SOILS & GEOLOGY REPORT

SOILS & GEOLOGY REPORT

Xcel Energy recognizes El Paso County's requirement for a Geology and Soils Report and has reviewed the requirements outlined in Chapter 8.4.9 of El Paso County's Land Development Code.

At this time, exploratory borings have been drilled along portions of Pathway in El Paso County. Results of the exploratory borings are found in the attached soil boring logs. Xcel Energy continues to work with landowners to finalize pole locations to be able to finalize a geotechnical study prior to construction. Engineers will use this study to determine the size and type of foundations needed to support the transmission line poles. Once this geotechnical study is complete, Xcel Energy can provide a copy to El Paso County, upon request.

No significant natural hazards have been identified in the areas planned for Pathway development in El Paso County, including faults and fissures, unstable slopes, landslide areas, rockslide areas, and avalanche areas, expansive or evaporative soils with the risk of subsidence, and wildfire hazard areas. Professional engineers who will guide construction do not foresee any unusual risks. Xcel Energy electric facilities, including transmission poles, are specifically designed for the locations where they are placed. Geotechnical studies will be conducted for transmission poles to identify subsurface conditions and determine foundation specifications. Transmission lines are structurally designed according to the NESC, which incorporates standards from the American Society of Civil Engineers on structural loading.

Vivid Engineering Group
3885 Forest Street
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BORING NUMBER SB-5290

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/21/24 **COMPLETED** 3/21/24
GROUND ELEVATION 6347.57 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.6, Resistivity = 3500 ohm-cm, Sulfate = 0.006%		Clayey SAND with Gravel, fine to coarse-grained, olive brown and brown, moist, loose to dense	
	SPT	3-4-4 (8)				
	AU					
	SPT	5-9-17 (26)				
	AU					
	SPT	10-10-16 (26)	MC = 9.1%			
10	SPT	14-15-16 (31)				
					11.0	6336.6
	SPT	11-16-17 (33)	MC = 4.7%		Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, moist, dense	
	SPT	14-16-17 (33)				
					16.0	6331.6
					Clayey SAND, fine to coarse-grained, light brown and olive brown, moist, medium dense	
20	SPT	7-8-9 (17)	MC = 11.3%			
	SPT	5-5-6 (11)				
30	MC	9-12	MC = 15.5% DD = 116.4 pcf UC = 47psi			
					32.0	6315.6
	MC	12-16			Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, medium dense to dense	
40	SPT	12-14-16 (30)	MC = 4.5% LL = NP PL = NP Fines = 7.4%			
	SPT	15-17-21 (38)				
50	SPT	16-22-26 (48)				
					50.5	6297.1
					Bottom of borehole at 50.5 feet.	

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BORING NUMBER SB-5091

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/29/24 **COMPLETED** 3/29/24
GROUND ELEVATION 5393.05 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.2, Resistivity = 5200 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, light brown, slightly moist, medium dense to dense	
	SPT	17-20-19 (39)				
	AU					
5	SPT	10-11-14 (25)				
	AU					
	SPT	15-19-19 (38)	MC = 2.1%			
					9.0	5384.1
10	SPT	15-16-19 (35)			Sandy Lean CLAY, light brown, slightly moist, hard	
					12.0	5381.1
	MC	25-31			Clayey SAND, fine to medium-grained, brown, slightly moist, dense to very dense	
15	SPT	15-15-15 (30)	MC = 5.3%			
20	MC	27-31				
25	SPT	46-25-34 (59)				
30	SPT	27-33-40 (73)	MC = 6.5% LL = 25 PL = 15 Fines = 48.0%			
					32.0	5361.1
					Poorly Graded SAND, fine to coarse-grained, olive brown, slightly moist, very dense	
35	SPT	18-29-30 (59)				
					37.0	5356.1
					Silty SAND, fine to medium-grained, light brown, slightly moist, very dense	
40	SPT	26-27-28 (55)	MC = 9.2%			
					40.5	5352.6
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5092

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/29/24 **COMPLETED** 3/29/24
GROUND ELEVATION 5411.27 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.003%, pH = 8.2, Resistivity = 6300 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, olive brown and brown, slightly moist, medium dense
	SPT	13-11-13 (24)			
	AU				
5	SPT	10-8-10 (18)			
	AU				
	SPT	11-13-17 (30)	MC = 1.9%		
10	SPT	11-13-14 (27)			
12.5					5398.8
	SPT	12-12-13 (25)	MC = 6.7%		Clayey SAND, fine to medium-grained, olive brown, moist, medium dense
15	MC	18-26			
17.0					5394.3
					Silty SAND, fine to medium-grained, olive brown, moist, medium dense to dense
20	MC	25-29			
25	SPT	11-13-13 (26)	MC = 4.6% LL = NP PL = NP Fines = 28.0%		
30	SPT	11-13-18 (31)			
35	SPT	20-22-21 (43)	MC = 3.7%		
40	SPT	14-17-19 (36)			
40.5					5370.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5093

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 4/1/24 **COMPLETED** 4/1/24
GROUND ELEVATION 5392.33 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.4, Resistivity = 3800 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown, slightly moist, medium dense to dense	
	SPT	9-13-15 (28)				
	AU					
5	SPT	19-22-27 (49)				
	AU					
	SPT	21-24-25 (49)	MC = 2.9%			
					8.0	5384.3
					Lean CLAY with Sand, brown, slightly moist, hard	
10	MC	17-22				
					11.0	5381.3
					Poorly Graded SAND with Silt, fine to medium-grained, brown, slightly moist, dense	
	SPT	16-17-18 (35)				
15	SPT	14-15-16 (31)	MC = 2.2% LL = NP PL = NP Fines = 7.5%			
					17.0	5375.3
					Clayey SAND with Gravel, fine to coarse-grained, olive brown, moist, very dense	
20	SPT	50				
25	SPT	50/5"	MC = 3.9%			
					27.0	5365.3
					Silty SAND, fine to coarse-grained, olive brown and light brown, moist, dense	
30	MC	20-40				
					33.0	5359.3
					Poorly Graded SAND, fine to coarse-grained, brown, slightly moist, very dense	
35	SPT	14-29-32 (61)	MC = 3.0%			
					37.0	5355.3
					Lean CLAY with Sand, brown, moist, hard	
40	SPT	11-16-22 (38)				
					40.5	5351.8
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5094

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 4/1/24 **COMPLETED** 4/1/24
GROUND ELEVATION 5407.78 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.002%, pH = 8.2, Resistivity = 3800 ohm-cm, Sulfate = <0.001%		1.0 Clayey SAND with Gravel, fine to coarse-grained, brown, slightly moist	5406.8
	SPT	5-5-6 (11)			Poorly Graded SAND with Silt, fine to coarse-grained, light brown and brown, slightly moist, medium dense to loose	
	AU					
5	SPT	6-5-5 (10)			6.0	5401.8
	AU				Silty SAND, fine to coarse-grained, brown, slightly moist, medium dense to very dense	
	SPT	24-22-24 (46)	MC = 4.2%			
10	MC	21-31				
	MC	18-21				
15	SPT	15-13-12 (25)	MC = 6.1%			
20	SPT	13-12-11 (23)				
25	SPT	26-21-22 (43)	MC = 3.6% LL = NP PL = NP Fines = 19.0%			
30	SPT	50				
35	SPT	50/5"			37.0	5370.8
					Lean CLAY with Sand, olive brown, moist, hard	
40	SPT	13-17-23 (40)	MC = 18.6%		40.5	5367.3

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5095

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/29/24 **COMPLETED** 1/29/24
GROUND ELEVATION 5406.39 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 4250 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, loose to medium dense	
	SPT	3-2-3 (5)				
	AU					
5	SPT	3-6-7 (13)				
					5.0	5401.4
	AU				Clayey SAND, fine to coarse-grained, calcareous, brown, moist, medium dense	
	SPT	6-5-6 (11)	MC = 6.7%			
10	MC	7-13				
					11.0	5395.4
	SPT	5-7-8 (15)			Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, medium dense	
15	SPT	5-9-18 (27)	MC = 4.8%			
					18.0	5388.4
20	MC	14-23			Poorly Graded SAND with CLAY, fine to coarse-grained, olive-brown and brown, moist, medium dense	
25	SPT	32-15-11 (26)				
					25.0	5381.4
					Fat CLAY, olive-brown and brown, iron oxide staining, moist, very stiff to hard (Highly Weathered Claystone)	
30	SPT	8-17-25 (42)	MC = 18.5% LL = 62 PL = 16 Fines = 98.4%			
35	SPT	22-25-37 (62)				
40	SPT	16-28-36 (64)	MC = 17.2%			
					40.5	5365.9
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5096

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/29/24 **COMPLETED** 1/29/24
GROUND ELEVATION 5403.19 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 3800 ohm-cm, Sulfate = 0.027%		Clayey SAND, fine to coarse-grained, brown, moist, loose	
	SPT	3-4-5 (9)				
	AU					
5	SPT	9-10-11 (21)				
	AU					
	SPT	16-19-19 (38)	MC = 4.6%			
10	MC	21-36				
					3.0	5400.2
					Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, medium dense to dense	
					11.0	5392.2
	SPT	19-24-27 (51)			Clayey SAND with Gravel, fine to coarse-grained, olive-brown, calcareous, moist, very dense to dense	
15	SPT	17-22-26 (48)	MC = 5.1%			
					19.5	5383.7
20	MC	10-17			Fat CLAY, olive brown and dark gray, iron oxide staining, moist, very stiff to hard (Highly Weathered Claystone)	
25	SPT	9-15-20 (35)	MC = 17.2% LL = 59 PL = 14 Fines = 91.5%			
30	SPT	13-19-22 (41)				
35	SPT	21-28-37 (65)	MC = 17.1%			
40	SPT	12-17-23 (40)			40.5	5362.7

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5097

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/29/24 **COMPLETED** 1/29/24
GROUND ELEVATION 5412.86 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.1, Resistivity = 2300 ohm-cm, Sulfate = 0.027%		Poorly Graded SAND with Silt, fine to coarse-grained, light brown and brown, moist, loose to medium dense	
	SPT	2-3-2 (5)				
	AU					
5	SPT	4-6-7 (13)				
	AU					
	SPT	5-9-9 (18)	MC = 5.4%			
10	MC	8-12				
					11.0	5401.9
					Clayey SAND, fine to coarse-grained, brown and gray, calcareous, moist, dense to medium dense	
	SPT	13-15-20 (35)	MC = 5.3%			
15	SPT	12-13-15 (28)				
					16.0	5396.9
					Lean CLAY with Gravel, brown and gray, iron oxide staining, moist, hard	
20	MC	17-50	MC = 9.5% DD = 123.2 pcf UC = 27psi			
					21.0	5391.9
					Lean CLAY, olive brown, iron oxide staining, moist, hard to very stiff	
25	SPT	16-18-23 (41)	MC = 20.7%			
30	SPT	9-12-17 (29)				
					33.0	5379.9
					Fat CLAY, dark gray, iron oxide staining, moist, hard (Highly Weathered Claystone)	
35	SPT	12-21-27 (48)	MC = 21.0% LL = 69 PL = 16 Fines = 97.2%			
40	SPT	11-15-19 (34)				
					40.5	5372.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5098

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/30/24 **COMPLETED** 1/30/24
GROUND ELEVATION 5429.2 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.9, Resistivity = 3200 ohm-cm, Sulfate = 0.028%		Silty SAND, fine to medium-grained, gray, light brown and brown, moist, very loose to dense	
	SPT	3-5-6 (11)				
	AU					
5	SPT	5-7-9 (16)				
	AU					
	SPT	2-2-2 (4)	MC = 2.1%			
10	MC	3-7				
	SPT	8-10-11 (21)	MC = 7.2% LL = NP PL = NP Fines = 25.9%			
15	SPT	13-16-18 (34)				
20	MC	9-15				
						23.0 5406.2
					Poorly Graded SAND with Clay, fine to coarse-grained, calcareous, moist, dense	
25	SPT	9-17-17 (34)	MC = 15.4%			
						28.0 5401.2
					Clayey SAND with Gravel, fine to coarse-grained, light brown, calcareous, iron oxide staining, moist, medium dense	
30	SPT	9-9-20 (29)				
						33.0 5396.2
					Lean CLAY with Sand, gray and brown, iron oxide, moist, hard	
35	SPT	20-14-19 (33)	MC = 24.9%			
40	SPT	10-11-20 (31)				40.5 5388.7
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5099

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/30/24 **COMPLETED** 1/30/24
GROUND ELEVATION 5441.25 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 2100 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown and brown, calcareous, moist, loose to medium dense	
	SPT	6-7-8 (15)				
	AU					
5	SPT	3-3-4 (7)				
	AU					
	SPT	5-5-6 (11)	MC = 5.5%			
10	MC	7-10				
	SPT	6-5-6 (11)				
15	SPT	7-9-13 (22)	MC = 10.1%			
					17.0	5424.3
					Poorly Graded SAND with Silt, fine to medium-grained, gray and light brown, moist, medium dense to very dense	
20	MC	6-14				
25	SPT	11-24-28 (52)			26.0	5415.3
					Fat CLAY with Sand, brown and gray, calcareous, iron oxide staining, moist, very stiff to hard	
30	SPT	7-12-16 (28)	MC = 22.5% LL = 73 PL = 19 Fines = 96.9%			
35	SPT	8-11-21 (32)				
40	SPT	9-15-19 (34)	MC = 21.8%		40.5	5400.8
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5100

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/30/24 **COMPLETED** 1/30/24
GROUND ELEVATION 5456.81 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 7.5, Resistivity = 1750 ohm-cm, Sulfate = 0.054%		Poorly Graded SAND with Silt, fine to medium-grained, brown, moist, medium dense
	SPT	8-10-13 (23)			
	AU				
5	SPT	9-11-13 (24)			
	AU				
	SPT	8-9-11 (20)			
10	MC	9-15			
	SPT	9-10-9 (19)	MC = 4.8%		13.0 5443.8
15	SPT	8-14-14 (28)			Silty SAND, fine to medium-grained, brown and gray, moist, medium dense to very dense
20	MC	12-10			
25	SPT	14-17-16 (33)	MC = 5.3% LL = NP PL = NP Fines = 30.0%		
30	SPT	22-30-24 (54)			31.0 5425.8
					Sandy Lean CLAY, gray and brown, iron oxide staining, calcareous, moist, hard
35	SPT	16-19-25 (44)	MC = 9.8%		
40	SPT	14-18-27 (45)	MC = 21.5%		40.5 5416.3
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5101

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 1/30/24 **COMPLETED** 1/30/24
GROUND ELEVATION 5471.84 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Dakota Drilling (CME-55)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 7.2, Resistivity = 5200 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, light brown, brown and gray, moist, medium dense to very dense
	SPT	6-12-19 (31)			
	AU				
5	SPT	8-12-11 (23)			
	AU				
	SPT	6-6-6 (12)	MC = 4.8%		
10	MC	8-11			
	SPT	5-5-6 (11)	MC = 6.2%		
15	SPT	6-11-14 (25)			
20	MC	13-25			
25	SPT	18-21-25 (46)	MC = 4.9%, LL = NP, PL = NP, Fines = 31.3%		
30	SPT	29-37-50 (87)			
					32.0 / 5439.8 — Clayey SAND, fine to coarse-grained, brown, calcareous, mois, very dense
35	SPT	13-16-33 (49)	MC = 19.5%		35.0 / 5436.8 — Lean CLAY with Sand, brown and gray, iron oxide staining, moist, hard
40	SPT	14-18-26 (44)	MC = 18.9%		40.5 / 5431.3 — Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5102

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/1/24 **COMPLETED** 2/1/24
GROUND ELEVATION 5494.54 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 7.9, Resistivity = 6150 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, brown, moist, dense to medium dense	
	SPT	14-18-15 (33)				
	AU					
5	SPT	9-10-11 (21)				
	AU					
	SPT	17-10-11 (21)				
10	SPT	11-10-12 (22)	MC = 2.4% LL = NP PL = NP Fines = 18.1%			
	SPT	12-11-14 (25)			13.0	5481.5
15	SPT	14-12-10 (22)			Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
					18.0	5476.5
20	SPT	16-16-15 (31)	MC = 3.5%		Silty SAND, fine to medium-grained, lgith brown and gray, moist, dense	
25	MC	25-21				
30	MC	25-32	MC = 4.5% DD = 122.2 pcf			
					33.0	5461.5
35	SPT	20-19-36 (55)			Clayey SAND, fine to coarse-grained, light brown and gray, calcareous, moist, very dense	
					37.0	5457.5
40	SPT	26-18-13 (31)	MC = 7.7%		Sandy Lean CLAY, olive brown, iron oxide staining, calcareous, moist, hard	
					40.5	5454.0

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5103

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/1/24 **COMPLETED** 2/1/24
GROUND ELEVATION 5512.8 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 7.3, Resistivity = 11000 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, loose to medium dense	
	SPT	5-5-5 (10)				
	AU					
5	SPT	8-6-6 (12)				
	AU					
	SPT	5-6-6 (12)	MC = 1.1%			
10	SPT	8-8-8 (16)				
	SPT	4-14-13 (27)	MC = 2.7%		13.0	5499.8
15	SPT	14-9-9 (18)			Sandy Lean CLAY, reddish brown and light brown, calcareous, moist, very stiff to hard	
20	SPT	11-10-10 (20)	MC = 7.8% LL = 20 PL = 12 Fines = 51.1%			
25	SPT	13-12-15 (27)				
30	MC	41-50/5"				
35	SPT	23-26-31 (57)			37.0	5475.8
					Lean CLAY with Sand, olive brown, iron oxide staining, moist, hard (Highly Weathered Claystone)	
40	SPT	11-15-21 (36)	MC = 18.6%		40.5	5472.3
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5104

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/1/24 **COMPLETED** 2/1/24
GROUND ELEVATION 5531.12 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 7.6, Resistivity = 8450 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to medium-grained, light brown, moist, loose to medium dense
	SPT	4-3-4 (7)			
	AU				
5	SPT	4-4-5 (9)			
	AU				
	SPT	5-5-7 (12)			
8.0					5523.1
					Silty SAND, fine to medium-grained, light brown and brown, moist, medium dense
10	SPT	6-8-8 (16)	MC = 1.5%		
13.0					5518.1
	SPT	11-12-12 (24)			Sandy Lean CLAY, brown and gray, calcareous, moist, very stiff to hard
15	SPT	9-13-12 (25)	MC = 6.9%		
20	SPT	16-14-16 (30)			
25	SPT	16-12-11 (23)	MC = 8.7% LL = 28 PL = 12 Fines = 62.0%		
30	MC	26-31	MC = 7.4% DD = 134.0 pcf		
35	SPT	16-15-15 (30)			
40	SPT	15-19-17 (36)	MC = 5.8%		
40.5					5490.6

