

US EPA ARCHIVE DOCUMENT

ATTACHMENT D: INJECTION WELL PLUGGING PLAN

Facility Name: FutureGen 2.0 Morgan County CO₂ Storage Site
IL-137-6A-0001 (Well #1)

Facility Contacts: Kenneth Humphreys, Chief Executive Officer,
FutureGen Industrial Alliance, Inc., Morgan County Office,
73 Central Park Plaza East, Jacksonville, IL 62650, 217-243-8215

Location of Injection Well: Morgan County, IL; 26–16N–9W; 39.800266°N and 90.07469°W

The FutureGen Alliance shall comply with the reporting and notification provisions in 40 CFR 146.92.

Immediately Prior to Well Plugging:

Per the requirements at 40 CFR 146.92, The FutureGen Alliance must:

1. Flush each injection well with a buffer fluid;
2. Determine the bottomhole reservoir pressure using methods and procedures identified in Attachment C – Testing and Monitoring Plan; and
3. Demonstrate external mechanical integrity using methods and procedures identified in Attachment C – Testing and Monitoring Plan.

Information on Plugs:

Cementing to Plug and Abandon Data	Plug #1	Plug #2	Plug #3	Plug #4	Plug #5	Plug #6	Plug #7
Diameter of Boring in Which Plug Will Be Placed (in)	7	7	7	7	7	7	
Depth to Bottom of Tubing or Drill Pipe (MD) (ft)	6,004 or 7,004 ^(a)	3,900	3,100	1,800	1,500	700	
Sacks of Cement to Be Used (each plug) (sks)	451 or 665 ^(a)	149	0	53	0	124	
Slurry Volume to Be Pumped (ft ³)	505 or 745 ^(a)	167	271	63	167	146	
Slurry Weight (lb/ft ³)	15.8	15.8	8.6	15.6	8.6	15.6	
Top of Plug (MD) (ft)	3,900	3,100	1,800	1,500	700	0	
Bottom of Plug (MD) (ft)	6,004 or 7,004 ^(a)	3,900	3,100	1,800	1,500	700	
Type of Cement or Other Material	EverCrete	EverCrete	6% Gel	Class A	6% Gel	Class A	
Method of Emplacement (e.g., balance method, retainer method, or two-plug method)	Balance Method						
(a) This value applies to injection wells completed with a 2,500 ft lateral. MD = measured depth.							

