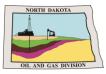


Mineral Resources



February 9, 2023

Allowed Cement Blends for Oil and Gas Well Plugging

The intent of this letter is to inform Oil and Gas Well operators within the state of North Dakota that the North Dakota Industrial Commission (NDIC) intends to allow the use of the follow cement blends for the plugging of oil and gas wells within the state of North Dakota under the noted stipulations:

- Where estimated bottom-hole static temperature is greater than or equal to (≥) 220°F, 35% silica flour by volume is required to be added to Class "G" cement or Type 1L High Sulfate Resistance blends to meet the time and compressive strength requirements as stated in North Dakota Administrative Code (NDAC) Section 43-02-03-21 (Casing, tubing, and cementing requirements).
- Where estimated bottom-hole static temperature is less than (<) 220°F, "neat" Class G cement or Type 1L High Sulfate Resistance blends may be used for cement plugs to meet the time and compressive strength requirements as stated in NDAC Section 43-

02-03-21 (Casing, tubing, and cementing requirements).

- 3. Mix volumes must be based on the plugging job by well and shall be reviewed with the NDIC Inspector at the time of submitting the Sundry Notice for Intent to Plug. All plugging jobs shall be witnessed by the NDIC Field Inspector while performing the plugging operations.
- 4. All mill specification sheets shall be available for inspection and proof of cement blends used to verify High Sulfate Resistance when Type 1L is used.

Allowed Cement Blends for Oil and Gas Well Construction, Completion, and Remedial Cementing

In all oil and gas well construction, completion, and remedial cementing operations operators shall ensure cement blends meet the requirements as stated in NDAC 43-02-03-21 (Casing, tubing, and cementing requirements).

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