



6899 Pecos Street, Unit C
Denver, Colorado 80221

CLIENT: PDC Energy Inc.

LOGGED BY: Alexander Hamilton

PROJECT MANAGER: Brock Nelson

DRILLING CONTRACTOR: Tasman Geosciences

DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 11.5

DEPTH TO WATER (FT. BGS): 2.5

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH01

LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457179.7

EASTING (CO STATE PLANE): 530933.4

CASING ELEVATION (FT. AMSL): 4743.31

GROUND ELEVATION (FT. AMSL): 4743.61

Depth (feet)	Sampler Type	SPT (Blows)	% Rec.	Lithologic Description	USCS	PID (ppm)	Lab	Well Construction	Depth (feet)
		10 20 30 40	25 50 75			100 1000			
0				Brown, sandy/silty clay, rich in organics, roots, no staining or odor, dry	CL			Cement Collar	0
				Brown, sand, moist, loose, low desntiy, medium grained, well sorted	SP			Hydrated Bentonite Crumbles	
				Same as above, saturated	SP				
				No Recovery					
				Brown, sand, saturated, loose, low density, medium grained, well sorted	SP				
5				Gray, clay, moist, medium density, medium plasticity, some calcite staining, no odor	CL			10-20 Silica Sand	5
				No Recovery					
				Gray, clay, moist, medium density, medium plasticity, some calcite staining, no odor	CL				
				Brown, sandy clay, wet, low density, non plastic	SC				
10				Tan, moist sand, high density, poorly graded, fine grained	SP				10

Drilling / Sample Method:

Solid Stem Auger
 Push Probe

Macro Liner
 CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab
 Analytical Chemistry Lab
 Geotechnical & Analytical Chemistry Lab



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DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 4

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH02

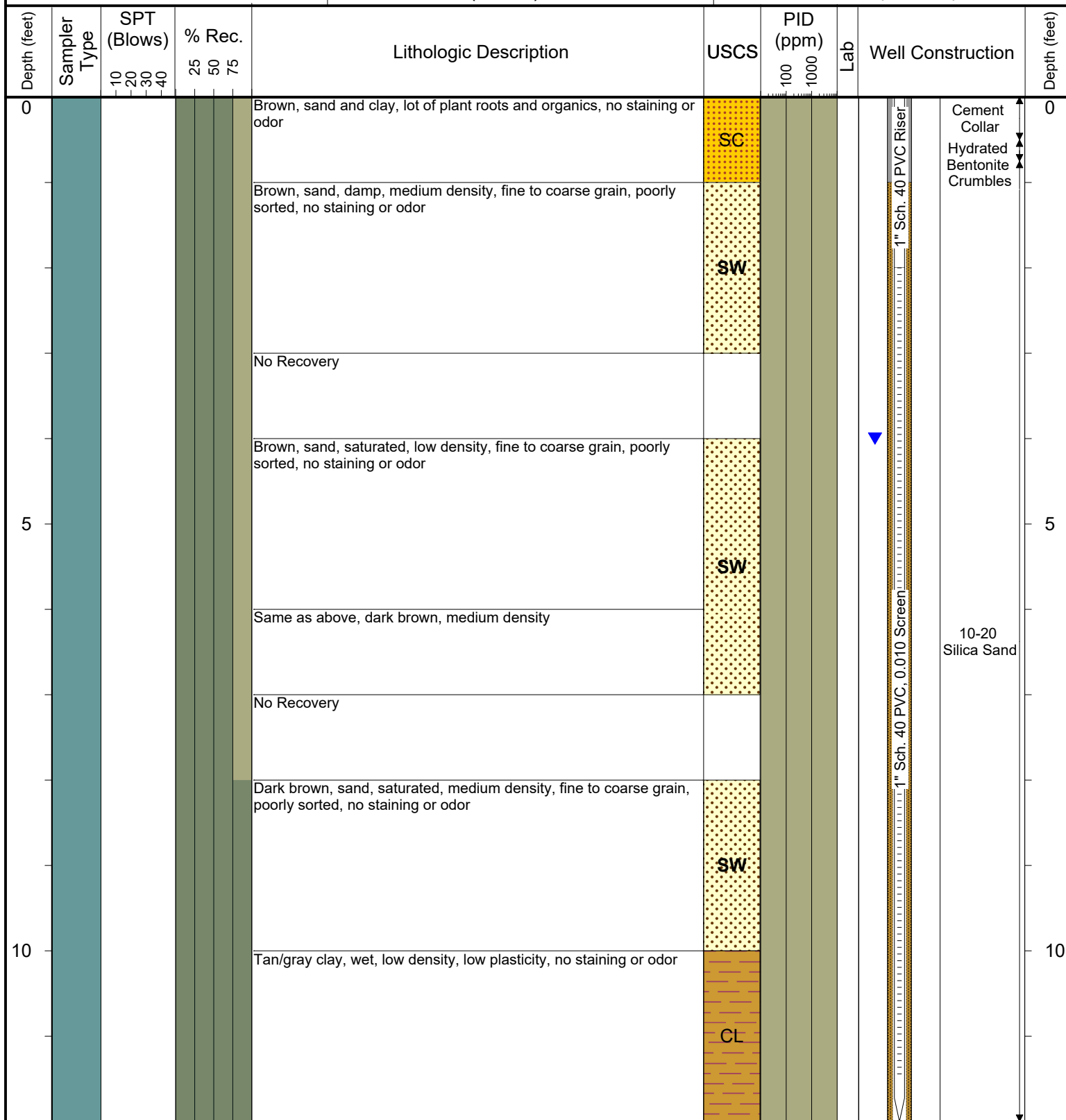
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457192.8

