**Explanation:**

psi - pounds per square inch

**Pressure Differential Through Time at RPN-1-INJ**Ascension, Assumption, and Iberville Parishes  
Louisiana

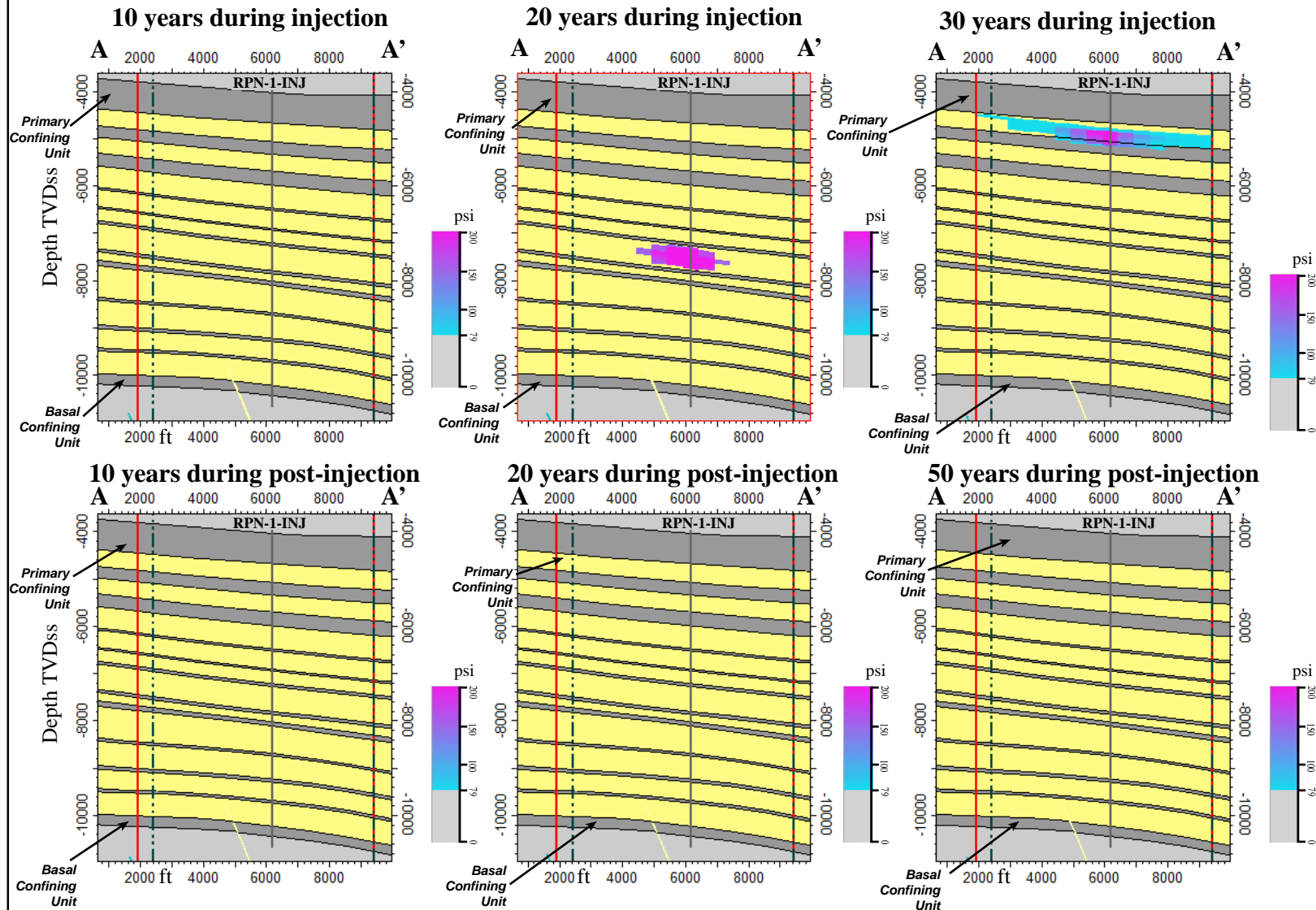
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**Figure****3.1-1**



