

PS Five Years of Deep Fluid Disposal into the Ellenburger of the Fort Worth Basin*

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Abstract

The Ellenburger is characterized as a compartmentalized reservoir in West Texas with significant secondary porosities attributed to lateral and vertical paleokarst features. Similarly, water wells producing from the Ellenburger in the Llano region, exhibit well yields that vary by several orders of magnitude. Those same attributes are likely to control the injection potential throughout the Fort Worth Basin.

More than 834 million barrels of produced water have been injected into in the Ellenburger of the Newark, East (Barnett Shale) field from October 2006 through September 2011. The presentation will include comparative analyses of varied injection rates, injection pressures, and disposal volumes from this period. Earthquake data from the same period will be presented together with the spatial distribution of injection pressures, injection volumes and regional geologic structures.

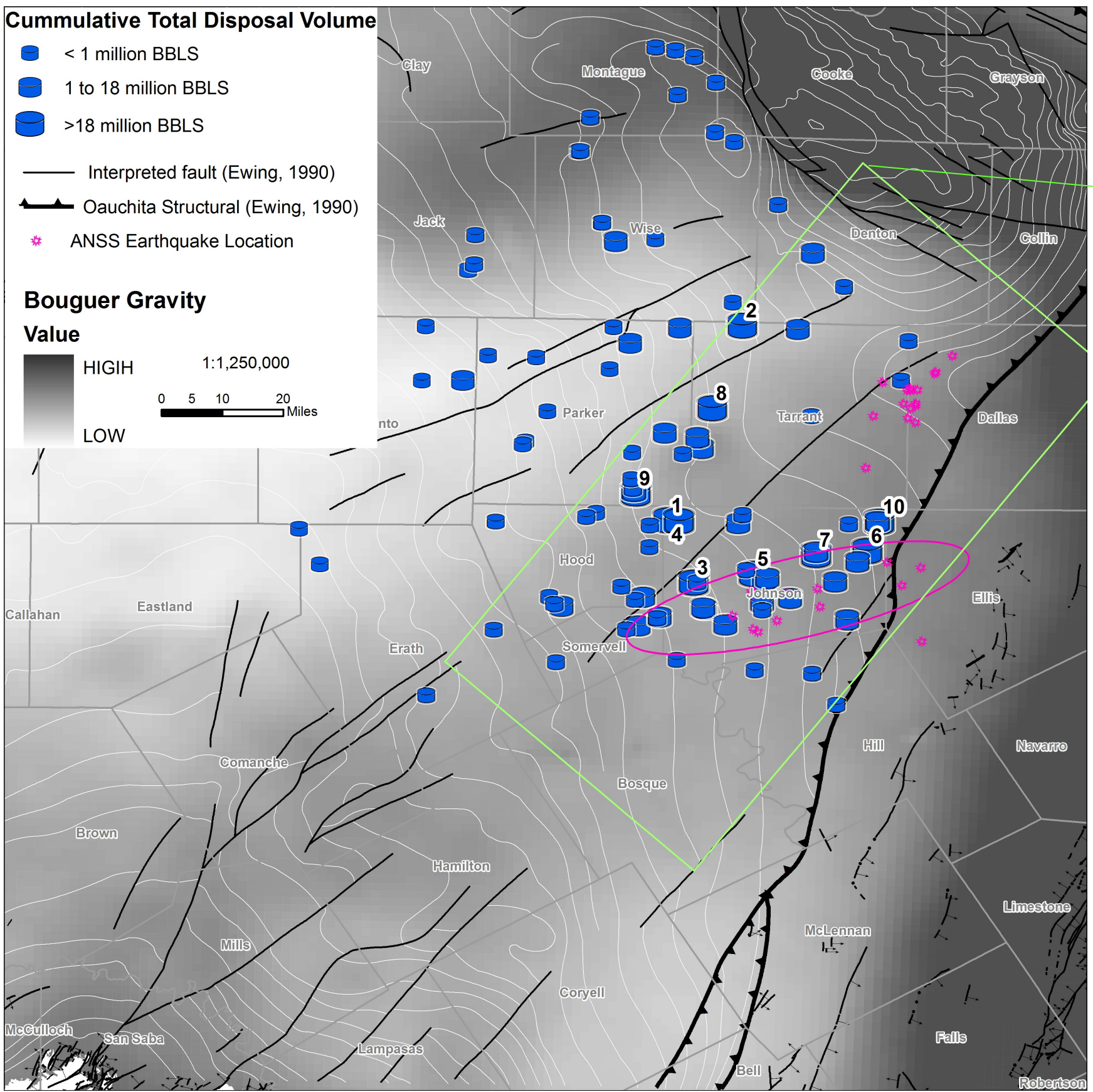