EASTING (CO STATE PLANE): 530947.8

CASING ELEVATION (FT. AMSL): 4743.93

GROUND ELEVATION (FT. AMSL): 4744.15



Drilling / Sample Method:

☐ Solid Stem Auger
☒ Push Probe

☐ Macro Liner

☒ CME Continuous Sample Tube

Laboratory Sample Types:

☒ Geotechnical Lab

☒ Analytical Chemistry Lab

☒ Geotechnical & Analytical Chemistry Lab



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DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 4

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH03

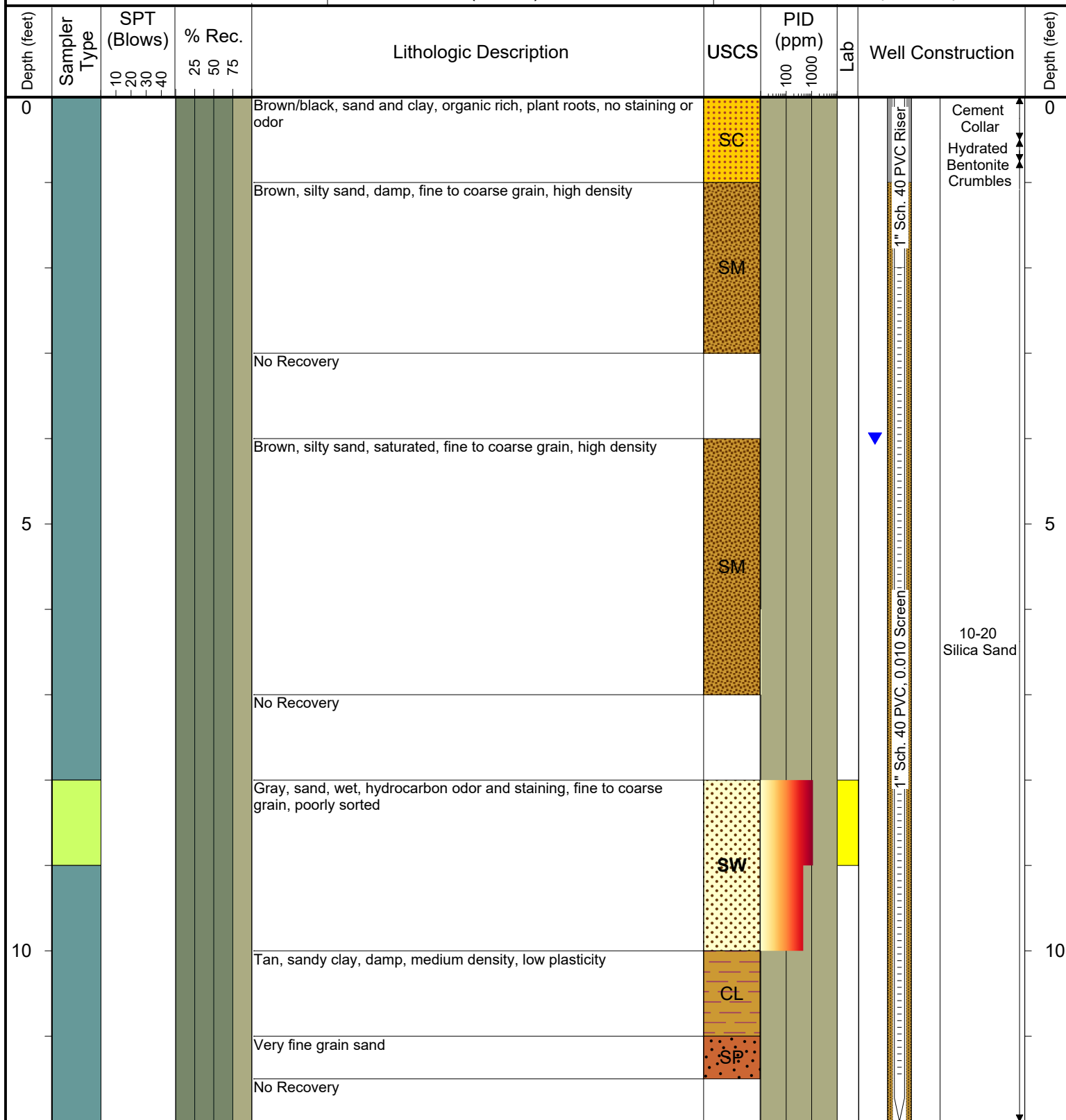
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457195.8