10/9/2025  
JOSEPH E. MIZERANY



### Legend:

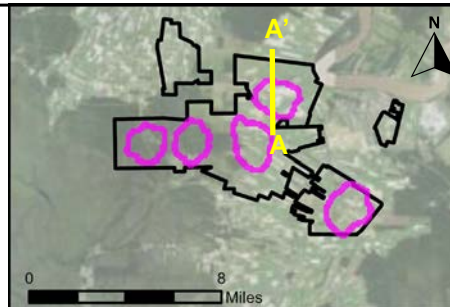
- RPS Storage Site
- Modeled CO<sub>2</sub> plume boundaries
- Sand-prone zone
- Shale-prone zone
- Unmodeled interval
- Vertical AoR boundary
- Vertical modeled CO<sub>2</sub> plume extent
- F-RPN-11
- F-RPN-15

### Notes:

ft - feet  
TVDss - True Vertical Depth sub-sea  
CO<sub>2</sub> - Carbon Dioxide  
F-RPN-X = Interpreted fault

### Explanation:

psi cut-offs vary through time as a result of critical pressure changes as injection intervals get shallower



**Cross Section Modeled  
Pressure Buildup (time-series)**  
Ascension, Assumption, and Iberville Parishes  
Louisiana



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**Figure**

**3.1-2**

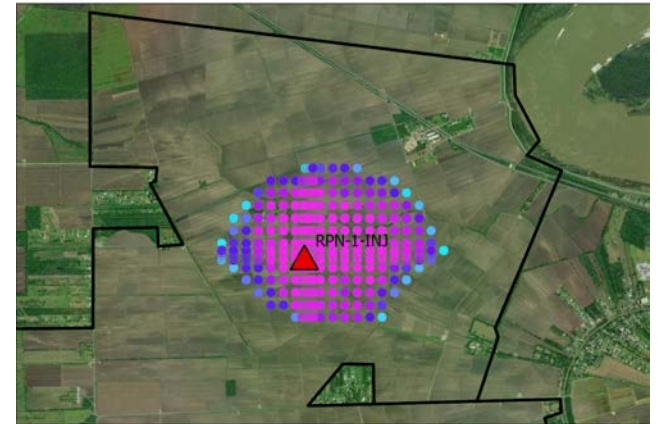
10 years during injection



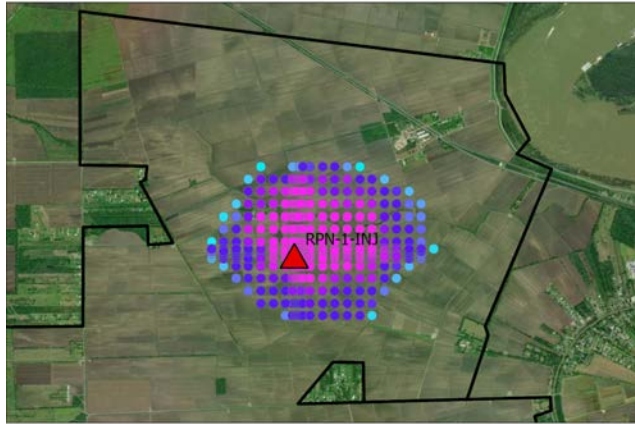
20 years during injection



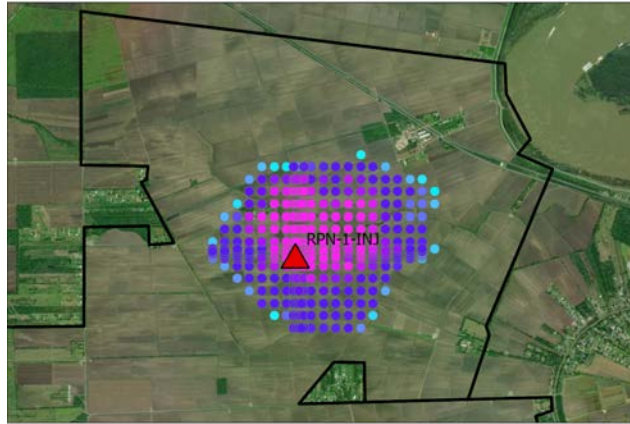
30 years during injection



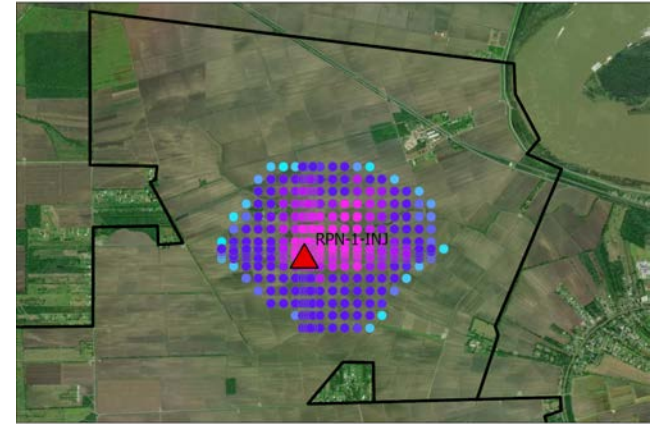
10 years during post-injection



20 years during post-injection



50 years during post-injection



### Legend:

— RPN Storage Site

▲ RPN-1-INJ



### Notes:

The CO<sub>2</sub> plume boundary is cutoff with gas saturation above 3%.  
Showing maximum CO<sub>2</sub> saturation at each X/Y cell for all depths.