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5105

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/5/24 **COMPLETED** 2/5/24
GROUND ELEVATION 5532.66 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.003%, pH = 7.6, Resistivity = 6700 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, loose
	SPT	4-4-4 (8)			
	AU				
5	SPT	4-4-3 (7)			
6.0					5526.7
	AU				Clayey SAND, fine to medium-grained, light brown and brown, calcareous, moist, medium dense to dense
	SPT	14-11-11 (22)	MC = 5.3%		
10	SPT	16-15-13 (28)			
	SPT	9-9-13 (22)	MC = 4.5%		
15	SPT	11-11-15 (26)			
20	SPT	13-13-15 (28)	MC = 5.9% LL = 25 PL = 14 Fines = 47.9%		
25	MC	20-39			
30	MC	22-33	MC = 3.8% DD = 123.1 pcf		
35	SPT	12-12-17 (29)			
40	SPT	20-18-25 (43)			
40.5					5492.2

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5106

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/5/24 **COMPLETED** 2/5/24
GROUND ELEVATION 5535.44 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 7.9, Resistivity = 13000 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND, fine to coarse-grained, moist, loose to medium dense	
	SPT	2-2-2 (4)				
	AU					
5	SPT	2-3-3 (6)				
	AU					
	SPT	4-5-5 (10)				
10	SPT	6-6-6 (12)				
					11.0	5524.4
					Silty SAND, fine to medium-grained, brown, moist, medium dense	
	SPT	7-6-5 (11)	MC = 3.9% LL = NP PL = NP Fines = 18.3%			
15	SPT	6-7-10 (17)				
					14.5	5520.9
					Poorly Graded SAND with CLAY, fine to coarse-grained, moist, medium dense	
20	SPT	12-13-14 (27)	MC = 9.4%			
25	SPT	11-13-13 (26)				
30	MC	17-17	MC = 3.0% DD = 109.3 pcf			
					32.0	5503.4
					Clayey SAND, fine to coarse-grained, gray and light brown, moist, dense to medium dense	
35	SPT	16-20-16 (36)				
40	SPT	14-13-15 (28)	MC = 4.1%			
					40.5	5494.9
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5107

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/5/24 **COMPLETED** 2/9/24
GROUND ELEVATION 5535.99 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = 4600 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, medium dense	
	SPT	8-8-8 (16)				
	AU					
4.0						5532.0
5	SPT	7-6-3 (9)			Silty SAND, fine to coarse-grained, light brown and brown, moist, loose to medium dense	
	AU					
	SPT	11-11-10 (21)				
10	SPT	12-10-11 (21)	MC = 3.3%			
	SPT	11-9-9 (18)				
15	SPT	11-11-13 (24)	MC = 4.9%			
18.0						5518.0
20	SPT	13-14-15 (29)			Clayey SAND, fine to coarse-grained, light brown and brown, calcareous, moist, medium dense to dense	
25	MC	15-20	MC = 5.4% DD = 122.1 pcf			
30	SPT	18-22-21 (43)	MC = 6.6% LL = 30 PL = 12 Fines = 37.7%			
35	SPT	14-18-23 (41)				
35.0						5501.0
					Poorly Graded SAND with Clay and Gravel, fine to coarse-grained, light brown and brown, moist, dense to very dense	
40	SPT	25-36-50 (86)				
40.5						5495.5
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5108

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/9/24 **COMPLETED** 2/9/24
GROUND ELEVATION 5530.36 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 5300 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to medium-grained, light brown, moist, medium dense	
	SPT	9-9-8 (17)				
	AU					
5	SPT	9-8-7 (15)				
	AU					
	SPT	7-5-4 (9)				
10	SPT	7-9-9 (18)				
	SPT	6-3-6 (9)	MC = 4.7% LL = NP PL = NP Fines = 32.5%			
15	SPT	11-12-13 (25)				
20	SPT	19-15-15 (30)	MC = 4.5%			
25	MC	20-28				
30	SPT	18-17-15 (32)	MC = 6.3%			
35	SPT	18-19-16 (35)				
40	SPT	23-23-20 (43)	MC = 2.0%			

6.0 — 5524.4
Silty SAND, fine to medium-grained, light brown, moist, loose to medium dense
13.0 — 5517.4
Clayey SAND, fine to medium-grained, light brown and brown, calcareous, moist, medium dense
22.0 — 5508.4
Poorly Graded SAND with Silt, fine to medium-grained, brown, moist, dense
27.0 — 5503.4
Clayey SAND, fine to coarse-grained, brown, calcareous, moist, dense
31.0 — 5499.4
Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, dense
40.5 — 5489.9
Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5109

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/9/24 **COMPLETED** 2/9/24
GROUND ELEVATION 5530.13 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 2650 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, light brown, moist, medium dense
	SPT	7-8-9 (17)			
	AU				
5	SPT	6-5-7 (12)			
	AU				
	SPT	13-14-15 (29)			
10	SPT	13-14-15 (29)			
	SPT	13-12-11 (23)	MC = 5.4%		
15	SPT	9-7-9 (16)			
20	SPT	18-18-18 (36)	MC = 8.2% LL = 28 PL = 10 Fines = 40.1%		
25	MC	24-32			
30	MC	17-20	MC = 7.8% DD = 109.7 pcf		
35	SPT	12-16-23 (39)			6.0 / 5524.1 Clayey SAND, fine to coarse-grained, light brown, brown and gray, calcareous, moist, medium dense to dense 35.0 / 5495.1 Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, dense to very dense
40	SPT	18-25-29 (54)	MC = 2.1%		40.5 / 5489.6 Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5110

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/9/24 **COMPLETED** 2/9/24
GROUND ELEVATION 5536.21 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.4, Resistivity = 3400 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown, slightly moist, loose	
	SPT	5-2-3 (5)				
	AU					
5	SPT	8-5-4 (9)				
					5.0	5531.2
	AU				Clayey SAND, fine to medium-grained, light brown, moist, loose to dense	
	SPT	12-14-16 (30)	MC = 6.4%			
10	SPT	20-18-15 (33)				
					11.0	5525.2
	SPT	11-11-10 (21)			Silty SAND, fine to coarse-grained, light brown, moist, medium dense	
15	SPT	15-14-12 (26)	MC = 4.7%			
20	SPT	13-14-15 (29)				
25	SPT	15-15-14 (29)				
					27.0	5509.2
					Lean CLAY with Sand, light brown and brown, calcareous, moist, hard	
30	SPT	12-16-19 (35)	MC = 17.2% LL = 41 PL = 14 Fines = 76.0%			
35	MC	30-37				
40	SPT	10-15-16 (31)	MC = 8.1%			
					40.5	5495.7

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5111

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/14/24 **COMPLETED** 2/14/24
GROUND ELEVATION 5537.72 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 5600 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to medium-grained, light brown and brown, slightly moist, medium dense	
	SPT	7-5-6 (11)				
	AU					
	SPT	7-7-7 (14)				
	AU					
	SPT	6-7-10 (17)	MC = 3.7%			
					8.0	5529.7
10	SPT	10-15-8 (23)			Silty SAND, fine to medium-grained, light brown, slightly moist, medium dense	
					11.0	5526.7
	SPT	12-20-24 (44)			Clayey SAND, fine to coarse-grained, reddish brown, dark brown and brown, calcareous, moist, dense to very dense	
	SPT	20-46-27 (73)	MC = 8.5% LL = 28 PL = 11 Fines = 37.2%			
20	MC	20-30				
	MC	23-42	MC = 7.8% DD = 109.7 pcf			
					28.0	5509.7
30	MC	24-30			Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, dense	
					33.0	5504.7
	SPT	12-15-17 (32)	MC = 8.1%		Clayey SAND, fine to coarse-grained, brown and light brown, moist, dense	
					39.0	5498.7
40	SPT	11-14-21 (35)			Poorly Graded SAND with Clay, fine to coarse-grained, light brown, moist, dense to very dense	
	SPT	25-44-43 (87)				
50	SPT	19-30-50/5"				
					50.4	5487.3
					Bottom of borehole at 50.4 feet.	

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BORING NUMBER SB-5112

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/14/24 **COMPLETED** 2/14/24
GROUND ELEVATION 5532.76 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = 4700 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown and brown, moist, dense to medium dense
	SPT	15-17-14 (31)			
	AU				
5	SPT	13-8-9 (17)			
	AU				
	SPT	9-6-8 (14)	MC = 3.7%		
10	SPT	9-9-13 (22)			
					12.0 5520.8
	SPT	7-3-2 (5)	MC = 3.9%		Silty SAND, fine to medium-grained, light brown, moist, loose
					14.0 5518.8
15	SPT	5-13-15 (28)			Clayey SAND, fine to medium-grained, light brown and olive brown, calcareous, moist, medium dense to very dense
20	SPT	18-27-23 (50)	MC = 7.3%		
25	MC	32-50/4"			
30	MC	12-18			
35	SPT	10-17-24 (41)	MC = 16.5% LL = 47 PL = 13 Fines = 33.4%		
40	SPT	18-20-22 (42)			40.5 5492.3

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5113

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/13/24 **COMPLETED** 2/13/24
GROUND ELEVATION 5522.27 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.9, Resistivity = 7300 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown, moist, medium dense	
	SPT	7-10-8 (18)				
	AU					
5	SPT	9-6-5 (11)				
	AU					
	SPT	10-9-9 (18)				
					6.0	5516.3
					Clayey SAND, fine to medium-grained, light brown, moist, medium dense	
					9.0	5513.3
10	SPT	8-5-4 (9)	MC = 3.7%		Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, loose to medium dense	
	SPT	3-4-4 (8)				
15	SPT	5-6-8 (14)				
					18.0	5504.3
					Clayey SAND, fine to coarse-grained, light brown, moist, dense	
20	SPT	15-18-26 (44)	MC = 6.2% LL = 24 PL = 15 Fines = 33.0%			
25	MC	25-38				
					28.0	5494.3
					Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, dense to very dense	
30	MC	18-38				
35	SPT	18-47-30 (77)	MC = 1.5%			
					37.0	5485.3
					Clayey SAND, fine to coarse-grained, light brown, moist, very dense	
					39.5	5482.8
40	SPT	18-27-40 (67)			40.5 Poorly Graded SAND, fine to coarse-grained, light brown, moist, very dense	5481.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5114

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/13/24 **COMPLETED** 2/13/24
GROUND ELEVATION 5514.18 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 5500 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, reddish brown and light brown, moist, loose to dense	
	SPT	7-6-5 (11)				
	AU					
5	SPT	8-9-9 (18)				
	AU					
	SPT	3-3-4 (7)				
10	SPT	7-6-6 (12)	MC = 2.9%			
	SPT	8-12-19 (31)				
15	SPT	16-17-20 (37)				
					18.0	5496.2
					Clayey SAND, fine to coarse-grained, brown, moist, dense	
20	SPT	9-14-20 (34)	MC = 21.3%		20.0	5494.2
					Sandy Lean CLAY, olive brown, moist, hard	
25	SPT	15-16-17 (33)				
30	MC	21-47	MC = 13.2% DD = 119.6 pcf LL = 42 PL = 13 Fines = 56.4% UC = 220psi		30.0	5484.2
					Clayey SAND, fine to coarse-grained, light brown and brown, moist, dense	
					34.5	5479.7
35	MC	22-37			Poorly Graded SAND with Clay, fine to coarse-grained, reddish brown and brown, moist, dense	
40	SPT	17-22-23 (45)	MC = 1.6%		40.5	5473.7
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5115

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/13/24 **COMPLETED** 2/13/24
GROUND ELEVATION 5490 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.7, Resistivity = 4850 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown, slightly moist, medium dense	
	SPT	6-8-7 (15)				
	AU					
5	SPT	9-8-9 (17)				
	AU					
	SPT	10-13-13 (26)				
					8.0	5482.0
					Clayey SAND, fine to medium-grained, light brown, calcareous, moist, medium dense to dense	
10	SPT	16-14-15 (29)	MC = 9.1%			
					12.5	5477.5
	SPT	14-18-19 (37)			Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, dense	
					14.0	5476.0
15	SPT	16-23-22 (45)			Sandy Lean CLAY, light brown and brown, calcareous, moist, hard	
20	SPT	13-21-35 (56)	MC = 14.2% LL = 40 PL = 13 Fines = 65.8%			
25	MC	20-30				
					26.0	5464.0
					Poorly Graded SAND with Clay, fine to coarse-grained, brown and reddish brown, moist, dense	
30	MC	21-44	MC = 4.8% DD = 124.1 pcf			
35	SPT	13-15-17 (32)				
40	SPT	15-18-26 (44)	MC = 5.3%			
					40.5	5449.5
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5116

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/13/24 **COMPLETED** 2/13/24
GROUND ELEVATION 5490.3 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.3, Resistivity = 2900 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown, calcareous, moist, medium dense	
	SPT	11-14-13 (27)				
	AU					
	SPT	10-10-9 (19)				
	AU					
	SPT	11-13-15 (28)	MC = 5.0%			
10	SPT	19-22-19 (41)				
	MC	50/5"				
	MC	19-33	MC = 8.4% DD = 123.5 pcf UC = 146psi			
20	SPT	20-22-29 (51)	MC = 7.7%			
	SPT	15-16-17 (33)				
30	MC	21-30	MC = 9.5% DD = 115.7 pcf			
	SPT	21-27-23 (50)				
40	SPT	13-14-18 (32)				
	SPT	17-26-34 (60)	MC = 14.7% LL = 45 PL = 15 Fines = 59.5%			
50	SPT	22-23-17 (40)				

9.5 — 5480.8
11.0 — Poorly Graded SAND with Clay, fine to coarse-grained, light brown, calcareous, moist, dense — 5479.3
Clayey SAND, fine to coarse-grained, light brown, moist, very dense to dense
22.0 — 5468.3
Poorly Graded SAND with Clay seams, fine to medium grained, moist, dense to very dense
37.0 — 5453.3
Clayey SAND, fine to coarse-grained, light brown and gray, moist, dense
44.0 — 5446.3
Sandy Lean CLAY, brown, calcareous, moist, hard
47.0 — 5443.3
Poorly Graded SAND with Clay seams, fine to coarse-grained, moist, dense
50.5 — 5439.8

Bottom of borehole at 50.5 feet.

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BORING NUMBER SB-5117

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/12/24 **COMPLETED** 2/12/24
GROUND ELEVATION 5515 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.3, Resistivity = 8700 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to medium-grained, reddish brown and light brown, slightly moist to moist, medium dense
	SPT	6-5-6 (11)			
	AU				
5	SPT	6-5-8 (13)			
	AU				
	SPT	7-6-7 (13)	MC = 2.3%		
10	SPT	12-8-8 (16)			
	SPT	10-10-12 (22)	MC = 2.8%		
15	SPT	10-13-14 (27)			
20	SPT	7-7-10 (17)			
25	SPT	6-6-5 (11)	MC = 2.4% LL = NP PL = NP Fines = 9.3%		
30	SPT	7-7-13 (20)			
35	SPT	12-11-16 (27)			
					38.0 5477.0
40	SPT	18-20-22 (42)	MC = 4.2%		Clayey SAND, fine to coarse-grained, reddish brown, calcareous, moist, dense
					40.5 5474.5
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5118

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/12/24 **COMPLETED** 2/12/24
GROUND ELEVATION 5511.77 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 8.1, Resistivity = 3850 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown and reddish brown, slightly moist, medium dense
	SPT	7-7-6 (13)			
	AU				
5	SPT	8-5-5 (10)			
	AU				
	SPT	4-5-5 (10)			
10	SPT	6-7-9 (16)	MC = 2.3%		
	SPT	10-11-8 (19)	MC = 2.2%		
15	SPT	8-9-10 (19)			
20	SPT	9-10-11 (21)	MC = 4.6%		
					23.0 5488.8
25	SPT	22-22-23 (45)			Clayey SAND, fine to coarse-grained, reddish brown and light brown, calcareous, moist, medium dense to dense
30	MC	18-21			
35	SPT	18-17-14 (31)	MC = 7.4% LL = 24 PL = 13 Fines = 31.9%		
40	SPT	14-13-13 (26)			40.5 5471.3
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5119

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/12/24 **COMPLETED** 2/12/24
GROUND ELEVATION 5509.05 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = 6800 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, slightly moist, loose
	SPT	7-5-4 (9)			
	AU				
5	SPT	6-5-3 (8)			
	AU				
	SPT	10-9-13 (22)	MC = 4.2%		3.0 5506.1
					Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, loose to medium dense
10	SPT	24-20-20 (40)			8.0 5501.1
	MC	25-34	MC = 5.6%		Sandy Fat CLAY, olive brown and brown, calcareous, moist, very stiff to hard
15	MC	21-34	MC = 10.8%, DD = 120.0 pcf, UC = 223psi		
20	MC	27-24			
25	SPT	10-10-10 (20)	MC = 18.8%, LL = 53, PL = 18, Fines = 65.8%		
30	SPT	17-24-28 (52)			
35	SPT	10-20-15 (35)	MC = 5.4%		37.0 5472.1
					Poorly Graded SAND with Clay, fine to coarse-grained, light brown, moist, dense
40	SPT	13-20-28 (48)			40.5 5468.6
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5120

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/12/24 **COMPLETED** 2/12/24
GROUND ELEVATION 5513.31 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 8.3, Resistivity = 3700 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, light brown and brown, slightly moist, loose to dense	
	SPT	8-6-4 (10)				
	AU					
5	SPT	7-7-7 (14)				
	AU					
	SPT	14-19-15 (34)	MC = 6.3%			
10	SPT	12-17-19 (36)				
					11.0	5502.3
					Clayey SAND, fine to medium-grained, light brown and brown, moist, dense	
	SPT	18-18-18 (36)			13.0	5500.3
					Lean CLAY with Sand, light brown and brown, calcareous, moist, hard to very stiff	
15	SPT	13-12-12 (24)	MC = 15.1% LL = 45 PL = 15 Fines = 75.4%			
					17.0	5496.3
					Poorly Graded SAND with Silt and Gravel, fine to coarse-grained, brown and gray, moist, medium dense to dense	
20	MC	23-24				
25	MC	19-18				
30	SPT	17-20-22 (42)	MC = 2.1%			
35	SPT	14-15-26 (41)				
40	SPT	14-15-27 (42)	MC = 2.6%		40.5	5472.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5121