EASTING (CO STATE PLANE): 530930.1

CASING ELEVATION (FT. AMSL): 4743.01

GROUND ELEVATION (FT. AMSL): 4743.15



Drilling / Sample Method:

Solid Stem Auger
Push Probe

Macro Liner

CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab

Analytical Chemistry Lab

Geotechnical & Analytical Chemistry Lab



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DRILLING CONTRACTOR: Tasman Geosciences

DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 2.5

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH04

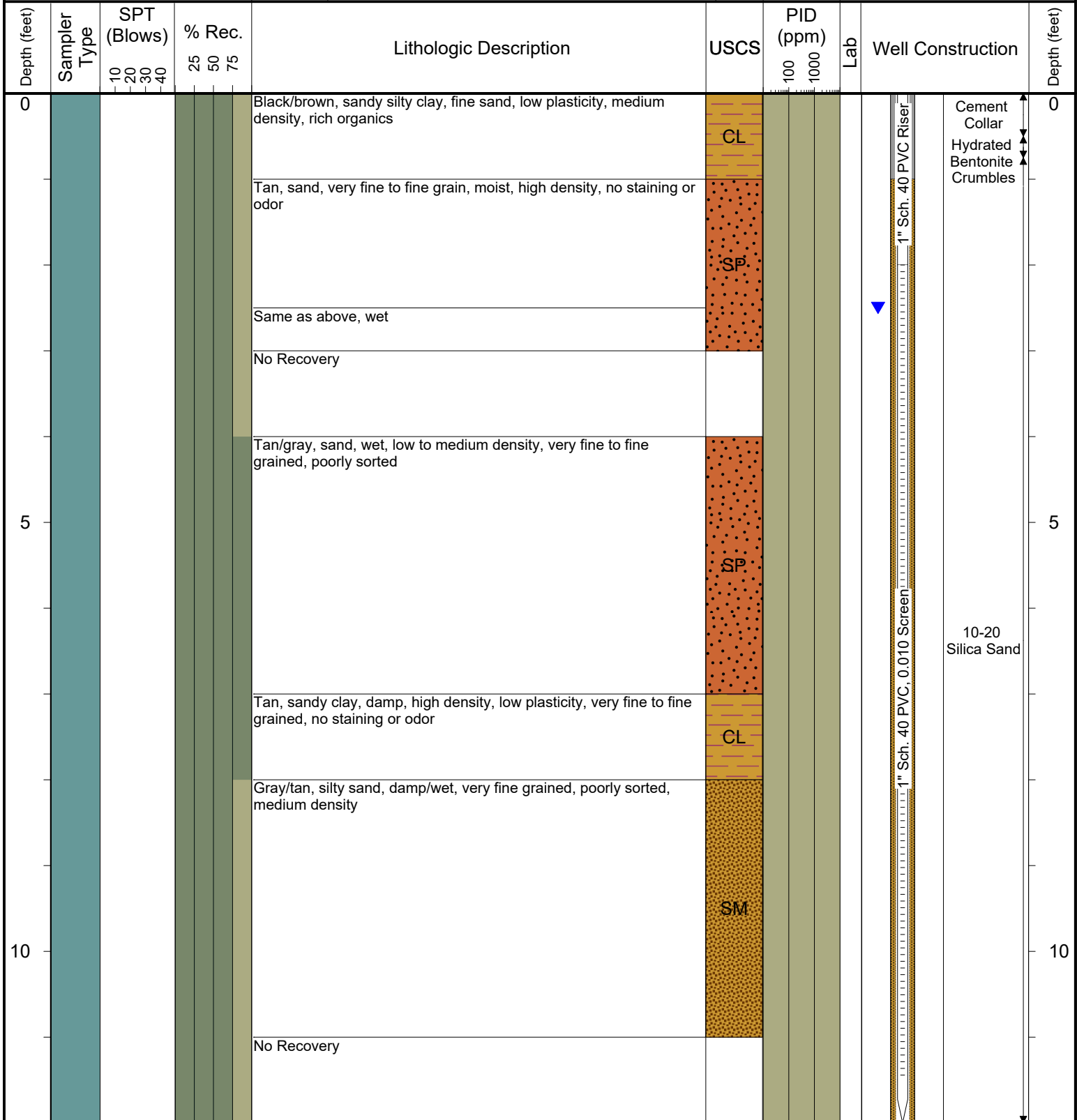
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457198.5

