

**Conversion of Base Irrigation Groundwater Application Summary**  
**Conversion Based on Installation of Pivot System**  
**Jerry Kye Mask**

**Permit Number:** P100-014 (AT00902)  
**Purpose of Use:** Irrigation  
**Place of Use:** Atascosa County  
**Original Permitted Amount:** 1415.600 acre-feet  
**Irrigation Base Amount:** 707.800 acre-feet  
**Irrigation Unrestricted Amount:** 707.800 acre-feet  
**Date Board Issued Original IRP:** January 14, 2003

EAA WELL NO.	LOCATION	MEASURING METHOD	WITHDRAWAL RATE
W100-010 (AT00902-001)	29-13.00-31.90 / 98-45.00-18.60	Meter	3855 gpm
W100-011 (AT00902-002)	29-13.00-29.70 / 98-45.00-18.40	Meter	1227gpm

**Number of acre-feet applicant originally requested to be converted from base irrigation to unrestricted irrigation groundwater:**

393.111 acre-feet

(222.797 acre-feet due to installation of pivots, and 170.314 due to dryland farming of adjacent corners)

**Number of acre-feet staff recommends to be converted from base irrigation to unrestricted irrigation groundwater:**

393.111 acre-feet

(222.797 acre-feet due to installation of pivots, and 170.314 due to dryland farming of adjacent corners)

**Place of Use for Permit:**

817.900

The tract(s) of land more fully described in Special Assumption Warranty Deed dated 10/17/1996 as recorded with Clerk as Document # 15347, Official Public Records, Atascosa County, Texas, the tract(s) of land more fully described in Special Warranty Deed dated 10/17/1996 as recorded with Clerk as Document # 15349, Official Public Records, Atascosa County, Texas, the tract(s) of land more fully described in Special Assumption Warranty Deed dated 10/17/1996 as recorded with Clerk as Document # 15348, Official Public Records, Atascosa County, Texas, the tract(s) of land more fully described in

Assumption Warranty Deed with Vendor's Lien dated 2/28/1978 as recorded with Clerk as Document, Volume 477, Pages 188 - 191, Official Public Records, Atascosa County, Texas, and the tract(s) of land more fully described in Irrevocable Designation Of Historically Irrigated Lands Pertaining To Edwards Aquifer Groundwater Rights dated 10/10/2018 as recorded with Clerk as Document # 191138, Official Public Records, Atascosa County, Texas.

### **Current Physical Description of Place of Use:**

The original IRP was granted due to historical irrigation of 707.800 acres, located one mile south of IH 35, off Luckey Rd and FM 2790, near Lytle in Atascosa county. On January 14, 2003, Permit No. IRP 2003-AT00902 (P100-014) was issued to Jerry Kye Mask. On November 13, 2018, the place of use for P100-014 was amended to include an Irrevocable Designation of Historically Irrigated Lands Pertaining to Edwards Aquifer Groundwater Rights. Currently, the 707.800 acre-feet BIG are located on the 802.400 designated historically irrigated acres (HIA). The 802.400 HIA are being utilized for agricultural use and are the subject of this Conversion of Base.

### **Description of Conservation Equipment:**

Eight (8) Reinke center pivot irrigation systems were installed on the HIA: one (1) in 2006; seven (7) between 2013 and 2017 (see Attachment B). Six utilize the full circle with some overlapping coverage, one utilizes just over a 3/4 circle, and one covers only a few acres. The pivots utilize a Mid-Elevation Spray Application (MESA) to irrigate approximately 609.300 base acres.

### **Staff Calculations:**

Staff calculated the area under the pivots and found that 609.300 base acres are currently being irrigated under the pivot system. EAA staff has calculated a projected savings of 222.797 acre-feet by the installation of the pivot system. In addition, staff calculated corner credit of 170.314 acre-feet based on the standard calculation for the center pivots (609.300 acres under the pivots subtracted from the total 802.400 base acres). Corner credit is calculated on the standard based one acre-foot per acre (considering a 75 percent coverage of the base acres and a base ratio of 0.882 acre-foot/acre). The total conversion as calculated by EAA staff is 393.111 acre-feet.

### **Staff Recommendation:**

Staff recommends a conversion be granted for 393.111 acre-feet. The application will be reviewed at the January 22, 2019 Permits/Enforcement Committee Meeting and the February 12, 2019 Board Meeting.