	.16
1953	0	0	1498	835	0	2333	.40
1954	0	0	508	1238	0	1746	.30
1955	0	0	1632	0	0	1632	.28
1956	0	0	2032	1804	11	3847	.67
1957	0	0	0	0	0	0	.00
1958	0	0	1162	953	0	2115	.37
1959	0	0	2363	1527	0	3890	.67
1960	0	0	1052	1804	11	2867	.50
1961	0	0	1947	1176	0	3123	.54
1962	0	0	798	1804	11	2613	.45
1963	0	0	2363	25	0	2388	.41
1964	0	0	1438	0	0	1438	.25
1965	0	0	0	0	0	0	.00
1966	0	0	1635	1659	0	3294	.57
1967	0	0	1117	0	0	1117	.19
1968	0	0	0	0	0	0	.00
1969	0	0	0	577	0	577	.10
1970	0	0	1015	475	0	1490	.26
1971	0	0	1314	419	0	1733	.30
1972	0	0	2363	1804	0	4167	.72
1973	0	0	0	62	0	62	.01
1974	0	0	1726	1728	11	3465	.60
1975	0	0	0	173	0	173	.03
1976	0	0	1779	1739	0	3518	.61
1977	0	541	2291	1581	0	4413	.76
1978	0	0	0	1552	0	1552	.27
1979	0	0	0	219	0	219	.04
1980	0	0	0	727	0	727	.13
AVERAGE	0	18	1064	887	2	1971	.34

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY
MANCOS RIVER WATERSHED

OPERATION OF RESERVOIR @ SITE NO. 9

CASE III - 100 % NEW PIA DEMAND: 2997 ACRES; 7701 AFY

SHORTAGES - AF

YEAR	MAY	JUNE	JULY	AUG	SEPT	TOTAL	% OF DEMAND
1951	0	0	2953	2405	14	5372	.70
1952	0	0	0	1802	0	1802	.23
1953	0	0	2556	1706	14	4276	.56
1954	0	0	1566	2109	0	3675	.48
1955	0	0	2690	0	0	2690	.35
1956	0	0	3090	2405	14	5509	.72
1957	0	0	0	0	0	0	.00
1958	0	0	2220	1824	0	4044	.53
1959	0	0	3151	2398	14	5563	.72
1960	0	0	2110	2405	14	4529	.59
1961	0	0	3005	2047	0	5052	.66
1962	0	0	1856	2405	14	4275	.56
1963	0	307	3151	896	0	4354	.57
1964	0	0	2496	0	0	2496	.32
1965	0	0	0	0	0	0	.00
1966	0	0	2693	2405	0	5098	.66
1967	0	0	2175	369	0	2544	.33
1968	0	0	888	0	14	902	.12
1969	0	0	0	1448	0	1448	.19
1970	0	0	2073	1346	0	3419	.44
1971	0	0	2372	1290	0	3662	.48
1972	0	0	3151	2405	0	5556	.72
1973	0	0	0	933	0	933	.12
1974	0	0	2784	2405	14	5203	.68
1975	0	0	0	1044	0	1044	.14
1976	0	0	2837	2405	0	5242	.68
1977	0	1185	3151	2405	14	6755	.88
1978	0	0	748	2405	14	3167	.41
1979	0	0	0	1090	0	1090	.14
1980	0	0	0	1598	0	1598	.21
AVERAGE	0	50	1791	1532	5	3377	.44

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY

MANCOS RIVER WATERSHED

PRELIMINARY COST ESTIMATE FOR MANCOS RESERVOIR 9A

CAPACITY - 7200 AF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
1.0	Site Work and Dam				
1.1	Reservoir Clearing	30	ac	$2500.00	$75,000
1.2	Dam				
1.2.1	River Diversion	-	LS	60000.00	60,000
1.2.2	Foundation Dewatering	-	LS	30000.00	30,000
1.2.3	Foundation Excavation				
	a. Common	113,000	cy	3.00	339,000
	b. Rock	28,200	cy	15.00	423,000
1.2.4	Embankment	418,400	cy	5.00	2,092,000
1.2.5	Foundation Grouting				
	a. Mobil & Demobil	-	LS	8600.00	8,600
	b. Hookups	180	ea	45.00	8,100
	c. Set-ups	60	ea	35.00	2,100
	d. Cement (Furn. & Hand.)	900	sacks	5.50	4,950
	e. Drilling				
	1. Soil	200	lf	6.00	1,200
	2. Rock	1,800	lf	12.00	21,600
	f. Pressure Grouting	900	sacks	5.30	4,770
	g. Metal Pipe (F & R)	1,650	lbs	1.50	2,480
1.2.6	Slush Grouting	170	cy	130.00	22,100
1.2.7	Dental Concrete	2,500	cy	100.00	250,000
1.2.8	Access Roads	-	LS	46100.00	46,100
		SUBTOTAL - SITE WORK AND DAM			$3,391,000
2.0	Spillway				
2.1	Structural Excavation				
2.1.1	Rock	245,000	cy	$18.00	$4,410,000
2.2	Mass Concrete	2,350	cy	130.00	305,500
2.3	Structural Concrete	4,000	cy	380.00	1,520,000
2.4	Rock Bolts	100	ea	180.00	18,000
		SUBTOTAL - SPILLWAY			$6,253,500

PRELIMINARY COST ESTIMATE FOR MANCOS RESERVOIR 9A (CONT.)