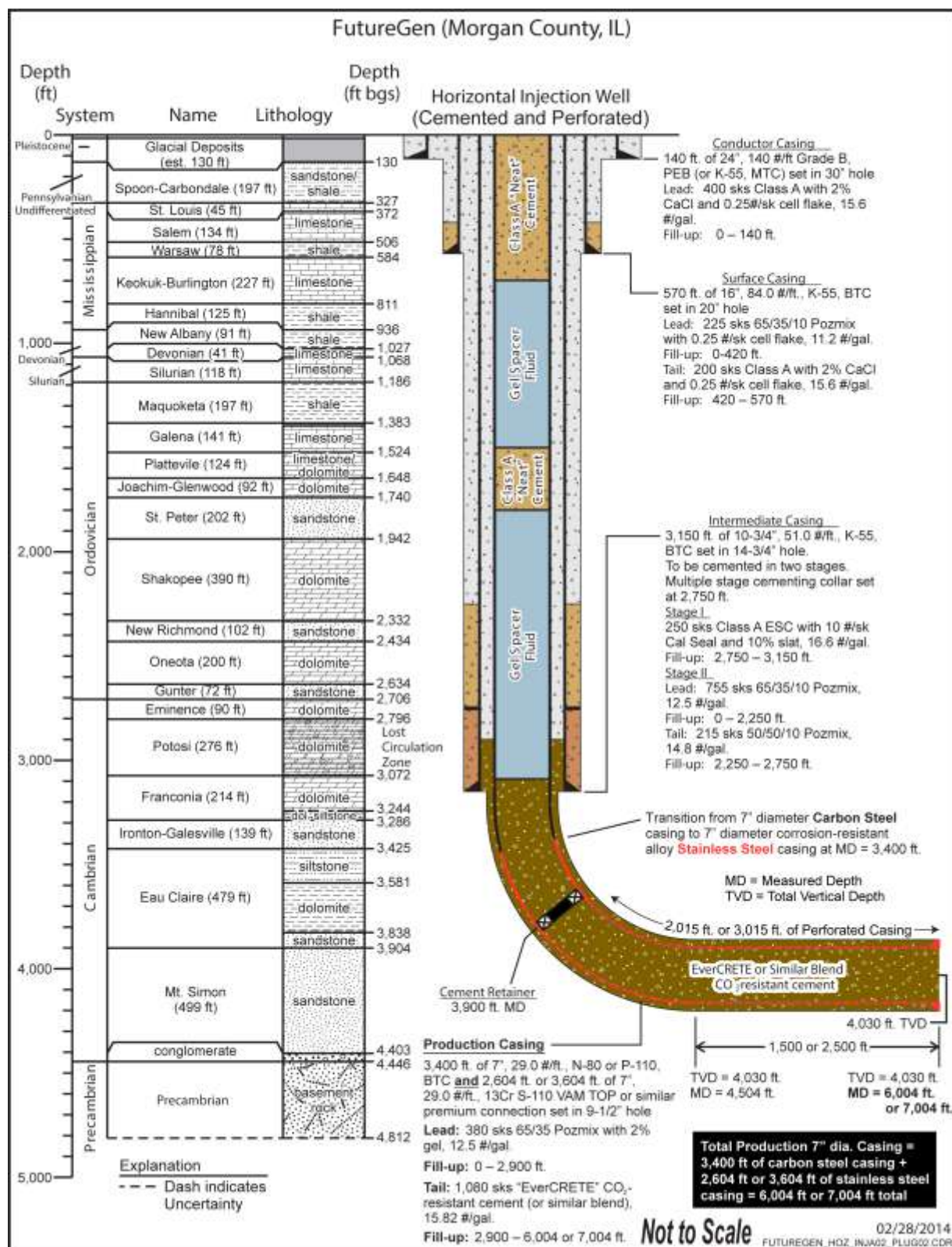
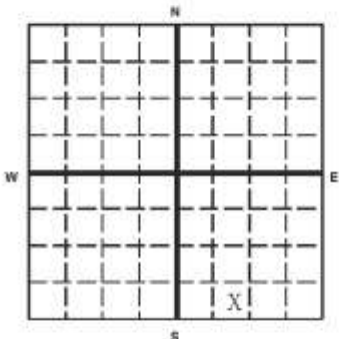
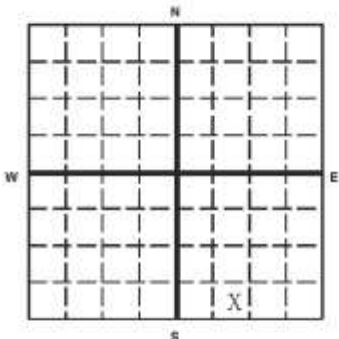
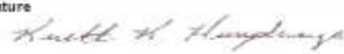


Figure 1. Diagram of Injection Well after Plugging and Abandonment (geology and depths shown in this diagram are based on site-specific characterization data obtained from the FutureGen 2.0 Stratigraphic Well).

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Locate Well and Outline Unit on Section Plat - 640 Acres 	State: Illinois County: Morgan Permit Number: not yet issued Surface Location Description SE 1/4 of SE 1/4 of SW 1/4 of SE 1/4 of Section 26 Township 10N Range 9W Locate well in two directions from nearest lines of quarter section and drilling unit. Surface Location ft. from (N-S) Line of quarter section and ft. from (E-W) Line of quarter section. TYPE OF AUTHORIZATION ☒ Individual Permit ☐ Area Permit ☐ Rule Number of Wells 1 Lease Name WELL ACTIVITY ☐ CLASS I ☐ CLASS II ☐ Brine Disposal ☐ Enhanced Recovery ☐ Hydrocarbon Storage ☐ CLASS III Well Number																																																																								
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