



"Safety as a Value"

Telephone: 970.385.4528
Facsimile: 970.385.4638

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

October 31, 2022

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

Attention: Janet Binns, Environmental Protection Specialist II

Re: C-1981-035, King I Refuse Pile 2022 Compaction Test Results

Mr. Binns:

Attached is a report by Geomat, Inc. documenting results of the annual compaction tests performed on 10/18/2022 at the King I Refuse Pile.

Please call Jordan McCourt at (970) 385-4528 x 6531 if you have any questions or comments.

Sincerely,

A handwritten signature in black ink that reads "Jordan McCourt". The script is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Jordan McCourt
Project Coordinator
GCC Energy, LLC



915 Malta Avenue
Farmington, NM 87401
Phone: 505-327-7928
Fax: 505-326-5721

Daily Observation Report

Client:

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

Project:

201-3529
Refuse Pile Density Testing
6473 CR 120
Hesperus, CO 81326

Daily Project Summary

Activity Number: 3 **Date:** 10/18/2022 **Arrival Time:** 09:35 **GEOMAT Technician:** Kevin Yazzie
Client / Project Representative: Wade

Travel Time: 1.50 **Test Time:** 2.50 **Standby Time:** 0.00
Reason For Standby: N/A

Total Time: 4.00

Observations

Specific Location: King Coal I & II

Weather Conditions: Partly Cloudy / Dry / Calm / Sunny

Unexpected Site Conditions: None

Equipment On-site: None

Work in Progress / Remarks:

Tech arrived at King Coal II, for check-in at the dispatch building with Wade. Escorted to building to obtain hazard training for mine. Upon completion of hazard training, escorted to King Coal I for FDT's on refuse piles. 6 FDT's total were performed (3 on bottom refuse and 3 on upper refuse piles) Wade informed technician, the elevation has not changed from the last visit. No protor taken, technician reported test results to Wade. No other testing was needed. End

Preliminary Test Results

Field Density Test Results (Earthwork or Hot Mix Asphalt):

Pass: 6 **Fail:** 0 **Pending:** 0 **Total:** 6

Cementitious Test Results (Concrete, Grout, etc.): None Performed

Test Results															
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Optimum Moisture Tolerance (%)	Remark
14		10/18/22	4873	C	--	11.0	80.8	37.2	75.2	103.2	8	93	90	NA	DP
15		10/18/22	4873	C	--	11.0	80.8	38.6	75.0	104.0	8	93	90	NA	DP
16		10/18/22	4873	C	--	11.0	80.8	29.8	75.1	97.5	8	93	90	NA	DP
17		10/18/22	4873	C	--	11.0	80.8	29.1	77.7	100.3	8	96	90	NA	DP
18		10/18/22	4873	C	--	11.0	80.8	29.9	77.0	100.0	8	95	90	NA	DP
19		10/18/22	4873	C	--	11.0	80.8	29.5	77.5	100.4	8	96	90	NA	DP
Test Information															
Test #	Test Location		Elevation		Reference		Gauge		Field Technician						
14	Other: 55' North & 31' East of SWC of Bottom GOB Pit		18.0		Feet above native subgrade		Troxler / 3440 / 31098 / 02/14/2022		Kevin Yazzie						
15	Other: 95' North & 88' East of SWC of Bottom GOB Pit		20.0		Feet above native subgrade		Troxler / 3440 / 31098 / 02/14/2022		Kevin Yazzie						
16	Other: 122' North & 150' East of SWC of Bottom GOB Pit		28.0		Feet above native subgrade		Troxler / 3440 / 31098 / 02/14/2022		Kevin Yazzie						
17	Other: 65' North & 45' East of SWC of Upper GOB Pit		10.0		Feet below top of fill		Troxler / 3440 / 31098 / 02/14/2022		Kevin Yazzie						
18	Other: 85' North & 110' East of SWC of Upper GOB Pit		10.0		Feet below top of fill		Troxler / 3440 / 31098 / 02/14/2022		Kevin Yazzie						
19	Other: 135' North & 205' East of SWC of Upper GOB Pit		10.0		Feet below top of fill		Troxler / 3440 / 31098 / 02/14/2022		Kevin Yazzie						
DP: Density Pass		Remarks		Comments											
				Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.											