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/9/24 **COMPLETED** 2/9/24
GROUND ELEVATION 5533.03 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.006%, pH = 8.1, Resistivity = 7300 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, light brown, slightly moist, medium dense
	SPT	7-6-5 (11)			
	AU				
5	SPT	7-6-7 (13)			
	AU				
	SPT	5-5-8 (13)	MC = 2.8%		
10	SPT	12-11-10 (21)			
	SPT	6-6-6 (12)			
15	SPT	9-10-11 (21)			
18.0					5515.0
					Fat CLAY with Sand, brown, calcareous, moist, hard
20	SPT	10-15-17 (32)	MC = 20.5% LL = 71 PL = 18 Fines = 82.2%		
25	MC	14-24			
30	MC	16-28			
35	SPT	10-10-12 (22)	MC = 23.9%		
38.0					5495.0
					Clayey SAND, fine to coarse-grained, brown, calcareous, moist, dense
40	SPT	15-18-24 (42)			
40.5					5492.5
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5122

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/14/24 **COMPLETED** 2/14/24
GROUND ELEVATION 5534.49 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.9, Resistivity = 3600 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, light brown and brown, slightly moist, medium dense	
	SPT	14-12-11 (23)				
	AU					
5	SPT	13-11-9 (20)				
	AU					
	SPT	8-10-9 (19)	MC = 5.5%			
					9.0	5525.5
10	SPT	10-9-7 (16)			Silty SAND, fine to medium-grained, light brown, slightly moist, medium dense to dense	
	SPT	15-21-20 (41)				
15	SPT	16-17-20 (37)	MC = 3.0% LL = NP PL = NP Fines = 15.8%			
					17.0	5517.5
20	SPT	14-12-16 (28)			Poorly Graded SAND with Silt, fine to coarse-grained, light brown, slightly moist, medium dense to dense	
25	MC	15-27				
30	MC	17-33				
35	SPT	16-13-17 (30)	MC = 4.4%			
					39.5	5495.0
40	SPT	17-21-29 (50)			Clayey SAND, fine to coarse-grained, light brown, moist, very dense	
					40.5	5494.0

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5123

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/14/24 **COMPLETED** 2/14/24
GROUND ELEVATION 5545.58 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.0, Resistivity = 2450 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown, calcareous, moist, very loose to very dense	
	SPT	2-1-2 (3)				
	AU					
5	SPT	2-4-5 (9)				
	AU					
	SPT	12-17-24 (41)				
10	MC	30-50/5"	MC = 9.5% DD = 121.3 pcf UC = 235psi			
	MC	13-16				
						14.0 5531.6
15	SPT	7-11-14 (25)	MC = 2.1%		Poorly Graded SAND with Silt, fine to medium-grained, light brown, moist, medium dense	
						17.0 5528.6
					Clayey SAND, fine to coarse-grained, light brown, calcareous, moist, medium dense to dense	
20	SPT	13-17-16 (33)				
25	SPT	8-10-14 (24)	MC = 12.4% LL = 44 PL = 18 Fines = 46.4%			
30	MC	18-34	MC = 12.0% DD = 114.2 pcf			
35	SPT	12-16-17 (33)				
						38.0 5507.6
					Sandy Lean CLAY, brown, moist, hard	
40	SPT	8-13-18 (31)	MC = 15.1%			40.5 5505.1

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5124

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/15/24 **COMPLETED** 2/15/24
GROUND ELEVATION 5554.06 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.9, Resistivity = 3700 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown, calcareous, moist, medium dense	
	SPT	4-5-8 (13)				
	AU					
5	SPT	9-9-8 (17)				
	AU					
	SPT	10-9-12 (21)				
					8.0	5546.1
					Poorly Graded SAND with Clay, fine to medium-grained, brown, moist, medium dense	
10	SPT	11-9-12 (21)	MC = 3.8%			
					12.0	5542.1
	SPT	9-8-9 (17)			Clayey SAND, fine to coarse-grained, light brown and brown, moist, medium dense	
					14.0	5540.1
15	SPT	7-9-9 (18)			Silty, Clayey SAND, fine to coarse-grained, light brown, moist, medium dense	
20	SPT	11-12-14 (26)	MC = 8.3% LL = 26 PL = 21 Fines = 44.2%			
					20.0	5534.1
					Clayey SAND, fine to medium-grained, moist, medium dense to dense	
25	MC	15-21	MC = 9.3% DD = 127.9 pcf			
					29.5	5524.6
30	MC	22-33			Poorly Graded SAND, fine to coarse-grained, light brown, moist, dense to very dense	
35	MC	31-46	MC = 4.4% DD = 121.3 pcf			
40	SPT	22-34-43 (77)				
					40.5	5513.6
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5125

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/15/24 **COMPLETED** 2/15/24
GROUND ELEVATION 5571.52 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 6800 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, slightly moist, loose to medium dense	
	SPT	3-3-3 (6)				
	AU					
5	SPT	5-5-7 (12)				
	AU					
	SPT	7-8-9 (17)				
					7.5	5564.0
					Silty SAND, fine to coarse-grained, light brown, moist, medium dense	
10	SPT	9-13-17 (30)	MC = 3.3%			
	SPT	9-7-7 (14)				
15	SPT	10-11-12 (23)	MC = 2.9% LL = NP PL = NP Fines = 15.4%			
20	SPT	4-4-10 (14)				
					20.5	5551.0
					Clayey SAND, fine to coarse-grained, brown, calcareous, moist, dense	
25	MC	19-45				
30	MC	15-33				
					32.0	5539.5
					Poorly Graded SAND with Clay, fine to coarse-grained, light brown, moist, very dense	
35	SPT	12-21-30 (51)	MC = 3.8%		35.0	5536.5
					Clayey SAND, fine to coarse-grained, light brown, moist, very dense	
40	SPT	21-25-32 (57)			40.5	5531.0
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5126

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/15/24 **COMPLETED** 2/15/24
GROUND ELEVATION 5589.7 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 7.9, Resistivity = 7200 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND wtih Clay, fine to coarse-grained, light brown, slightly moist, loose to medium dense	
	SPT	2-3-2 (5)				
	AU					
	SPT	2-2-2 (4)				
	AU					
	SPT	3-5-8 (13)				
10	SPT	11-9-7 (16)	MC = 3.6%			
	SPT	7-8-8 (16)				
	SPT	11-10-12 (22)				
					18.0	5571.7
20	SPT	12-9-12 (21)	MC = 4.1% LL = 19 PL = 17 Fines = 29.3%		Silty SAND, fine to coarse-grained, light brown, slightly moist to moist, medium dense to very dense	
	SPT	18-16-14 (30)				
30	MC	18-21	MC = 5.0% DD = 123.8 pcf			
	MC	38-42				
					35.0	5554.7
					Poorly Graded SAND, fine to coarse-grained, light brown, moist, medium dense	
40	MC	15-17	MC = 1.8% DD = 114.2 pcf			
					42.0	5547.7
					Clayey SAND, fine to coarse-grained, light brown, moist, dense to very dense	
	SPT	17-23-24 (47)				
50	SPT	15-26-32 (58)	MC = 10.2%			
					50.5	5539.2
					Bottom of borehole at 50.5 feet.	

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BORING NUMBER SB-5127

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/16/24 **COMPLETED** 2/16/24
GROUND ELEVATION 5603.64 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 4700 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, loose to medium dense	
	SPT	4-3-4 (7)				
	AU					
	SPT	5-7-4 (11)				
	AU					
	SPT	5-4-6 (10)				
10	SPT	12-9-9 (18)				
	SPT	9-10-10 (20)	MC = 5.1%			
					13.0	5590.6
	SPT	7-6-8 (14)			Clayey SAND, fine to coarse-grained, light brown, moist, medium dense	
					18.0	5585.6
20	SPT	3-7-11 (18)			Silty SAND, fine to coarse-grained, light brown, moist, medium dense to dense	
	SPT	7-6-4 (10)	MC = 3.4%			
30	MC	14-16				
	SPT	12-14-15 (29)				
40	SPT	17-15-16 (31)	MC = 3.5% LL = NP PL = NP Fines = 20.4%			
	SPT	11-12-16 (28)				
50	SPT	12-14-20 (34)	MC = 6.8%			
					50.5	5553.1

Bottom of borehole at 50.5 feet.

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BORING NUMBER SB-5128

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/16/24 **COMPLETED** 2/16/24
GROUND ELEVATION 5603.47 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 7.6, Resistivity = 4500 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, moist, loose to medium dense	
	SPT	3-4-3 (7)				
	AU					
5	SPT	3-4-5 (9)				
	AU					
	SPT	11-6-7 (13)	MC = 6.9%			
10	SPT	9-11-12 (23)				
10.0						5593.5
					Silty SAND, fine to coarse-grained, reddish brown, moist, medium dense to loose	
	MC	18-16	MC = 2.3% DD = 116.0 pcf			
15	SPT	9-8-9 (17)				
20	SPT	8-7-8 (15)				
25	SPT	5-6-3 (9)	MC = 4.2% LL = NP PL = NP Fines = 22.3%			
28.0						5575.5
					Clayey SAND, fine to medium-grained, brown, moist, medium dense	
30	SPT	11-12-16 (28)				
32.0						5571.5
					Lean CLAY with Sand, brown, moist, hard	
35	SPT	8-15-25 (40)	MC = 18.5%			
37.0						5566.5
					Clayey SAND, fine to medium-grained, brown, moist, dense	
40	SPT	13-18-19 (37)				
40.5						5563.0
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5129

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/16/24 **COMPLETED** 2/16/24
GROUND ELEVATION 5608.87 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.9, Resistivity = 3900 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Clay, fine to coarse-grained, light brown and brown, moist, loose	
	SPT	4-3-3 (6)				
	AU					
5	SPT	3-4-3 (7)				
	AU					
	SPT	9-11-11 (22)	MC = 9.0%			
10	SPT	9-11-7 (18)				
	SPT	6-5-3 (8)				
15	SPT	5-6-8 (14)	MC = 12.5%			
20	SPT	21-24-14 (38)				
25	MC	13-14	MC = 5.6% DD = 117.8 pcf			
30	MC	16-25				
35	SPT	11-12-10 (22)	MC = 4.6% LL = NP PL = NP Fines = 17.9%			
40	SPT	16-12-17 (29)				

6.0 — 5602.9 — Clayey SAND, fine to medium-grained, light brown and brown, moist, medium dense to loose

13.0 — 5595.9 — Poorly Graded SAND with Clay, fine to coarse-grained, light brown and gray, medium dense to dense

23.0 — 5585.9 — Clayey SAND, fine to medium-grained, light brown and brown, medium dense

34.0 — 5574.9 — Silty SAND, fine to coarse-grained, light brown, moist, medium dense

39.5 — 5569.4 — Clayey SAND, fine to coarse-grained, reddish brown and brown, moist, medium dense

40.5 — 5568.4

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5130

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/16/24 **COMPLETED** 2/16/24
GROUND ELEVATION 5606.65 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.008%, pH = 8.0, Resistivity = 4150 ohm-cm, Sulfate = <0.001%		Clayey SAND with Gravel, fine to coarse-grained, reddish brown and brown, calcareous, moist, loose to very dense	
	SPT	7-5-5 (10)				
	AU					
5	SPT	4-9-8 (17)				
	AU					
	SPT	22-29-24 (53)				
					8.0	5598.7
					Poorly Graded SAND, fine to coarse-grained, reddish brown and brown, moist, dense	
10	SPT	17-20-23 (43)	MC = 2.8%			
					11.0	5595.7
					Clayey SAND with Gravel, fine to coarse-grained, brown, moist, medium dense	
	MC	19-22				
					14.5	5592.2
15	MC	16-19			Poorly Graded SAND, fine to coarse-grained, light brown, moist, medium dense	
20	SPT	12-10-10 (20)	MC = 4.4%			
					22.0	5584.7
					Clayey SAND, fine to coarse-grained, light brown and reddish brown, moist, medium dense	
25	SPT	11-12-10 (22)				
					28.0	5578.7
					Silty SAND, fine to coarse-grained, gray and light brown, moist, dense to very dense	
30	SPT	9-13-19 (32)	MC = 3.3% LL = NP PL = NP Fines = 18.8%			
35	SPT	29-26-40 (66)				
40	SPT	16-17-21 (38)	MC = 5.3%			
					40.5	5566.2
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5131

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/19/24 **COMPLETED** 2/19/24
GROUND ELEVATION 5612.33 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 4100 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, light brown, moist, loose	
	SPT	3-3-3 (6)				
	AU					
4.0						5608.3
5	SPT	3-3-4 (7)			Poorly Graded SAND with Clay, fine to medium-grained, brown, moist, loose to medium dense	
	AU					
	SPT	7-8-13 (21)	MC = 7.6%			
8.0						5604.3
10	SPT	14-13-16 (29)			Clayey SAND, fine to coarse-grained, brown and light brown, calcareous, moist, medium desne	
	SPT	9-9-8 (17)	MC = 11.1%			
13.0						5599.3
15	MC	8-15			Silty SAND, fine to medium-grained, light brown, moist, medium dense	
17.0						5595.3
20	SPT	13-18-25 (43)	MC = 2.4% LL = NP PL = NP Fines = 7.3%		Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, medium dense to very dense	
25	MC	19-33				
30	MC	22-40				
35	SPT	18-28-43 (71)	MC = 3.3%			
40	SPT	7-11-12 (23)				
40.5						5571.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5132

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/19/24 **COMPLETED** 2/19/24
GROUND ELEVATION 5618.57 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.006%, pH = 8.3, Resistivity = 3200 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, reddish brown, moist, medium dense
	SPT	5-6-7 (13)			
	AU				
5	SPT	7-11-8 (19)			
	AU				
	SPT	12-10-9 (19)	MC = 5.7%		
10	SPT	14-13-13 (26)			
11.0					5607.6
	SPT	12-13-12 (25)	MC = 4.7%		Silty SAND, fine to coarse-grained, light brown and brown, moist, medium dense to very dense
15	MC	14-16			
20	MC	19-18			
25	MC	30-50/5"	MC = 3.6%		
30	MC	17-23			
35	SPT	15-18-19 (37)	MC = 5.3% LL = NP PL = NP Fines = 13.3%		
40	SPT	12-10-14 (24)			
40.5					5578.1

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5133

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 5627.61 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.2, Resistivity = 3600 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown and brown, calcareous, moist, medium dense	
	SPT	10-11-4 (15)				
	AU					
5	SPT	14-12-12 (24)				
	AU					
	SPT	6-9-12 (21)	MC = 6.6%			
10	SPT	13-15-15 (30)				
	SPT	11-13-14 (27)	MC = 5.9%			
15	SPT	6-8-11 (19)				
20	SPT	14-22-24 (46)	MC = 7.7% LL = 28 PL = 15 Fines = 39.0%			
25	MC	11-15	MC = 8.2% DD = 116.6 pcf			
30	MC	18-21				
35	MC	20-25	MC = 8.1%			
40	SPT	13-12-15 (27)				

6.0 — 5621.6
Silty SAND, fine to medium-grained, reddish brown, moist, medium dense
9.0 — 5618.6
Clayey SAND, fine to coarse-grained, brown, calcareous, moist, medium dense
12.0 — 5615.6
Silty SAND, fine to medium-grained, reddish brown and light brown, moist, medium dense
18.0 — 5609.6
Clayey SAND, fine to coarse-grained, brown, calcareous, moist, dense to medium dense
27.0 — 5600.6
Poorly Graded SAND with Clay, fine to coarse-grained, light brown, moist, medium dense
40.5 — 5587.1

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5134

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/19/24 **COMPLETED** 2/19/24
GROUND ELEVATION 5632.05 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 8.2, Resistivity = 4000 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown, calcareous, moist, medium dense	
	SPT	6-9-10 (19)				
	AU					
5	SPT	11-10-6 (16)				
	AU					
	SPT	12-12-15 (27)	MC = 3.9%			
					8.0	5624.1
					Silty SAND, fine to coarse-grained, brown, moist, medium dense to dense	
10	SPT	15-15-7 (22)				
	SPT	15-16-28 (44)	MC = 4.5% LL = NP PL = NP Fines = 34.8%			
					13.0	5619.1
					Clayey SAND, fine to coarse-grained, reddish brown, moist, dense to medium dense	
15	MC	22-33	MC = 5.0% DD = 120.2 pcf			
20	MC	14-18				
					24.0	5608.1
25	MC	14-15			Poorly Graded SAND with Clay, fine to coarse-grained, reddish brown, moist, medium dense	
					29.0	5603.1
30	MC	15-21	MC = 12.4% DD = 122.3 pcf UC = 105psi		Clayey SAND, fine to coarse-grained, reddish brown, moist, medium dense	
35	MC	16-25	MC = 12.2% DD = 120.7 pcf			
					37.0	5595.1
					Poorly Graded SAND, fine to coarse-grained, reddish brown, moist, dense	
40	SPT	23-22-21 (43)				
					40.5	5591.6
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5135

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/19/24 **COMPLETED** 2/19/24
GROUND ELEVATION 5639.18 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.5, Resistivity = 4400 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to medium-grained, reddish brown, slightly moist, medium dense	
	SPT	8-6-6 (12)				
	AU					
4.0						5635.2
5	SPT	11-10-9 (19)			Clayey SAND, fine to medium-grained, brown, slightly moist, medium dense	
	AU					
	SPT	14-14-14 (28)				
8.0						5631.2
10	SPT	18-13-11 (24)	MC = 3.6%		Silty SAND, fine to medium-grained, reddish brown, slightly moist, loose to medium dense	
	SPT	12-11-12 (23)				
15	SPT	6-4-4 (8)	MC = 8.2% LL = NP PL = NP Fines = 21.7%			
20	SPT	10-8-14 (22)				
25	MC	19-21				
27.0						5612.2
30	MC	25-33	MC = 8.4% DD = 125.4 pcf		Clayey SAND, fine to coarse-grained, reddish brown, moist, dense to medium dense	
35	MC	16-25				
37.0						5602.2
40	SPT	13-12-15 (27)	MC = 2.1%		Poorly Graded SAND with Clay, fine to medium-grained, light brown, moist, medium dense	
40.5						5598.7

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5136

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 2/19/24 **COMPLETED** 2/19/24
GROUND ELEVATION 5650.29 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.006%, pH = 8.2, Resistivity = 5000 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, reddish brown, slightly moist, medium dense to dense
	SPT	11-10-10 (20)			
	AU				
5	SPT	5-6-7 (13)			
	AU				
	SPT	10-8-9 (17)			
10	SPT	12-10-11 (21)			
	SPT	7-5-7 (12)	MC = 4.7%		
15	SPT	7-9-12 (21)			
20	SPT	7-9-8 (17)	MC = 3.2% LL = NP PL = NP Fines = 17.9%		
25	SPT	13-16-22 (38)			
					27.0 — 5623.3
					Clayey SAND, fine to coarse-grained, reddish brown, calcareous, moist, dense
30	SPT	14-15-17 (32)	MC = 9.6%		
35	MC	35-31			
					37.0 — 5613.3
					Poorly Graded SAND, fine to coarse-grained, reddish brown, moist, dense
40	SPT	19-25-21 (46)	MC = 1.6%		40.5 — 5609.8
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5137