CAPACITY - 7200 AF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
3.0	Outlet Works				
3.1	Excavation (rock)	8,800	cy	$18.00	$158,400
3.2	Pipe				
	3.2.1 10-foot Diameter	650	lf	750.00	487,500
	3.2.2 4-foot Diameter	300	lf	180.00	54,000
3.3	Mass Concrete	4,750	cy	160.00	760,000
3.4	Structural Concrete	700	cy	350.00	245,000
3.6	36-inch Howell-Bunger Valve	-	LS	75000.00	75,000
3.7	Guard Valve	-	LS	40000.00	40,000
3.8	Trashrack	11,200	lbs	3.00	33,600
		SUBTOTAL - OUTLET WORKS			$1,853,500

CAPITAL COST	
TOTAL LISTED WORK ITEMS	$11,498,000
Unlisted Items and Contingencies (25%)	2,875,000
TOTAL CONTRACT COST	$14,373,000
Engineering and Construction Administration (20%)	2,875,000
TOTAL CONSTRUCTION COST	$17,248,000
Interest During Construction (2 year at 8.375%)	1,445,000
TOTAL CAPITAL COST	$18,693,000
ANNUAL COST	
Annualized Capital Cost (8.375% for 50 years)	$1,594,000
Annual Operation, Maintenance, & Replacement Costs	25,000
TOTAL ANNUAL COST	$1,619,000

UTE INDIAN RESERVATIONS AGRICULTURAL ENGINEERING STUDY

MANCOS RIVER WATERSHED

PRELIMINARY COST ESTIMATE FOR MANCOS RESERVOIR 9C

CAPACITY - 4400 AF

ITEM	DISCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
1.0	Site Work and Dam				
1.1	Reservoir Clearing	20	ac	$2,500.00	$50,000
1.2	Dam				
1.2.1	River Diversion	-	LS	60000.00	60,000
1.2.2	Foundation Dewatering	-	LS	30000.00	30,000
1.2.3	Foundation Excavation				
	a. Common	93,300	cy	3.00	279,900
	b. Rock	23,350	cy	15.00	350,250
1.2.4	Embankment	254,500	cy	5.00	1,272,500
1.2.5	Foundation Grouting				
	a. Mobil & Demobil	-	LS	4200.00	4,200
	b. Hookups	164	ea	45.00	7,380
	c. Set-ups	56	ea	35.00	1,960
	d. Cement (Furn. & Hand.)	800	sacks	5.50	4,400
	e. Drilling				
	1. Soil	200	lf	6.00	1,200
	2. Rock	1,600	lf	12.00	19,200
	f. Pressure Grouting	800	sacks	5.30	4,240
	g. Metal Pipe (F & H)	1,510	lbs	1.50	2,270
1.2.6	Slush Grouting	140	cy	130.00	18,200
1.2.7	Dental Concrete	2,000	cy	100.00	200,000
1.2.8	Access Roads	-	LS	46700.00	46,700
		SUBTOTAL - SITE WORK AND DAM			$2,352,400
2.0	Spillway				
2.1	Structural Excavation				
2.1.1	Rock	245,000	cy	$18.00	$4,410,000
2.2	Mass Concrete	2,350	cy	130.00	305,500
2.3	Structural Concrete	4,000	cy	380.00	1,520,000
2.4	Rock Bolts	100	ea	180.00	18,000
		SUBTOTAL - SPILLWAY			$6,253,500

PRELIMINARY COST ESTIMATE FOR MANCOS RESERVOIR 9C

CAPACITY - 4400 AF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
3.0	Outlet Works				
3.1	Excavation (rock)	6,500	cy	$18.00	$117,000
3.2	Pipe				
	3.2.1 10-foot Diameter	550	lf	750.00	412,500
	3.2.2 4-foot Diameter	250	lf	180.00	45,000
3.3	Mass Concrete	3,500	cy	160.00	560,000
3.4	Structural Concrete	700	cy	350.00	245,000
3.6	36-inch Howell-Bunger Valve	-	LS	75000.00	75,000
3.7	Guard Valve	-	LS	40000.00	40,000
3.8	Trashrack	11,200	lbs	3.00	33,600
		SUBTOTAL - OUTLET WORKS			$1,528,100

CAPTIAL COST	
TOTAL LISTED WORK ITEMS	$10,134,000
Unlisted Items and Contingencies (25%)	2,534,000
TOTAL CONTRACT COST	$12,668,000
Engineering and Construction Administration (20%)	2,534,000
TOTAL CONSTRUCTION COST	$15,202,000
Interest During Construction (2 year at 8.375%)	1,273,000
TOTAL CAPITAL COST	$16,475,000
ANNUAL COST	
Annualized Capital Cost (8.375% for 50 years)	$1,405,000
Annual Operation, Maintenance, & Repair Costs	25,000
TOTAL ANNUAL COST	$1,430,000