

## Appendix D

TWDB Groundwater Use Estimates for Pecos  
County

## Estimated Annual Groundwater use in Pecos County in Acre-Feet Texas Water Development Board Water Uses Survey Data

All Values in: Acre-feet per Year

Source: TWDB Water Use Database

Year	Aquifer	Municipal	Manufac- turing	Steam Electric	Irrigation	Mining	Livestock	Total
1980	CENOZOIC PECOS ALLUVIUM	87	0	0	50,000	0	282	50,369
	EDWARDS-TRINITY PLATEAU	4,177	6	2,087	53,134	3,070	1,100	63,574
	OTHER	1	0	0	0	7	5	13
	RUSTLER	0	0	0	10	0	5	15
	<b>Total</b>	<b>4,265</b>	<b>6</b>	<b>2,087</b>	<b>103,144</b>	<b>3,077</b>	<b>1,392</b>	<b>113,971</b>
1984	CENOZOIC PECOS ALLUVIUM	336	3	0	20,000	5,090	225	25,654
	EDWARDS-TRINITY PLATEAU	4,440	10	2,391	70,000	5,176	760	82,777
	OTHER	5	0	0	0	106	5	116
	RUSTLER	0	0	0	22	63	5	90
	<b>Total</b>	<b>4,781</b>	<b>13</b>	<b>2,391</b>	<b>90,022</b>	<b>10,435</b>	<b>995</b>	<b>108,637</b>
1985	CENOZOIC PECOS ALLUVIUM	326	3	0	17,718	58	240	18,345
	EDWARDS-TRINITY PLATEAU	4,334	9	2,169	62,013	341	809	69,675
	OTHER	5	0	0	0	9	5	19
	RUSTLER	0	0	0	20	0	5	25
	<b>Total</b>	<b>4,665</b>	<b>12</b>	<b>2,169</b>	<b>79,751</b>	<b>408</b>	<b>1,059</b>	<b>88,064</b>
1986	CENOZOIC PECOS ALLUVIUM	308	1	0	14,700	64	87	15,160
	EDWARDS-TRINITY PLATEAU	4,199	9	2,184	51,450	207	291	58,340
	OTHER	4	0	0	0	5	2	11
	RUSTLER	0	0	0	17	0	2	19
	<b>Total</b>	<b>4,511</b>	<b>10</b>	<b>2,184</b>	<b>66,167</b>	<b>276</b>	<b>382</b>	<b>73,530</b>
1987	CENOZOIC PECOS ALLUVIUM	304	0	0	13,450	53	173	13,980
	EDWARDS-TRINITY PLATEAU	3,467	9	1,989	47,076	191	584	53,316
	OTHER	4	0	0	0	4	4	12
	RUSTLER	0	0	0	15	0	4	19
	<b>Total</b>	<b>3,775</b>	<b>9</b>	<b>1,989</b>	<b>60,541</b>	<b>248</b>	<b>765</b>	<b>67,327</b>
1988	CENOZOIC PECOS ALLUVIUM	319	0	0	13,065	36	146	13,566
	EDWARDS-TRINITY PLATEAU	4,166	8	1,969	45,727	204	495	52,569
	OTHER	4	0	0	0	6	3	13
	RUSTLER	0	0	0	15	0	3	18
	<b>Total</b>	<b>4,489</b>	<b>8</b>	<b>1,969</b>	<b>58,807</b>	<b>246</b>	<b>647</b>	<b>66,166</b>

Year	Aquifer	Manufac-		Steam			Livestock	Total
		Municipal	turing	Electric	Irrigation	Mining		
1989	CENOZOIC PECOS ALLUVIUM	257	0	0	14,648	48	164	15,117
	EDWARDS-TRINITY PLATEAU	3,971	8	1,312	51,268	188	642	57,389
	OTHER	4	0	0	0	7	4	15
	RUSTLER	0	0	0	17	0	4	21
	<b>Total</b>	<b>4,232</b>	<b>8</b>	<b>1,312</b>	<b>65,933</b>	<b>243</b>	<b>814</b>	<b>72,542</b>
1990	CENOZOIC PECOS ALLUVIUM	260	0	0	14,028	37	170	14,495
	EDWARDS-TRINITY PLATEAU	3,543	6	1,509	49,098	197	667	55,020
	OTHER	1	0	0	0	10	4	15
	RUSTLER	0	0	0	16	0	4	20
	<b>Total</b>	<b>3,804</b>	<b>6</b>	<b>1,509</b>	<b>63,142</b>	<b>244</b>	<b>845</b>	<b>69,550</b>
1991	CENOZOIC PECOS ALLUVIUM	293	0	0	13,490	29	176	13,988
	EDWARDS-TRINITY PLATEAU	2,957	5	1,577	47,215	129	691	52,574
	OTHER	1	0	0	0	8	4	13
	RUSTLER	0	0	0	15	0	4	19
	<b>Total</b>	<b>3,251</b>	<b>5</b>	<b>1,577</b>	<b>60,720</b>	<b>166</b>	<b>875</b>	<b>66,594</b>
1992	CENOZOIC PECOS ALLUVIUM	244	0	0	13,284	31	215	13,774
	EDWARDS-TRINITY PLATEAU	2,807	5	1,610	46,496	149	845	51,912
	OTHER	1	0	0	0	9	5	15
	RUSTLER	0	0	0	15	0	5	20
	<b>Total</b>	<b>3,052</b>	<b>5</b>	<b>1,610</b>	<b>59,795</b>	<b>189</b>	<b>1,070</b>	<b>65,721</b>
1993	CENOZOIC PECOS ALLUVIUM	317	0	0	16,355	42	193	16,907
	EDWARDS-TRINITY PLATEAU	3,537	4	1,588	57,245	154	757	63,285
	OTHER	1	0	0	0	1	4	6
	RUSTLER	0	0	0	18	0	4	22
	<b>Total</b>	<b>3,855</b>	<b>4</b>	<b>1,588</b>	<b>73,618</b>	<b>197</b>	<b>958</b>	<b>80,220</b>
1994	CENOZOIC PECOS ALLUVIUM	377	0	0	25,436	26	216	26,055
	EDWARDS-TRINITY PLATEAU	3,719	4	1,319	44,227	171	849	50,289
	OTHER	1	0	0	0	0	4	5
	RUSTLER	0	0	0	1,283	0	4	1,287
	<b>Total</b>	<b>4,097</b>	<b>4</b>	<b>1,319</b>	<b>70,946</b>	<b>197</b>	<b>1,073</b>	<b>77,636</b>

Year	Aquifer	Manufac-		Steam		Mining	Livestock	Total
		Municipal	turing	Electric	Irrigation			
1995	CENOZOIC PECOS ALLUVIUM	431	0	0	29,403	37	201	30,072
	EDWARDS-TRINITY PLATEAU	3,697	4	1,493	51,125	215	791	57,325
	OTHER	1	0	0	0	0	4	5
	RUSTLER	0	0	0	1,483	0	4	1,487
	<b>Total</b>	<b>4,129</b>	<b>4</b>	<b>1,493</b>	<b>82,011</b>	<b>252</b>	<b>1,000</b>	<b>88,889</b>
1996	CENOZOIC PECOS ALLUVIUM	439	0	0	26,912	15	219	27,585
	EDWARDS-TRINITY PLATEAU	4,149	4	1,267	46,794	249	861	53,324
	OTHER	1	0	0	0	0	4	5
	RUSTLER	0	0	0	1,357	0	4	1,361
	<b>Total</b>	<b>4,589</b>	<b>4</b>	<b>1,267</b>	<b>75,063</b>	<b>264</b>	<b>1,088</b>	<b>82,275</b>
1997	CENOZOIC PECOS ALLUVIUM	395	0	0	27,677	17	214	28,303
	EDWARDS-TRINITY PLATEAU	3,953	4	979	48,125	236	840	54,137
	OTHER	1	0	0	0	0	4	5
	RUSTLER	0	0	0	1,396	0	4	1,400
	<b>Total</b>	<b>4,349</b>	<b>4</b>	<b>979</b>	<b>77,198</b>	<b>253</b>	<b>1,062</b>	<b>83,845</b>
1998	CENOZOIC PECOS ALLUVIUM	335	0	0	28,349	5	177	28,866
	EDWARDS-TRINITY PLATEAU	3,348	1	0	49,293	71	693	53,406
	OTHER	1	0	0	0	0	3	4
	RUSTLER	0	0	0	1,430	0	3	1,433
	<b>Total</b>	<b>3,684</b>	<b>1</b>	<b>0</b>	<b>79,072</b>	<b>76</b>	<b>876</b>	<b>83,709</b>
1999	CENOZOIC PECOS ALLUVIUM	317	0	0	27,853	17	208	28,395
	EDWARDS-TRINITY PLATEAU	3,171	1	979	48,431	236	816	53,634
	OTHER	1	0	0	0	0	4	5
	RUSTLER	0	0	0	1,404	0	4	1,408
	<b>Total</b>	<b>3,489</b>	<b>1</b>	<b>979</b>	<b>77,688</b>	<b>253</b>	<b>1,032</b>	<b>83,442</b>
2000	CENOZOIC PECOS ALLUVIUM	343	0	0	25,961	11	188	26,503
	EDWARDS-TRINITY PLATEAU	3,429	2	0	45,141	152	737	49,461
	OTHER	1	0	0	0	0	4	5
	RUSTLER	0	0	0	1,309	0	4	1,313
	<b>Total</b>	<b>3,773</b>	<b>2</b>	<b>0</b>	<b>72,411</b>	<b>163</b>	<b>933</b>	<b>77,282</b>