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 5638.87 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.5, Resistivity = 4800 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, reddish brown and light brown, slightly moist, medium dense
	SPT	11-13-11 (24)			
	AU				
5	SPT	11-10-12 (22)			
	AU				
	SPT	11-8-11 (19)			
10	SPT	11-13-20 (33)	MC = 9.2% LL = 31 PL = 13 Fines = 57.0%		Sandy Lean CLAY, reddish brown and light brown, calcareous, moist, hard
	MC	20-28	MC = 4.8% DD = 124.0 pcf		
15	SPT	13-19-18 (37)			
20	SPT	14-17-26 (43)	MC = 26.8%		
25	SPT	14-17-27 (44)			
30	MC	28-50/5"	MC = 6.3% DD = 115.3 pcf UC = 39psi		
35	SPT	16-25-26 (51)			Silty SAND, fine to medium-grained, light brown, moist, very dense to dense
40	SPT	16-19-17 (36)	MC = 27.0%		

6.0 5632.9
9.0 5629.9
32.0 5606.9
40.5 5598.4

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5138

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 5647.93 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 4300 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, reddish brown, slightly moist, dense	
	SPT	13-15-18 (33)				
	AU					
						4.0 5643.9
5	SPT	19-19-16 (35)			Silty SAND, fine to medium-grained, reddish brown and brown, slightly moist, dense to medium dense	
	AU					
	SPT	11-10-10 (20)				
10	SPT	7-8-9 (17)	MC = 4.9%			11.0 5636.9
					Clayey SAND, fine to coarse-grained, reddish brown and light brown, slightly moist, dense	
	SPT	19-22-21 (43)				
15	MC	23-35				18.0 5629.9
					Silty SAND, fine to coarse-grained, light brown and brown, slightly moist, dense to very dense	
20	SPT	17-22-19 (41)	MC = 1.2% LL = NP PL = NP Fines = 17.0%			
25	SPT	23-17-16 (33)				
30	MC	41-50/5"	MC = 4.3% DD = 119.3 pcf			
35	MC	24-36				37.0 5610.9
					Clayey SAND, fine to coarse-grained, brown, slightly moist, very dense	
40	SPT	27-33-36 (69)	MC = 9.4%			40.5 5607.4

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5139

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 5657.85 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.007%, pH = 7.7, Resistivity = 1700 ohm-cm, Sulfate = 0.025%		Clayey SAND, fine to coarse-grained, light brown and reddish brown, calcareous, moist, medium dense to very dense
	SPT	8-9-11 (20)			
	AU				
5	SPT	12-11-12 (23)			
	AU				
	SPT	13-14-15 (29)	MC = 3.8%		
10	SPT	12-13-14 (27)			
	MC	38-50/5"			
15	MC	50-30	MC = 9.2% DD = 116.8 pcf		
20	MC	10-9			
25	SPT	22-36-38 (74)	MC = 5.6% LL = 24 PL = 13 Fines = 38.0%		
30	SPT	25-40-50/5"			
					32.0 / 5625.9
					Poorly Graded SAND with Clay, fine to coarse-grained, light brown and reddish brown, moist, very dense
35	SPT	23-28-29 (57)	MC = 1.8%		
40	SPT	16-21-31 (52)			40.5 / 5617.4
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5140

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/21/24 **COMPLETED** 2/21/24
GROUND ELEVATION 5658.71 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 4500 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, reddish brown and brown, slightly moist, medium dense
	SPT	10-11-12 (23)			
	AU				
5	SPT	7-11-14 (25)			
	AU				
	SPT	10-6-4 (10)			
10	SPT	10-4-11 (15)	MC = 3.1%		
	MC	12-16			
15	MC	11-11			
20	SPT	7-11-13 (24)	MC = 3.6% LL = NP PL = NP Fines = 15.0%		
25	MC	14-17			
30	MC	27-46			
35	SPT	13-21-20 (41)	MC = 4.3%		
					6.0 5652.7 Silty SAND, fine to coarse-grained, light brown and brown, slightly moist, medium dense to dense 36.0 5622.7 Clayey SAND, fine to medium-grained, reddish brown, slightly moist, very dense
40	SPT	20-29-26 (55)			40.5 5618.2 Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5141

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/21/24 **COMPLETED** 2/21/24
GROUND ELEVATION 5665.01 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.8, Resistivity = 2300 ohm-cm, Sulfate = <0.001%		Sandy Lean CLAY, brown and dark red brown, moist, very stiff	
	SPT	9-9-8 (17)				
	AU					
5	SPT	9-8-12 (20)	MC = 7.8%			
	AU					
	MC	13-21				
					7.5	5657.5
					Clayey SAND, fine to coarse-grained, brown and light brown, calcareous, moist, medium dense	
10	MC	14-19	MC = 12.0% DD = 117.0 pcf UC = 163psi			
	SPT	10-8-13 (21)	MC = 10.5% LL = 32 PL = 14 Fines = 47.0%		13.0	5652.0
					14.0 Sandy Lean CLAY, olive brown, calcareous, moist, very stiff	5651.0
15	MC	13-22			Clayey SAND, fine to coarse-grained, brown, calcareous, moist, medium dense	
20	SPT	12-9-12 (21)	MC = 13.9%			
					22.0	5643.0
					Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, medium dense	
25	MC	12-16				
30	SPT	9-10-12 (22)				
					32.0	5633.0
					Silty SAND, fine to coarse-grained, reddish brown, moist, dense	
35	SPT	18-21-19 (40)	MC = 8.2%			
					37.0	5628.0
					Poorly Graded SAND with Clay, fine to coarse-grained, reddish brown, moist, medium dense	
40	SPT	10-14-15 (29)			40.5	5624.5
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5142

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/21/24 **COMPLETED** 2/21/24
GROUND ELEVATION 5665.56 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.8, Resistivity = 4000 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, reddish brown and brown, moist, medium dense	
	SPT	11-10-10 (20)				
	AU					
5	SPT	10-10-10 (20)				
	AU					
	MC	10-14				
					8.0	5657.6
					Silty SAND, fine to medium-grained, light brown, slightly moist, medium dense	
10	MC	15-24				
					11.0	5654.6
					Clayey SAND, fine to coarse-grained, brown, calcareous, moist, dense	
	SPT	16-18-20 (38)	MC = 7.4% LL = 28 PL = 14 Fines = 42.0%			
15	MC	22-34	MC = 8.5% DD = 125.8 pcf			
					17.0	5648.6
					Silty SAND, fine to coarse-grained, reddish brown, slightly moist, dense to medium dense	
20	MC	22-24				
25	MC	25-30	MC = 4.3% DD = 125.0 pcf			
30	MC	31-32				
35	SPT	15-14-15 (29)				
					37.0	5628.6
					Poorly Graded SAND with Silt, fine to coarse-grained, reddish brown, slightly moist, medium dense	
40	SPT	16-15-14 (29)	MC = 3.4%			
					40.5	5625.1
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5144

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/6/24 **COMPLETED** 3/6/24
GROUND ELEVATION 5696.66 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.5, Resistivity = 2300 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown and light brown, slightly moist, medium dense	
	SPT	7-7-7 (14)				
	AU					
5	SPT	8-6-6 (12)				
	AU					
	SPT	12-12-14 (26)	MC = 7.1%			
					7.5	5689.2
					Lean CLAY with Sand, brown and light brown, calcareous, moist, very stiff	
					9.0	5687.7
10	SPT	12-14-14 (28)			Clayey SAND, fine to medium-grained, reddish brown, calcareous, moist, medium dense	
	SPT	12-13-13 (26)	MC = 6.2%			
15	MC	14-20				
20	SPT	12-15-12 (27)				
25	SPT	10-11-12 (23)	MC = 5.9% LL = 26 PL = 14 Fines = 32.0%			
30	MC	15-28				
					32.0	5664.7
					Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, moist, very dense	
35	SPT	16-25-26 (51)	MC = 11.0%			
40	SPT	37-33-38 (71)				
					40.5	5656.2
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5145

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/6/24 **COMPLETED** 3/6/24
GROUND ELEVATION 5681.92 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = 5500 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to medium-grained, brown, dry to slightly moist, medium dense	
	SPT	7-8-9 (17)				
	AU					
5	SPT	9-7-7 (14)				
	AU					
	SPT	7-8-7 (15)	MC = 5.2%			
8.0						5673.9
					Sandy Lean CLAY, brown, dark brown and reddish brown, moist, stiff to hard	
10	SPT	8-7-5 (12)				
	MC	14-29	MC = 9.2% DD = 125.1 pcf UC = 221psi			
13.0						5668.9
					Clayey SAND, fine to coarse-grained, brown and light brown, calcareous, moist, dense to very dense	
15	SPT	14-15-17 (32)	MC = 4.7% LL = 30 PL = 16 Fines = 24.0%			
20	SPT	23-21-22 (43)				
25	MC	40-50/5"	MC = 5.2% DD = 134.7 pcf			
30	SPT	14-15-18 (33)				
35	SPT	21-25-26 (51)	MC = 5.4%			
37.0						5644.9
					Sandy Lean CLAY, reddish brown, moist, very stiff	
40	SPT	12-12-15 (27)				
40.5						5641.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5146

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/6/24 **COMPLETED** 3/6/24
GROUND ELEVATION 5666.86 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.002%, pH = 8.4, Resistivity = 2600 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to medium-grained, brown, dry to slightly moist, medium dense	
	SPT	10-11-12 (23)				
	AU					
	SPT	6-6-7 (13)				
	AU					
	SPT	14-14-13 (27)	MC = 4.1%			
10	SPT	14-11-10 (21)				
					11.0	5655.9
	SPT	15-16-17 (33)	MC = 4.9%		Clayey SAND, fine to medium-grained, brown and light brown, calcareous, slightly moist, dense	
					13.0	5653.9
	SPT	12-14-17 (31)			Poorly Graded SAND with Clay, fine to coarse-grained, light brown, slightly moist, medium dense to very dense	
20	MC	18-24	MC = 10.4% DD = 118.2 pcf			
	MC	37-50/5"				
					26.0	5640.9
					Clayey SAND, fine to coarse-grained, light brown and reddish brown, calcareous, slightly moist, dense to very dense	
30	SPT	13-17-22 (39)	MC = 3.3% LL = 28 PL = 14 Fines = 27.0%			
	SPT	15-15-24 (39)				
40	SPT	47-35-42 (77)	MC = 5.6%			
	SPT	41-50/5"				
					47.0	5619.9
					Silty SAND, fine to coarse-grained, olive brown, moist, very dense	
50	SPT	27-30-39 (69)				
					50.5	5616.4
					Bottom of borehole at 50.5 feet.	

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BORING NUMBER SB-5152

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/22/24 **COMPLETED** 2/22/24
GROUND ELEVATION 5702.2 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.2, Resistivity = 3850 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, light brown, calcareous, slightly moist, medium dense	
	SPT	6-10-11 (21)				
	AU					
5	SPT	11-9-13 (22)				
	AU					
	MC	13-18	MC = 3.6% DD = 117.4 pcf			
10	MC	13-16				
	SPT	8-8-12 (20)				
15	SPT	11-12-12 (24)	MC = 8.5% LL = 34 PL = 18 Fines = 79.0%			
20	MC	10-13				
25	MC	14-20	MC = 12.6% DD = 103.5 pcf			
30	MC	15-21				
35	SPT	32-50/3"				
40	SPT	24-28-12 (40)	MC = 4.2%			

6.0 5696.2
Poorly Graded SAND with Clay, fine to medium-grained, brown, slightly moist, medium dense
11.0 5691.2
Clayey SAND, fine to medium-dense, light brown, slightly moist, medium dense
13.0 5689.2
Lean CLAY with Sand, light brown and brown, calcareous, moist, very stiff
28.0 5674.2
Clayey SAND with trace Gravel, fine to coarse-grained, light brown, slightly moist, medium dense to very dense
40.5 5661.7

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5153

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/22/24 **COMPLETED** 2/22/24
GROUND ELEVATION 5708.71 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 7.9, Resistivity = 4400 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown, calcareous, slightly moist, medium dense	
	SPT	11-14-13 (27)				
	AU					
5	SPT	14-9-10 (19)				
	AU					
	MC	13-10	MC = 4.9% DD = 119.0 pcf			
10	MC	6-10				
	MC	12-14	MC = 5.1% DD = 118.2 pcf			
					13.0	5695.7
15	MC	9-10			Poorly Graded SAND with Silt, fine to coarse-grained, light brown, slightly moist, medium dense	
20	MC	15-12				
					22.0	5686.7
					Clayey SAND, fine to coarse-grained, light brown and reddish brown, moist, medium dense	
25	MC	9-7				
					28.0	5680.7
					Poorly Graded SAND with Clay, fine to coarse-grained, brown, slightly moist, medium dense	
30	MC	11-13				
					33.0	5675.7
35	SPT	7-11-11 (22)	MC = 7.7% LL = 27 PL = 12 Fines = 35.0%		Clayey SAND, fine to coarse-grained, light brown, slightly moist, medium dense	
40	SPT	6-10-11 (21)				
					40.5	5668.2
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5154

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/22/24 **COMPLETED** 2/22/24
GROUND ELEVATION 5712.43 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 8.1, Resistivity = 4500 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, light brown, slightly moist, medium dense
	SPT	10-10-7 (17)			
	AU				
5	SPT	9-6-5 (11)			
	AU				
	SPT	6-7-9 (16)	MC = 4.7%		
10	SPT	9-10-9 (19)			
	MC	13-16			
15	SPT	11-8-8 (16)	MC = 4.4%		
20	MC	12-16			
25	MC	8-10	MC = 9.8% DD = 109.9 pcf UC = 70psi		
30	MC	11-14			
35	SPT	5-6-6 (12)	MC = 12.2% LL = 29 PL = 13 Fines = 53.0%		
40	SPT	9-8-7 (15)			

6.0 5706.4

Sandy Lean CLAY, light brown and brown, calcareous, slightly moist to moist, very stiff to stiff

40.5 5671.9

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5155

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/22/24 **COMPLETED** 2/22/24
GROUND ELEVATION 5705.31 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = NR ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, reddish brown and brown, dry, medium dense	
	SPT	10-13-14 (27)				
	AU					
5	SPT	15-13-11 (24)				
	AU					
	SPT	8-7-7 (14)	MC = 3.9%			
10	SPT	11-8-6 (14)				
					11.0	5694.3
	MC	9-14			Poorly Graded SAND with Silt, fine to coarse-grained, light brown and brown, slightly moist, medium dense	
					14.0	5691.3
15	SPT	9-9-9 (18)	MC = 4.8% LL = NP PL = NP Fines = 24.0%		Silty SAND, fine to coarse-grained, reddish brown and brown, slightly moist, medium dense to dense	
20	MC	8-9				
25	MC	19-21				
30	MC	23-23	MC = 5.0%			
35	SPT	31-21-13 (34)				
40	SPT	15-18-21 (39)	MC = 3.9%			
					40.5	5664.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5156

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 2/21/24 **COMPLETED** 2/21/24
GROUND ELEVATION 5691.77 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 8.1, Resistivity = NR ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown, dark brown and reddish brown, calcareous, slightly moist, medium dense
	SPT	14-14-13 (27)			
	AU				
5	SPT	14-12-13 (25)			
	AU				
	MC	10-6			
10	MC	15-17	MC = 5.6% DD = 121.3 pcf		
	MC	15-18			
15	MC	12-16			
20	MC	12-13	MC = 3.6% DD = 116.5 pcf LL = 25 PL = 14 Fines = 18.0%		
					22.0 / 5669.8 Poorly Graded SAND, fine to coarse-grained, light brown, slightly moist, medium dense
25	MC	13-14			
					27.0 / 5664.8 Silty SAND, fine to medium-grained, light brown, moist, dense to medium dense
30	SPT	13-21-17 (38)			
35	SPT	12-10-11 (21)	MC = 9.6%		
40	SPT	8-9-12 (21)			40.5 / 5651.3 Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5157

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/4/24 **COMPLETED** 3/4/24
GROUND ELEVATION 5666.08 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 34.00 ft / Elev 5632.08 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.4, Resistivity = 6200 ohm-cm, Sulfate = <0.001%		Clayey SAND with Gravel, fine to coarse-grained, brown and dark brown, slightly moist, medium dense	
	SPT	9-12-14 (26)				
	AU					
5	SPT	4-6-6 (12)				
					5.0	5661.1
	AU				Poorly Graded SAND with Silt, fine to coarse-grained, light brown, slightly moist to moist, medium dense to dense	
	SPT	9-6-7 (13)	MC = 2.3%			
10	SPT	10-12-15 (27)				
	SPT	14-18-20 (38)				
15	MC	25-31	MC = 3.5%			
20	MC	19-17				
25	SPT	16-16-16 (32)				
					27.0	5639.1
					Sandy Lean CLAY, olive brown and dark brown, moist to wet, hard	
30	SPT	24-43-50/3"	MC = 19.4% LL = 39 PL = 19 Fines = 61.0%			
					33.0	5633.1
					▽ SANDSTONE, dark gray and brown, wet, very hard	
35	MC	37-50/3"				
	MC	50/4"			39.3	5626.8
					Bottom of borehole at 39.3 feet.	

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BORING NUMBER SB-5158

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/4/24 **COMPLETED** 3/4/24
GROUND ELEVATION 5671.04 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 24.00 ft / Elev 5647.04 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.3, Resistivity = 2400 ohm-cm, Sulfate = <0.001%		Sandy Lean CLAY, dark brown, slightly moist, very stiff	
	SPT	10-15-14 (29)				
	AU					
5	SPT	7-7-8 (15)				
	AU					
	MC	9-13				
					3.0	5668.0
					Silty SAND, fine to medium-grained, brown, slightly moist, medium dense	
					8.0	5663.0
					Clayey SAND, fine to coarse-grained, light brown, slightly moist, medium dense	
10	MC	14-20	MC = 12.2%			
					11.0	5660.0
					Poorly Graded SAND with Silt, fine to coarse-grained, light brown, slightly moist, medium dense	
	MC	10-12				
15	SPT	6-7-8 (15)				
					17.0	5654.0
					Clayey SAND, fine to coarse-grained, olive brown, iron oxide staining, moist to wet, dense to very dense	
20	SPT	10-12-23 (35)	MC = 19.2% LL = 34 PL = 23 Fines = 40.0%			
					24.0 ▽	5647.0
25	MC	50/5"			Clayey SANDSTONE, dark brown, wet, very hard	
30	MC	50/5"				
					31.0	5640.0
					Sandy CLAYSTONE, dark gray, wet, very hard	
35	MC	50/5"				
	SPT	50/5"	MC = 22.3%			
					39.4	5631.6
					Bottom of borehole at 39.4 feet.	

