

November 28, 2022

Delivered via Trackable Overnight Delivery

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

RECEIVED

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UST DIVISION



Subject: Request to Modify Groundwater Monitoring and Reporting Schedule in 2023

Products (SE) Pipe Line Corporation
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693, "Kinder Morgan Belton Pipeline Release"

Dear Mr. Mendenhall,

On behalf of Products (SE) Pipe Line Corporation (PPL), Jacobs is submitting this letter to maintain the current number of groundwater monitoring and reporting events and the current number of groundwater monitoring locations at PPL's Lewis Drive Remediation Site (Site ID #18693), located in Belton, South Carolina (site).

As you are aware, PPL has worked diligently with the South Carolina Department of Health and Environmental Control (DHEC) over the last eight years to assess, remediate, and monitor conditions at the site. PPL has compiled a significant body of data that indicates overall decreasing trends in hydrocarbon concentrations and frequency of occurrence as shown in the First 2022 Semiannual Monitoring Report submitted to DHEC on August 26, 2022.

As presented in the Corrective Action Plan Addendum #2 submitted to DHEC on May 24, 2021, and accepted by DHEC on June 29, 2021, PPL installed three new horizontal air sparge (HAS) wells (HAS-4, HAS-5, and HAS-6) to treat areas in the Browns Creek Protection Zone (BCPZ) and Cupboard Creek Protection Zone (CCPZ). HAS-4 and HAS-5 in the BCPZ began operation on June 20, 2022. Startup of HAS-6 in the CCPZ is scheduled to occur in December 2022.

The proposed 2023 annual, semiannual, quarterly, and monthly sampling events; semiannual product recovery; and semiannual reporting schedule are based on the current Table 1 – Groundwater and Surface Water Monitoring and Reporting Plan (January 1, 2022 to December 31, 2022) accepted by DHEC on May 27, 2022.

The proposed 2023 monitoring plan is presented in the attached Table 1 and displayed on Figure 1. Ideally, PPL would like to receive a response to this request prior to December 16, 2022.

Jacobs

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If you have any questions concerning this request or the project in general, 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 – Groundwater and Surface Water Monitoring and Reporting Plan (January 1, 2023 to December 31, 2023)
- Figure 1 – Site Overview

Table 1. Groundwater and Surface Water Monitoring and Reporting Plan (January 1, 2023 to December 31, 2023)

Products (SE) Pipe Line Corporation

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Frequency ^a :	Sampling and Gauging				Biodegradation Evaluation	Product Gauging and Recovery
	Monthly (January 2023 to December 2023)	Quarterly (June 2023 and December 2023)	Semiannually ^b (September 2023)	Annually (March 2023)	Annually ^c (March 2023)	Semiannually and Annually (March and September 2023)
Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d				Nitrate ^e , Sulfate ^e , Ferrous Iron ^{o,f} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^e , and DO ^{o,f}	Not Analyzed
Feature ID						
Surface Water						
SW-01 ^g	Y	Y	Y	Y		
SW-02 ^g	Y	Y	Y	Y		
SW-03 ^g	Y	Y	Y	Y		
SW-04	Y	Y	Y	Y		
SW-05 ^g	Y	Y	Y	Y		
SW-07	Y	Y	Y	Y		
SW-08 ^g	Y	Y	Y	Y		
SW-09	Y	Y	Y	Y		
SW-10 ^g	Y	Y	Y	Y		
SW-11	Y	Y	Y	Y		
SW-12	Y	Y	Y	Y		
SW-13	Y	Y	Y	Y		
SW-14	Y	Y	Y	Y		
Surface Water Subtotal:	13	13	13	13	0	0
Browns Creek Protection Zone						
MW-12			Y	Y	Y	
MW-12B			Y	Y		
MW-15			Y	Y	Y	
MW-15B		Y	Y	Y		
MW-24			Y	Y		
MW-24B			Y	Y		
MW-25			Y	Y	Y	
MW-25B			Y	Y		
MW-28			Y	Y	Y	
MW-34				Y		
MW-35			Y	Y	Y	
MW-37		Y	Y	Y		
MW-38		Y	Y	Y		
MW-38B		Y	Y	Y		
MW-39		Y	Y	Y		