### Top-View Map of CO<sub>2</sub> Saturation Distribution from RPS Model

Ascension, Assumption, and Iberville Parishes  
Louisiana

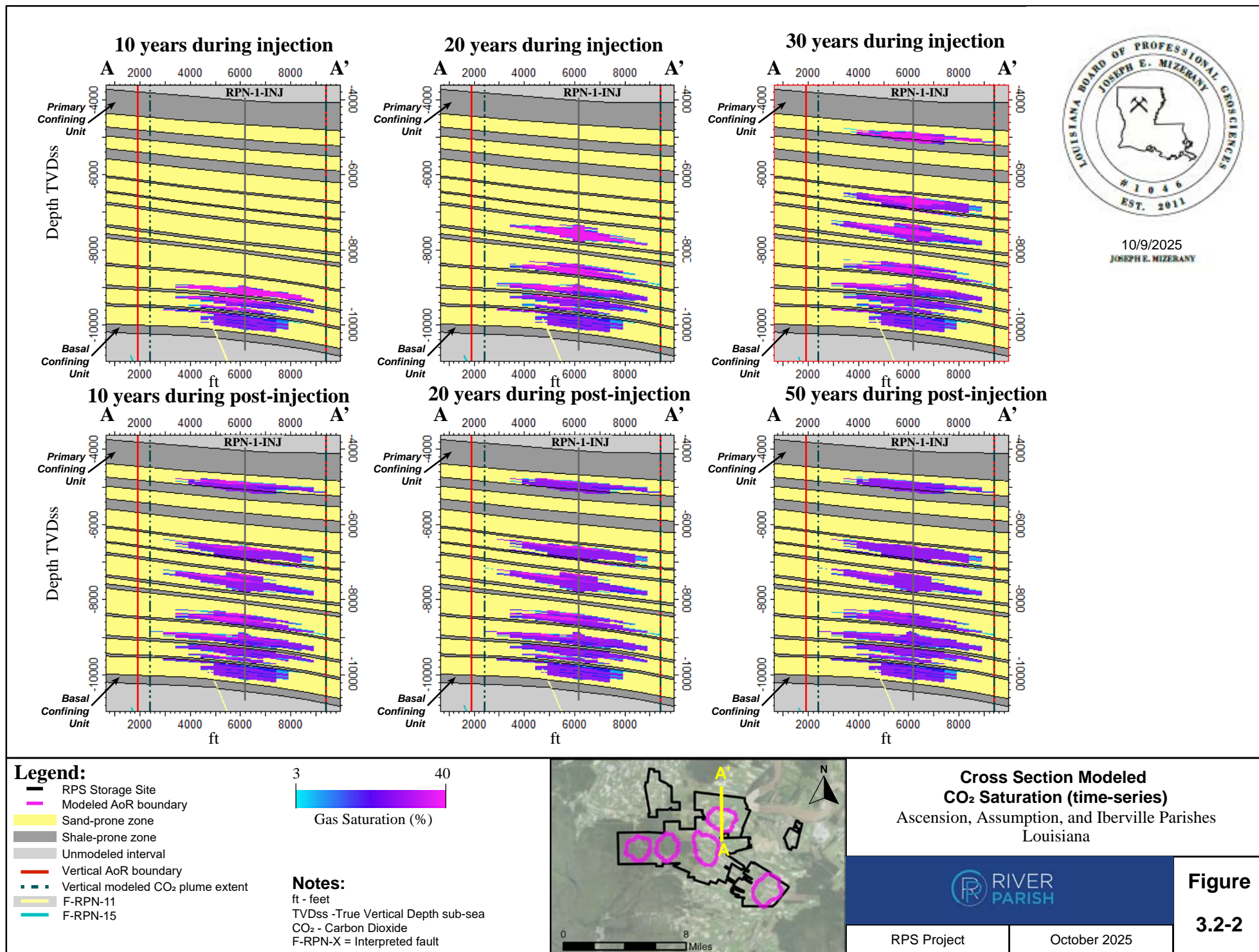


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Figure

3.2-1





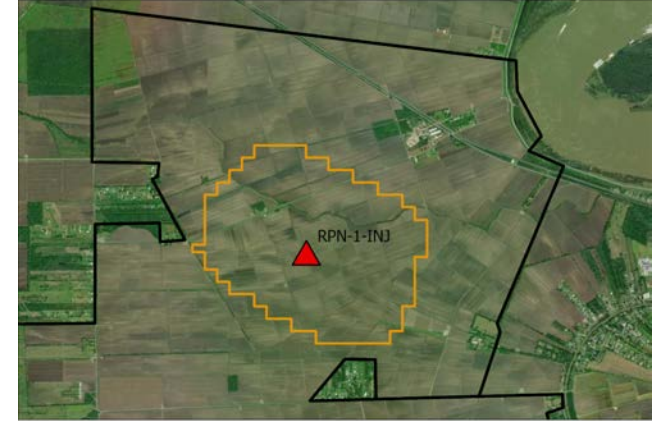
10 years during injection



20 years during injection



30 years during injection



10 years during post-injection



20 years during post-injection



50 years during post-injection



**Legend:**

- RPN Storage Site
- Pressure Front
- ▲ RPN-1-INJ

**Notes:**

Showing maximum pressure front at each X/Y cell for all depths.