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BORING NUMBER SB-5159

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/6/24 **COMPLETED** 3/6/24
GROUND ELEVATION 5681.01 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 30.00 ft / Elev 5651.01 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.003%, pH = 8.6, Resistivity = 2100 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, calcareous, slightly moist, medium dense to dense
	SPT	14-15-14 (29)			
	AU				
5	SPT	8-9-12 (21)			
	AU				
	SPT	13-16-16 (32)	MC = 5.8%		
					9.0 / 5672.0
10	SPT	13-15-16 (31)			Poorly Graded SAND with CLAY, fine to coarse-grained, olive brown, moist, dense to medium dense
	SPT	19-24-21 (45)	MC = 4.1%		
15	MC	16-13			
20	MC	33-38			
25	MC	17-15			
					27.0 / 5654.0
					Sandy CLAYSTONE, dark brown and gray, moist to wet, hard to very hard
30	SPT	18-19-50/5"	MC = 23.0%		▽
35	SPT	50/5"	MC = 25.3%, LL = 35, PL = 18, Fines = 42.0%		
	SPT	50/2"			39.2 / 5641.8
					Bottom of borehole at 39.2 feet.

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BORING NUMBER SB-5160

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/6/24 **COMPLETED** 3/6/24
GROUND ELEVATION 5692.01 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 33.00 ft / Elev 5659.01 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.3, Resistivity = 1800 ohm-cm, Sulfate = 0.025%		Clayey SAND, fine to coarse-grained, brown, olive brown and reddish brown, calcareous, slightly moist, medium dense to very dense
	SPT	7-8-11 (19)			
	AU				
5	SPT	8-8-9 (17)			
	AU				
	SPT	11-12-14 (26)	MC = 4.1%		
10	SPT	13-12-11 (23)			
	SPT	15-16-14 (30)	MC = 5.3%, LL = 28, PL = 15, Fines = 36.0%		
15	MC	19-27			
20	SPT	14-14-12 (26)	MC = 4.7%		
					23.0 / 5669.0
25	MC	50/5"			SANDSTONE, gray, moist to wet, very hard
30	MC	50/5"			▽
35	SPT	49-42-50/3"			
					37.0 / 5655.0
					CLAYSTONE, brown and gray, iron oxide staining, wet, very hard
	SPT	50/5"	MC = 26.3%		39.4 / 5652.6
					Bottom of borehole at 39.4 feet.

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BORING NUMBER SB-5161

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/4/24 **COMPLETED** 3/4/24
GROUND ELEVATION 5708.96 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.001%, pH = 7.9, Resistivity = 2000 ohm-cm, Sulfate = 0.008%		Clayey SAND, fine to coarse-grained, reddish brown, calcareous, slightly moist, medium dense
	SPT	10-12-13 (25)			
	AU				
5	SPT	12-14-13 (27)			
	AU				
	MC	34-20			6.0 5703.0 Silty SAND, fine to medium-grained, reddish brown and brown, slightly moist, very dense 8.0 5701.0
10	MC	50/4"	MC = 5.9% DD = 116.0 pcf		SANDSTONE, light brown and gray, moist, very hard
	MC	50/3"			
15	MC	50/4"	MC = 5.8% DD = 98.5 pcf		
20	MC	50/4"			
25	MC	50/4"	MC = 7.5% DD = 105.4 pcf		
30	MC	50/3"			
35	SPT	50/6"	MC = 18.0% LL = NP PL = NP Fines = 43.0%		
	SPT	50/4"			39.3 5669.7 Bottom of borehole at 39.3 feet.

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BORING NUMBER SB-5162

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/4/24 **COMPLETED** 3/4/24
GROUND ELEVATION 5735.47 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.5, Resistivity = 2300 ohm-cm, Sulfate = <0.001%		Lean CLAY with Sand, brown and olive brown, calcareous, moist, very stiff to hard
	SPT	12-15-17 (32)			
	AU				
5	SPT	11-9-13 (22)			
	AU				
	SPT	13-14-15 (29)			
10	SPT	11-21-22 (43)	MC = 8.8% LL = 34 PL = 16 Fines = 78.0%		
	MC	38-50/3"			13.0 5722.5
15	MC	50/4"			SANDSTONE, olive brown and gray, iron oxide staining, moist, very hard
20	MC	50/3"	MC = 7.8% DD = 116.3 pcf		
25	MC	50/2"			
30	SPT	50/5"	MC = 10.4%		
35	SPT	50/2"			
	SPT	50/4"	MC = 11.1%		39.3 5696.2
					Bottom of borehole at 39.3 feet.

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BORING NUMBER SB-5163

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/5/24 **COMPLETED** 3/5/24
GROUND ELEVATION 5752.22 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.011%, pH = 8.2, Resistivity = 900 ohm-cm, Sulfate = 0.051%		Silty SAND, fine to medium-grained, gray and light brown, slightly moist, dense to medium dense	
	SPT	12-14-19 (33)				
	AU					
5	SPT	9-9-11 (20)				
	AU					
	SPT	18-21-23 (44)	MC = 9.6%			
10	MC	16-20				
					11.0	5741.2
					Silty SAND, fine to medium-grained, light brown, slightly moist, dense	
	SPT	9-15-19 (34)				
					14.0	5738.2
15	MC	18-34			15.0 Clayey SAND, fine to medium-grained, olive brown, slightly moist, dense	5737.2
					Lean CLAY with Sand, olive brown and light brown, calcareous, moist, hard	
20	SPT	15-25-37 (62)	MC = 9.8% LL = 49 PL = 18 Fines = 75.0%			
25	SPT	16-24-31 (55)				
30	SPT	16-24-31 (55)	MC = 11.5%			
35	SPT	14-22-34 (56)				
					37.0	5715.2
					Clayey SAND, fine to medium-grained, brown and gray, iron oxide staining, moist, very dense	
	SPT	50/6"			39.5	5712.7

Bottom of borehole at 39.5 feet.

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BORING NUMBER SB-5164

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/5/24 **COMPLETED** 3/5/24
GROUND ELEVATION 5760.13 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 8.4, Resistivity = 1300 ohm-cm, Sulfate = 0.053%		Sandy Lean CLAY, brown and gray, slightly moist, hard	
	SPT	13-14-18 (32)				
	AU					
5	SPT	10-11-13 (24)				
	AU					
	SPT	23-20-15 (35)				
					3.0	5757.1
					Clayey SAND, fine to coarse-grained, light brown and reddish brown, slightly moist, medium dense to dense	
					8.0	5752.1
10	SPT	11-12-14 (26)	MC = 1.5%		Poorly Graded SAND with Clay, fine to coarse-grained, brown and light brown, slightly moist, medium dense to dense	
	SPT	14-18-20 (38)				
					14.0	5746.1
15	SPT	15-23-30 (53)	MC = 11.4%		Clayey SAND with Gravel, fine to coarse-grained, olive brown, calcareous, moist, very dense	
					17.0	5743.1
20	MC	20-20			Clayey SAND, fine to medium-grained, olive brown, calcareous, medium dense to very dense	
25	MC	20-26				
30	SPT	13-16-21 (37)	MC = 8.4% LL = 32 PL = 16 Fines = 45.0%			
35	SPT	13-16-35 (51)				
40	SPT	29-34-50/4"	MC = 13.3%		40.3	5719.8

Bottom of borehole at 40.3 feet.

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BORING NUMBER SB-5182

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/7/24 **COMPLETED** 3/7/24
GROUND ELEVATION 5830.21 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.011%, pH = 8.1, Resistivity = 800 ohm-cm, Sulfate = 0.054%		Clayey SAND, fine to coarse-grained, brown and light brown, calcareous, slightly moist, medium dense to dense	
	SPT	10-10-11 (21)				
	AU					
5	SPT	11-14-18 (32)				
	AU					
	SPT	6-7-6 (13)				
10	MC	18-25				
	SPT	9-8-9 (17)	MC = 4.6%			
					14.5	5815.7
15	SPT	7-10-19 (29)			Poorly Graded SAND with Clay, fine to coarse-grained, light brown, slightly moist, medium dense to dense	
20	SPT	13-14-21 (35)	MC = 8.5%			
					20.0	5810.2
					Sandy Lean CLAY, light brown, moist, hard	
					22.0	5808.2
					Clayey SAND, fine to coarse-grained, light brown, slightly moist, dense	
25	MC	21-25				
					29.0	5801.2
30	SPT	12-18-25 (43)	MC = 4.5% LL = NP PL = NP Fines = 45.9%		Silty SAND, fine to coarse-grained, olive brown and gray, slightly moist, dense to very dense	
35	SPT	23-24-28 (52)				
					37.0	5793.2
					Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, moist, very dense	
40	SPT	21-28-37 (65)	MC = 3.4%			
					40.5	5789.7
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5183

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/7/24 **COMPLETED** 3/7/24
GROUND ELEVATION 5827.02 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.3, Resistivity = 1700 ohm-cm, Sulfate = <0.001%		Sandy Lean CLAY, light brown, slightly moist	
	SPT	8-6-6 (12)				
	AU			1.0	Clayey SAND, fine to medium-grained, light brown and gray, slightly moist, medium dense	5826.0
5	SPT	4-5-6 (11)				
	AU			3.0	Sandy Lean CLAY, olive brown and light brown, calcareous, moist, stiff to hard	5824.0
	SPT	12-16-21 (37)				
10	MC	15-30				
				11.0	Clayey SAND, fine to coarse-grained, dark brown and light brown, moist, medium dense	5816.0
	MC	16-21				
15	SPT	10-7-10 (17)	MC = 11.5%			
				17.0	Silty SAND, fine to coarse-grained, light brown and olive brown, moist, medium dense to dense	5810.0
20	SPT	8-9-12 (21)				
25	SPT	15-21-22 (43)	MC = 3.7% LL = NP PL = NP Fines = 12.3%			
30	SPT	14-14-15 (29)				
35	SPT	15-19-18 (37)	MC = 2.1%			
				38.0	Clayey SAND, fine to medium-grained, light brown, moist, medium dense	5789.0
40	SPT	10-12-14 (26)		40.5		5786.5

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5184

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/7/24 **COMPLETED** 3/7/24
GROUND ELEVATION 5834.86 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.2, Resistivity = 4500 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, light brown and brown, slightly moist, medium dense	
	SPT	7-10-13 (23)				
	AU					
5	SPT	16-14-14 (28)				
	AU					
	SPT	12-14-15 (29)	MC = 3.9%			
10	MC	16-15				
					11.0	5823.9
					Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, slightly moist, medium dense	
	SPT	7-9-14 (23)	MC = 9.8%			
15	SPT	11-8-10 (18)			15.0	5819.9
					Clayey SAND, fine to coarse-grained, olive brown, moist, medium dense	
20	MC	14-15	MC = 11.4% DD = 119.8 pcf UC = 41psi			
					22.0	5812.9
					Silty SAND, fine to coarse-grained, olive brown, moist, dense to medium dense	
25	SPT	16-16-20 (36)				
30	SPT	12-13-16 (29)	MC = 5.9% LL = NP PL = NP Fines = 24.4%			
					32.0	5802.9
					Lean CLAY with Sand, olive brown, moist, very stiff	
35	SPT	9-14-16 (30)	MC = 16.3%		35.0	5799.9
					Poorly Graded SAND, fine to coarse-grained, brown, moist, dense	
40	SPT	13-16-24 (40)				
					40.5	5794.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5185

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/8/24 **COMPLETED** 3/8/24
GROUND ELEVATION 5839.86 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.2, Resistivity = 3700 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown, calcareous, slightly moist, medium dense	
	SPT	5-6-9 (15)				
	AU					
5	SPT	8-9-10 (19)				
	AU					
	SPT	4-8-11 (19)	MC = 1.5%			
					5.0	5834.9
					Poorly Graded SAND with Silt, fine to medium-grained, reddish brown, slightly moist, medium dense	
					8.0	5831.9
					Clayey SAND, fine to coarse-grained, olive brown, moist, medium dense	
10	SPT	14-14-14 (28)				
	MC	13-18				
					12.5	5827.4
					Poorly Graded SAND with Silt, fine to coarse-grained, reddish brown and brown, moist, medium dense	
15	SPT	7-12-11 (23)	MC = 1.7% LL = NP PL = NP Fines = 6.2%			
20	SPT	9-13-15 (28)				
25	SPT	10-12-10 (22)				
					25.5	5814.4
					Sandy Lean CLAY, olive brown, moist, very stiff	
30	MC	12-20	MC = 15.2% DD = 113.7 pcf UC = 35psi			
					30.0	5809.9
					Clayey SAND, fine to medium-grained, light brown and reddish brown, moist, medium dense to dense	
35	SPT	10-12-13 (25)	MC = 10.5%			
40	SPT	12-16-19 (35)				
					40.5	5799.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5186

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/8/24 **COMPLETED** 3/8/24
GROUND ELEVATION 5847.99 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.002%, pH = 8.1, Resistivity = 3100 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown and reddish brown, slightly moist, medium dense to dense	
	SPT	10-12-14 (26)				
	AU					
5	SPT	12-14-12 (26)				
	AU					
	SPT	11-14-15 (29)	MC = 3.7%			
10	SPT	12-17-20 (37)				
						11.0 5837.0
	MC	35-48			Poorly Graded SAND with Silt, fine to coarse-grained, reddish brown and olive brown, slightly moist, very dense to medium dense	
15	SPT	11-9-13 (22)	MC = 11.0%			15.0 5833.0
					Sandy Lean CLAY, olive brown, moist, very stiff	
						19.0 5829.0
20	MC	13-15			Clayey SAND, fine to coarse-grained, olive brown, moist, medium dense	
25	SPT	9-8-12 (20)	MC = 14.5%			
						27.0 5821.0
					Poorly Graded SAND with Silt, fine to medium-grained, olive brown and brown, moist, medium dense	
30	SPT	7-12-10 (22)				
						32.0 5816.0
					Sandy Lean CLAY, light brown, moist, very stiff	
35	SPT	5-10-13 (23)	MC = 13.1% LL = 26 PL = 17 Fines = 57.0%			
40	SPT	10-11-11 (22)				40.5 5807.5
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5187

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/8/24 **COMPLETED** 3/8/24
GROUND ELEVATION 5853.12 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.009%, pH = 8.5, Resistivity = 900 ohm-cm, Sulfate = 0.055%		Sandy Lean CLAY, dark brown and gray, calcareous, slightly moist, hard	
	SPT	10-15-23 (38)				
	AU					
5	SPT	28-39-50/4"				
	AU					
	MC	28-35				
10	MC	17-22				
	SPT	12-16-18 (34)				
15	SPT	12-12-16 (28)	MC = 14.7% LL = 63 PL = 23 Fines = 71.0%			
					7.0	5846.1
					Fat CLAY with SAND, brown and olive brown, calcareous, moist, hard to very stiff	
					17.0	5836.1
					Lean CLAY with Sand, brown, moist, hard	
20	SPT	8-12-18 (30)				
					22.0	5831.1
					Clayey SAND, fine to medium-grained, reddish brown and brown, moist, dense	
25	SPT	18-23-20 (43)	MC = 8.1%			
					27.0	5826.1
					Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, moist, medium dense to very dense	
30	SPT	11-12-14 (26)				
35	SPT	22-30-34 (64)	MC = 2.9%			
40	SPT	17-26-40 (66)				
					40.5	5812.6
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5188

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/8/24 **COMPLETED** 3/8/24
GROUND ELEVATION 5864.17 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.007%, pH = 8.3, Resistivity = 1500 ohm-cm, Sulfate = 0.032%		Clayey SAND, fine to medium-coarse, brown and olive brown, calcareous, slightly moist, medium dense	
	SPT	9-12-13 (25)				
	AU					
5	SPT	12-8-9 (17)				
	AU					
	SPT	18-21-23 (44)				
10	SPT	22-17-16 (33)	MC = 3.0%			
	MC	19-38	MC = 10.4% DD = 126.0 pcf			
15	SPT	19-27-31 (58)	MC = 8.9% LL = 33 PL = 15 Fines = 53.0%			
					19.5	5844.7
20	SPT	18-21-30 (51)			Sandy Lean CLAY, brown and olive brown, calcareous, moist, hard	
25	SPT	17-14-16 (30)				
					26.0	5838.2
30	MC	17-25	MC = 5.9% DD = 124.9 pcf		Poorly Graded SAND with Silt, fine to coarse-grained, reddish brown and brown, moist, very dense to dense	
35	SPT	14-16-16 (32)				
					37.0	5827.2
40	SPT	13-14-20 (34)			Clayey SAND, fine to medium-grained, light brown, moist, medium dense to dense	
					40.5	5823.7
					Poorly Graded SAND with Silt, fine to medium-grained, brown, moist, dense	
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5189

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/11/24 **COMPLETED** 3/11/24
GROUND ELEVATION 5868.57 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.7, Resistivity = 3300 ohm-cm, Sulfate = <0.001%		Sandy Lean CLAY, dark brown, slightly moist, hard	
	SPT	19-27-35 (62)				
	AU					
5	SPT	23-19-16 (35)				
					5.5	5863.1
	AU				Clayey SAND, fine to coarse-grained, brown and reddish brown, moist, medium dense to very dense	
	SPT	17-20-25 (45)				
10	MC	35-50	MC = 5.0% DD = 130.0 pcf			
	SPT	18-25-29 (54)	MC = 4.9% LL = 29 PL = 13 Fines = 46.0%			
15	SPT	19-13-14 (27)				
					17.0	5851.6
					Poorly Graded SAND, fine to coarse-grained, olive brown, moist, dense	
20	SPT	17-21-25 (46)	MC = 2.0%			
					22.0	5846.6
					Clayey SAND, fine to coarse-grained, brown, moist, medium dense to dense	
25	SPT	16-12-13 (25)				
30	MC	23-29				
					32.0	5836.6
					Poorly Graded SAND with Silt, fine to coarse-grained, light brown, slightly moist, medium dense to very dense	
35	SPT	13-12-8 (20)	MC = 3.7%			
40	SPT	27-40-50/5"				
					40.4	5828.2
					Bottom of borehole at 40.4 feet.	

