



"Safety as a Value"

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GCC Energy, LLC
6473 County Road 120
Hesperus, CO 81326

May 21, 2018

State of Colorado
Division of Reclamation, Mining & Safety
1313 Sherman St, Room 215
Denver, CO 80203

Attention: Brock Bowles, Environmental Protection Specialist

Re: C-1981-035, King I Refuse Pile 2018 Compaction Test Results

Mr. Bowles:

Attached is a report by Trautner Geotech documenting results of annual compaction tests performed on March 28, 2018 at the King I Refuse Pile.

Please call Tom Bird at (970) 385-4528 x 6503 if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to be 'Tom Bird', written over a horizontal line.

Tom Bird
Manager, Coal Services
GCC Energy, LLC

DAILY FIELD REPORT AND TEST RESULTSPROJECT NAME: *GOB Pile Testing*PROJECT NO.: *55152MT*DATE: *3/28/18*TECHNICIAN: *See Below*REQUESTED SERVICE: *Nuclear Field Density Test*CONTRACTOR: *GCC*FOREMAN: *Mr. Tom Bird*

Technician field notes and comments: I arrived on-site as requested. I performed nine (9) nuclear field density tests on previously placed and compacted coal GOB. All test results were verbally given to Mr. Tom Bird.

NUCLEAR FIELD DENSITY TEST RESULTS

Date	Test No.	Test Location	Probe Depth (in)	Test Elevation	Proctor Density (PCF)	Optimum Moisture (%)	Field Density (PCF)	Field Moisture (%)	Relative Compaction (%)	Material Type	Technician
3/28/18	1	Bottom of N. face – S. side, 12ft. above toe of slope	6	Top of existing	92.4	12.5	106.0	12.6	100+	Coal GOB	C. Campbell
3/28/18	2	Bottom of N. face – Middle area, 50ft. above toe of slope	6	Top of existing	92.4	12.5	103.4	10.9	100+	Coal GOB	C. Campbell
3/28/18	3	Bottom of N. face – N. side, 55ft. above toe of slop	6	Top of existing	92.4	12.5	97.8	12.1	100+	Coal GOB	C. Campbell
3/28/18	4	Reclamation pad GOB pile – SW corner area	6	Top of existing	92.4	12.5	86.4	12.0	94	Coal GOB	C. Campbell
3/28/18	5	Reclamation pad GOB pile – W. side, approximate mid-length, 15ft. E. of W. edge of pad	6	Top of existing	92.4	12.5	102.0	9.1	100+	Coal GOB	C. Campbell
3/28/18	6	Reclamation pad GOB pile – NW corner area	6	Top of existing	92.4	12.5	88.1	10.4	95	Coal GOB	C. Campbell
3/28/18	7	Reclamation pad GOB pile – N. - central area, 20ft. S. of hillside top of slope	6	Top of existing	92.4	12.5	92.8	10.3	100	Coal GOB	C. Campbell
3/28/18	8	Reclamation pad GOB pile – SE corner area, 35ft. N. of Huntington Pond driveway	6	Top of existing	92.4	12.5	90.0	11.9	97	Coal GOB	C. Campbell
3/28/18	9	Reclamation pad GOB pile – approximate center of reclamation pad	6	Top of existing	92.4	12.5	104.2	9.5	100+	Coal GOB	C. Campbell

THE CHARACTERISTICS REPORTED ABOVE ARE ONLY APPROPRIATE FOR THE ELEVATIONS AND LOCATIONS TESTED DURING OUR FIELD WORK.