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MW-40		Y	Y	Y	Y	
MW-41		Y	Y	Y		
MW-42			Y	Y	Y	
MW-43				Y		
MW-43B				Y		
MW-49				Y		
Brown's Creek Subtotal:	0	7	17	21	7	0
Cupboard Creek Protection Zone						
MW-19			Y	Y	Y	
MW-20		Y	Y	Y	Y	
MW-23		Y	Y	Y		
MW-23B			Y	Y		
MW-26			Y	Y		
MW-26B			Y	Y		
MW-29			Y	Y		
MW-46			Y	Y		
MW-56		Y	Y	Y	Y	
MW-57		Y	Y	Y		
MW-58		Y	Y	Y		
MW-59		Y	Y	Y		
MW-60		Y	Y	Y		
MW-61B		Y	Y	Y		
MW-62		Y	Y	Y		
MW-63		Y	Y	Y		
Cupboard Creek Subtotal:	0	10	16	16	3	0
Hayfield Zone						
MW-02				Y	Y	
MW-02B				Y		
MW-03				Y	Y	
MW-04			Y	Y	Y	
MW-05				Y		
MW-06				Y		

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MW-06B			Y	Y		
MW-07		Y	Y	Y		
MW-08				Y	Y	
MW-09			Y	Y	Y	
MW-09B			Y	Y		
MW-10				Y	Y	
MW-13			Y	Y		
MW-13B			Y	Y		
MW-14		Y	Y	Y		
MW-14B		Y	Y	Y		
MW-16				Y		
MW-17			Y	Y		
MW-17B		Y	Y	Y		
MW-18			Y	Y	Y	
MW-21			Y	Y		
MW-30				Y		
MW-31				Y		
MW-31B				Y		
MW-32			Y	Y	Y	
MW-33				Y		
MW-33T			Y	Y		
MW-36		Y	Y	Y		
MW-36B			Y	Y		
MW-45		Y	Y	Y		
MW-45B			Y	Y		
MW-47			Y	Y		
MW-48B			Y	Y		
MW-50B			Y	Y		
MW-51			Y	Y		
MW-52			Y	Y		
MW-53			Y	Y		
MW-54			Y	Y		
MW-55			Y	Y		
Hayfield Subtotal:	0	6	27	39	8	0

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Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d				Nitrate ^e , Sulfate ^e , Ferrous Iron ^{e,f} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^g , and DO ^{e,f}	Not Analyzed
Shallow Bedrock Zone						
MW-01			Y	Y	Y	
MW-01B			Y	Y		
MW-11		Y	Y	Y	Y	
MW-22			Y	Y	Y	
MW-27			Y	Y		
MW-27B			Y	Y		
MW-44				Y		
MW-44B				Y		
Shallow Bedrock Subtotal:		1	6	8	3	0
Product Recovery Feature						
RW-01						Y
RW-02						Y ^h
RW-03						Y ^h
RW-04						Y ^h
RW-05						Y ^h
RW-06						Y
RW-07						Y ^h
RW-08						Y
RW-09						Y
RW-10						Y ^h
RW-11						Y
RW-12						Y
RW-14						Y
RW-15						Y ^h
RT-1A						Y
RT-1B						Y
RT-1C						Y
RS-01						Y ^h
RS-02						Y ^h
RS-04						Y
RS-05						Y ^h
RS-06						Y

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Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d				Nitrate ^e , Sulfate ^e , Ferrous Iron ^{o,f} , Carbon Dioxide ^g , Methane ^g , Alkalinity ^g , and DO ^{o,f}	Not Analyzed
RS-07						Y
RS-08						Y
RS-09						Y
RS-10						Y
RS-11						Y
RS-12						Y
RS-13						Y
RS-14						Y ^h
RS-15						Y
RS-16						Y
RS-17						Y
RS-18						Y
RS-20						Y
Product Recovery Subtotal:						Y
Grand Totals:	13	37	79	97	21	36

Notes:

^a Frequency: Any alterations to the monitoring frequency will be proposed to the South Carolina Department of Health and Environmental Control prior to December 31, 2023.