EASTING (CO STATE PLANE): 530920.3

CASING ELEVATION (FT. AMSL): 4742.63

GROUND ELEVATION (FT. AMSL): 4742.77



Drilling / Sample Method:

Solid Stem Auger
 Push Probe

Macro Liner

CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab

Analytical Chemistry Lab

Geotechnical & Analytical Chemistry Lab



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DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 2.5

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH05

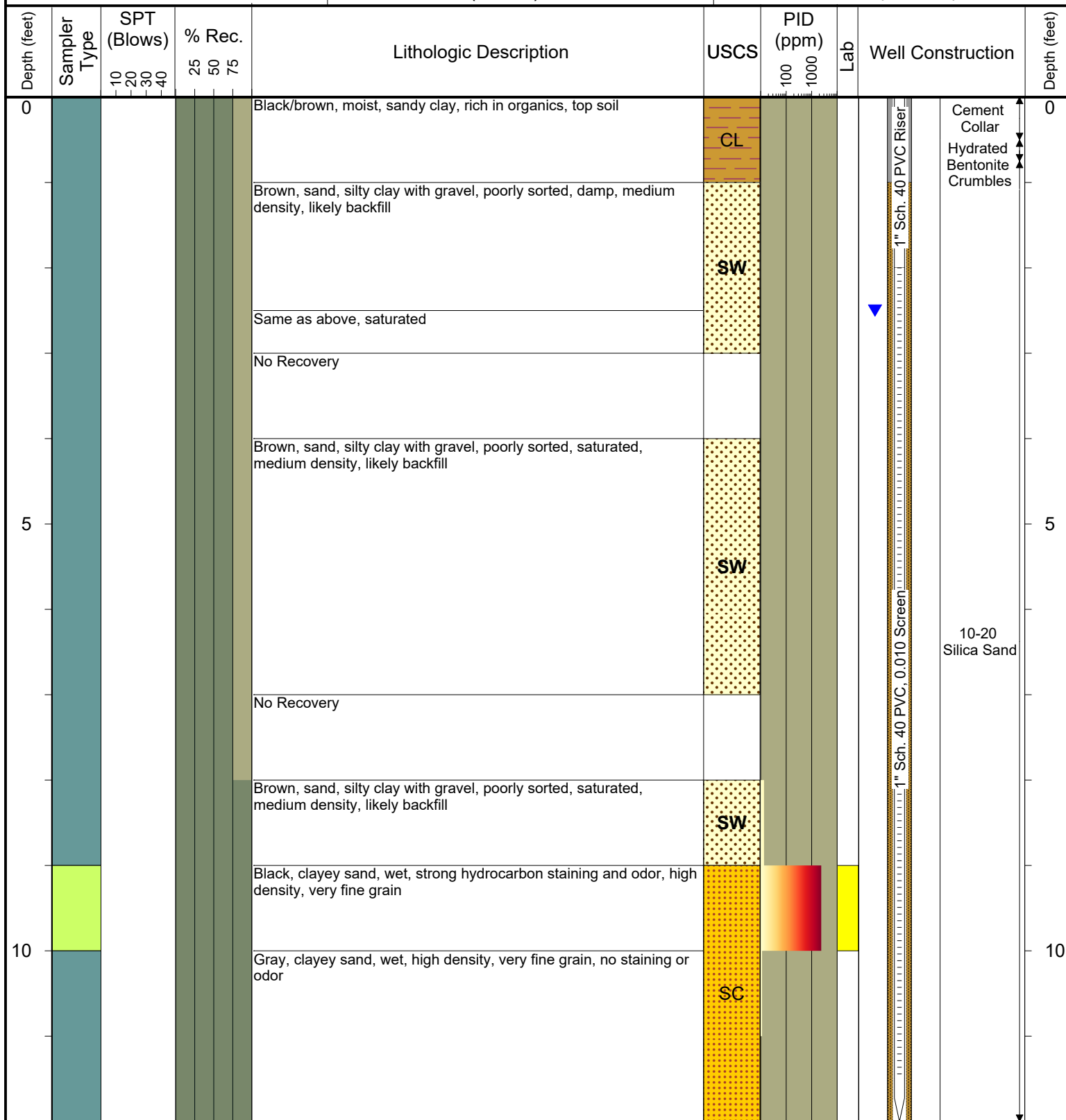
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457201.2

