



"Safety as a Value"

Telephone: 970.385.4528
Facsimile: 970.385.4638

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

June 16, 2017

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

Attention: Rob Zuber, Environmental Protection Specialist II

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

Mr. Zuber:

Attached is a report by Trautner Geotech documenting results of compaction tests performed on June 7, 2017 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 at King Coal Mine, 2016*PROJECT NO.: *54268MT*DATE: *6/7/16*TECHNICIAN: *See Below*REQUESTED SERVICE: *Nuclear Field Density Test*CONTRACTOR: *GCC Energy*FOREMAN: *Mr. Tom Bird*Technician field notes and comments:
results were verbally given to Mr. Tom Bird.

I arrived on-site as requested. I performed seven (7) nuclear field density tests on previously placed and compacted coal GOB. All test

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
6/7/16	1	GOB Refuse reclamation pad – SW corner area, 100ft. N. of top of road	6		92.4	12.5	82.1	8.5	89	Coal GOB	C. Campbell
6/7/16	2	GOB Refuse reclamation pad – 60ft. S. and 60ft. E. of NW corner	6		92.4	12.5	93.1	5.4	101	Coal GOB	C. Campbell
6/7/16	3	GOB Refuse reclamation pad – center of N. side, 60ft. S. of N. toe of slope	6		92.4	12.5	104.5	7.1	113	Coal GOB	C. Campbell
6/7/16	4	GOB Refuse reclamation pad – NE corner area, 25ft. S. of N. toe of slope	6		92.4	12.5	105.2	4.8	114	Coal GOB	C. Campbell
6/7/16	5	GOB Refuse reclamation pad – E. end of pile, centerline running east-west	6		92.4	12.5	103.3	5.5	112	Coal GOB	C. Campbell
6/7/16	6	GOB Refuse reclamation pad – approximate center of pile	6		92.4	12.5	93.5	6.5	101	Coal GOB	C. Campbell
6/7/16	7	GOB Refuse reclamation pad – S. side of pile, 200ft. E. of top of driveway, 40ft. N. of S. toe of slope	6		92.4	12.5	87.6	6.2	95	Coal GOB	C. Campbell

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