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BORING NUMBER SB-5190

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/11/24 **COMPLETED** 3/11/24
GROUND ELEVATION 5872.23 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.003%, pH = 8.2, Resistivity = 4000 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Clay, fine to medium-grained, slightly moist, loose to medium dense	
	SPT	7-5-5 (10)				
	AU					
5	SPT	7-7-8 (15)				
	AU					
	SPT	14-19-21 (40)	MC = 2.6%			
					6.0	5866.2
					Clayey SAND, fine to medium-grained, brown, slightly moist, dense	
10	SPT	19-21-22 (43)				
	SPT	15-12-13 (25)	MC = 1.9%			
15	SPT	10-12-8 (20)				
					9.0	5863.2
					Poorly Graded SAND with Clay, fine to coarse-grained, light brown, moist, dense to medium dense	
					15.0	5857.2
					Clayey SAND, fine to coarse-grained, reddish brown and brown, calcareous, moist, medium dense to dense	
20	MC	17-23	MC = 8.8% DD = 126.7 pcf			
25	MC	13-18				
30	SPT	15-18-18 (36)				
					32.0	5840.2
					Silty SAND, fine to coarse-grained, light brown, slightly moist, dense	
35	SPT	30-26-23 (49)	MC = 2.1% LL = NP PL = NP Fines = 12.8%			
40	SPT	16-15-19 (34)				
					40.5	5831.7
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5191

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/11/24 **COMPLETED** 3/11/24
GROUND ELEVATION 5877.35 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 4100 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, light brown, slightly moist, medium dense	
	SPT	13-14-15 (29)				
	AU					
5	SPT	15-12-15 (27)				
	AU					
	SPT	12-14-16 (30)				
					3.0	5874.4
					Clayey SAND, fine to coarse-grained, brown, calcareous, moist, medium dense	
					6.0	5871.4
					Poorly Graded SAND, fine to coarse-grained, light brown, slightly moist, medium dense to dense	
					9.0	5868.4
10	SPT	19-20-20 (40)	MC = 4.9%		Clayey SAND, fine to coarse-grained, reddish brown and olive brown, moist, dense to medium dense	
	MC	13-22				
					14.0	5863.4
15	SPT	18-19-18 (37)			Poorly Graded SAND, fine to coarse-grained, brown and olive brown, moist, dense	
					17.0	5860.4
					Sandy Fat CLAY, olive brown and reddish brown, moist, very stiff	
20	SPT	8-11-13 (24)	MC = 19.9% LL = 57 PL = 23 Fines = 68.0%			
25	MC	15-19	MC = 16.4% DD = 115.1 pcf			
					27.0	5850.4
					Poorly Graded SAND, fine to coarse-grained, brown and olive brown, slightly moist, medium dense	
30	SPT	9-7-8 (15)			30.0	5847.4
					Clayey SAND, fine to coarse-grained, reddish brown, slightly moist, medium dense	
35	SPT	11-12-16 (28)	MC = 7.1%		35.5	5841.9
					Poorly Graded SAND, fine to medium-grained, brown and olive brown, slightly moist, medium dense	
40	SPT	16-11-7 (18)			40.5	5836.9
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5192

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/11/24 **COMPLETED** 3/11/24
GROUND ELEVATION 5879.29 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.8, Resistivity = 5550 ohm-cm, Sulfate = <0.001%		Clayey SAND with Gravel, fine to coarse-grained, light brown and gray, dry, dense	
	SPT	15-17-14 (31)				
	AU					
5	SPT	10-14-11 (25)				
	AU					
	SPT	18-18-20 (38)	MC = 2.5%			
10	MC	31-45				
					Poorly Graded SAND with Silt, fine to coarse-grained, brown, slightly moist, medium dense to very dense	
	SPT	12-13-11 (24)	MC = 8.3%			
15	MC	12-20	MC = 14.8% DD = 115.0 pcf			
					Lean CLAY with Sand, light brown and brown, calcareous, moist, very stiff	
20	SPT	12-14-19 (33)				
25	SPT	22-30-32 (62)				
30	SPT	14-17-23 (40)	MC = 8.5% LL = 32 PL = 15 Fines = 34.0%			
					Clayey SAND, fine to coarse-grained, brown and olive brown, moist, dense to very dense	
35	SPT	19-20-20 (40)				
40	SPT	13-13-13 (26)				
					Poorly Graded SAND with Clay, fine to coarse-grained, brown and olive brown, slightly moist, dense to medium dense	

3.0 5876.3
11.0 5868.3
16.0 5863.3
32.0 5847.3
40.5 5838.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5193

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/12/24 **COMPLETED** 3/12/24
GROUND ELEVATION 5883.71 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 7.7, Resistivity = 7550 ohm-cm, Sulfate = <0.001%		Well Graded SAND with Silt, fine to coarse-grained, brown and olive brown, slightly moist, loose to medium dense
	SPT	4-4-3 (7)			
	AU				
5	SPT	5-14-13 (27)			
	AU				
	SPT	9-7-8 (15)	MC = 4.4%		
10	MC	18-20			
	SPT	14-14-12 (26)	MC = 4.8%		
15	SPT	12-4-7 (11)			
20	SPT	13-14-16 (30)	MC = 5.6% LL = NP PL = NP Fines = 9.8%		
				22.0	5861.7
					Poorly Graded SAND with Silt, fine to coarse-grained, brown, slightly moist, medium dense to very dense
25	SPT	12-15-16 (31)			
30	MC	18-20			
35	SPT	10-10-12 (22)	MC = 4.3%		
40	SPT	19-24-33 (57)			
				40.5	5843.2
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5194

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/12/24 **COMPLETED** 3/12/24
GROUND ELEVATION 5894.85 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = 4950 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown and light brown, calcareous, dry, dense to medium dense	
	SPT	12-17-20 (37)				
	AU					
5	SPT	22-18-23 (41)				
	AU					
	SPT	13-12-11 (23)	MC = 4.2%			
10	MC	20-23				
						10.0 5884.9
					Poorly Graded SAND with Clay, fine to medium-grained, brown, slightly moist to moist, medium dense to dense	
	SPT	19-19-22 (41)				
15	MC	18-21				
20	SPT	11-12-14 (26)	MC = 5.4%			
25	SPT	15-16-15 (31)				
						27.0 5867.9
					Lean CLAY with Sand, brown, moist, hard	
30	SPT	17-20-25 (45)	MC = 16.9% LL = 45 PL = 22 Fines = 72.0%			
						32.0 5862.9
					Poorly Graded SAND with Silt, fine to medium-grained, light brown, slightly moist, very dense to dense	
35	SPT	20-27-37 (64)				
40	SPT	17-17-28 (45)	MC = 10.2%			
						40.5 5854.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5195

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/13/24 **COMPLETED** 3/13/24
GROUND ELEVATION 5904.31 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.3, Resistivity = 3300 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, dry, medium dense	
	SPT	12-12-13 (25)				
	AU					
5	SPT	9-9-7 (16)				
	AU					
	SPT	15-14-12 (26)				
10	SPT	50/6"	MC = 2.2%			
	MC	30-45				
15	SPT	30-50/6"				
					Silty SAND, fine to medium-grained, light brown, slightly moist, medium dense to very dense	
					4.0	5900.3
					Poorly Graded SAND with Silt, fine to coarse-grained, light brown, slightly moist, very dense	
					14.0	5890.3
					Clayey SAND, fine to coarse-grained, olive brown and brown, calcareous, moist, very dense	
					17.0	5887.3
20	SPT	30-50/3"	MC = 5.8%			
25	MC	50/6"	MC = 13.7%, DD = 117.5 pcf			
					29.0	5875.3
30	SPT	37-50/6"	MC = 1.9%, LL = NP, PL = NP, Fines = 20.0%		Silty SAND, fine to medium-grained, light brown, slightly moist, very dense	
					32.0	5872.3
					Clayey SAND, fine to medium-grained, brown, slightly moist, very dense	
35	SPT	50/6"				
					40.0	5864.3
40	SPT	50-39-32 (71)			40.5	5863.8
					Poorly Graded SAND with Silt, fine to medium-grained, brown, moist, very dense	
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5196

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/13/24 **COMPLETED** 3/13/24
GROUND ELEVATION 5897.61 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.1, Resistivity = 3500 ohm-cm, Sulfate = <0.001%		Silty SAND with Gravel, fine to coarse-grained, brown to olive brown, dry to slightly moist, medium dense to very dense	
	SPT	12-12-14 (26)				
	AU					
5	SPT	7-5-16 (21)				
	AU					
	MC	50/6"				
						8.0 / 5889.6
10	SPT	19-50/6"	MC = 8.1%		Clayey SAND, fine to coarse-grained, olive brown to reddish brown, moist, very dense	
	MC	50/6"				
15	SPT	50/6"				
						17.0 / 5880.6
20	SPT	27-36-23 (59)	MC = 2.5% LL = NP PL = NP Fines = 8.8%		Well Graded SAND with Silt, fine to coarse-grained, reddish brown, moist, very dense to dense	
25	SPT	20-17-29 (46)				
						27.0 / 5870.6
30	MC	36-34			Silty SAND, fine to coarse-grained, olive brown, slightly moist, dense	
						32.0 / 5865.6
35	SPT	23-28-29 (57)	MC = 6.7%		Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, slightly moist, very dense to medium dense	
						39.5 / 5858.1
40	SPT	24-12-12 (24)			Sandy Lean CLAY, olive brown, moist, very stiff	40.5 / 5857.1

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5197

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/13/24 **COMPLETED** 3/13/24
GROUND ELEVATION 5903.17 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 34.00 ft / Elev 5869.17 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.008%, pH = 8.2, Resistivity = 1900 ohm-cm, Sulfate = 0.012%		1.0 Sandy Lean CLAY with Gravel, brown, slightly moist	5902.2
	SPT	9-15-30 (45)			Clayey SAND, fine to coarse-grained, reddish brown, slightly moist, dense to very dense	
	AU					
	SPT	30-50/6"				
	AU					
	SPT	13-21-25 (46)			9.0	5894.2
10	MC	24-34			Silty SAND, fine to medium-grained, olive brown, slightly moist, dense	
					11.0	5892.2
	SPT	18-19-20 (39)	MC = 2.2%		Poorly Graded SAND with Clay, fine to coarse-grained, reddish brown to olive brown, slightly moist, dense to very dense	
	SPT	15-18-20 (38)				
20	SPT	14-14-22 (36)	MC = 2.7%			
	SPT	18-20-22 (42)				
30	SPT	25-30-37 (67)	MC = 4.9%			
					32.0	5871.2
	SPT	6-7-14 (21)			Sandy Lean CLAY, brown, moist to wet, very stiff to hard ▽	
40	SPT	8-16-42 (58)	MC = 15.4% LL = 43 PL = 18 Fines = 59.0%			
	SPT	8-8-13 (21)			47.0	5856.2
					Poorly Graded SAND, fine to medium-grained, reddish brown, wet, very dense	
50	SPT	17-25-37 (62)			50.5	5852.7

Bottom of borehole at 50.5 feet.

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BORING NUMBER SB-5285

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/20/24
GROUND ELEVATION 6333.07 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.008%, pH = 7.2, Resistivity = 3500 ohm-cm, Sulfate = <0.001%		Silty SAND with Gravel, fine to coarse-grained, brown and olive brown, moist, medium dense	
	SPT	8-7-10 (17)				
	AU					
5	SPT	9-10-13 (23)				
	AU					
	SPT	7-9-10 (19)	MC = 6.7%			
10	SPT	9-8-11 (19)				
					12.0	6321.1
	SPT	6-6-10 (16)	MC = 14.0%		Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
15	MC	7-11				
					18.0	6315.1
					Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, medium dense	
20	MC	15-22				
					22.0	6311.1
					Clayey SAND, fine to coarse-grained, reddish brown, moist, medium dense	
25	SPT	8-10-13 (23)				
					27.0	6306.1
					SIlty SAND, fine to medium-grained, brown, moist, medium dense	
30	SPT	9-10-12 (22)	MC = 9.3% LL = NP PL = NP Fines = 18.0%			
35	SPT	10-12-16 (28)				
					37.0	6296.1
					Clayey SAND, fine to coarse-grained, brown, moist, dense	
40	SPT	10-12-20 (32)	MC = 10.3%			
					40.5	6292.6

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5286

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/20/24
GROUND ELEVATION 6328.24 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.7, Resistivity = 5500 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, light brown, slightly moist, medium dense to very dense	
	SPT	8-11-17 (28)				
	AU					
5	SPT	16-15-17 (32)				
	AU					
	SPT	30-32-35 (67)				
10	SPT	36-37-34 (71)	MC = 3.6% LL = NP PL = NP Fines = 19.0%			
11.0						6317.2
	MC	8-10	MC = 34.6% DD = 86.0 pcf UC = 37psi		Lean CLAY with Sand, brown, moist, very stiff to hard	
15	MC	13-32	MC = 29.3% DD = 91.4 pcf			
15.0						6313.2
					Poorly Graded SAND, fine to medium-grained, light brown, moist, medium dense	
20	SPT	14-14-14 (28)				
22.0						6306.2
					Silty SAND, fine to medium-grained, gray and light brown, moist, dense	
25	SPT	19-18-21 (39)	MC = 3.4%			
27.0						6301.2
					Poorly Graded SAND with Silt, fine to coarse-grained, brown, moist, dense	
30	SPT	18-18-19 (37)				
35	SPT	17-20-21 (41)	MC = 6.0%			
40	SPT	13-16-17 (33)				
40.5						6287.7

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5287

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/21/24
GROUND ELEVATION 6325.96 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 24.00 ft / Elev 6301.96 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.5, Resistivity = 7800 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Gravel, fine to medium-grained, dark brown, slightly moist	6325.0
	SPT	3-2-2 (4)			Silty SAND, fine to medium-grained, dark brown, moist, loose to very loose	
	AU					
5	SPT	2-1-1 (2)				
	AU			6.0		6320.0
	SPT	2-3-9 (12)	MC = 3.9%		Poorly Graded SAND with Silt, fine to coarse-grained, dark brown and brown, moist, medium dense	
10	SPT	9-9-9 (18)				
	SPT	11-10-9 (19)				
15	SPT	7-7-7 (14)	MC = 8.5%	15.5		6310.5
					Well Graded SAND with Silt, fine to medium-grained, brown, moist to very moist, medium dense to very dense	
20	SPT	8-15-17 (32)				
					▽	
25	SPT	13-10-11 (21)	MC = 13.7% LL = NP PL = NP Fines = 9.6%			
30	SPT	14-19-24 (43)				
35	SPT	14-21-29 (50)	MC = 9.5%			
40	SPT	21-33-42 (75)		40.5		6285.5

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5288

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/21/24 **COMPLETED** 3/21/24
GROUND ELEVATION 6355.29 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.006%, pH = 8.0, Resistivity = 2700 ohm-cm, Sulfate = 0.004%		Clayey SAND, fine to coarse-grained, olive brown and brown, moist, loose to medium dense
	SPT	3-3-4 (7)			
	AU				
5	SPT	4-5-4 (9)			
	AU				
	SPT	5-6-9 (15)	MC = 9.0%		
8.0					6347.3
10	SPT	13-16-17 (33)			Clayey SAND with Gravel, fine to coarse-grained, reddish brown, moist, medium dense to dense
	SPT	10-15-19 (34)	MC = 7.7%		
15	MC	17-20			
20	MC	14-16			
25	SPT	9-8-11 (19)			
27.0					6328.3
					Sandy Fat CLAY, brown and reddish brown, moist, very stiff to hard
30	SPT	5-9-11 (20)	MC = 19.0% LL = 50 PL = 20 Fines = 67.0%		
35	SPT	11-17-23 (40)	MC = 10.0%		
37.0					6318.3
					Poorly Graded SAND with CLAY, fine to coarse-grained, reddish brown, moist, medium dense
40	SPT	14-15-15 (30)			
40.5					6314.8
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5289

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/21/24 **COMPLETED** 3/21/24
GROUND ELEVATION 6355.06 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 7.7, Resistivity = 1800 ohm-cm, Sulfate = 0.001%		Clayey SAND with Gravel, fine to coarse-grained, brown, moist, medium dense to dense
	SPT	5-6-9 (15)			
	AU				
5	SPT	8-8-10 (18)			
	AU				
	SPT	14-14-17 (31)	MC = 7.2%		
10	MC	17-18			
	SPT	12-11-14 (25)			13.0 / 6342.1
15	SPT	10-20-19 (39)	MC = 8.2% LL = NP PL = NP Fines = 14.0%		Silty SAND, fine to coarse-grained, olive brown and reddish brown, moist, medium dense to dense
20	SPT	9-11-12 (23)			
25	SPT	12-13-14 (27)	MC = 6.0%		
30	MC	16-22			
35	SPT	11-11-9 (20)	MC = 10.3%		
40	SPT	8-11-12 (23)			40.5 / 6314.6

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5290

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/21/24 **COMPLETED** 3/21/24
GROUND ELEVATION 6347.57 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.6, Resistivity = 3500 ohm-cm, Sulfate = 0.006%		Clayey SAND with Gravel, fine to coarse-grained, olive brown and brown, moist, loose to dense	
	SPT	3-4-4 (8)				
	AU					
	SPT	5-9-17 (26)				
	AU					
	SPT	10-10-16 (26)	MC = 9.1%			
10	SPT	14-15-16 (31)				
					11.0	6336.6
	SPT	11-16-17 (33)	MC = 4.7%		Poorly Graded SAND with Silt, fine to coarse-grained, olive brown, moist, dense	
	SPT	14-16-17 (33)				
					16.0	6331.6
					Clayey SAND, fine to coarse-grained, light brown and olive brown, moist, medium dense	
20	SPT	7-8-9 (17)	MC = 11.3%			
	SPT	5-5-6 (11)				
30	MC	9-12	MC = 15.5% DD = 116.4 pcf UC = 47psi			
					32.0	6315.6
					Poorly Graded SAND with Silt, fine to coarse-grained, light brown, moist, medium dense to dense	
	MC	12-16				
40	SPT	12-14-16 (30)	MC = 4.5% LL = NP PL = NP Fines = 7.4%			
	SPT	15-17-21 (38)				
50	SPT	16-22-26 (48)				
					50.5	6297.1
					Bottom of borehole at 50.5 feet.	