Year	Aquifer	Municipal	Manufac- turing	Steam Electric	Irrigation	Mining	Livestock	Total
2001	CENOZOIC PECOS ALLUVIUM	373	0	0	23,037	11	198	23,619
	EDWARDS-TRINITY PLATEAU	3,852	2	907	40,056	152	777	45,746
	OTHER	0	0	0	0	0	4	4
	RUSTLER	0	0	0	1,162	0	4	1,166
	<b>Total</b>	<b>4,225</b>	<b>2</b>	<b>907</b>	<b>64,255</b>	<b>163</b>	<b>983</b>	<b>70,535</b>
2002	CENOZOIC PECOS ALLUVIUM	351	0	0	21,961	16	175	22,503
	EDWARDS-TRINITY PLATEAU	3,718	2	907	38,186	216	686	43,715
	OTHER	0	0	0	0	0	3	3
	RUSTLER	0	0	0	1,108	0	3	1,111
	<b>Total</b>	<b>4,069</b>	<b>2</b>	<b>907</b>	<b>61,255</b>	<b>232</b>	<b>867</b>	<b>67,332</b>
2003	CENOZOIC PECOS ALLUVIUM	320	0	0	13,496	15	150	13,981
	EDWARDS-TRINITY PLATEAU	3,790	2	647	23,467	214	590	28,710
	OTHER	0	0	0	0	0	3	3
	RUSTLER	0	0	0	681	0	3	684
	<b>Total</b>	<b>4,110</b>	<b>2</b>	<b>647</b>	<b>37,644</b>	<b>229</b>	<b>746</b>	<b>43,378</b>

**Estimated 2009 Groundwater use for Irrigation in Pecos County  
Texas Water Development Board Water Conservation Data + MPGCD  
Site-Specific Information**

2009 Crop Type	2009 Acreage in Production	2009 Application Rate (inches of water per year)	2009 Estimated Groundwater Use (acre-feet per year)
Cotton <sub>1</sub>	3,658	35*	10,669
Sorghum <sub>1</sub>	240	22*	441
Corn <sub>1</sub>	176	27*	396
Rice <sub>1</sub>	0	0*	0
Wheat <sub>2</sub>	1,543	37*	4,541
Other Grain <sub>1</sub>	338	19*	534
Forage/Hay/Pasture <sub>1</sub>	14,604	36*	43,812
Peanuts <sub>1</sub>	0	0*	0
Soy Oil <sub>1</sub>	106	27*	239
Vineyard <sub>2</sub>	1,200	29*	2,758
Orchard <sub>2</sub>	3,000	66	16,500
Alfalfa <sub>1</sub>	4,933	66	27,132
Sugar Cane <sub>1</sub>	0	0*	0
Vegetables <sub>2</sub>	3,000	22*	5,965
Other <sub>1</sub>	4,344	6*	2,172
Golf Courses <sub>3</sub>	1	n/a	350
Failed Crops <sub>1</sub>	423	4*	141
<b>Total</b>	<b>37,566</b>	<b>n/a</b>	<b>115,650</b>

Notes:

1 – TWDB Estimate

2 – MPGCD Estimate

3 – MPGCD Estimate based on reported total annual use

\* – TWDB Irrigation Application Rate Estimate

## Appendix E

Details on the Development of the Estimate of  
Annual Recharge to the Capitan Reef Aquifer in  
Pecos County

## Discussion

As mentioned in the plan text, as of the date of the plan no published estimates on the amount or rates of annual recharge to the Capitan Reef aquifer have been identified. In order to meet the TWDB requirement that groundwater management plans include an estimate of the annual recharge rates used by other researchers for the Edwards-Trinity (Plateau) aquifer near the outcrop area of the Capitan reef aquifer in Pecos County may be applicable. The preliminary rate of recharge used in the development of the TWDB Edwards-Trinity (Plateau) aquifer groundwater availability model (GAM) is 4 percent of annual precipitation. (Anaya 2002) The Edwards-Trinity (Plateau) aquifer GAM includes the area of Pecos County adjacent to the Capitan Reef aquifer outcrop area. A rate of 1.6 percent of annual precipitation was estimated for the Edwards-Trinity (Plateau) aquifer for Crockett County. (Inglehart 1967) In order to develop a preliminary estimate of the annual recharge to the Capitan Reef aquifer in Pecos County the District used a median value of 2.8 percent of annual precipitation as an assumptive recharge rate to meet TWDB groundwater management plan requirements.

The area of the outcrop of the Capitan Limestone was estimated using a GIS to calculate the area from a scanned image of the Fort Stockton Sheet of the Geologic Atlas of Texas. (BEG, 1994) The 1961-1990 annual average precipitation for the portion of Pecos County where the Capitan Limestone outcrops is given as 16-18 inches in the USDA-NRCS map of Texas Annual Precipitation. (USDA-NRCS 1999) The District used the lower value of 16 inches per year to develop the estimate of annual recharge. The estimate of annual recharge to the Capitan Reef aquifer was calculated in the following manner:

$2.8 \text{ percent of } 16 \text{ inches annual precipitation} = 0.448 \text{ inches per year}$

$0.448 \text{ inches per year} / 12 \text{ inches (1 foot)} = 0.037333 \text{ feet per year}$

$0.037333 \text{ feet per year rounded to } 0.037 \text{ feet per year}$

$\text{Estimated Area of the Capitan Limestone in Pecos County} = 22,279 \text{ acres}$

$0.037 \text{ feet per year} \times 22,279 \text{ acres} = 824.323 \text{ ac-ft per year}$

**Rounded to 824 ac-ft per year**

## Appendix F

Details on the Development of the Estimates of  
Annual Groundwater Availability in the Capitan Reef  
and Rustler Aquifers in Pecos County

### **Calculation Methodology for Capitan and Rustler Aquifers**

Assumptions: aquifer has both unconfined and confined zones

$$Q(t) = R(t) - D(t) + dS/dt$$

Where:

**Q(t)** = the total rate of groundwater withdrawal (ac-ft/yr)

**R(t)** = the total rate of groundwater recharge to the basin (aquifer) (ac-ft/yr)

**D(t)** = the total rate of groundwater discharge from the basin (aquifer) (ac-ft/yr)

**dS/dt** = change in aquifer storage of groundwater over time (draw down in feet)  
(Freeze and Cherry, 1979)

If annual pumping is approximately equal to annual recharge; the factors for recharge and discharge in the aquifer will cancel each other and the relationship may be simplified to:

$$Q(t) = dS/dt$$

If it is assumed that the annual amount of recharge to the aquifer is approximately equal to groundwater use from the aquifer in where it occurs in MPGCD; the step-by-step description of the process to project the effects of use in each county is as follows:

1. The total area occupied by the aquifer in each county is subdivided by aquifer zone (unconfined, confined).
2. The area of each aquifer zone is divided by the total area occupied by the aquifer in the County to give the percentage of the total aquifer area in the County represented by each zone.
3. The estimate of annual recharge (assumed to be equal to the estimate annual aquifer pumping) is divided by the percentage value of the total aquifer area in the County represented by each aquifer sub-zone in the County to give an estimate of recharge to each aquifer sub-zone (in acre-feet per year).
4. The area (in acres) of each aquifer sub-zone is multiplied by an estimated amount of aquifer draw-down (in feet) <sub>1</sub> and then multiplied by the storage coefficient of the aquifer zone (expressed as a decimal fraction) <sub>2</sub> to give an estimate of the amount of water (in acre-feet) that could be removed from the aquifer if the estimated amount of aquifer draw-down occurred.
5. The estimated volume of water that could be produced from each aquifer zone with the specified estimate of aquifer draw-down is divided by 50 (years) to estimate the amount of water that could be produced each year from the aquifer zone over a 50-year period to result in the estimated amount of aquifer draw-down at the end to the 50-year time period.
6. The estimated annual amount of water that could be produced from each aquifer zone (in acre-feet per year) is added to the estimate of annual recharge for the zone (in acre-feet per year) to give the estimated availability value for the aquifer zone (in acre-feet per year).