EASTING (CO STATE PLANE): 530905.4

CASING ELEVATION (FT. AMSL): 4742.59

GROUND ELEVATION (FT. AMSL): 4742.69



Drilling / Sample Method:

☐ Solid Stem Auger
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☐ Macro Liner

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Laboratory Sample Types:

☐ Geotechnical Lab

☒ Analytical Chemistry Lab

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DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 11.5

DEPTH TO WATER (FT. BGS): 2.5

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH06

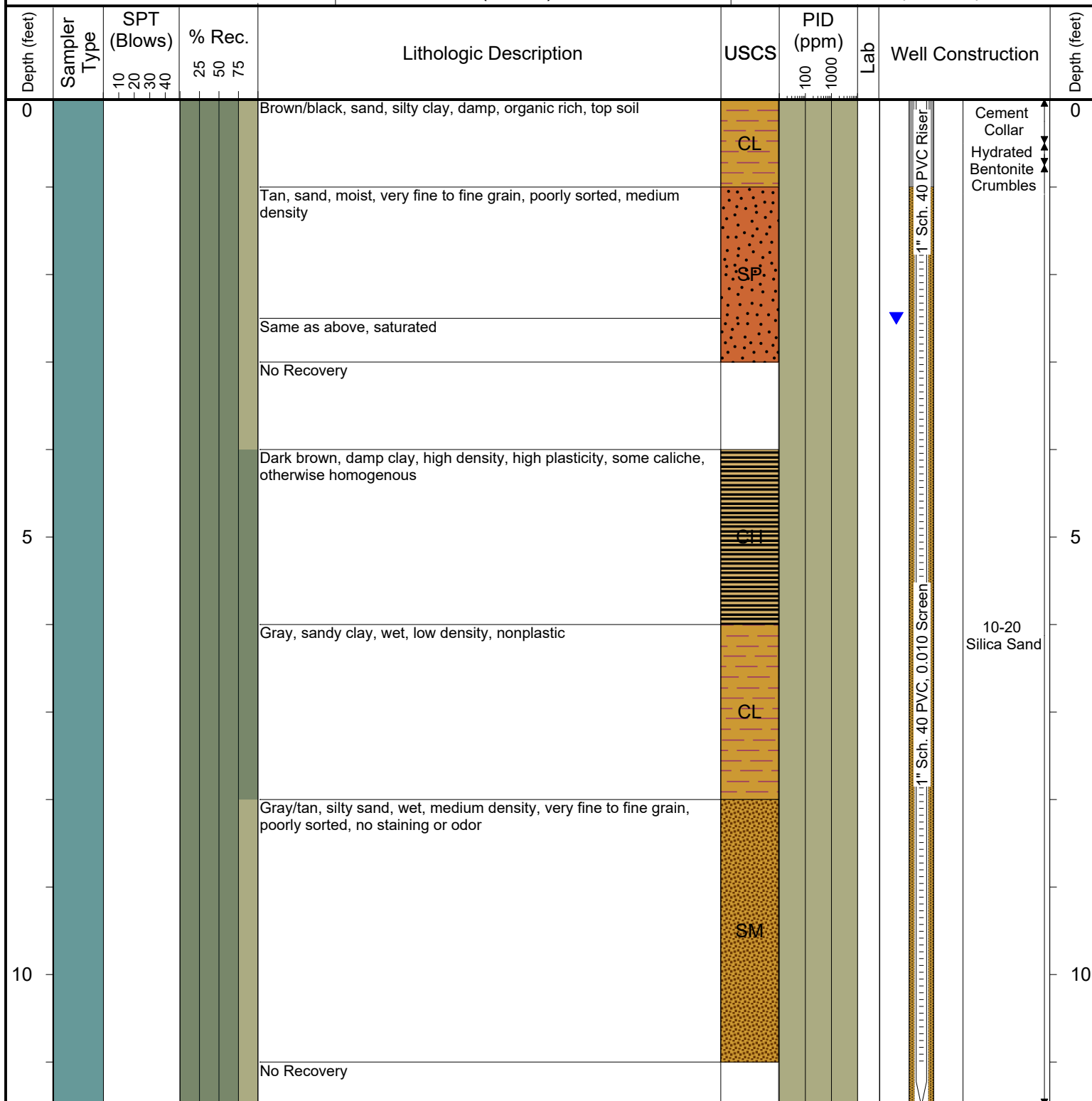
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457185