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BORING NUMBER SB-5291

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/22/24 **COMPLETED** 3/22/24
GROUND ELEVATION 6390.47 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.1, Resistivity = 2400 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown and brown, calcareous, moist, loose to medium dense	
	SPT	5-5-4 (9)				
	AU					
5	SPT	5-4-5 (9)				
	AU					
	SPT	4-5-7 (12)	MC = 8.0%			
10	SPT	13-14-12 (26)				
					11.0	6379.5
	MC	13-22	MC = 2.4% DD = 118.6 pcf		Poorly Graded SAND, fine to coarse-grained, light brown and brown, slightly moist, dense to medium dense	
15	SPT	10-9-10 (19)				
					19.0	6371.5
20	SPT	9-6-6 (12)	MC = 27.4% LL = 62 PL = 24 Fines = 89.0%		Fat CLAY, olive brown and brown, moist, stiff	
					23.0	6367.5
25	MC	27-34			Silty SAND, fine to coarse-grained, brown, moist, dense	
30	SPT	15-16-17 (33)				
35	SPT	16-20-21 (41)	MC = 6.4%			
40	SPT	13-15-17 (32)				
					40.5	6350.0
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5292

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/22/24 **COMPLETED** 3/22/24
GROUND ELEVATION 6397.97 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.1, Resistivity = 2400 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, calcareous, slightly moist, medium dense	
	SPT	9-11-11 (22)				
	AU					
5	SPT	12-10-9 (19)				
	AU					
	SPT	2-6-6 (12)	MC = 2.2%			
10	SPT	10-12-15 (27)				
	SPT	7-12-11 (23)				
15	SPT	7-8-10 (18)	MC = 6.7% LL = NP PL = NP Fines = 12.0%			
20	SPT	12-13-17 (30)				
25	MC	25-29	MC = 5.2% DD = 116.9 pcf			
30	MC	18-20				
35	SPT	12-17-20 (37)	MC = 8.3%			
40	SPT	14-18-20 (38)				

6.0 — 6392.0
Poorly Graded SAND with Silt, fine to coarse-grained, light brown and olive brown, slightly moist, medium dense
9.0 — 6389.0
Silty SAND, fine to coarse-grained, light brown and brown, slightly moist, medium dense
12.5 — 6385.5
Well Graded SAND with Silt, fine to coarse-grained, light brown and olive brown, moist, medium dense
17.0 — 6381.0
Clayey SAND, fine to coarse-grained, olive brown, moist, medium dense
20.0 — 6378.0
Poorly Graded SAND with Clay, fine to coarse-grained, olive brown, moist, medium dense to dense
32.0 — 6366.0
Clayey SAND with Gravel, fine to coarse-grained, reddish brown and olive brown, moist, dense
37.0 — 6361.0
Poorly Graded SAND, fine to coarse-grained, light brown, slightly moist, dense
40.5 — 6357.5

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5293

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/22/24 **COMPLETED** 3/22/24
GROUND ELEVATION 6388.68 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.005%, pH = 7.6, Resistivity = 4100 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown and dark brown, slightly moist, medium dense
	SPT	11-7-6 (13)			
	AU				
5	SPT	5-7-12 (19)			
	AU				
	SPT	17-19-16 (35)			
10	MC	15-16	MC = 6.1% DD = 118.9 pcf		
	SPT	12-13-12 (25)			
15	SPT	14-17-19 (36)	MC = 8.9%		
20	SPT	8-9-11 (20)			
25	SPT	15-16-17 (33)	MC = 6.1% LL = NP PL = NP Fines = 16.0%		
30	MC	24-31			
35	SPT	15-13-22 (35)	MC = 5.2%		
40	SPT	19-25-25 (50)			

4.5 — 6384.2
Poorly Graded SAND with Clay, fine to coarse-grained, olive brown, moist, medium dense
6.0 — 6382.7
Clayey SAND with Gravel, fine to coarse-grained, reddish brown and olive brown, moist, dense to medium dense
17.0 — 6371.7
Silty SAND, fine to medium-grained, reddish brown and olive brown, moist, medium dense to dense
40.5 — 6348.2
Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5294

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/28/24 **COMPLETED** 3/28/24
GROUND ELEVATION 6374.02 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 13.00 ft / Elev 6361.02 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.003%, pH = 7.5, Resistivity = 2200 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, medium dense
	SPT	5-8-8 (16)			
	AU				
5	SPT	10-12-11 (23)			
	AU				
	SPT	26-19-15 (34)			
10	SPT	13-14-14 (28)	MC = 9.9%		Silty SAND, fine to coarse-grained, brown, moist to wet, medium dense to very dense
	SPT	13-15-17 (32)			▽
15	SPT	15-16-18 (34)			
20	SPT	19-19-26 (45)	MC = 11.0%		
25	MC	11-17			
30	SPT	20-23-29 (52)	MC = 14.0% LL = NP PL = NP Fines = 13.0%		
35	SPT	30-50			
40	SPT	32-50	MC = 14.2%		

3.0 6371.0
8.0 6366.0
40.5 6333.5

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5295

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/28/24 **COMPLETED** 3/28/24
GROUND ELEVATION 6390.06 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 29.00 ft / Elev 6361.06 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.3, Resistivity = 1500 ohm-cm, Sulfate = <0.001%		1.0 Lean CLAY with Sand, brown, moist	6389.1
	SPT	5-5-6 (11)			Clayey SAND, fine to coarse-grained, dark brown and olive brown, moist, medium dense	
	AU					
	SPT	9-11-11 (22)				
	AU					
	SPT	19-14-17 (31)	MC = 10.3%		7.5	6382.6
10	MC	16-23			Sandy Lean CLAY, brown and dark brown, moist, hard	
	MC	24-26			12.5	6377.6
					Clayey SAND, fine to coarse-grained, olive brown, moist, dense	
	SPT	17-16-19 (35)			14.0 Well Graded SAND with Silt, fine to coarse-grained, brown, moist to wet, dense to very dense	6376.1
20	SPT	22-18-20 (38)				
	SPT	27-27-24 (51)	MC = 5.6% LL = NP PL = NP Fines = 11.0%		▽	
30	SPT	26-44-50/4"				
	SPT	26-34-50/5"	MC = 10.1%			
40	SPT	22-26-37 (63)				
	SPT	22-17-18 (35)			47.0	6343.1
					Lean CLAY with SAND, brown and gray, wet, hard	
50	SPT	26-27-32 (59)	MC = 22.1%		50.5	6339.6

Bottom of borehole at 50.5 feet.

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BORING NUMBER SB-5296

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6386.71 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 12.00 ft / Elev 6374.71 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.8, Resistivity = 16000 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt and Gravel, fine to coarse-grained, light brown and brown, moist, loose	
	SPT	3-2-3 (5)				
	AU					
5	SPT	3-2-2 (4)				
	AU					
	SPT	6-8-11 (19)	MC = 7.6%			
10	SPT	10-9-10 (19)				
	SPT	9-13-15 (28)	MC = 12.9% LL = NP PL = NP Fines = 13.0%			
15	SPT	11-14-16 (30)				
					6.0	6380.7
					Silty SAND with Gravel, fine to coarse-grained, brown and olive brown, moist to very moist, medium dense	
					▽	
					17.0	6369.7
					Clayey SAND with Gravel, fine to coarse-grained, olive brown, very moist, medium dense	
20	SPT	12-13-11 (24)	MC = 10.8%			
25	MC	15-18				
					26.0	6360.7
					Poorly Graded SAND, fine to coarse-grained, olive brown and light brown, moist, medium dense to dense	
30	MC	15-21				
35	SPT	15-15-15 (30)	MC = 7.5%			
40	SPT	13-12-13 (25)				
					40.5	6346.2
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5297

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6400.57 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 19.00 ft / Elev 6381.57 ft
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 7.4, Resistivity = 1600 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown, moist, medium dense to loose	
	SPT	10-8-8 (16)				
	AU					
5	SPT	7-6-5 (11)				
	AU					
	SPT	4-3-5 (8)	MC = 19.8%			
10	SPT	4-3-4 (7)				
10.0						6390.6
					Poorly Graded SAND with Clay, fine to medium-grained, brown and olive brown, moist, loose to medium dense	
	SPT	7-6-6 (12)	MC = 8.8%			
15	SPT	6-6-7 (13)				
20	SPT	3-3-2 (5)			▽	
25	MC	6-7	MC = 18.1%			
27.0						6373.6
					Clayey SAND, fine to medium-grained, olive brown, moist, medium dense	
30	MC	10-17				
32.0						6368.6
					Well Graded SAND with Silt, fine to coarse-grained, light brown, moist, medium dense to dense	
35	SPT	12-13-16 (29)	MC = 12.6% LL = NP PL = NP Fines = 12.0%			
40	SPT	9-13-18 (31)				
40.5						6360.1
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5298

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6422.8 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 7.6, Resistivity = 8300 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, olive brown, moist	6421.8
	SPT	4-5-9 (14)				
	AU					
5	SPT	10-10-10 (20)				
	AU					
	SPT	9-10-12 (22)				
10	MC	16-18				
	SPT	10-18-16 (34)	MC = 6.7%			
15	MC	15-21				
20	SPT	8-10-11 (21)				
25	SPT	10-12-14 (26)	MC = 11.5% LL = 31 PL = 18 Fines = 23.0%			
30	MC	21-23				
35	SPT	14-15-18 (33)	MC = 8.6%			
40	SPT	12-13-13 (26)				

1.0 — Poorly Graded SAND with Silt, fine to medium-grained, brown and olive brown, moist, medium dense
7.0 — 6415.8
Clayey SAND, fine to coarse-grained, reddish brown and olive brown, moist, medium dense to dense
14.0 — 6408.8
Poorly Graded SAND with Clay, fine to coarse-grained, olive brown and reddish brown, moist, medium dense
22.0 — 6400.8
Clayey SAND, fine to medium-grained, reddish brown, moist, medium dense
32.0 — 6390.8
Poorly Graded SAND with Silt, fine to medium-grained, brown, moist, dense to medium dense
40.5 — 6382.3

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5299

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6457.86 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.0, Resistivity = 3300 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, dark brown and light brown, slightly moist, medium dense	
	SPT	9-10-9 (19)				
	AU					
	SPT	9-10-12 (22)				
	AU					
	SPT	17-23-24 (47)	MC = 8.0%			
10	MC	22-23				
	MC	12-13				
					3.0	6454.9
					Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, medium dense	
					6.0	6451.9
					Clayey SAND, fine to coarse-grained, olive brown and gray, moist, dense to medium dense	
					13.0	6444.9
	SPT	13-19-19 (38)	MC = 4.0% LL = NP PL = NP Fines = 13.0%		Silty SAND, fine to coarse-grained, olive brown, moist, medium dense to dense	
					17.0	6440.9
20	SPT	8-12-13 (25)			Clayey SAND, fine to coarse-grained, brown, moist, medium dense to dense	
	SPT	18-24-25 (49)	MC = 8.5%			
					27.0	6430.9
					Poorly Graded SAND with Silt, fine to medium-grained, olive brown, moist, dense	
30	SPT	20-24-17 (41)				
					32.0	6425.9
					Poorly Graded SAND with Silt, fine to medium-grained, light brown, moist, medium dense to dense	
	SPT	11-12-16 (28)	MC = 5.5%			
40	SPT	15-18-18 (36)				
	SPT	21-28-39 (67)	MC = 4.3%			
50	SPT	19-28-34 (62)				
					50.5	6407.4
					Bottom of borehole at 50.5 feet.	

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BORING NUMBER SB-5300

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/28/24 **COMPLETED** 3/28/24
GROUND ELEVATION 6445.96 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.0, Resistivity = 4400 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, olive brown, moist, dense
	SPT	20-15-15 (30)			
	AU				
5	SPT	19-21-19 (40)			
	AU				
	SPT	26-26-36 (62)	MC = 4.7%		
10	SPT	45-35-33 (68)			
	SPT	30-30-34 (64)	MC = 7.7%		
15	SPT	20-20-18 (38)			
20	SPT	21-12-19 (31)	MC = 8.5% LL = NP PL = NP Fines = 18.0%		
25	MC	36-36			
30	MC	32-50			
35	SPT	14-12-13 (25)	MC = 10.8%		
40	SPT	23-20-26 (46)			

6.0 6440.0
Silty SAND, fine to coarse-grained, olive brown, moist, dense to very dense
31.0 6415.0
Clayey SAND, fine to medium-grained, brown, moist, medium dense
37.0 6409.0
Poorly Graded SAND, fine to medium-grained, olive brown, moist, dense
40.5 6405.5
Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5301

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/28/24 **COMPLETED** 3/28/24
GROUND ELEVATION 6420.85 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = NR ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, light brown and olive brown, slightly moist to moist, medium dense to very dense	
	SPT	7-11-11 (22)				
	AU					
5	SPT	17-25-35 (60)				
	AU					
	SPT	22-27-27 (54)				
					8.0	6412.9
					Silty SAND, fine to coarse-grained, reddish brown, moist, dense	
10	SPT	26-26-15 (41)	MC = 5.2% LL = NP PL = NP Fines = 16.0%			
	MC	25-32				
					14.0	6406.9
15	SPT	15-16-17 (33)	MC = 1.9%		Poorly Graded SAND, fine to coarse-grained, light brown, moist, dense	
20	SPT	14-14-17 (31)				
					22.0	6398.9
					SANDSTONE, olive brown, moist, very hard	
25	SPT	50/5"	MC = 4.4%			
30	SPT	50				
35	SPT	50				
40	SPT	45-39-33 (72)	MC = 4.8%			
					40.5	6380.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5302

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties, CO
DATE STARTED 3/29/24 **COMPLETED** 3/29/24
GROUND ELEVATION 6423.57 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.004%, pH = 8.2, Resistivity = 810 ohm-cm, Sulfate = 0.023%		Clayey SAND, dark brown and light brown, calcareous, slightly moist, dense to very dense
	SPT	20-23-18 (41)			
	AU				
5	SPT	11-12-20 (32)			
	AU				
	SPT	32-50/5"	MC = 10.3%		
10	MC	50/4"			
	SPT	50			
14.0					6409.6
15	SPT	14-14-14 (28)	MC = 2.2%		SANDSTONE, brown and olive brown, moderately hard to very hard
20	SPT	26-39-47 (86)			
25	SPT	36-49-43 (92)	MC = 8.4% LL = NP PL = NP Fines = 11.0%		
30	MC	50			
35	SPT	50	MC = 8.2%		
40	SPT	48-30-42 (72)			
40.5					6383.1

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5303

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/27/24 **COMPLETED** 3/27/24
GROUND ELEVATION 6442.11 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.0, Resistivity = 1500 ohm-cm, Sulfate = 0.001%		Clayey SAND, fine to medium-grained, dark brown and brown, calcareous, moist, medium dense	
	SPT	6-6-6 (12)				
	AU					
5	SPT	6-12-20 (32)				
	AU					
	SPT	13-18-19 (37)	MC = 13.7% LL = 47 PL = 19 Fines = 65.0%			
10	MC	17-24				
						3.0 6439.1
					Sandy Lean CLAY, brown, calcareous, moist, hard to very stiff	
						11.0 6431.1
	MC	17-40			Clayey SAND, fine to coarse-grained, light brown, moist, very dense to medium dense	
15	SPT	16-17-21 (38)	MC = 10.2%			
20	SPT	11-12-13 (25)				
						22.0 6420.1
					Poorly Graded SAND, fine to coarse-grained, light brown, moist, dense	
25	SPT	12-14-17 (31)	MC = 2.5%			
30	SPT	17-21-25 (46)				
						32.0 6410.1
					Silty SAND, fine to coarse-grained, brown, moist, dense	
35	SPT	16-18-16 (34)	MC = 7.6%			
						37.0 6405.1
					Poorly Graded SAND, fine to medium-grained, brown, moist, medium dense	
40	SPT	12-16-13 (29)				
						40.5 6401.6

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5304

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/27/24 **COMPLETED** 3/27/24
GROUND ELEVATION 6476.64 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.6, Resistivity = 1800 ohm-cm, Sulfate = <0.001%		Lean CLAY with Sand, dark brown and brown, moist, very stiff	
	SPT	11-14-16 (30)				
	AU					
5	SPT	18-15-13 (28)				
	AU					
	SPT	15-18-21 (39)	MC = 8.5%			
10	SPT	27-35-36 (71)				
	MC	21-36				
						3.0 6473.6
					Clayey SAND, fine to coarse-grained, reddish brown, calcareous, moist, medium dense to very dense	
						13.0 6463.6
15	SPT	14-17-18 (35)	MC = 4.9%		Poorly Graded SAND with Clay, fine to coarse-grained, dark brown, brown and reddish brown, moist, dense	
						17.0 6459.6
					Lean CLAY with Sand, brown, moist, stiff	
20	SPT	3-5-7 (12)				
25	MC	8-10	MC = 21.3% DD = 104.4 pcf UC = 40psi			
						27.0 6449.6
					Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
30	SPT	11-8-11 (19)				
						32.0 6444.6
					Well Graded SAND with Silt, fine to coarse-grained, brown, moist, dense	
35	SPT	18-20-27 (47)	MC = 6.2% LL = NP PL = NP Fines = 9.2%			35.0 6441.6
					Clayey SAND with Gravel, fine to coarse-grained, olive brown, moist, dense	
40	SPT	20-17-23 (40)				40.5 6436.1

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5305

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/27/24 **COMPLETED** 3/27/24
GROUND ELEVATION 6504.6 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.004%, pH = 8.0, Resistivity = 1300 ohm-cm, Sulfate = <0.001%		Lean CLAY with Sand, brown to reddish brown, slightly moist, stiff to very stiff	
	SPT	5-4-5 (9)				
	AU					
5	SPT	7-7-9 (16)				
	AU					
	SPT	8-10-14 (24)				
10	MC	15-16	MC = 6.8% DD = 119.4 pcf			
					11.0	6493.6
	SPT	9-7-8 (15)			Clayey SAND, fine to medium-grained, light brown, slightly moist, medium dense	
					14.0	6490.6
15	SPT	11-12-12 (24)			Poorly Graded SAND with Clay, fine to medium-grained, brown, slightly moist, medium dense	
					17.0	6487.6
					Clayey SAND, fine to coarse-grained, brown and dark brown, calcareous, slightly moist, medium dense to very dense	
20	SPT	10-11-12 (23)	MC = 9.4%			
25	MC	12-20				
30	SPT	17-24-25 (49)				
35	SPT	20-26-47 (73)	MC = 8.4% LL = 30 PL = 15 Fines = 43.0%			
40	SPT	20-25-26 (51)				
					40.5	6464.1
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5306