**Top-View Map of Pressure Front  
from RPS Model**

Ascension, Assumption, and Iberville Parishes  
Louisiana

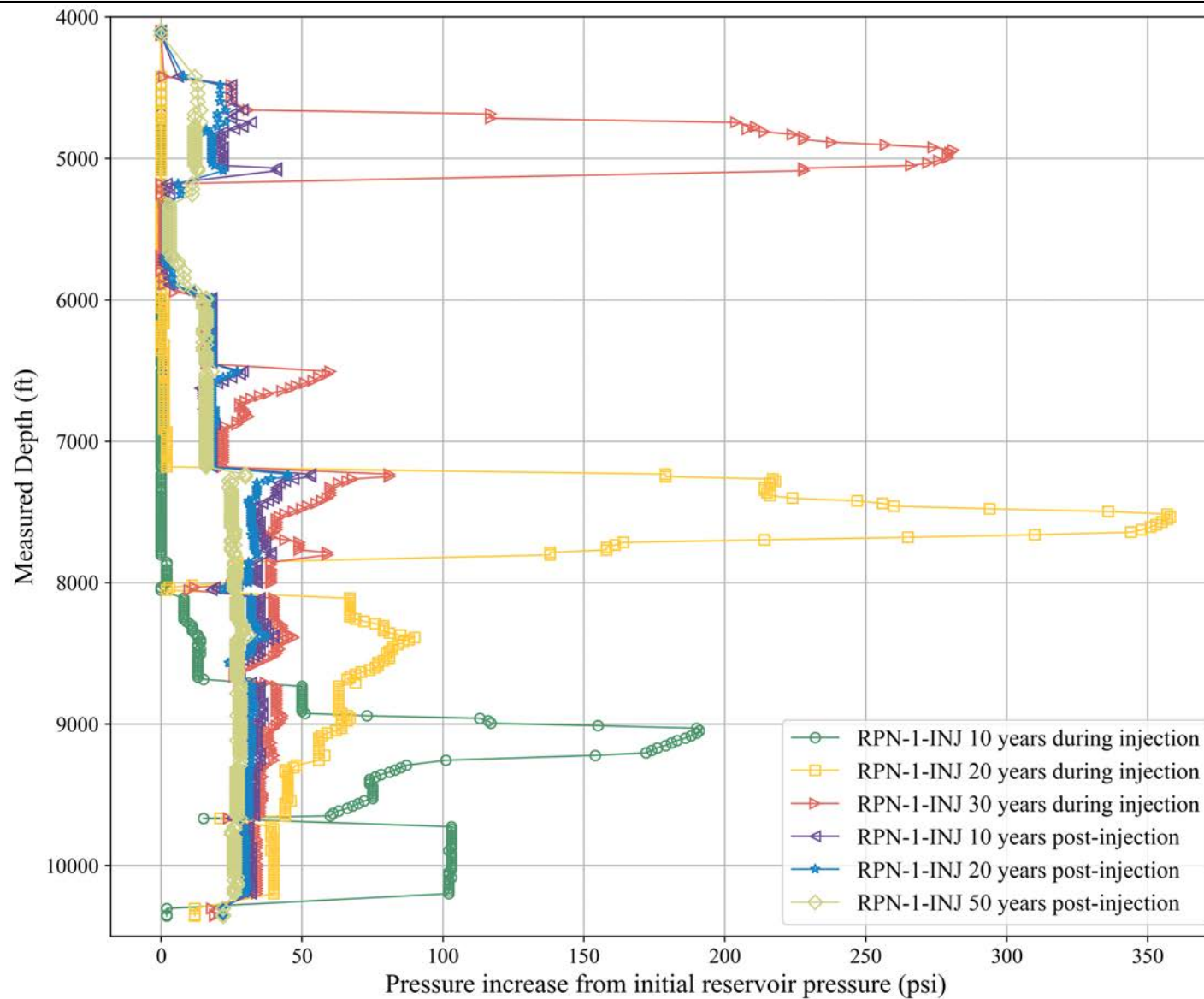


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**Figure**