- The estimated availability values (in acre-feet per year) of the several aquifer zones are summed to give a total estimated availability value for the aquifer.

Notes:

- The estimated average aquifer draw-down values were kept constant for the two sub-zones of the confined zone and for the unconfined zone of the aquifer.
- The storage coefficient values for the confined and unconfined zones were kept constant in the aquifer zone in all sub-zones.

County	Aquifer	Aquifer zone	Sub-division Area (acres)	Total Aquifer Area in County (acres)	Sub-division Percent of Total Area	Estimated Total County Pumping (ac-ft per year)	Assigned Annual Recharge Volume (ac-ft)	Estimated Average Aquifer Draw-down (ft)	Storage Co-efficient (dimensionless)	Total With-drawal Volume (ac-ft)	Annual With-drawal Volume (ac-ft)	MAG Estimate (ac-ft)
Pecos	Rustler	Confined GMA 3	241,707	741,398	33%	10,063	3321	300	0.0001	7251	145	3466
Pecos	Rustler	Confined GMA 7	499,691	741,398	67%	10,063	6742	300	0.0001	14991	300	7042
<b>Totals</b>			<b>741,398</b>				<b>10,063</b>			<b>22,242</b>	<b>445</b>	<b>10,508</b>

Table F-1, Groundwater Availability Estimates for the Rustler Aquifer in MPGCD

County	Aquifer	Aquifer zone	Sub-division Area (acres)	Total Aquifer Area in County (acres)	Sub-division Percent of Total Area	Estimated Total County Pumping (ac-ft per year)	Assigned Annual Recharge Volume (ac-ft)	Estimated Average Aquifer Draw-down (ft)	Storage Co-efficient (dimensionless)	Total With-drawal Volume (ac-ft)	Annual With-drawal Volume (ac-ft)	MAG Estimate (ac-ft)
Pecos	Capitan	Recharge unconfined	22,279	369,708	6%	10,315	619	15	0.1	33419	668	1287
Pecos	Capitan	Confined GMA 7	298,622	369,708	81%	10,315	8355	200	0.0001	5972	119	8474
Pecos	Capitan	Confined GMA 3	48,807	369,708	13%	10,315	1341	200	0.0001	976	20	1361
<b>Totals</b>			<b>369,708</b>				<b>10,315</b>			<b>40,367</b>	<b>807</b>	<b>11,122</b>

Table F-2, Groundwater Availability Estimates for the Capitan Reef aquifer in MPGCD

## Appendix G

Identification of Edwards-Trinity (Plateau) / Pecos  
Valley Aquifer GAM Grid Cells Defining  
Groundwater Management Zones in MPGCD

## Management Zone 1 – Cell Identification

ROW	COL	CELL_ID	CentroidX	CentroidY
190	123	1190123	4034257.100000000000	19604086.000000000000
190	124	1190124	4038180.999999999000	19600553.000000000000
190	125	1190125	4042104.850000000000	19597020.000000000000
190	126	1190126	4046028.600000000000	19593487.000000000000
190	127	1190127	4049952.350000000000	19589954.000000000000
190	128	1190128	4053876.200000000000	19586421.000000000000
190	129	1190129	4057800.100000000000	19582888.000000000000
190	130	1190130	4061723.850000000000	19579355.000000000000
191	122	1191122	4026800.350000000000	19603695.000000000000
191	123	1191123	4030724.100000000000	19600162.000000000000
191	124	1191124	4034647.999999999000	19596629.000000000000
191	125	1191125	4038571.850000000000	19593096.000000000000
191	126	1191126	4042495.600000000000	19589563.000000000000
191	127	1191127	4046419.350000000000	19586030.000000000000
191	128	1191128	4050343.200000000000	19582497.000000000000
191	129	1191129	4054267.100000000000	19578964.000000000000
191	130	1191130	4058190.850000000000	19575431.000000000000
192	120	1192120	4015419.83258082000	19606837.665800000000
192	121	1192121	4019343.61742362000	19603304.334200000000
192	122	1192122	4023267.33258082000	19599771.665800000000
192	123	1192123	4027191.11742362000	19596238.334200000000
192	124	1192124	4031114.98256748000	19592705.665800000000
192	125	1192125	4035038.86741917000	19589172.334200000000
192	126	1192126	4038962.58257637000	19585639.665800000000
192	127	1192127	4042886.36741917000	19582106.334200000000
192	128	1192128	4046810.14915191000	19578573.667500000000
192	129	1192129	4050734.05084808000	19575040.332500000000
192	130	1192130	4054657.83258082000	19571507.665800000000
193	118	1193118	4004039.100000000000	19609980.000000000000
193	119	1193119	4007962.94986338000	19606447.002600000000
193	120	1193120	4011886.75013735000	19602913.997400000000
193	121	1193121	4015810.600000000000	19599381.000000000000
193	122	1193122	4019734.350000000000	19595848.000000000000
193	123	1193123	4023658.100000000000	19592315.000000000000
193	124	1193124	4027581.999999999000	19588782.000000000000
193	125	1193125	4031505.850000000000	19585249.000000000000
193	126	1193126	4035429.600000000000	19581716.000000000000
193	127	1193127	4039353.350000000000	19578183.000000000000
193	128	1193128	4043277.100000000000	19574650.000000000000
193	129	1193129	4047200.999999999000	19571117.000000000000
193	130	1193130	4051124.850000000000	19567584.000000000000
194	117	1194117	3996582.350000000000	19609589.000000000000
194	118	1194118	4000506.100000000000	19606056.000000000000
194	119	1194119	4004429.850000000000	19602523.000000000000
194	120	1194120	4008353.700000000000	19598990.000000000000
194	121	1194121	4012277.600000000000	19595457.000000000000

Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
194	122	1194122	4016201.350000000000	19591924.000000000000
194	123	1194123	4020125.100000000000	19588391.000000000000
194	124	1194124	4024048.999999999000	19584858.000000000000
194	125	1194125	4027972.850000000000	19581325.000000000000
194	126	1194126	4031896.600000000000	19577792.000000000000
194	127	1194127	4035820.350000000000	19574259.000000000000
194	128	1194128	4039744.100000000000	19570726.000000000000
194	129	1194129	4043667.999999999000	19567193.000000000000
194	130	1194130	4047591.850000000000	19563660.000000000000
196	116	1196116	3985592.51743251000	19605274.334200000000
196	117	1196117	3989516.33258082000	19601741.665800000000
196	118	1196118	3993440.11742362000	19598208.334200000000
196	119	1196119	3997363.83258082000	19594675.665800000000
196	120	1196120	4001287.71743252000	19591142.334200000000
196	121	1196121	4005211.600000000000	19587609.000000000000
196	122	1196122	4009135.350000000000	19584076.000000000000
196	123	1196123	4013059.100000000000	19580543.000000000000
196	124	1196124	4016982.850000000000	19577010.000000000000
196	125	1196125	4020906.700000000000	19573477.000000000000
196	126	1196126	4024830.600000000000	19569944.000000000000
196	127	1196127	4028754.350000000000	19566411.000000000000
196	128	1196128	4032678.100000000000	19562878.000000000000
196	129	1196129	4036601.999999999000	19559345.000000000000
196	130	1196130	4040525.850000000000	19555812.000000000000
209	110	1209110	3916120.600000000000	19575463.000000000000
209	111	1209111	3920044.350000000000	19571930.000000000000
209	112	1209112	3923968.100000000000	19568397.000000000000
209	113	1209113	3927891.999999999000	19564864.000000000000
209	114	1209114	3931815.850000000000	19561331.000000000000
209	115	1209115	3935739.600000000000	19557798.000000000000
209	116	1209116	3939663.350000000000	19554265.000000000000
209	117	1209117	3943587.100000000000	19550732.000000000000
209	118	1209118	3947510.999999999000	19547199.000000000000
209	119	1209119	3951434.850000000000	19543666.000000000000
209	120	1209120	3955358.600000000000	19540133.000000000000
209	121	1209121	3959282.350000000000	19536600.000000000000
209	122	1209122	3963206.16657556000	19533067.001700000000
195	116	1195116	3989125.53342492000	19609197.998300000000
195	117	1195117	3993049.350000000000	19605665.000000000000
195	118	1195118	3996973.100000000000	19602132.000000000000
195	119	1195119	4000896.850000000000	19598599.000000000000
195	120	1195120	4004820.700000000000	19595066.000000000000
195	121	1195121	4008744.600000000000	19591533.000000000000
195	122	1195122	4012668.350000000000	19588000.000000000000
195	123	1195123	4016592.100000000000	19584467.000000000000
195	124	1195124	4020515.94986264000	19580934.002600000000

Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
195	125	1195125	4024439.75013661000	19577400.99740000000
195	126	1195126	4028363.60000000000	19573868.00000000000
195	127	1195127	4032287.35000000000	19570335.00000000000
195	128	1195128	4036211.10000000000	19566802.00000000000
195	129	1195129	4040134.99999999000	19563269.00000000000
195	130	1195130	4044058.85000000000	19559736.00000000000
197	116	1197116	3982059.49999999000	19601351.00000000000
197	117	1197117	3985983.35000000000	19597818.00000000000
197	118	1197118	3989907.10000000000	19594285.00000000000
197	119	1197119	3993830.85000000000	19590752.00000000000
197	120	1197120	3997754.70000000000	19587219.00000000000
197	121	1197121	4001678.58257637000	19583685.66580000000
197	122	1197122	4005602.36741917000	19580152.33420000000
197	123	1197123	4009526.08257637000	19576619.66580000000
197	124	1197124	4013449.86741917000	19573086.33420000000
197	125	1197125	4017373.68256748000	19569553.66580000000
197	126	1197126	4021297.61742362000	19566020.33420000000
197	127	1197127	4025221.33258082000	19562487.66580000000
197	128	1197128	4029145.11742362000	19558954.33420000000
197	129	1197129	4033068.98256748000	19555421.66580000000
197	130	1197130	4036992.86741917000	19551888.33420000000
198	116	1198116	3978526.49999999000	19597427.00000000000
198	117	1198117	3982450.35000000000	19593894.00000000000
198	118	1198118	3986374.10000000000	19590361.00000000000
198	119	1198119	3990297.85000000000	19586828.00000000000
198	120	1198120	3994221.66657556000	19583295.00170000000
198	121	1198121	3998145.53342492000	19579761.99830000000
198	122	1198122	4002069.35000000000	19576229.00000000000
198	123	1198123	4005993.10000000000	19572696.00000000000
198	124	1198124	4009916.85000000000	19569163.00000000000
198	125	1198125	4013840.70000000000	19565630.00000000000
198	126	1198126	4017764.60000000000	19562097.00000000000
198	127	1198127	4021688.35000000000	19558564.00000000000
198	128	1198128	4025612.10000000000	19555031.00000000000
198	129	1198129	4029535.94986264000	19551498.00260000000
198	130	1198130	4033459.75013661000	19547964.99740000000
199	116	1199116	3974993.49999999000	19593503.00000000000
199	117	1199117	3978917.35000000000	19589970.00000000000
199	118	1199118	3982841.10000000000	19586437.00000000000
199	119	1199119	3986764.85000000000	19582904.00000000000
199	120	1199120	3990688.60000000000	19579371.00000000000
199	121	1199121	3994612.49999999000	19575838.00000000000
199	122	1199122	3998536.35000000000	19572305.00000000000
199	123	1199123	4002460.10000000000	19568772.00000000000
199	124	1199124	4006383.85000000000	19565239.00000000000
199	125	1199125	4010307.70000000000	19561706.00000000000

## Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
199	126	1199126	4014231.600000000000	19558173.000000000000
199	127	1199127	4018155.350000000000	19554640.000000000000
199	128	1199128	4022079.100000000000	19551107.000000000000
199	129	1199129	4026002.850000000000	19547574.000000000000
199	130	1199130	4029926.700000000000	19544041.000000000000
200	106	1200106	3932222.350000000000	19624909.000000000000
200	107	1200107	3936146.200000000000	19621376.000000000000
200	108	1200108	3940070.100000000000	19617843.000000000000
200	109	1200109	3943993.850000000000	19614310.000000000000
200	110	1200110	3947917.600000000000	19610777.000000000000
200	111	1200111	3951841.350000000000	19607244.000000000000
200	112	1200112	3955765.200000000000	19603711.000000000000
200	113	1200113	3959689.100000000000	19600178.000000000000
200	114	1200114	3963612.850000000000	19596645.000000000000
200	115	1200115	3967536.600000000000	19593112.000000000000
200	116	1200116	3971460.499999990000	19589579.000000000000
200	117	1200117	3975384.350000000000	19586046.000000000000
200	118	1200118	3979308.100000000000	19582513.000000000000
200	119	1200119	3983231.850000000000	19578980.000000000000
200	120	1200120	3987155.600000000000	19575447.000000000000
200	121	1200121	3991079.499999990000	19571914.000000000000
200	122	1200122	3995003.350000000000	19568381.000000000000
200	123	1200123	3998927.100000000000	19564848.000000000000
200	124	1200124	4002850.850000000000	19561315.000000000000
200	125	1200125	4006774.666575070000	19557782.001700000000
200	126	1200126	4010698.533424430000	19554248.998300000000
200	127	1200127	4014622.350000000000	19550716.000000000000
200	128	1200128	4018546.100000000000	19547183.000000000000
200	129	1200129	4022469.850000000000	19543650.000000000000
200	130	1200130	4026393.700000000000	19540117.000000000000
201	106	1201106	3928689.332580820000	19620985.665800000000
201	107	1201107	3932613.183999160000	19617452.336000000000
201	108	1201108	3936537.016000830000	19613919.664000000000
201	109	1201109	3940460.867419170000	19610386.334200000000
201	110	1201110	3944384.582576370000	19606853.665800000000
201	111	1201111	3948308.367419170000	19603320.334200000000
201	112	1201112	3952232.182567480000	19599787.665800000000
201	113	1201113	3956156.117423620000	19596254.334200000000
201	114	1201114	3960079.832580820000	19592721.665800000000
201	115	1201115	3964003.617423620000	19589188.334200000000
201	116	1201116	3967927.432444160000	19585655.668400000000
201	117	1201117	3971851.267555830000	19582122.331600000000
201	118	1201118	3975775.082576370000	19578589.665800000000
201	119	1201119	3979698.867419170000	19575056.334200000000
201	120	1201120	3983622.582576370000	19571523.665800000000
201	121	1201121	3987546.517432510000	19567990.334200000000

## Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
201	122	1201122	3991470.350000000000	19564457.000000000000
201	123	1201123	3995394.100000000000	19560924.000000000000
201	124	1201124	3999317.850000000000	19557391.000000000000
201	125	1201125	4003241.600000000000	19553858.000000000000
201	126	1201126	4007165.499999999000	19550325.000000000000
201	127	1201127	4011089.350000000000	19546792.000000000000
201	128	1201128	4015013.100000000000	19543259.000000000000
201	129	1201129	4018936.850000000000	19539726.000000000000
201	130	1201130	4022860.700000000000	19536193.000000000000
202	106	1202106	3925156.350000000000	19617062.000000000000
202	107	1202107	3929080.100000000000	19613529.000000000000
202	108	1202108	3933003.999999999000	19609996.000000000000
202	109	1202109	3936927.850000000000	19606463.000000000000
202	110	1202110	3940851.600000000000	19602930.000000000000
202	111	1202111	3944775.350000000000	19599397.000000000000
202	112	1202112	3948699.200000000000	19595864.000000000000
202	113	1202113	3952623.100000000000	19592331.000000000000
202	114	1202114	3956546.850000000000	19588798.000000000000
202	115	1202115	3960470.600000000000	19585265.000000000000
202	116	1202116	3964394.350000000000	19581732.000000000000
202	117	1202117	3968318.200000000000	19578199.000000000000
202	118	1202118	3972242.100000000000	19574666.000000000000
202	119	1202119	3976165.850000000000	19571133.000000000000
202	120	1202120	3980089.600000000000	19567600.000000000000
202	121	1202121	3984013.499999999000	19564067.000000000000
202	122	1202122	3987937.33258082000	19560533.665800000000
202	123	1202123	3991861.11742362000	19557000.334200000000
202	124	1202124	3995784.83258082000	19553467.665800000000
202	125	1202125	3999708.61742362000	19549934.334200000000
202	126	1202126	4003632.48256748000	19546401.665800000000
202	127	1202127	4007556.36741917000	19542868.334200000000
202	128	1202128	4011480.08257637000	19539335.665800000000
203	106	1203106	3921623.350000000000	19613138.000000000000
203	107	1203107	3925547.100000000000	19609605.000000000000
203	108	1203108	3929470.999999999000	19606072.000000000000
203	109	1203109	3933394.850000000000	19602539.000000000000
203	110	1203110	3937318.600000000000	19599006.000000000000
203	111	1203111	3941242.350000000000	19595473.000000000000
203	112	1203112	3945166.200000000000	19591940.000000000000
203	113	1203113	3949090.100000000000	19588407.000000000000
203	114	1203114	3953013.850000000000	19584874.000000000000
203	115	1203115	3956937.600000000000	19581341.000000000000
203	116	1203116	3960861.350000000000	19577808.000000000000
203	117	1203117	3964785.200000000000	19574275.000000000000
203	118	1203118	3968709.100000000000	19570742.000000000000
203	119	1203119	3972632.850000000000	19567209.000000000000

Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
203	120	1203120	3976556.600000000000	19563676.000000000000
203	121	1203121	3980480.499999999000	19560143.000000000000
203	122	1203122	3984404.350000000000	19556610.000000000000
203	123	1203123	3988328.100000000000	19553077.000000000000
203	124	1203124	3992251.850000000000	19549544.000000000000
203	125	1203125	3996175.600000000000	19546011.000000000000
203	126	1203126	4000099.499999999000	19542478.000000000000
203	127	1203127	4004023.350000000000	19538945.000000000000
203	128	1203128	4007947.100000000000	19535412.000000000000
204	106	1204106	3918090.350000000000	19609214.000000000000
204	107	1204107	3922014.100000000000	19605681.000000000000
204	108	1204108	3925937.999999999000	19602148.000000000000
204	109	1204109	3929861.850000000000	19598615.000000000000
204	110	1204110	3933785.600000000000	19595082.000000000000
204	111	1204111	3937709.350000000000	19591549.000000000000
204	112	1204112	3941633.166575070000	19588016.001700000000
204	113	1204113	3945557.033424430000	19584482.998300000000
204	114	1204114	3949480.850000000000	19580950.000000000000
204	115	1204115	3953404.600000000000	19577417.000000000000
204	116	1204116	3957328.350000000000	19573884.000000000000
204	117	1204117	3961252.200000000000	19570351.000000000000
204	118	1204118	3965176.100000000000	19566818.000000000000
204	119	1204119	3969099.850000000000	19563285.000000000000
204	120	1204120	3973023.600000000000	19559752.000000000000
204	121	1204121	3976947.449863380000	19556219.002600000000
204	122	1204122	3980871.250137350000	19552685.997400000000
204	123	1204123	3984795.100000000000	19549153.000000000000
204	124	1204124	3988718.850000000000	19545620.000000000000
204	125	1204125	3992642.600000000000	19542087.000000000000
204	126	1204126	3996566.499999999000	19538554.000000000000
204	127	1204127	4000490.350000000000	19535021.000000000000
204	128	1204128	4004414.100000000000	19531488.000000000000
205	106	1205106	3914557.350000000000	19605290.000000000000
205	107	1205107	3918481.100000000000	19601757.000000000000
205	108	1205108	3922404.999999999000	19598224.000000000000
205	109	1205109	3926328.850000000000	19594691.000000000000
205	110	1205110	3930252.600000000000	19591158.000000000000
205	111	1205111	3934176.350000000000	19587625.000000000000
205	112	1205112	3938100.100000000000	19584092.000000000000
205	113	1205113	3942023.999999999000	19580559.000000000000
205	114	1205114	3945947.850000000000	19577026.000000000000
205	115	1205115	3949871.600000000000	19573493.000000000000
205	116	1205116	3953795.350000000000	19569960.000000000000
205	117	1205117	3957719.200000000000	19566427.000000000000
205	118	1205118	3961643.100000000000	19562894.000000000000
205	119	1205119	3965566.850000000000	19559361.000000000000

## Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
205	120	1205120	3969490.600000000000	19555828.000000000000
205	121	1205121	3973414.350000000000	19552295.000000000000
205	122	1205122	3977338.200000000000	19548762.000000000000
205	123	1205123	3981262.100000000000	19545229.000000000000
205	124	1205124	3985185.850000000000	19541696.000000000000
205	125	1205125	3989109.600000000000	19538163.000000000000
205	126	1205126	3993033.499999999000	19534630.000000000000
205	127	1205127	3996957.350000000000	19531097.000000000000
205	128	1205128	4000881.100000000000	19527564.000000000000
206	106	1206106	3911024.36741917000	19601366.33420000000
206	107	1206107	3914948.08257637000	19597833.66580000000
206	108	1206108	3918872.01743251000	19594300.33420000000
206	109	1206109	3922795.83258082000	19590767.66580000000
206	110	1206110	3926719.61742362000	19587234.33420000000
206	111	1206111	3930643.33258082000	19583701.66580000000
206	112	1206112	3934567.11742362000	19580168.33420000000
206	113	1206113	3938490.98256748000	19576635.66580000000
206	114	1206114	3942414.86741917000	19573102.33420000000
206	115	1206115	3946338.58257637000	19569569.66580000000
206	116	1206116	3950262.36741917000	19566036.33420000000
206	117	1206117	3954186.14915191000	19562503.66750000000
206	118	1206118	3958110.05084808000	19558970.33250000000
206	119	1206119	3962033.83258082000	19555437.66580000000
206	120	1206120	3965957.61742362000	19551904.33420000000
206	121	1206121	3969881.350000000000	19548371.000000000000
206	122	1206122	3973805.200000000000	19544838.000000000000
206	123	1206123	3977729.100000000000	19541305.000000000000
206	124	1206124	3981652.850000000000	19537772.000000000000
206	125	1206125	3985576.600000000000	19534239.000000000000
206	126	1206126	3989500.44986264000	19530706.00260000000
206	127	1206127	3993424.25013661000	19527172.99740000000
206	128	1206128	3997348.100000000000	19523640.000000000000
207	106	1207106	3907491.350000000000	19597443.000000000000
207	107	1207107	3911415.100000000000	19593910.000000000000
207	108	1207108	3915338.94986338000	19590377.00260000000
207	109	1207109	3919262.75013735000	19586843.99740000000
207	110	1207110	3923186.600000000000	19583311.000000000000
207	111	1207111	3927110.350000000000	19579778.000000000000
207	112	1207112	3931034.100000000000	19576245.000000000000
207	113	1207113	3934957.999999999000	19572712.000000000000
207	114	1207114	3938881.850000000000	19569179.000000000000
207	115	1207115	3942805.600000000000	19565646.000000000000
207	116	1207116	3946729.350000000000	19562113.000000000000
207	117	1207117	3950653.100000000000	19558580.000000000000
207	118	1207118	3954576.999999999000	19555047.000000000000
207	119	1207119	3958500.850000000000	19551514.000000000000

Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
207	120	1207120	3962424.600000000000	19547981.000000000000
207	121	1207121	3966348.332580820000	19544447.665800000000
207	122	1207122	3970272.217432520000	19540914.334200000000
207	123	1207123	3974196.082576370000	19537381.665800000000
207	124	1207124	3978119.867419170000	19533848.334200000000
207	125	1207125	3982043.582576370000	19530315.665800000000
207	126	1207126	3985967.367419170000	19526782.334200000000
207	127	1207127	3989891.182567480000	19523249.665800000000
207	128	1207128	3993815.117423620000	19519716.334200000000
208	106	1208106	3903958.350000000000	19593519.000000000000
208	107	1208107	3907882.100000000000	19589986.000000000000
208	108	1208108	3911805.850000000000	19586453.000000000000
208	109	1208109	3915729.700000000000	19582920.000000000000
208	110	1208110	3919653.600000000000	19579387.000000000000
208	111	1208111	3923577.350000000000	19575854.000000000000
208	112	1208112	3927501.100000000000	19572321.000000000000
208	113	1208113	3931424.999999990000	19568788.000000000000
208	114	1208114	3935348.850000000000	19565255.000000000000
208	115	1208115	3939272.600000000000	19561722.000000000000
208	116	1208116	3943196.350000000000	19558189.000000000000
208	117	1208117	3947120.100000000000	19554656.000000000000
208	118	1208118	3951043.999999990000	19551123.000000000000
208	119	1208119	3954967.850000000000	19547590.000000000000
208	120	1208120	3958891.600000000000	19544057.000000000000
208	121	1208121	3962815.350000000000	19540524.000000000000
208	122	1208122	3966739.200000000000	19536991.000000000000
208	123	1208123	3970663.100000000000	19533458.000000000000
208	124	1208124	3974586.850000000000	19529925.000000000000
208	125	1208125	3978510.600000000000	19526392.000000000000
208	126	1208126	3982434.350000000000	19522859.000000000000
208	127	1208127	3986358.200000000000	19519326.000000000000
208	128	1208128	3990282.100000000000	19515793.000000000000
209	123	1209123	3967130.033424920000	19529533.998300000000
209	124	1209124	3971053.850000000000	19526001.000000000000
209	125	1209125	3974977.600000000000	19522468.000000000000
209	126	1209126	3978901.350000000000	19518935.000000000000
209	127	1209127	3982825.200000000000	19515402.000000000000
209	128	1209128	3986749.100000000000	19511869.000000000000
210	120	1210120	3951825.600000000000	19536209.000000000000
210	121	1210121	3955749.350000000000	19532676.000000000000
210	122	1210122	3959673.100000000000	19529143.000000000000
210	123	1210123	3963596.999999990000	19525610.000000000000
210	124	1210124	3967520.850000000000	19522077.000000000000
210	125	1210125	3971444.600000000000	19518544.000000000000
210	126	1210126	3975368.350000000000	19515011.000000000000
210	127	1210127	3979292.200000000000	19511478.000000000000

## Management Zone 1 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
210	128	1210128	3983216.100000000000	19507945.000000000000
211	120	1211120	3948292.600000000000	19532285.000000000000
211	121	1211121	3952216.350000000000	19528752.000000000000
211	122	1211122	3956140.100000000000	19525219.000000000000
211	123	1211123	3960063.999999990000	19521686.000000000000
211	124	1211124	3963987.850000000000	19518153.000000000000
211	125	1211125	3967911.600000000000	19514620.000000000000
211	126	1211126	3971835.350000000000	19511087.000000000000
211	127	1211127	3975759.166575070000	19507554.001700000000
211	128	1211128	3979683.033424430000	19504020.998300000000
212	120	1212120	3944759.582576370000	19528361.665800000000
212	121	1212121	3948683.367419170000	19524828.334200000000
212	122	1212122	3952607.082576370000	19521295.665800000000
212	123	1212123	3956531.017432510000	19517762.334200000000
212	124	1212124	3960454.832580820000	19514229.665800000000
212	125	1212125	3964378.617423620000	19510696.334200000000
212	126	1212126	3968302.332580820000	19507163.665800000000
212	127	1212127	3972226.117423620000	19503630.334200000000
212	128	1212128	3976149.982567480000	19500097.665800000000
213	120	1213120	3941226.600000000000	19524438.000000000000
213	121	1213121	3945150.350000000000	19520905.000000000000
213	122	1213122	3949074.100000000000	19517372.000000000000
213	123	1213123	3952997.999999990000	19513839.000000000000
213	124	1213124	3956921.850000000000	19510306.000000000000
213	125	1213125	3960845.600000000000	19506773.000000000000
213	126	1213126	3964769.350000000000	19503240.000000000000
213	127	1213127	3968693.100000000000	19499707.000000000000
213	128	1213128	3972616.999999990000	19496174.000000000000
214	120	1214120	3937693.600000000000	19520514.000000000000
214	121	1214121	3941617.350000000000	19516981.000000000000
214	122	1214122	3945541.100000000000	19513448.000000000000
214	123	1214123	3949464.999999990000	19509915.000000000000
214	124	1214124	3953388.850000000000	19506382.000000000000
214	125	1214125	3957312.600000000000	19502849.000000000000
214	126	1214126	3961236.350000000000	19499316.000000000000
214	127	1214127	3965160.100000000000	19495783.000000000000
214	128	1214128	3969083.999999990000	19492250.000000000000
215	120	1215120	3934160.600000000000	19516590.000000000000
215	121	1215121	3938084.350000000000	19513057.000000000000
215	122	1215122	3942008.100000000000	19509524.000000000000
215	123	1215123	3945931.949863380000	19505991.002600000000
215	124	1215124	3949855.750137350000	19502457.997400000000
215	125	1215125	3953779.600000000000	19498925.000000000000
215	126	1215126	3957703.350000000000	19495392.000000000000
215	127	1215127	3961627.100000000000	19491859.000000000000
215	128	1215128	3965550.999999990000	19488326.000000000000

## Management Zone 2 – Cell Identification

ROW	COL	CELL_ID	CentroidX	CentroidY
164	147	1164147	4220286.749999999000	19621313.000000000000
164	148	1164148	4224210.499999999000	19617780.000000000000
164	149	1164149	4228134.499999999000	19614247.000000000000
164	150	1164150	4232058.249999999000	19610714.000000000000
164	151	1164151	4235981.999999999000	19607181.000000000000
164	152	1164152	4239905.749999999000	19603648.000000000000
164	153	1164153	4243829.499999999000	19600115.000000000000
164	154	1164154	4247753.499999999000	19596582.000000000000
165	146	1165146	4212829.999999999000	19620922.000000000000
165	147	1165147	4216753.749999999000	19617389.000000000000
165	148	1165148	4220677.499999999000	19613856.000000000000
165	149	1165149	4224601.499999999000	19610323.000000000000
165	150	1165150	4228525.249999999000	19606790.000000000000
165	151	1165151	4232448.999999999000	19603257.000000000000
165	152	1165152	4236372.749999999000	19599724.000000000000
165	153	1165153	4240296.499999999000	19596191.000000000000
165	154	1165154	4244220.499999999000	19592658.000000000000
165	155	1165155	4248144.249999999000	19589125.000000000000
165	156	1165156	4252067.999999999000	19585592.000000000000
166	146	1166146	4209296.999999999000	19616998.000000000000
166	147	1166147	4213220.749999999000	19613465.000000000000
166	148	1166148	4217144.499999999000	19609932.000000000000
166	149	1166149	4221068.499999999000	19606399.000000000000
166	150	1166150	4224992.249999999000	19602866.000000000000
166	151	1166151	4228915.999999999000	19599333.000000000000
166	152	1166152	4232839.749999999000	19595800.000000000000
166	153	1166153	4236763.499999999000	19592267.000000000000
166	154	1166154	4240687.499999999000	19588734.000000000000
166	155	1166155	4244611.249999999000	19585201.000000000000
166	156	1166156	4248534.999999999000	19581668.000000000000
167	143	1167143	4193992.600000000000	19623673.000000000000
167	144	1167144	4197916.499999999000	19620140.000000000000
167	145	1167145	4201840.249999999000	19616607.000000000000
167	146	1167146	4205763.999999999000	19613074.000000000000
167	147	1167147	4209687.749999999000	19609541.000000000000
167	148	1167148	4213611.499999999000	19606008.000000000000
167	149	1167149	4217535.499999999000	19602475.000000000000
167	150	1167150	4221459.249999999000	19598942.000000000000
167	151	1167151	4225382.999999999000	19595409.000000000000
167	152	1167152	4229306.749999999000	19591876.000000000000
167	153	1167153	4233230.499999999000	19588343.000000000000
167	154	1167154	4237154.499999999000	19584810.000000000000
167	155	1167155	4241078.249999999000	19581277.000000000000
167	156	1167156	4245001.999999999000	19577744.000000000000
168	140	1168140	4178688.100000000000	19630349.000000000000
168	141	1168141	4182611.83258082000	19626815.665800000000

