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October 3, 2022

Delivered via FedEx Overnight Delivery

Attention: Mr. Jeffery E. Mendenhall
South Carolina Department of Health and Environmental Control
Assessment Section, UST Management Division
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

Subject: Request to Abandon Vertical Bedrock Sparging and Temporary Piezometer Wells
Lewis Drive Release
Products (SE) Pipe Line Corporation
Belton, South Carolina
Site ID #18693, "Kinder Morgan Belton Pipeline Release"

Dear Mr. Mendenhall,

On behalf of Products (SE) Pipe Line Corporation (PPL), Jacobs Engineering Group Inc. (Jacobs), has prepared this plan to abandon three (3) 1-inch Vertical Bedrock Sparging (VBS) wells and thirteen (13) temporary piezometer wells at the Lewis Drive Site in Belton, Anderson County, South Carolina (Site ID #18693).

The proposed abandonment of the VBS wells is based on the results of a shallow bedrock zone air sparge test as summarized in the Completion Report for Shallow Bedrock Zone Air Sparge Test submitted to South Carolina Department of Health and Environmental Control on February 9, 2021. The test results indicate there is insufficient fracture aperture/density to permit air flow. Therefore, air sparging of bedrock at these depths is impractical, and no further evaluation of bedrock sparging is planned in this immediate area. In addition, groundwater samples were collected from the three VBS wells in 2020, and except for one low level detection of toluene (1.06 µg/L at VBS-01), dissolved hydrocarbons were not detected.

The rationale for the proposed piezometer well abandonments is that the current monitoring network of 2-inch wells provides sufficient groundwater elevation and analytical data, making the 1-inch piezometers, installed during the initial site characterization activities unnecessary.

Proposed Scope of Work

The 3 VSB wells and 13 temporary piezometer wells proposed for abandonment are shown on **Figure 1** and listed in **Table 1**. The VSB and temporary piezometer wells will be abandoned in accordance with the South Carolina Well Standards of the Official Code of South Carolina Section R.61-71 and as described below.

VBS and Piezometer Abandonment

The VSB and temporary piezometer wells will be abandoned by a licensed South Carolina driller and in accordance with Official Code of South Carolina (R.61-71) Section D.1. Conveyance piping to the VBS wells will be disconnected and capped prior to abandonment. The abandonment will be completed by a forced injection or pouring of grout (bentonite-cement or 20% high solids sodium bentonite grout) through a tremie pipe starting from the bottom of the well and proceeding to the ground surface per R.61-71 Section H.2.e. The polyvinyl chloride (PVC) surface casing and well monument will be removed and disposed as construction waste.

If you have any further questions or concerns, please call me at (919) 859-5789, or Greg Dempsey/PPL at (770) 751-4143.

Regards,

William M. Waldron
Program Manager

Copies to: Greg Dempsey, PPL (Digital, Greg_Dempsey@kindermorgan.com)
Mary Clair Lyons, Esq., PPL (Digital, Mary_Lyons@kindermorgan.com)

Attachments

- Table 1 – Wells Proposed for Abandonment, Construction Details
- Figure 1 – Proposed Well Abandonment Locations

Table

Table 1. Proposed Well Abandonment

Lewis Drive Release, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Location ID	Permit Number	Date Installed	Northing	Easting	Well Depth (ft bgs)	Screen Length (ft)	Depth to Water[1,2] (ft BTOC)	Rationale for Abandonment
TW-28	MW-09978	1/23/2015	989942.465	1546422.102	28	20.00	20.50	
TW-41	MW-09978	1/25/2015	990103.995	1546618.210	34	25.00	24.40	
TW-42	MW-09978	1/25/2015	990103.575	1546717.088	29.5	20.00	23.76	
TW-45	MW-09978	1/25/2015	990080.591	1546743.717	37.5	25.00	24.91	
TW-55	MW-10006	2/5/2015	990053.932	1545917.961	43	30.00	0.00	
TW-59	MW-09978	1/30/2015	989944.219	1546921.479	22	15.00	13.36	
TW-60	MW-09978	1/30/2015	990083.712	1546872.885	41.5	35.00	8.86	Current monitoring network of 2-inch wells is sufficient
TW-64	MW-09978	2/2/2015	990216.834	1546232.195	55	50.00	15.56	
TW-66	MW-09978	2/2/2015	990022.631	1546965.321	24	20.00	1.46	
TW-67	MW-09978	2/3/2015	989486.393	1545910.298	27	20.00	9.19	
TW-73	MW-09978	2/3/2015	989429.600	1546151.905	16	10.00	4.77	
TW-94	MW-10006	2/10/2015	990313.883	1545885.290	40	35.00	0.00	
TW-96	MW-10006	2/11/2015	990369.269	1545983.540	30	25.00	0.00	
VBS-01	SCHE03020469M	1/28/2017	989781.402	1546279.088	38.50	2.00	19.63	
VBS-02	SCHE03020469M	1/28/2017	989733.146	1546223.970	31.00	2.00	6.75	Insufficient fracture aperture/density to permit air flow
VBS-03	SCHE03020469M	1/27/2017	989668.841	1546148.569	36.20	2.00	9.81	

Notes:

[1] TW water depth measurements collected on July 11, 2018

[2] VBS water depth measurements collected on October 6, 2020

bgs = below ground surface

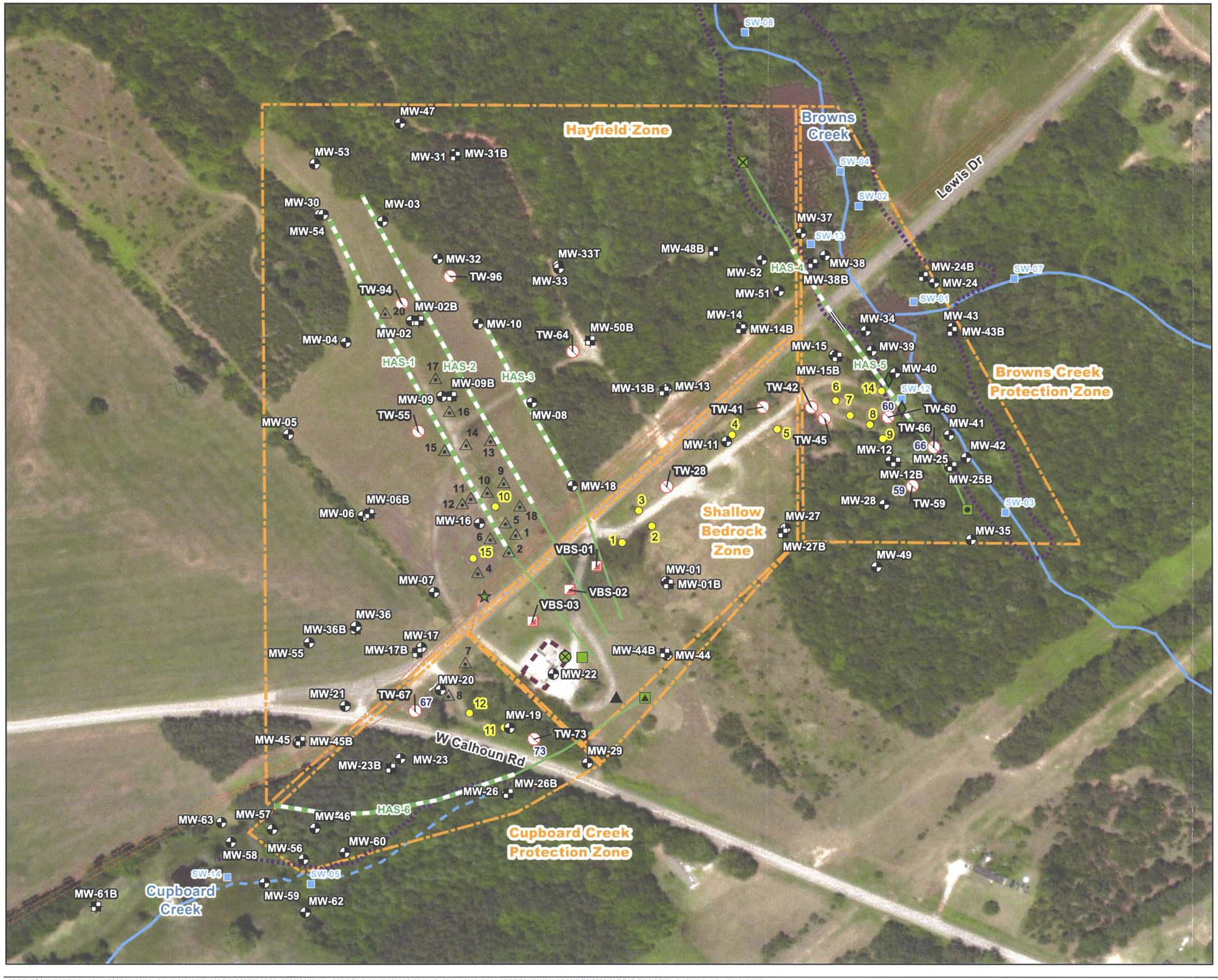
BTOC = below top of casing

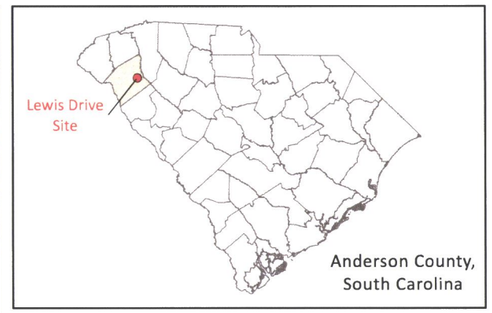
ft = feet

NM = not measured

TW = temporary well

Figure





LEGEND

- Release Point
- Monitoring Well
- Bedrock Monitoring Well
- Temporary Monitoring Well Proposed to Abandon
- Proposed Vertical Bedrock Sparging Well to Abandon
- Piezometer
- Recovery Sump
- Recovery Well (4-inch diameter)
- Surface Water Sampling Location
- Septic Tank
- Seep Location
- Vertical Saprolite Sparging Well
- HAS-1 Manway
- HAS-4/HAS-5 Manway (Distal End)
- HAS-4/HAS-5 Manway (Proximal End)
- HAS-6 Manway (Proximal End)
- Main Valve Box
- Grout
- Horizontal Sparging Well Screen
- Horizontal Sparging Well Riser
- Pipeline
- Waterbody
- Intermittent Stream
- Inspection Route for Sheen or Distressed Vegetation
- AS System Compound
- Remediation Zone

Note:
All quarterly wells will be sampled biannually.
All quarterly and biannual samples will be sampled annually.

Base Map Sources:
Environmental Systems Research Institute (Esri)
ArcMap World Imagery, 2020. Basemap features are approximate.

United States Geological Survey (USGS) National Hydrography Dataset (NHD)

N

0 200 400
Scale in feet

Figure 1. Proposed Well Abandonment Locations
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693 "Kinder Morgan Belton Pipeline Release"

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