**3.2-3**



**Explanation:**

psi - pounds per square inch  
ft - feet

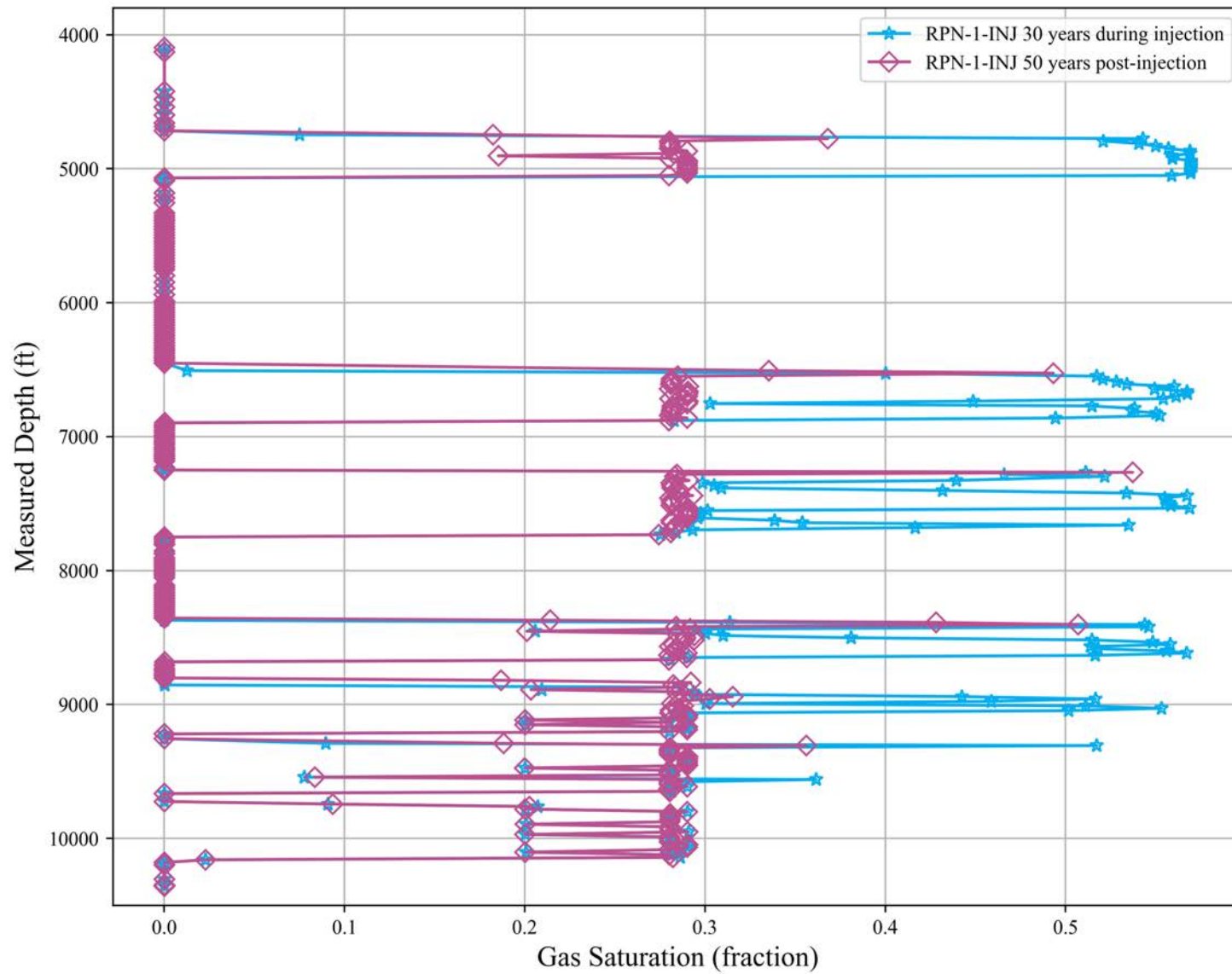
**RPS Model Predictions of Pressure Buildup  
Along the RPN-1-INJ Well Over Time**  
Ascension, Assumption, and Iberville Parishes  
Louisiana



