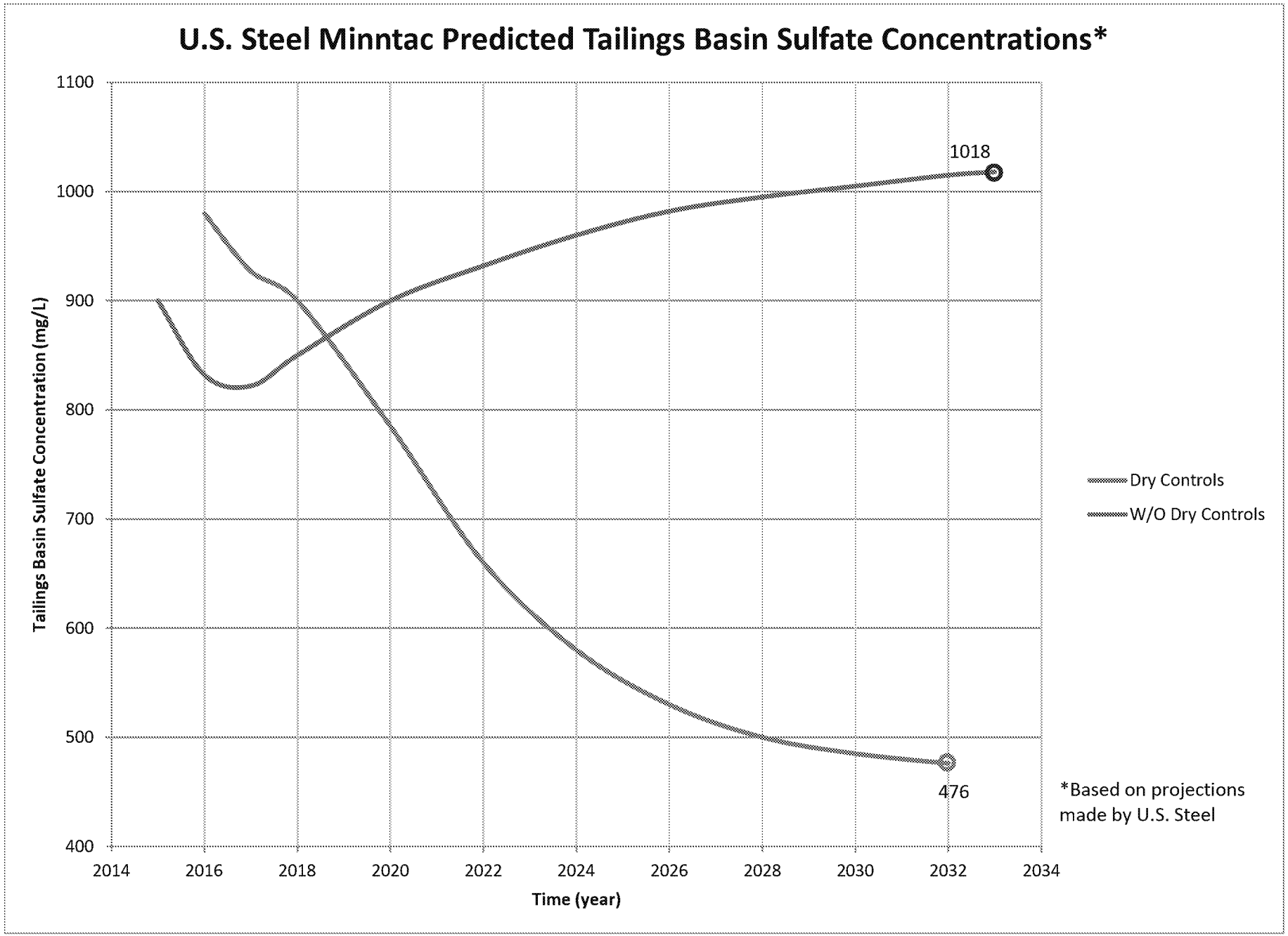
U.S. Steel Minntac Predicted Tailings Basin Sulfate Concentrations*
Tailings Basin Sulfate Concentration (mg/L)
1100
1000
900
800
700
600
500
400
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
Time (year)
1018
476
Dry Controls
W/O Dry Controls
*Based on projections made by U.S. Steel

	Dry Controls	W/O Dry Controls				
2015		900				
2016	980	832				
2017	927	822			MGD	
2018	900	850				
2020	785	900	115			2020
2022	660	932	272	193.5		2021
2024	580	960	380	326		2022
2026	530	982	452	416		2023
2028	500	995	495	473.5		2024
2030	485	1005	520	507.5		2025
2032	476	1015	539	529.5		2026
2033		1018				2027
						2028
						2029
						2030
						2031
						2032
		14				
		127.2727273				

mg in 32458 MT
liters in acre foot
acre feet at 250 mg/L
acres with 15' aquifer thickness
square miles

20*300 foot PRB flow (cu.ft./day)
flow MG/year
Mass of sulfate removed (Tonnes)

4.5	15140000			
115	715	5595	72737.29125	
194	1206			
272	1691			
326	2027			
380	2362			
416	2586			
452	2810			
474	2947			
495	3077			
508	3158			
520	3233			
530	3295			
539	3351			47
Metric Tonnes SO4	32458			

32,458,239,112,500
1,233,480
105,257.46
21,051
32.89

7,335
20
22.7