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/27/24 **COMPLETED** 3/27/24
GROUND ELEVATION 6494.02 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR Custom Auger Drilling (CME-45)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY J. Krebs **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.011%, pH = 7.8, Resistivity = 1000 ohm-cm, Sulfate = 0.034%		Sandy Lean CLAY, brown, calcareous, slightly moist to moist, stiff to very stiff
	SPT	5-6-8 (14)			
	AU				
5	SPT	6-7-12 (19)			
	AU				
	SPT	10-14-14 (28)			
10	MC	15-17	MC = 9.9%		
					11.0 6483.0 Poorly Graded SAND with Silt, fine to coarse-grained, reddish brown and gray, calcareous, slightly moist, dense
	SPT	16-17-19 (36)			
15	SPT	16-22-24 (46)	MC = 2.6%		
20	SPT	19-21-23 (44)			22.0 6472.0 Clayey SAND, fine to coarse-grained, reddish brown and gray, moist, dense to very dense
25	SPT	20-21-28 (49)	MC = 6.2%, LL = 26, PL = 14, Fines = 23.0%		
30	MC	50/5"			
35	SPT	35-50/5"	MC = 5.1%		
40	SPT	26-25-27 (52)			40.5 6453.5 Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5310

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/27/24 **COMPLETED** 3/27/24
GROUND ELEVATION 6493.33 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750X)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.009%, pH = 8.0, Resistivity = 1100 ohm-cm, Sulfate = 0.022%		Lean CLAY, light brown and dark brown, calcareous, dry to slightly moist, stiff to very stiff	
	SPT	12-10-8 (18)				
	AU					
5	SPT	12-20-10 (30)				
	AU					
	MC	9-15				
10	SPT	7-8-9 (17)	MC = 12.5% LL = 45 PL = 21 Fines = 87.0%			
	MC	12-6				
15	SPT	7-9-11 (20)				
						18.0 6475.3
20	SPT	10-9-6 (15)	MC = 11.4%		Clayey SAND, fine to coarse-grained, brown, slightly moist, medium dense	
						22.0 6471.3
25	SPT	10-11-13 (24)			Poorly Graded SAND with Silt and Gravel, fine to coarse-grained, brown and light gray, dry, medium dense to dense	
30	SPT	10-13-15 (28)				
35	SPT	14-16-19 (35)	MC = 3.2%			
40	SPT	10-12-13 (25)				40.5 6452.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5311

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6499.78 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.6, Resistivity = 3800 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to medium-grained, brown, dry to slightly moist, loose	
	SPT	4-3-5 (8)				
	AU					
5	SPT	5-6-4 (10)	MC = 6.4%			
	AU					
	MC	11-12				
10	SPT	8-9-7 (16)				
					11.0	6488.8
	SPT	7-7-6 (13)	MC = 8.4%		Clayey SAND, fine to medium-grained, brown, dry to slightly moist, medium dense	
15	MC	7-8				
					16.0	6483.8
					Lean CLAY with Sand, brown, dry to slightly moist, stiff to hard	
20	SPT	8-8-7 (15)				
25	SPT	17-20-21 (41)	LL = 36 PL = 18 Fines = 78.0%			
					29.0	6470.8
30	SPT	20-20-10 (30)			Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
					32.0	6467.8
					Sandy Lean CLAY, brown, moist, hard	
35	SPT	27-33-22 (55)	MC = 21.3%			
					36.0	6463.8
					Poorly Graded SAND, fine to coarse-grained, brown, dry to slightly moist, dense	
40	SPT	25-22-17 (39)				
					40.5	6459.3
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5312

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6501.38 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 37.00 ft / Elev 6464.38 ft
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 8.0, Resistivity = 3100 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt, fine to coarse-grained, brown, dry, medium dense	
	SPT	8-6-6 (12)				
	AU					
5	SPT	5-5-5 (10)	MC = 5.0%			
	AU					
	SPT	5-4-5 (9)				
10	MC	9-10	MC = 9.7% DD = 118.4 pcf UC = 185psi			
	SPT	2-4-4 (8)				
15	SPT	6-6-5 (11)	MC = 14.7% LL = 44 PL = 20 Fines = 86.0%			
					17.0	6484.4
					Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
20	MC	11-13				
25	SPT	9-10-11 (21)			25.0	6476.4
					Poorly Graded SAND with Silt and Clayey Sand seams, fine to coarse-grained, brown, moist, medium dense to dense	
30	SPT	13-11-10 (21)	MC = 3.4%			
35	SPT	8-20-15 (35)			▽	
40	SPT	14-14-12 (26)			40.5	6460.9
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5313

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/26/24 **COMPLETED** 3/26/24
GROUND ELEVATION 6475 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES Moved 20' South due to surfacing pipe
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 7.8, Resistivity = 1800 ohm-cm, Sulfate = 0.015%		Clayey SAND, fine to coarse-grained, brown, slightly moist, medium dense	
	SPT	25-14-8 (22)				
	AU					
5	SPT	7-6-6 (12)				
	AU					
	MC	7-27	MC = 12.7%			
10	SPT	13-13-10 (23)				
	SPT	10-10-9 (19)	MC = 11.1%			
15	SPT	9-10-9 (19)				
20	MC	13-14				
25	SPT	10-11-10 (21)	MC = 4.4% LL = NP PL = NP Fines = 13.0%			
30	SPT	14-17-14 (31)				
35	SPT	17-14-15 (29)	MC = 5.3%			
40	SPT	17-19-20 (39)				

3.0 — 6472.0
Sandy Lean CLAY, brown, slightly moist, stiff
6.0 — 6469.0
Clayey SAND with Gravel, fine to coarse-grained, brown, slightly moist, medium dense
12.5 — 6462.5
Silty SAND, fine to coarse-grained, brown, dry to slightly moist, medium dense to dense
40.5 — 6434.5

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5314

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/20/24
GROUND ELEVATION 6441.83 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES Moved 35' South due to steep angle of hill
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.9, Resistivity = 3500 ohm-cm, Sulfate = <0.001%		Silty SAND, fine to coarse-grained, brown, dry, loose	
	SPT	2-3-6 (9)				
	AU					
	SPT	6-8-11 (19)				
	AU					
	SPT	6-6-12 (18)				
10	MC	9-10	MC = 9.5%			
3.0						6438.8
					Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
11.0						6430.8
	SPT	9-17-17 (34)			Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, dense to medium dense	
	MC	12-16				
17.0						6424.8
					Silty SAND, fine to coarse-grained, brown, moist, dense to medium dense	
20	SPT	12-13-19 (32)	MC = 10.6%			
	SPT	10-14-17 (31)				
30	SPT	19-28-8 (36)	MC = 7.1% LL = NP PL = NP Fines = 15.0%			
	SPT	7-8-8 (16)				
36.0						6405.8
					Sandy Lean CLAY, red brown, moist, very stiff	
40	SPT	3-7-9 (16)				
43.0						6398.8
					Clayey SAND, fine to coarse-grained, red brown, moist, medium dense	
	SPT	8-10-11 (21)	MC = 9.0%			
50	SPT	8-11-12 (23)				
50.5						6391.3

Bottom of borehole at 50.5 feet.

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BORING NUMBER SB-5315

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/20/24
GROUND ELEVATION 6473.69 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.007%, pH = 8.1, Resistivity = 2150 ohm-cm, Sulfate = 0.023%		Clayey SAND, fine to coarse-grained, brown, slightly moist, medium dense	
	SPT	6-7-7 (14)				
	AU					
	SPT	5-5-4 (9)				
	AU					
	MC	5-8	MC = 2.3%			
					3.0	6470.7
					Silty SAND, fine-grained, brown, dry, loose to medium dense	
					8.0	6465.7
10	SPT	5-7-7 (14)			Clayey SAND, fine to coarse-grained, brown, dry, medium dense	
	SPT	6-7-14 (21)	MC = 8.4%, LL = 28, PL = 14, Fines = 36.0%			
	SPT	9-12-12 (24)				
					15.0	6458.7
					Silty SAND, fine to medium-grained, light brown, dry, medium dense to dense	
20	MC	9-11				
					24.5	6449.2
	SPT	10-16-16 (32)	MC = 5.0%		Poorly Graded SAND with Clay and Gravel, fine to coarse-grained, brown, dry to moist, medium dense to dense	
30	SPT	12-18-15 (33)				
					34.5	6439.2
	SPT	8-12-11 (23)	MC = 7.8%		Clayey SAND with Gravel, fine to coarse-grained, brown, dry to moist, medium dense to very dense	
40	SPT	13-15-22 (37)				
	SPT	10-19-23 (42)	MC = 7.2%			
50	SPT	28-29-27 (56)				
					50.5	6423.2
					Bottom of borehole at 50.5 feet.	

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BORING NUMBER SB-5316

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/20/24
GROUND ELEVATION 6452.92 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES Moved 20' South due to steep angle of hill
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 7.4, Resistivity = 3000 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, dark brown, calcareous, dry, medium dense to loose	
	SPT	10-12-13 (25)				
	AU					
5	SPT	5-3-5 (8)				
					5.0	6447.9
	AU				Poorly Graded SAND with Silt, fine to coarse-grained, brown, slightly moist, loose to medium dense	
	SPT	10-13-15 (28)	MC = 6.1%			
10	MC	12-12				
	SPT	6-8-7 (15)				
					13.0	6439.9
15	SPT	3-4-6 (10)			Clayey SAND with Gravel, fine to coarse-grained, dark brown, moist, medium dense	
					19.5	6433.4
20	MC	11-15	MC = 9.4%		Well Graded SAND with Silt, fine to coarse-grained, brown, moist, medium dense to dense	
25	SPT	8-11-12 (23)				
30	SPT	18-22-19 (41)	MC = 5.8% LL = NP PL = NP Fines = 10.7%			
35	SPT	16-21-19 (40)				
40	SPT	12-17-20 (37)	MC = 6.7%			
					40.5	6412.4

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5317

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/20/24 **COMPLETED** 3/20/24
GROUND ELEVATION 6443.43 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.006%, pH = 7.7, Resistivity = 2300 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, brown and gray, slightly moist, medium dense to dense	
	SPT	11-15-16 (31)				
	AU					
5	SPT	9-10-11 (21)				
	AU					
	MC	11-16	MC = 5.8%			
10	SPT	9-9-9 (18)				
	SPT	11-13-12 (25)	MC = 8.0%			
15	SPT	12-12-10 (22)				
20	MC	16-21	MC = 7.6%			
25	SPT	10-11-5 (16)				
30	SPT	8-8-12 (20)	MC = 12.3% LL = 32 PL = 15 Fines = 34.0%			
					32.0	6411.4
					Poorly Graded SAND with Clay, fine to coarse-grained, brown, moist, dense	
35	SPT	13-19-20 (39)				
					36.0	6407.4
					Clayey SAND, fine to coarse-grained, brown, moist, medium dense	
40	SPT	9-13-13 (26)				
					40.5	6402.9
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5318

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/19/24 **COMPLETED** 3/19/24
GROUND ELEVATION 6344.94 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.006%, pH = 7.3, Resistivity = 12000 ohm-cm, Sulfate = <0.001%		Clayey SAND, fine to coarse-grained, dark brown, slightly moist, medium dense
	SPT	3-9-7 (16)			
2.0					6342.9
	AU				Silty SAND, fine to coarse-grained, brown, moist, loose to medium dense
5	SPT	2-3-3 (6)	MC = 2.3%		
	AU				
	MC	4-6			
10	SPT	3-6-9 (15)			
	SPT	9-15-15 (30)			
15	SPT	10-13-13 (26)	MC = 3.6% LL = NP PL = NP Fines = 20.0%		
20	MC	10-12			
25	SPT	9-10-11 (21)			
30	SPT	9-12-11 (23)	MC = 3.8%		
35	SPT	8-9-10 (19)			
40	SPT	12-17-11 (28)	MC = 5.4%		
40.5					6304.4

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5324

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/19/24 **COMPLETED** 3/19/24
GROUND ELEVATION 6155.88 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 23.00 ft / Elev 6132.88 ft
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.005%, pH = 7.6, Resistivity = 7250 ohm-cm, Sulfate = <0.001%		Poorly Graded SAND with Silt and Gravel, fine to coarse-grained, brown, moist, loose to medium dense	
	SPT	2-2-3 (5)				
	AU					
5	SPT	4-5-4 (9)				
	AU					
	MC	3-6				
10	SPT	5-7-11 (18)	MC = 3.2%			
	SPT	6-6-5 (11)				
					13.0	6142.9
15	SPT	2-4-6 (10)			Lean CLAY with Sand, dark brown, slightly moist, stiff	
					18.0	6137.9
20	MC	9-6			Poorly Graded SAND with Silt, fine to medium-grained, brown, moist, medium dense	
					23.0 ▽	6132.9
25	SPT	3-4-7 (11)	MC = 27.5% LL = 52 PL = 21 Fines = 91.0%		Fat CLAY, dark brown and gray, moist to wet, stiff to hard	
30	SPT	6-13-18 (31)				
					32.0	6123.9
35	SPT	11-21-30 (51)	MC = 20.2%		CLAYSTONE, gray blue, moist to wet, moderately hard	
40	SPT	16-24-24 (48)	MC = 22.2%			
					40.5	6115.4
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5325

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/19/24 **COMPLETED** 3/19/24
GROUND ELEVATION 6133.24 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750x)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 14.00 ft / Elev 6119.24 ft
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.014%, pH = 7.8, Resistivity = 500 ohm-cm, Sulfate = 0.115%		Sandy Lean CLAY, dark brown, calcareous, moist, very stiff to stiff	
	SPT	9-13-14 (27)				
	AU					
5	SPT	5-5-5 (10)				
	AU					
	SPT	4-4-5 (9)	MC = 16.7%			
					8.0	6125.2
10	MC	8-9			Clayey SAND with Gravel, fine to coarse-grained, brown, moist, loose to medium dense	
	SPT	6-7-7 (14)				
					12.5	6120.7
15	SPT	6-5-6 (11)	MC = 14.5%		▽ Poorly Graded SAND with Clay and Gravel, fine to coarse-grained, brown, moist to wet, medium dense	
20	MC	3-10				
					24.5	6108.7
25	SPT	11-17-26 (43)			CLAYSTONE, gray blue, moist to wet, moderately hard	
30	SPT	14-26-46 (72)	MC = 20.6% LL = 59 PL = 24 Fines = 80.0%			
35	SPT	16-28-39 (67)				
40	SPT	19-36-49 (85)	MC = 19.7%			
					40.5	6092.7
					Bottom of borehole at 40.5 feet.	

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BORING NUMBER SB-5326

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/13/24 **COMPLETED** 3/13/24
GROUND ELEVATION 6115.27 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750X)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
AT TIME OF DRILLING ---
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.013%, pH = 7.7, Resistivity = 450 ohm-cm, Sulfate = 0.255%		Sandy Lean CLAY, dark gray, dry to slightly moist, medium stiff to stiff
	SPT	7-4-3 (7)			
	AU				
5	SPT	8-8-7 (15)			
	AU				
	SPT	10-13-17 (30)			
10	MC	10-33	MC = 13.1% DD = 110.2 pcf		6.0 6109.3 Sandy Silty CLAY, brown, moist, very stiff to hard
	SPT	20-20-50 (70)			11.0 6104.3 Fat CLAY with Sand, dark gray and brown, iron oxide staining, moist, (Highly Weathered Claystone)
15	MC	13-30	MC = 20.9% DD = 106.8 pcf UC = 142psi		
20	SPT	17-23-30 (53)			
25	SPT	13-26-20 (46)	MC = 14.8% LL = 61 PL = 23 Fines = 85.0%		
30	SPT	17-23-30 (53)			
35	SPT	17-20-31 (51)	MC = 21.1%		
40	SPT	20-20-33 (53)			40.5 6074.8

Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5327

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/13/24 **COMPLETED** 3/13/24
GROUND ELEVATION 6080.32 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750X)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 28.00 ft / Elev 6052.32 ft
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION
0	AU		Chloride = 0.009%, pH = 7.8, Resistivity = 450 ohm-cm, Sulfate = 0.085%		Fat CLAY with Sand, brown and dark brown, calcareous, iron oxide staining, moist to wet, very stiff to hard
	SPT	17-20-20 (40)			
	AU				
5	SPT	15-20-24 (44)			
	AU				
	MC	14-18			
10	SPT	13-13-14 (27)	MC = 12.0%		
	SPT	10-10-14 (24)			
15	MC	8-13	MC = 32.4% DD = 89.8 pcf UC = 69		
20	SPT	10-10-13 (23)			
25	SPT	10-10-16 (26)	MC = 20.8% LL = 50 PL = 20 Fines = 85.0%		
					28.0 ▽ 6052.3
30	SPT	20-30-50/1"			Silty SAND, fine to medium-grained, brown, wet, very dense
					33.0 6047.3
35	SPT	20-24-50/4"	MC = 19.5%		CLAYSTONE, grayish blue, wet, hard to moderately hard
40	SPT	15-23-30 (53)			40.5 6039.8
					Bottom of borehole at 40.5 feet.

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BORING NUMBER SB-5328

CLIENT Xcel Energy
PROJECT NAME Xcel Colorado Pathways Project - Segment 5
PROJECT NUMBER D23-1-400
PROJECT LOCATION Pueblo, El Paso, Lincoln, Elbert and Arapahoe Counties,
DATE STARTED 3/13/24 **COMPLETED** 3/13/24
GROUND ELEVATION 6059.63 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR VINE (CME-750X)
GROUND WATER LEVELS:
DRILLING METHOD 4" Solid Stem Auger
▽ **AT TIME OF DRILLING** 27.00 ft / Elev 6032.63 ft
LOGGED BY A. Xhafkollari **CHECKED BY** T. Nevin
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	TESTS	GRAPHIC LOG	MATERIAL DESCRIPTION	
0	AU		Chloride = 0.011%, pH = 7.9, Resistivity = 500 ohm-cm, Sulfate = 0.155%		Lean CLAY with Sand, brown, dark brown and gray, moist, stiff to hard	
	SPT	8-7-7 (14)				
	AU					
5	SPT	10-9-10 (19)				
	AU					
	SPT	11-17-18 (35)	MC = 12.3%			
10	MC	11-12				
	SPT	7-8-9 (17)	MC = 10.9% LL = 40 PL = 17 Fines = 77.0%			
15	SPT	7-8-9 (17)				
20	MC	9-9	MC = 28.9% DD = 100.9 pcf UC = 23psi			
					22.0	6037.6
					Silty SAND, fine to medium-grained, brown, moist to wet, medium dense	
25	SPT	7-8-8 (16)			▽	
					28.0	6031.6
					Lean CLAY with Sand, grayish blue, wet, very stiff to hard (Highly Weathered Claystone)	
30	SPT	9-9-10 (19)				
35	SPT	11-12-15 (27)	MC = 25.9%			
40	SPT	17-24-28 (52)				
					40.5	6019.1
					Bottom of borehole at 40.5 feet.	