## Management Zone 2 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
168	142	1168142	4186535.71743252000	19623282.33420000000
168	143	1168143	4190459.58257637000	19619749.66580000000
168	144	1168144	4194383.43384931000	19616216.33860000000
168	145	1168145	4198307.06615068000	19612683.66140000000
168	146	1168146	4202231.01743251000	19609150.33420000000
168	147	1168147	4206154.73258971000	19605617.66580000000
168	148	1168148	4210078.51743251000	19602084.33420000000
168	149	1168149	4214002.48256748000	19598551.66580000000
168	150	1168150	4217926.26741028000	19595018.33420000000
168	151	1168151	4221849.98256748000	19591485.66580000000
168	152	1168152	4225773.76741028000	19587952.33420000000
168	153	1168153	4229697.48256748000	19584419.66580000000
168	154	1168154	4233621.51743251000	19580886.33420000000
168	155	1168155	4237545.23258971000	19577353.66580000000
168	156	1168156	4241469.01743251000	19573820.33420000000
169	140	1169140	4175155.10000000000	19626425.00000000000
169	141	1169141	4179078.85000000000	19622892.00000000000
169	142	1169142	4183002.66657556000	19619359.00170000000
169	143	1169143	4186926.53342492000	19615825.99830000000
169	144	1169144	4190850.28342441000	19612292.99830000000
169	145	1169145	4194774.06657502000	19608760.00170000000
169	146	1169146	4198697.99999999000	19605227.00000000000
169	147	1169147	4202621.74999999000	19601694.00000000000
169	148	1169148	4206545.49999999000	19598161.00000000000
169	149	1169149	4210469.49999999000	19594628.00000000000
169	150	1169150	4214393.24999999000	19591095.00000000000
169	151	1169151	4218316.99999999000	19587562.00000000000
169	152	1169152	4222240.74999999000	19584029.00000000000
169	153	1169153	4226164.49999999000	19580496.00000000000
169	154	1169154	4230088.49999999000	19576963.00000000000
169	155	1169155	4234012.24999999000	19573430.00000000000
169	156	1169156	4237935.99999999000	19569897.00000000000
170	140	1170140	4171622.10000000000	19622501.00000000000
170	141	1170141	4175545.85000000000	19618968.00000000000
170	142	1170142	4179469.60000000000	19615435.00000000000
170	143	1170143	4183393.49999999000	19611902.00000000000
170	144	1170144	4187317.35000000000	19608369.00000000000
170	145	1170145	4191241.10000000000	19604836.00000000000
170	146	1170146	4195164.99999999000	19601303.00000000000
170	147	1170147	4199088.74999999000	19597770.00000000000
170	148	1170148	4203012.49999999000	19594237.00000000000
170	149	1170149	4206936.41643786000	19590704.00440000000
170	150	1170150	4210860.08356091000	19587170.99570000000
170	151	1170151	4214783.99999999000	19583638.00000000000
170	152	1170152	4218707.74999999000	19580105.00000000000
170	153	1170153	4222631.49999999000	19576572.00000000000

Management Zone 2 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
170	154	1170154	4226555.499999999000	19573039.000000000000
170	155	1170155	4230479.249999999000	19569506.000000000000
171	141	1171141	4172012.850000000000	19615044.000000000000
171	142	1171142	4175936.600000000000	19611511.000000000000
171	143	1171143	4179860.499999999000	19607978.000000000000
171	144	1171144	4183784.350000000000	19604445.000000000000
171	145	1171145	4187708.100000000000	19600912.000000000000
171	146	1171146	4191631.949863380000	19597379.002600000000
171	147	1171147	4195555.650137280000	19593845.997400000000
171	148	1171148	4199479.499999999000	19590313.000000000000
171	149	1171149	4203403.249999999000	19586780.000000000000
171	150	1171150	4207326.999999999000	19583247.000000000000
171	151	1171151	4211250.999999999000	19579714.000000000000
171	152	1171152	4215174.749999999000	19576181.000000000000
171	153	1171153	4219098.499999999000	19572648.000000000000
171	154	1171154	4223022.499999999000	19569115.000000000000
171	155	1171155	4226946.249999999000	19565582.000000000000
172	144	1172144	4180251.350000000000	19600521.000000000000
172	145	1172145	4184175.100000000000	19596988.000000000000
172	146	1172146	4188098.850000000000	19593455.000000000000
172	147	1172147	4192022.600000000000	19589922.000000000000
172	148	1172148	4195946.499999999000	19586389.000000000000
172	149	1172149	4199870.249999999000	19582856.000000000000
172	150	1172150	4203793.999999999000	19579323.000000000000
172	151	1172151	4207717.999999999000	19575790.000000000000
172	152	1172152	4211641.749999999000	19572257.000000000000
172	153	1172153	4215565.499999999000	19568724.000000000000
172	154	1172154	4219489.499999999000	19565191.000000000000
173	146	1173146	4184565.832580820000	19589531.665800000000
173	147	1173147	4188489.617423620000	19585998.334200000000
173	148	1173148	4192413.482567480000	19582465.665800000000
173	149	1173149	4196337.267410280000	19578932.334200000000
173	150	1173150	4200260.982567480000	19575399.665800000000
173	151	1173151	4204185.017432510000	19571866.334200000000
173	152	1173152	4208108.732589710000	19568333.665800000000
173	153	1173153	4212032.517432510000	19564800.334200000000
173	154	1173154	4215956.399028730000	19561267.670100000000
174	147	1174147	4184956.600000000000	19582075.000000000000
174	148	1174148	4188880.499999999000	19578542.000000000000
174	149	1174149	4192804.283424410000	19575008.998300000000
174	150	1174150	4196728.066575020000	19571476.001700000000
174	151	1174151	4200651.999999999000	19567943.000000000000
174	152	1174152	4204575.749999999000	19564410.000000000000
174	153	1174153	4208499.499999999000	19560877.000000000000
174	154	1174154	4212423.249999999000	19557344.000000000000
175	147	1175147	4181423.600000000000	19578151.000000000000

## Management Zone 2 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
175	148	1175148	4185347.499999999000	19574618.000000000000
175	149	1175149	4189271.350000000000	19571085.000000000000
175	150	1175150	4193195.100000000000	19567552.000000000000
175	151	1175151	4197118.999999999000	19564019.000000000000
175	152	1175152	4201042.749999999000	19560486.000000000000
175	153	1175153	4204966.499999999000	19556953.000000000000
176	147	1176147	4177890.600000000000	19574227.000000000000
176	148	1176148	4181814.499999999000	19570694.000000000000
176	149	1176149	4185738.350000000000	19567161.000000000000
176	150	1176150	4189662.100000000000	19563628.000000000000
176	151	1176151	4193585.94986338000	19560095.002600000000
176	152	1176152	4197509.65013728000	19556561.997400000000
177	147	1177147	4174357.600000000000	19570303.000000000000
177	148	1177148	4178281.44986264000	19566770.002600000000
177	149	1177149	4182205.25013661000	19563236.997400000000
177	150	1177150	4186129.100000000000	19559704.000000000000
177	151	1177151	4190052.850000000000	19556171.000000000000
177	152	1177152	4193976.600000000000	19552638.000000000000
178	147	1178147	4170824.58257637000	19566379.665800000000
178	148	1178148	4174748.36741917000	19562846.334200000000
178	149	1178149	4178672.18256748000	19559313.665800000000
178	150	1178150	4182596.11742362000	19555780.334200000000
178	151	1178151	4186519.83258082000	19552247.665800000000
178	152	1178152	4190443.61742362000	19548714.334200000000