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**Figure  
3.2-4**



**Explanation:**

psi - pounds per square inch  
ft - feet

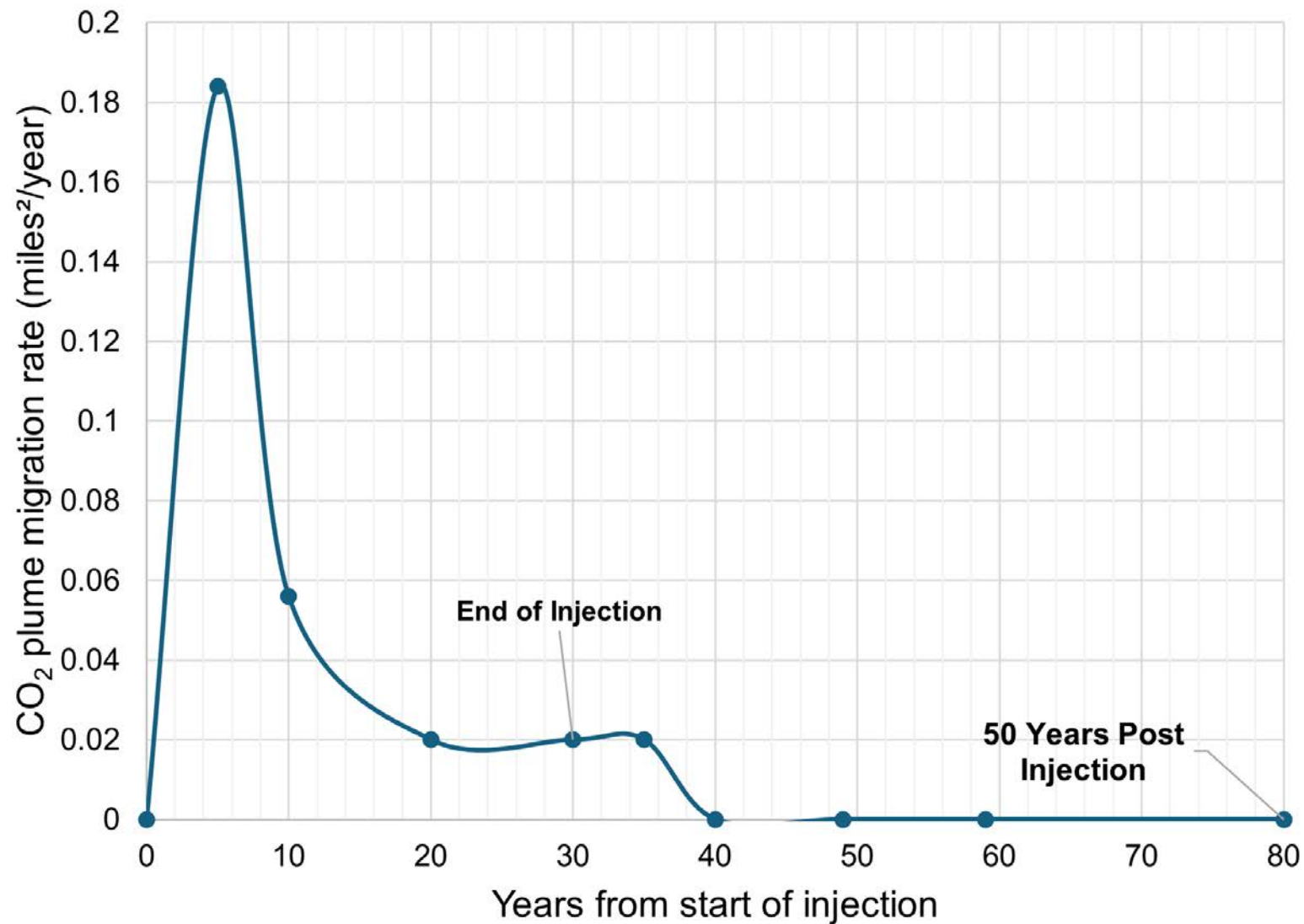
**Modeled CO<sub>2</sub> Saturation Along  
the RPN-1-INJ  
at 30 Years Injection and 50 Years Post Injection**  
Ascension, Assumption, and Iberville Parishes  
Louisiana



RPS Project

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**Figure  
3.2-5**



**Explanation:**

CO<sub>2</sub> - carbon dioxide

**Notes:**

The CO<sub>2</sub> plume boundary is cutoff with gas saturation above 3%.