^b The second semiannual report will follow the December 2023 monitoring event.

^c The first semiannual report will follow the June 2023 monitoring event.

^d Sampling and Gauging: BTEX, MTBE, naphthalene, and 1,2-DCA by EPA Method 8260D.

^e Biodegradation Evaluation: Nitrate and Sulfate by EPA Method 9056A, ferrous iron and dissolved oxygen by field test analysis, carbon dioxide by method SM4500-CO2 D, methane by method RSK-175, and alkalinity by method SM2320B.

^f Parameter collected in the field.

^g Surface water location to be gauged at staff gauge.

^h Product recovery feature deployed in well.

1,2-DCA = 1,2-dichloroethane

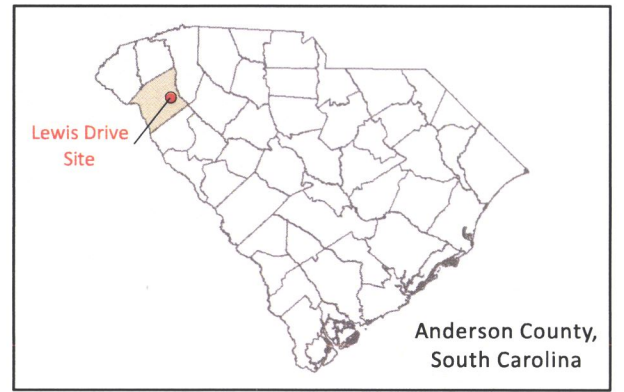
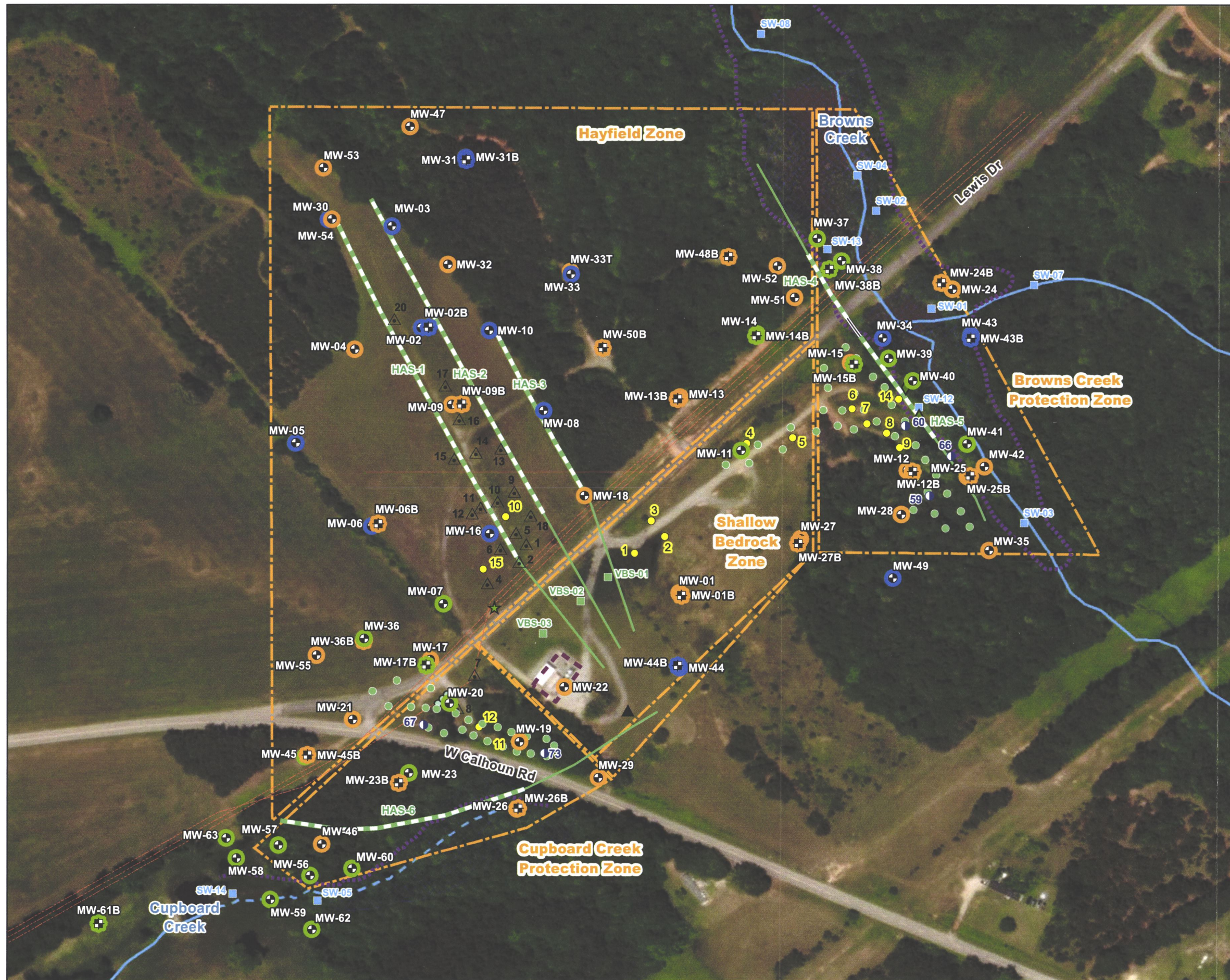
BTEX = benzene, toluene, ethylbenzene, and xylenes