### Management Zone 3 – Cell Identification

ROW	COL	CELL_ID	CentroidX	CentroidY
186	100	1186100	3958141.700000000000	19701041.000000000000
186	101	1186101	3962065.582576370000	19697507.665800000000
186	102	1186102	3965989.367419170000	19693974.334200000000
186	103	1186103	3969913.082576370000	19690441.665800000000
186	104	1186104	3973836.867419170000	19686908.334200000000
186	105	1186105	3977760.682567480000	19683375.665800000000
186	106	1186106	3981684.617423620000	19679842.334200000000
192	101	1192101	3940867.499999990000	19673965.000000000000
192	102	1192102	3944791.350000000000	19670432.000000000000
192	103	1192103	3948715.100000000000	19666899.000000000000
192	104	1192104	3952638.850000000000	19663366.000000000000
192	105	1192105	3956562.600000000000	19659833.000000000000
192	106	1192106	3960486.499999990000	19656300.000000000000
192	107	1192107	3964410.350000000000	19652767.000000000000
192	108	1192108	3968334.100000000000	19649234.000000000000
192	109	1192109	3972257.850000000000	19645701.000000000000
179	100	1179100	3982872.850000000000	19728507.000000000000
180	99	1180099	3975416.017432510000	19728116.334200000000
180	100	1180100	3979339.832580820000	19724583.665800000000
180	101	1180101	3983263.617423620000	19721050.334200000000
181	99	1181099	3971882.999999990000	19724193.000000000000
181	100	1181100	3975806.850000000000	19720660.000000000000
181	101	1181101	3979730.600000000000	19717127.000000000000
182	99	1182099	3968349.999999990000	19720269.000000000000
182	100	1182100	3972273.850000000000	19716736.000000000000
182	101	1182101	3976197.600000000000	19713203.000000000000
182	102	1182102	3980121.350000000000	19709670.000000000000
183	99	1183099	3964816.949863380000	19716345.002600000000
183	100	1183100	3968740.750137350000	19712811.997400000000
183	101	1183101	3972664.600000000000	19709279.000000000000
183	102	1183102	3976588.350000000000	19705746.000000000000
183	103	1183103	3980512.100000000000	19702213.000000000000
183	104	1183104	3984435.999999990000	19698680.000000000000
183	105	1183105	3988359.850000000000	19695147.000000000000
184	99	1184099	3961283.850000000000	19712421.000000000000
184	100	1184100	3965207.700000000000	19708888.000000000000
184	101	1184101	3969131.600000000000	19705355.000000000000
184	102	1184102	3973055.350000000000	19701822.000000000000
184	103	1184103	3976979.100000000000	19698289.000000000000
184	104	1184104	3980902.999999990000	19694756.000000000000
184	105	1184105	3984826.850000000000	19691223.000000000000
184	106	1184106	3988750.600000000000	19687690.000000000000
185	100	1185100	3961674.717432520000	19704964.334200000000
185	101	1185101	3965598.600000000000	19701431.000000000000
185	102	1185102	3969522.350000000000	19697898.000000000000
185	103	1185103	3973446.100000000000	19694365.000000000000

### Management Zone 3 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
185	104	1185104	3977369.94986264000	19690832.00260000000
185	105	1185105	3981293.75013661000	19687298.99740000000
185	106	1185106	3985217.60000000000	19683766.00000000000
187	100	1187100	3954608.70000000000	19697117.00000000000
187	101	1187101	3958532.60000000000	19693584.00000000000
187	102	1187102	3962456.35000000000	19690051.00000000000
187	103	1187103	3966380.10000000000	19686518.00000000000
187	104	1187104	3970303.85000000000	19682985.00000000000
187	105	1187105	3974227.70000000000	19679452.00000000000
187	106	1187106	3978151.60000000000	19675919.00000000000
187	107	1187107	3982075.35000000000	19672386.00000000000
187	108	1187108	3985999.10000000000	19668853.00000000000
187	109	1187109	3989922.99999999000	19665320.00000000000
188	100	1188100	3951075.66657556000	19693193.00170000000
188	101	1188101	3954999.53342492000	19689659.99830000000
188	102	1188102	3958923.35000000000	19686127.00000000000
188	103	1188103	3962847.10000000000	19682594.00000000000
188	104	1188104	3966770.85000000000	19679061.00000000000
188	105	1188105	3970694.70000000000	19675528.00000000000
188	106	1188106	3974618.60000000000	19671995.00000000000
188	107	1188107	3978542.35000000000	19668462.00000000000
188	108	1188108	3982466.10000000000	19664929.00000000000
188	109	1188109	3986389.94986264000	19661396.00260000000
189	101	1189101	3951466.49999999000	19685736.00000000000
189	102	1189102	3955390.35000000000	19682203.00000000000
189	103	1189103	3959314.10000000000	19678670.00000000000
189	104	1189104	3963237.85000000000	19675137.00000000000
189	105	1189105	3967161.70000000000	19671604.00000000000
189	106	1189106	3971085.60000000000	19668071.00000000000
189	107	1189107	3975009.35000000000	19664538.00000000000
189	108	1189108	3978933.10000000000	19661005.00000000000
189	109	1189109	3982856.85000000000	19657472.00000000000
189	110	1189110	3986780.70000000000	19653939.00000000000
190	101	1190101	3947933.49999999000	19681812.00000000000
190	102	1190102	3951857.35000000000	19678279.00000000000
190	103	1190103	3955781.10000000000	19674746.00000000000
190	104	1190104	3959704.85000000000	19671213.00000000000
190	105	1190105	3963628.66657507000	19667680.00170000000
190	106	1190106	3967552.53342443000	19664146.99830000000
190	107	1190107	3971476.35000000000	19660614.00000000000
190	108	1190108	3975400.10000000000	19657081.00000000000
190	109	1190109	3979323.85000000000	19653548.00000000000
190	110	1190110	3983247.70000000000	19650015.00000000000
190	111	1190111	3987171.60000000000	19646482.00000000000
191	101	1191101	3944400.51743251000	19677888.33420000000
191	102	1191102	3948324.33258082000	19674355.66580000000

### Management Zone 3 – Cell Identification Continued

ROW	COL	CELL_ID	CentroidX	CentroidY
191	103	1191103	3952248.11742362000	19670822.33420000000
191	104	1191104	3956171.83258082000	19667289.66580000000
191	105	1191105	3960095.61742362000	19663756.33420000000
191	106	1191106	3964019.48256748000	19660223.66580000000
191	107	1191107	3967943.36741917000	19656690.33420000000
191	108	1191108	3971867.08257637000	19653157.66580000000
191	109	1191109	3975790.86741917000	19649624.33420000000
191	110	1191110	3979714.68256748000	19646091.66580000000
191	111	1191111	3983638.61742362000	19642558.33420000000
191	112	1191112	3987562.33258082000	19639025.66580000000
193	102	1193102	3941258.35000000000	19666508.00000000000
193	103	1193103	3945182.10000000000	19662975.00000000000
193	104	1193104	3949105.85000000000	19659442.00000000000
193	105	1193105	3953029.60000000000	19655909.00000000000
193	106	1193106	3956953.49999999000	19652376.00000000000
193	107	1193107	3960877.35000000000	19648843.00000000000
193	108	1193108	3964801.10000000000	19645310.00000000000
194	102	1194102	3937725.25013735000	19662583.99740000000
194	103	1194103	3941649.10000000000	19659051.00000000000
194	104	1194104	3945572.85000000000	19655518.00000000000
194	105	1194105	3949496.60000000000	19651985.00000000000
194	106	1194106	3953420.49999999000	19648452.00000000000
194	107	1194107	3957344.35000000000	19644919.00000000000
196	102	1196102	3930659.21743252000	19654736.33420000000
196	103	1196103	3934583.08257637000	19651203.66580000000
196	104	1196104	3938506.86741917000	19647670.33420000000
196	105	1196105	3942430.58257637000	19644137.66580000000
195	102	1195102	3934192.20000000000	19658660.00000000000
195	103	1195103	3938116.10000000000	19655127.00000000000
195	104	1195104	3942039.85000000000	19651594.00000000000
195	105	1195105	3945963.60000000000	19648061.00000000000
195	106	1195106	3949887.49999999000	19644528.00000000000