EASTING (CO STATE PLANE): 530900.9

CASING ELEVATION (FT. AMSL): 4742.72

GROUND ELEVATION (FT. AMSL): 4742.92



Drilling / Sample Method:

Solid Stem Auger
 Push Probe

Macro Liner
 CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab
 Analytical Chemistry Lab

Geotechnical & Analytical Chemistry Lab



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DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 3

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH07

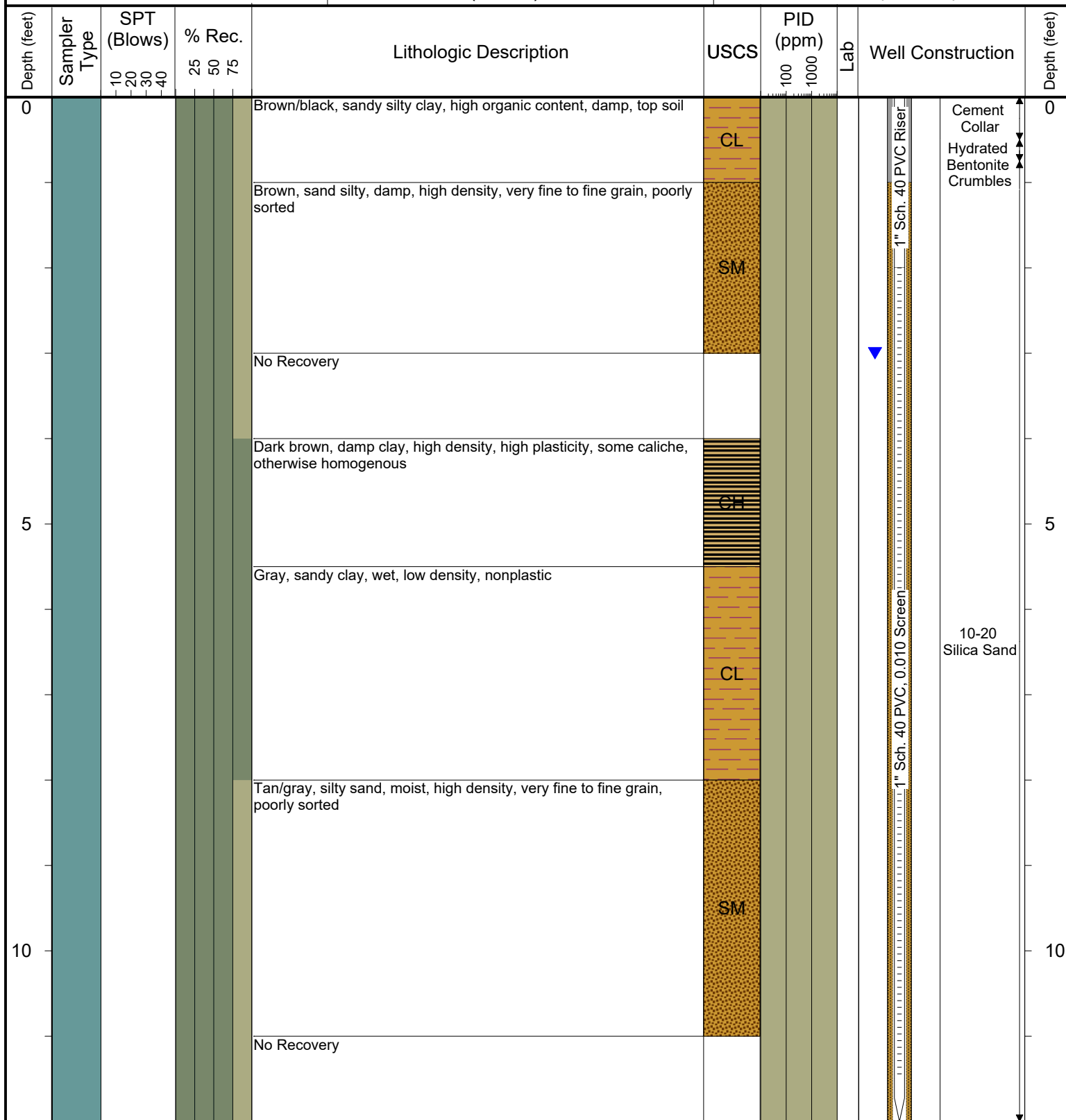
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457205.7

EASTING (CO STATE PLANE): 530889.2

CASING ELEVATION (FT. AMSL): 4742.58

GROUND ELEVATION (FT. AMSL): 4742.77



Drilling / Sample Method:

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Push Probe

Macro Liner

CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab

Analytical Chemistry Lab

Geotechnical & Analytical Chemistry Lab



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DRILLING EQUIPMENT: Push Probe

DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 2.5

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH08

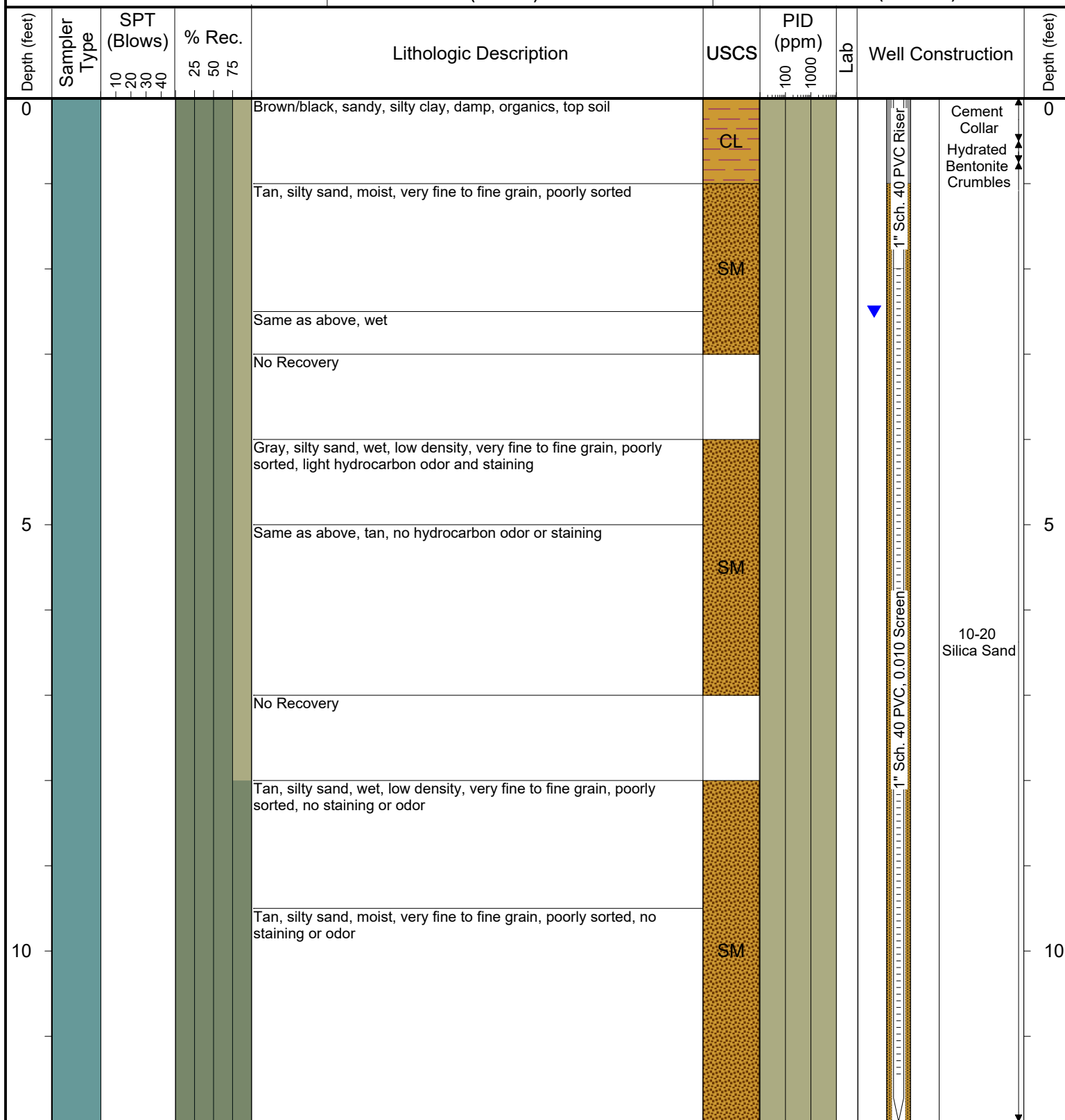
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457220.8

EASTING (CO STATE PLANE): 530908.3

CASING ELEVATION (FT. AMSL): 4742.66

GROUND ELEVATION (FT. AMSL): 4742.85



Drilling / Sample Method:

Solid Stem Auger
Push Probe

Macro Liner

CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab

Analytical Chemistry Lab

Geotechnical & Analytical Chemistry Lab



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DRILL BIT SIZE (INCHES): 2.375"

