

300 Sierra Manor Drive, Suite 1
Reno, NV 89511

June 28, 2018
File: 1013

Mr. Mike Hiatt
A&K EARTHMOVERS, INC
12251 Truckee Canyon Ct
Sparks, NV 89434

RE: Golden Valley Pit – NV Energy Bedding Sand

Dear Mr. Hiatt:

Per your request, we have performed aggregate quality testing on the bedding sand received by our laboratory from the Golden Valley Pit on June 21st. Test results are provided on the attached page(s) in comparison with standards outlined in the *Sierra Pacific Engineering & Construction Standard* specifications.

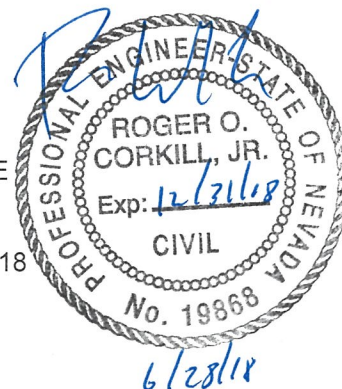
We appreciate this opportunity to provide our laboratory testing services. If you have any questions or require further information, please do not hesitate to contact us.

Sincerely,

CONSTRUCTION MATERIALS ENGINEERS, INC.

Katie B. Weasel for
Steven L. Vineis
Laboratory Manager
svineis@cmenv.com
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Roger O. Corkill Jr., PE
Project Manager
RE Number 19868
Expiration Date 12-31-18
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SLV:ROC:jb
Attachments
v:\active\1013\2018 testing\energy_bed_sand_ltr_06-28-18.doc

NV ENERGY BEDDING SAND TEST RESULTS SUMMARY - GOLDEN VALLEY PIT

Sieve Analysis

U.S. Standard Sieve Size	Percent Passing by Weight	
	ASTM C136/ASTM C117	NV Energy Specification ¹
³ / ₈ Inch	100	100
No. 4	100	90 - 100
No. 8	83	-
No. 16	60	-
No. 30	40	-
No. 50	24	10 - 40
No. 100	14	3 - 20
No. 200	8.3	0 - 15

Test Type	Test Method	Sample Result	NV Energy Specification ¹
Sand Equivalent	ASTM D2419	61	25 Minimum
Plasticity Index	ASTM D4318	Nonplastic	Nonplastic

Moisture Density

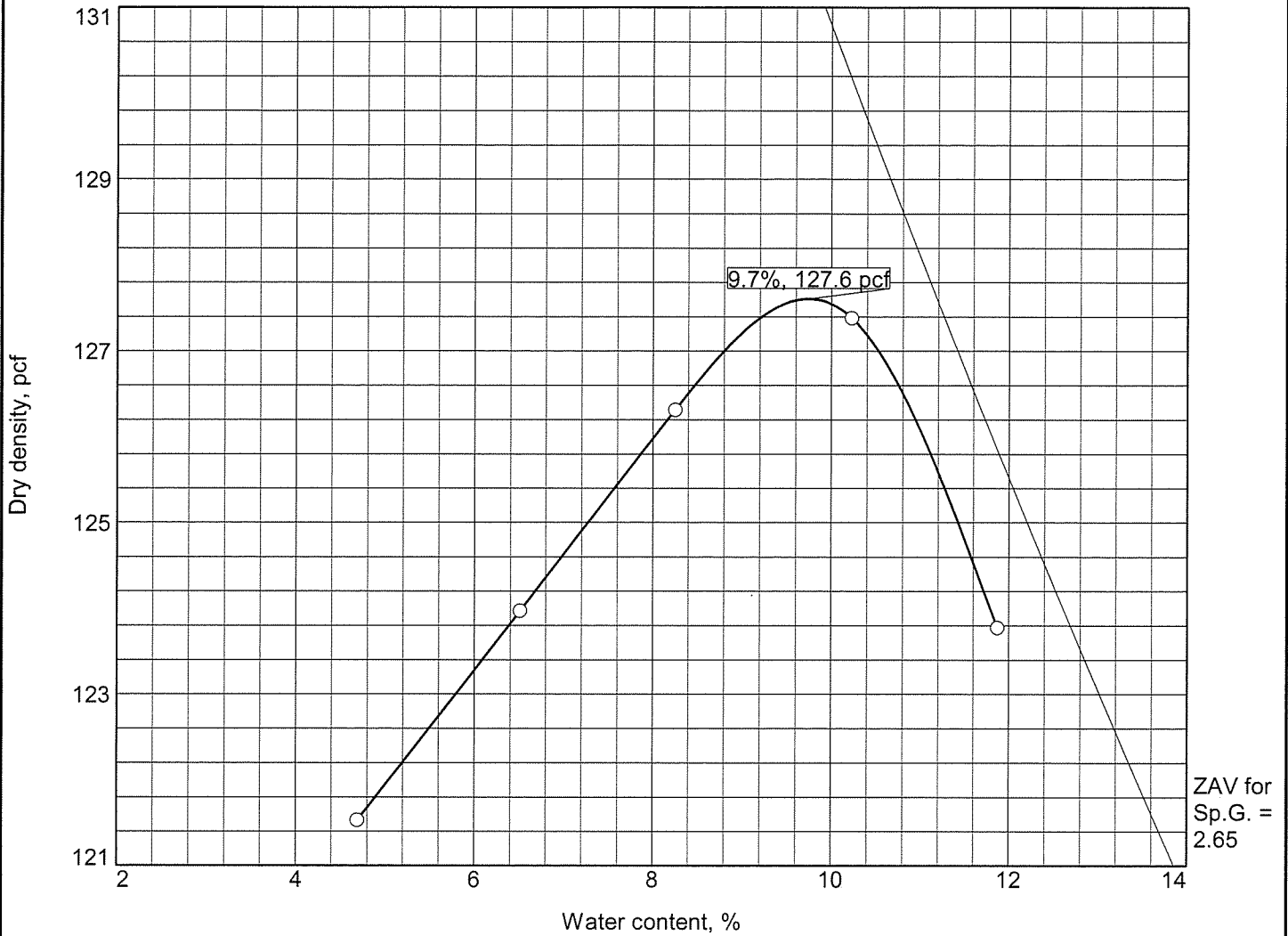
Test Type	Test Method	Sample Result	NV Energy Specification ¹
Maximum Dry Density	ASTM D1557A	127.6 pcf	-
Optimum Moisture	ASTM D1557A	9.7%	-

Angularity

Description	Test Method	Sample Result	NV Energy Specification ¹
Angular	ASTM D2488	0.0%	30% Maximum
Subangular	ASTM D2488	Acceptable	Acceptable
Subrounded	ASTM D2488	Acceptable	Acceptable
Rounded	ASTM D2488	Acceptable	Acceptable

¹ Specifications per Sierra Pacific Engineering and Construction Standard rev 5/16.

MOISTURE DENSITY REPORT



Test specification: ASTM D 1557-12 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
						NP	0	8.3

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 127.6 pcf Optimum moisture = 9.7 %	NV ENERGY BEDDING SAND

Project No. 1013 Client: A & K EARTHMOVERS, INC. Project: AGGREGATE TESTING ○ Location: GOLDEN VALLEY PIT Sample Number: 32628	Remarks: JUNE 28, 2018
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Figure

Tested By: J. WALTZ Checked By: R. CORKILL