

REPORT ON PETROGRAPHIC EXAMINATION OF AGGREGATE

Client: Cullimores Mix Limited
Netherhills
Whitminster
Gloucestershire
GL2 7PD

Source of Material	Ashton Keynes
Material Description	4/20 mm Aggregate
Date Received	8th April 2021
Requirements	To carry out a petrographic examination of an aggregate sample.
Date Test Started	12th April 2021
Test Method	BS EN 923-3 : 1997
Results	See following pages

Signed:



Date of Issue: 17th May 2021

on behalf of Testing & Consultancy Services Ltd.

REPORT NO TCSL 21/689

Summary of Findings

Aggregate Property	Observations		
Advised Grading	4/20mm		
Aggregate Type	Limestone Gravel		
Constituents	Major	Minor	Trace
	Limestone		Chert Sandstone Ironstone

Simplified Petrographic Description of Aggregate - BS EN 932-3:1997 Visual Observations

Discrete Constituent	Particle Shape	Surface Texture	Coatings/ Encrustations	Grade
Limestone	Subangular to well rounded	Moderately Rough to Smooth	Common Iron Oxide stains	1
Chert	Subangular	Moderately Rough	Iron Oxide stains	1
Sandstone	Subrounded	Moderately Rough	Iron Oxide stains	1
Ironstone	Subangular to Subrounded	Moderately Rough to Moderately Smooth	None	1

Comments:

Based on UK experience, the above aggregate combination could be classified as having potentially normal alkali-silica reactivity in accordance with BRE Digest 330. However, we would recommend a full high-power microscopical examination of a representative portion of the sample to clarify the alkali-silica potential of the sample.

Notes:

Major > 10%, Minor 2<10%, Trace <2%

Grade 1 (fresh): unchanged from original state: Grade 11 (slightly weathered): slight discoloration, slight weakening: Grade 111 (moderately weathered): considerably weakened, penetrative discoloration, large pieces cannot be broken by hand: Grade 1V (highly weathered): large pieces can be broken by hand, does not readily disaggregate (slake) when dry sample immersed in water: Grade V (completely weathered): considerably weakened, slakes, original texture apparent: Grade V1 (residual soil): soil derived by in situ weathering but retaining none of the original texture of fabric.