DATE STARTED - COMPLETED: 1/23/2019

TOTAL WELL DEPTH (FT. BGS): 12

DEPTH TO WATER (FT. BGS): 2.5

Mark 11, 12, 14-35 Tank Battery

BORING / WELL ID: BH09

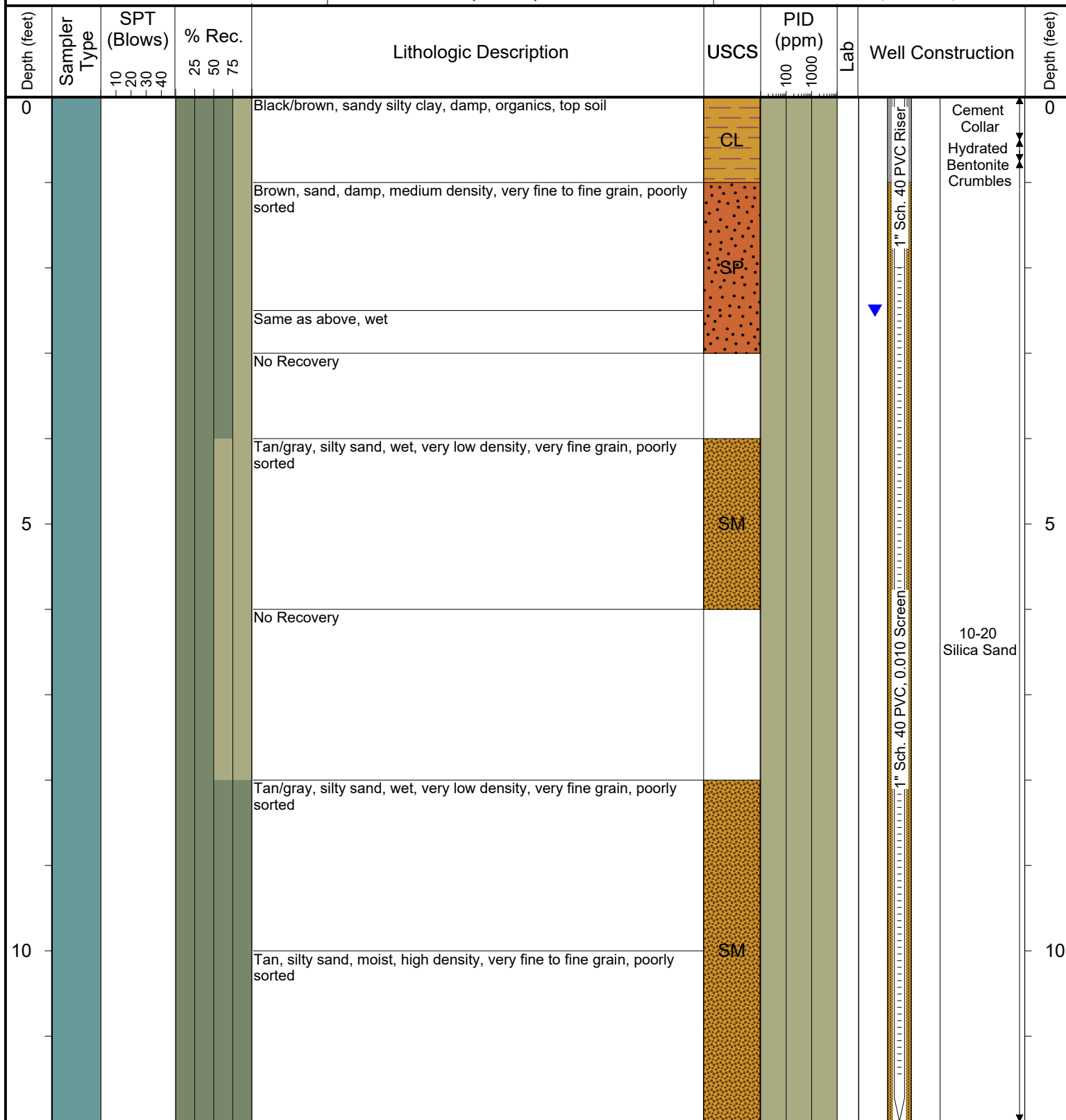
LOCATION: Evans, CO

NORTHING (CO STATE PLANE): 4457212.2

EASTING (CO STATE PLANE): 530935

CASING ELEVATION (FT. AMSL): 4743.28

GROUND ELEVATION (FT. AMSL): 4743.52



Drilling / Sample Method:

Solid Stem Auger
 Push Probe

Macro Liner
 CME Continuous Sample Tube

Laboratory Sample Types:

Geotechnical Lab
 Analytical Chemistry Lab

Geotechnical & Analytical Chemistry Lab