DO = dissolved oxygen

EPA = U.S. Environmental Protection Agency

MTBE = methyl tertiary butyl ether

Y = yes



LEGEND

- ★ Release Point
- ⊕ Bedrock Monitoring Well, Quarterly Sampling
- ⊕ Bedrock Monitoring Well, Semiannual Sampling
- ⊕ Bedrock Monitoring Well, Annual Sampling
- ⊕ Monitoring Well, Quarterly Sampling
- ⊕ Monitoring Well, Semiannual Sampling
- ⊕ Monitoring Well, Annual Sampling
- ⊕ Piezometer
- △ Recovery Sump
- Recovery Trench Point
- Recovery Well (4-inch diameter)
- Surface Water Sampling Location
- ▲ Septic Tank
- ◆ Seep Location
- Vertical Bedrock Sparging Well
- Vertical Sapolite Sparging Well
- Horizontal Sparging Well Riser
- Horizontal Sparging Well Screen
- Pipeline
- Waterbody
- Intermittent Stream
- ⊠ Delineated Wetland
- ⋯ Inspection Route for Sheen or Distressed Vegetation
- ⊠ AS System Compound
- ⊠ Remediation Zone

Note:
 All quarterly wells will be sampled semiannually.
 All quarterly and semiannual samples will be sampled annually.
 Northern surface water locations SW-09, SW-10, and SW-11 are not shown in Figure.

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)

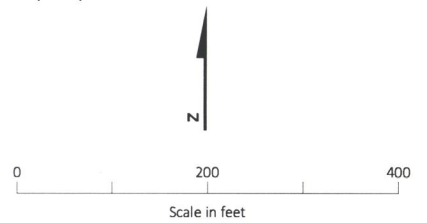


Figure 1. Site Overview
 Lewis Drive Remediation Site
 Belton, South Carolina
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