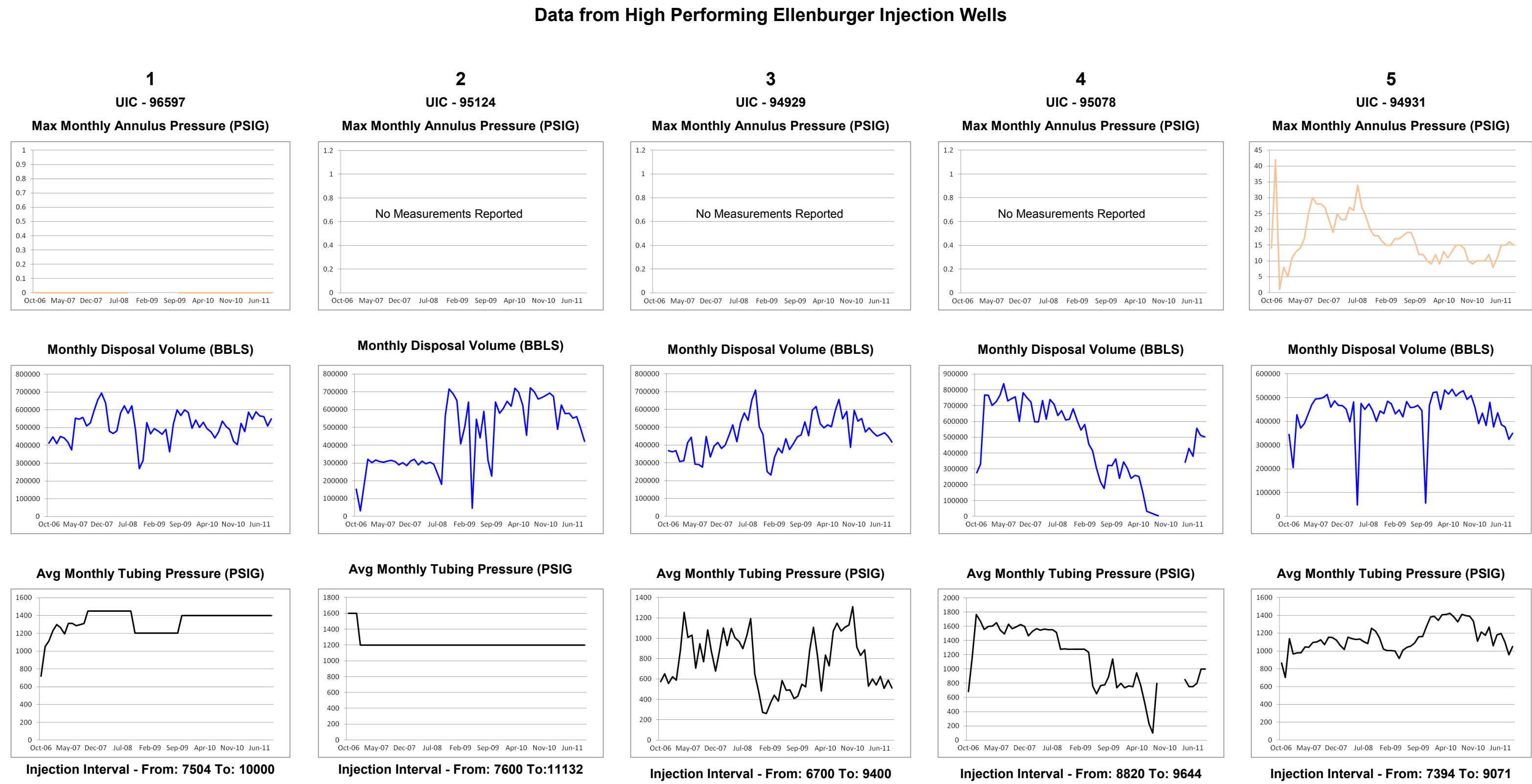
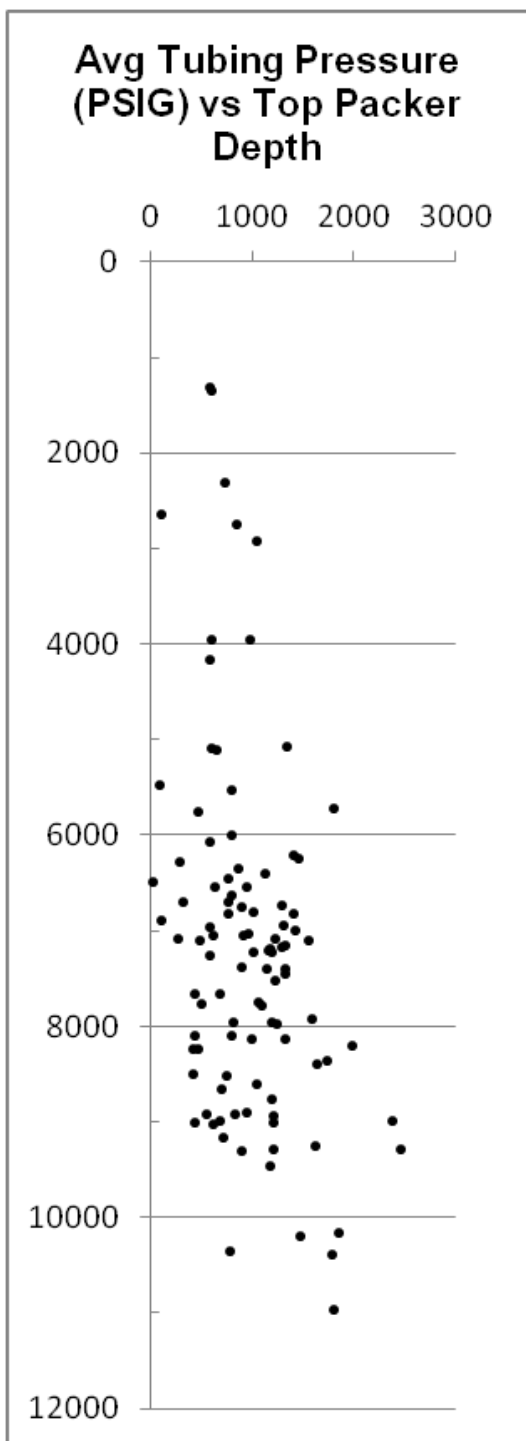
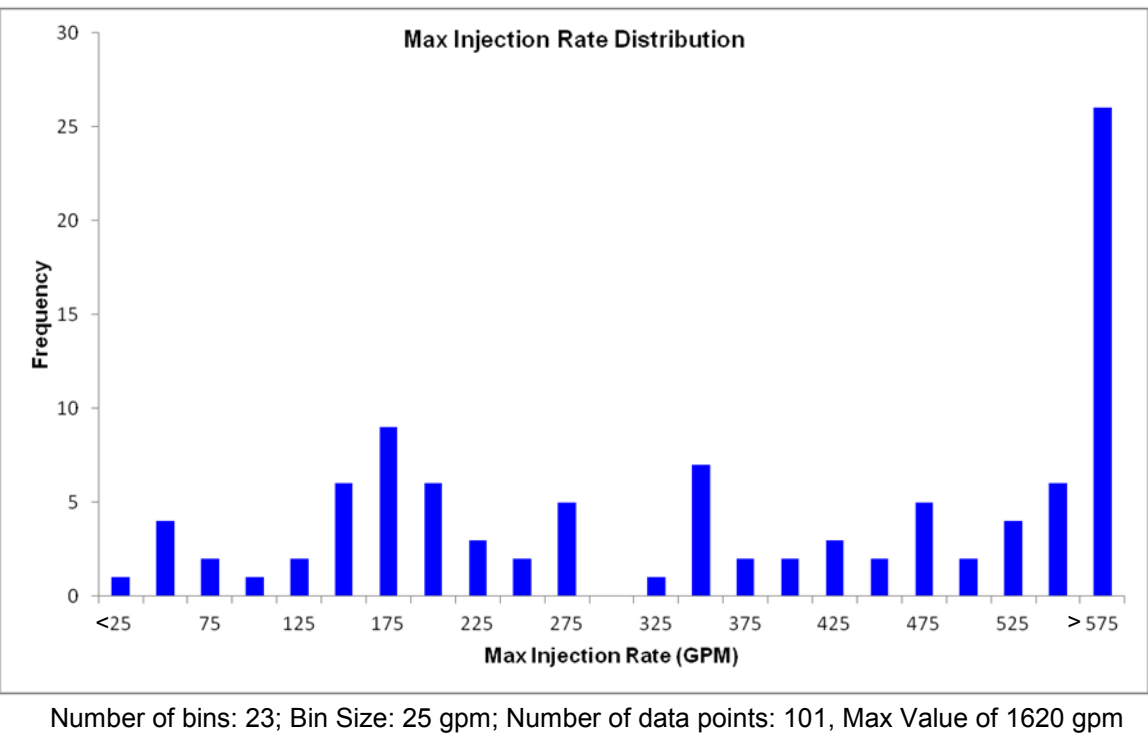
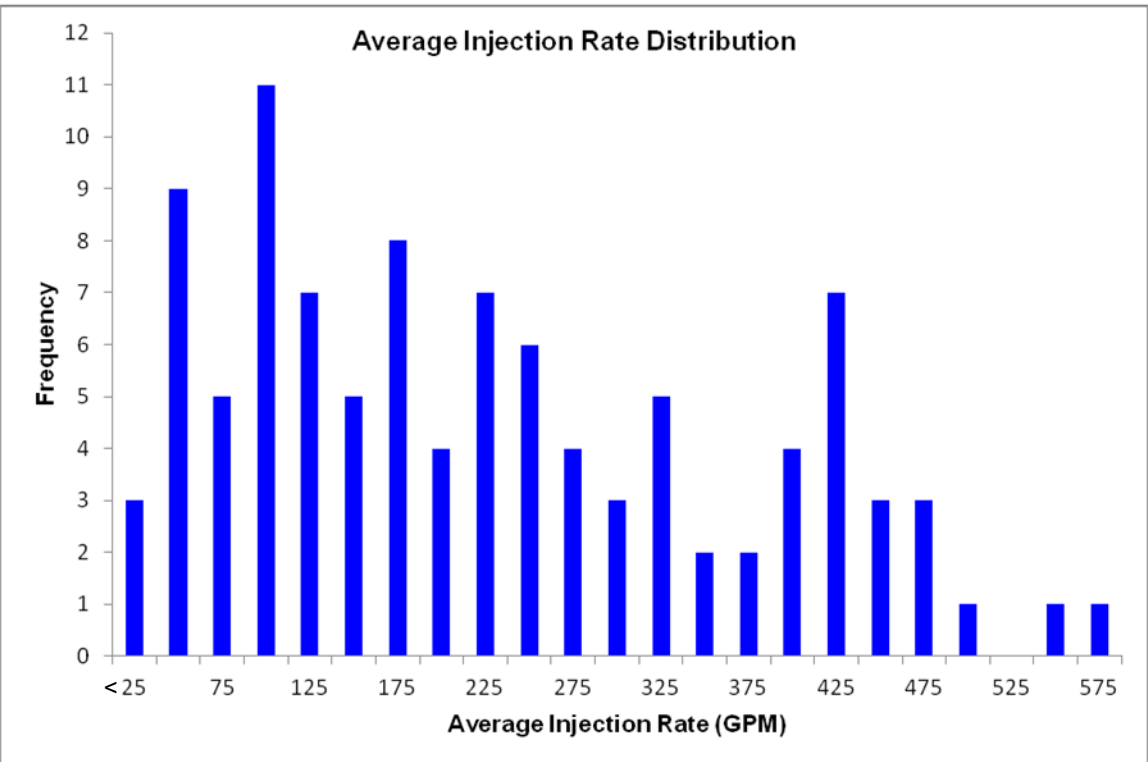
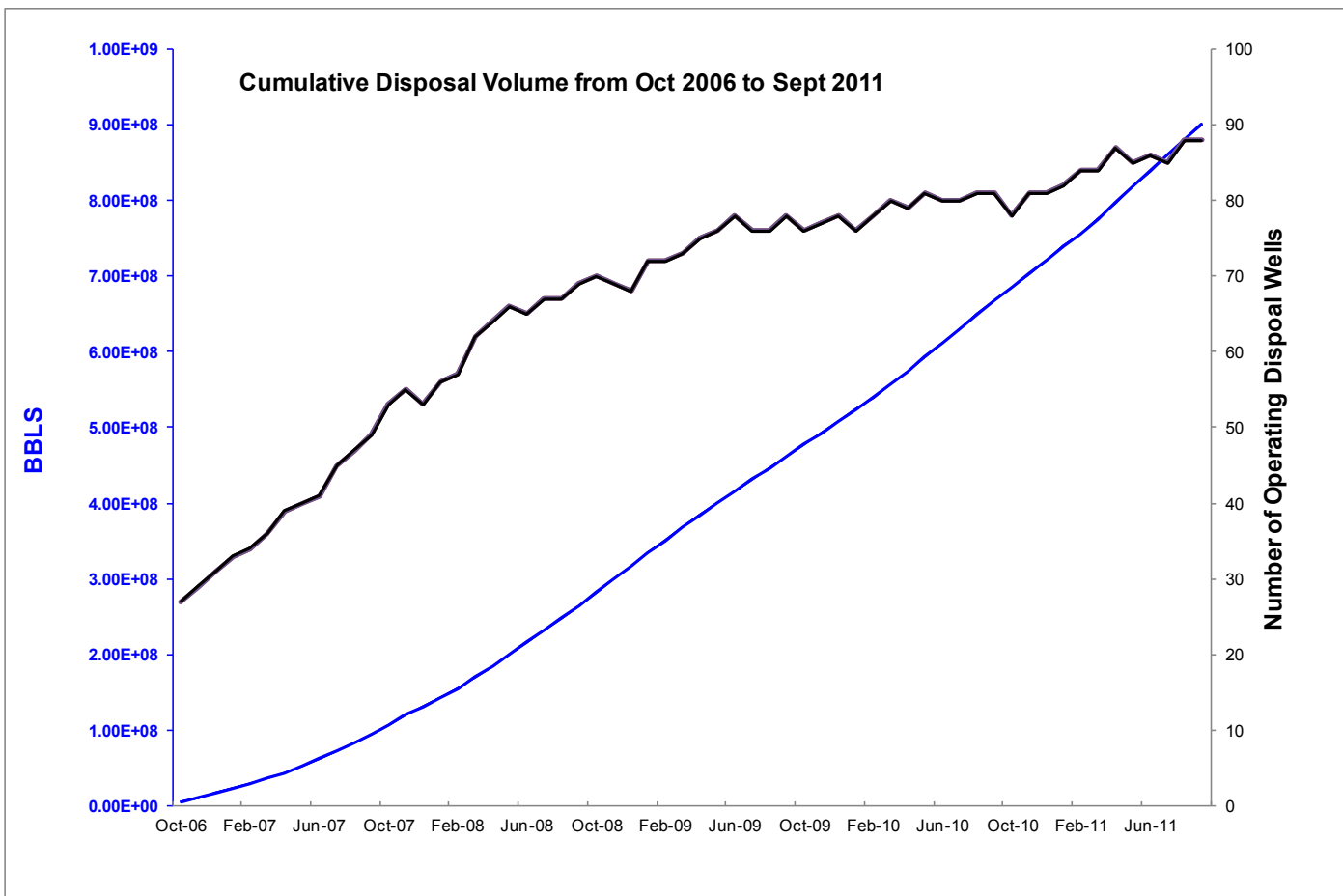
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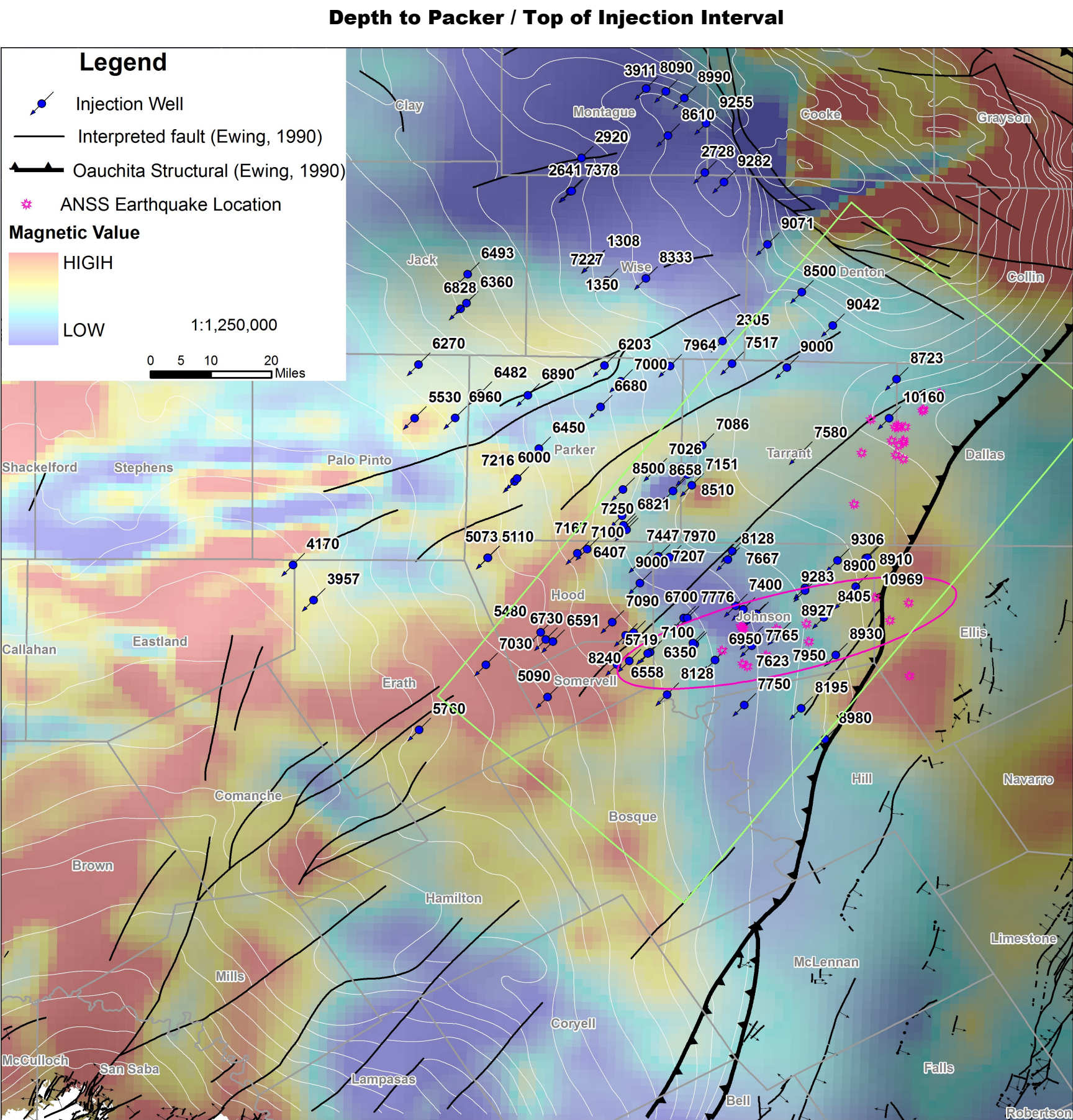
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ANSS Earthquakes		
UTC Date		Magnitude
2008 Nov 01		M2.7
2008 Nov 01		M2.5
2008 Oct 31		M3.0
2008 Oct 31		M2.9
2008 Oct 31		M2.9
2008 Oct 31		M2.9
2008 Oct 31		M2.6
2008 Oct 31		M2.6
2008 Oct 31		M2.5
2009 Dec 05		M2.9
2009 Jul 10		M2.0
2009 Jun 02		M2.8
2009 Jun 07		M2.6
2009 Jun 08		M2.4
2009 Jun 09		M2.3
2009 Jun 09		M2.0
2009 Jun 27		M2.4
2009 May 16		M3.3
2009 May 16		M3.0
2009 May 16		M2.7
2008 May 16		M2.6
2008 Oct 01		M2.3
2009 Sep 30		M2.4
2010 Nov 08		M2.5
2010 Nov 12		M2.1
2011 Aug 01		M2.2
2011 Aug 07		M2.6
2011 Jul 17		M3.0
2011 Jun 12		M2.7
2011 Jun 25		M2.5
2011 Sep 23		M2.4



References

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Texas Railroad Commission website, www.trc.state.tx.us/.

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