**RPS Base Model Predictions for CO<sub>2</sub> Plume Migration Rate at RPN-1-INJ**

Ascension, Assumption, and Iberville Parishes  
Louisiana



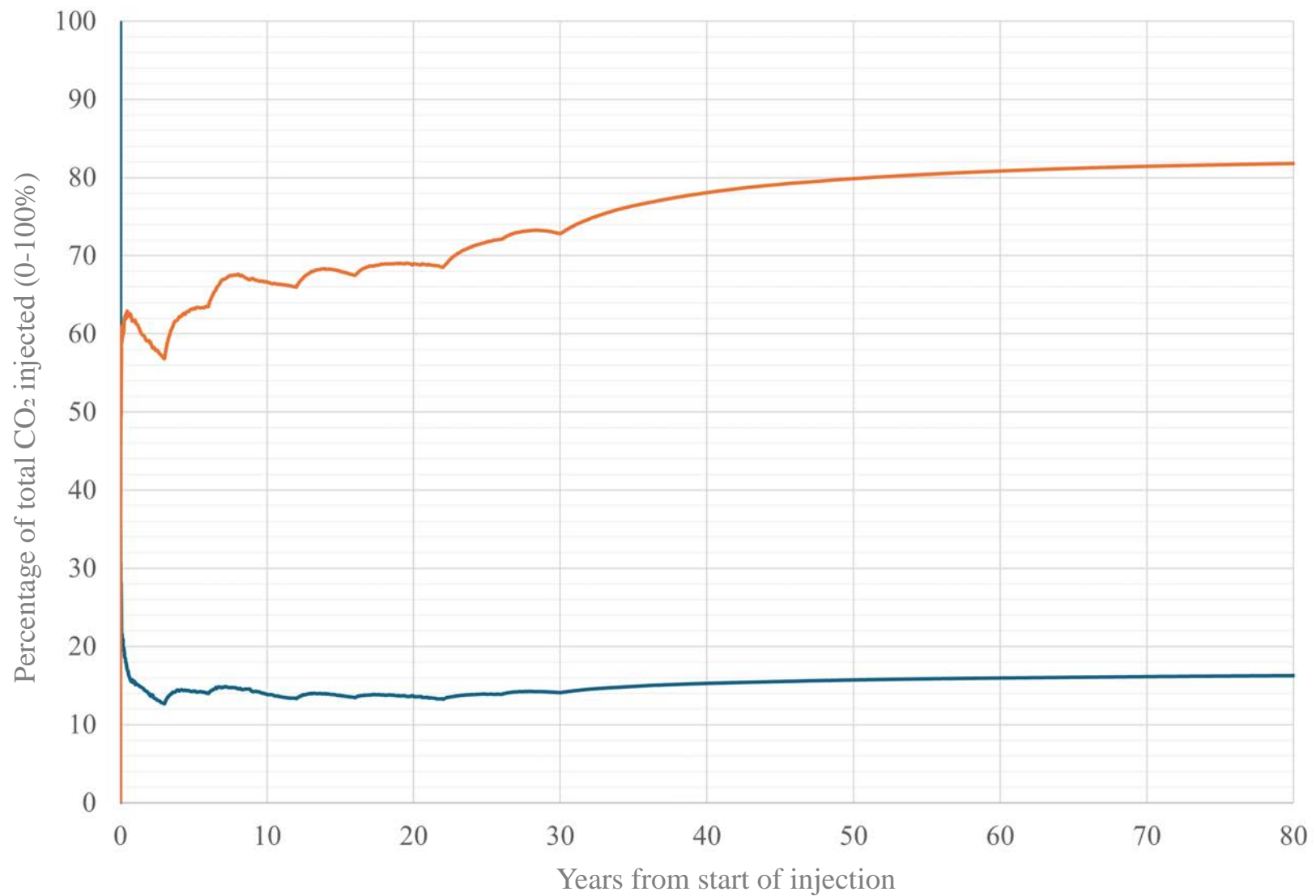
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**Figure**

**3.2-6**





**Legend:**

- Dissolved CO<sub>2</sub>
- Capillary Trapped CO<sub>2</sub>

**Explanation:**

CO<sub>2</sub> - Carbon Dioxide  
% - percent

**CO<sub>2</sub> Trapping Versus Time**

Ascension, Assumption, and Iberville Parishes  
Louisiana



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**Figure**

**3.2-7**