

Empire Laboratories, Inc.

GEOTECHNICAL ENGINEERING & MATERIALS TESTING

CORPORATE OFFICE
P.O. Box 503 • 301 No. Howes
Fort Collins, Colorado 80522
(303) 484-0359
FAX No. (303) 484-0454

September 11, 1989

RECEIVED
SEP 12 1989
Engineering Dept.

Clarendon Hills Associates
c/o Nordic Construction
309 West Harmony Road
Fort Collins, Colorado 80525

Attention: Mr. Gary Nordic

Re: Clarendon Hills Filing 3
Fort Collins, Colorado
ELI Project No. 7927

Gentlemen:

Enclosed are the results of extractions and gradations done on asphalt concrete picked up from the above-referenced site on August 25, 1989.

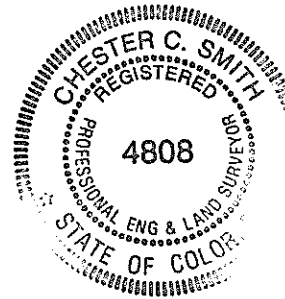
Very truly yours,

EMPIRE LABORATORIES, INC.



Chester C. Smith, P.E.
President

t/s



cc: Land Development Services - Mr. Dennis Donovan
City of Fort Collins Engineering Inspection - Mr. Lance Newlin
Western Mobile Northern, Inc.

Branch Offices

P.O. Box 16859
Colorado Springs, CO 80935
(719) 597-2116

P.O. Box 1135
Longmont, CO 80502
(303) 776-3921

P.O. Box 1744
Greeley, CO 80832
(303) 351-0460

P.O. Box 5659
Cheyenne, WY 82003
(307) 632-9224

Member of Consulting Engineers Council



ASPHALT CONCRETE LABORATORY TEST SUMMARY

Project: Clarendon Hills, Filing 3

Sample No.: 4

Date Sampled: 8-25-89

Time: 9:30 a.m.

Location: Cul De Sac "E", East End of Langdale

Truck No.: 7556 P

Temperature: 256^oF

Quantitative Extraction, ASTM D 2172

Asphalt Cement Content: 5.86%

Gradation Analysis of Extracted Aggregate, ASTM C 117 & C 136

<u>Sieve Size</u>	3/4"	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200
<u>% Pass.</u>	100.0	90.4	82.7	72.4	60.9	45.6	29.4	14.3	7.0	3.9
<u>Spec. Grade.</u>										
<u>E</u>	100.0			44/72	30/58					3/12

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CORPORATE OFFICE
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FAX No. (303) 484-0454

August 24, 1989

Clarendon Hills Associates
c/o Nordic Construction
309 West Harmony Road
Fort Collins, Colorado 80525

Attention: Mr. Gary Nordic

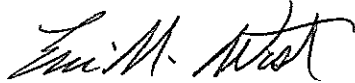
Re: Clarendon Hills Filing 3
Fort Collins, Colorado
ELI Project No. 7927

Gentlemen:

Enclosed are the results of extractions and gradations done on asphalt concrete picked up from the above-referenced site on August 17, 1989.

Very truly yours,

EMPIRE LABORATORIES, INC.



Eric R. West, P.E.
Materials and Field Services Manager

t/s

cc: Land Development Services - Mr. Dennis Donovan
City of Fort Collins Engineering Inspection - Mr. Lance Newlin
Western Mobile Northern, Inc.



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ASPHALT CONCRETE LABORATORY TEST SUMMARY

Project: Clarendon Hills Filing 3

Sample No.: 1

Date Sampled: August 17, 1989

Time: 9:30 a.m.

Location: Rochelle - South Lane, 1st Ribbon, 1st Lift

Temperature: 256^oF

Quantitative Extraction, ASTM D 2172

Asphalt Cement Content - 5.35%

Gradation Analysis of Extracted Aggregate, ASTM C 117 & C 136

<u>Sieve Size</u>	<u>3/4"</u>	<u>1/2"</u>	<u>3/8"</u>	<u>#4</u>	<u>#8</u>	<u>#16</u>	<u>#30</u>	<u>#50</u>	<u>#100</u>	<u>#200</u>
<u>% Passing</u>	100.0	87.5	79.1	57.6	42.4	31.9	22.4	13.4	8.3	5.0
<u>Spec. Grading E</u>	100			44/72	30/58					3/12

ASPHALT CONCRETE LABORATORY TEST SUMMARY

Project: Clarendon Hills Filing 3

Sample No.: 2

Date Sampled: August 17, 1989

Time: 12:10 p.m.

Location: Hinsdale Drive, Center Ribbon at Lott 44, 1st Lift

Temperature: 260^oF

Quantitative Extraction, ASTM D 2172

Asphalt Cement Content - 5.62%

Gradation Analysis of Extracted Aggregate, ASTM C 117 & C 136

<u>Sieve Size</u>	<u>3/4"</u>	<u>1/2"</u>	<u>3/8"</u>	<u>#4</u>	<u>#8</u>	<u>#16</u>	<u>#30</u>	<u>#50</u>	<u>#100</u>	<u>#200</u>
<u>% Passing</u>	100.0	90.5	82.8	64.5	48.8	36.2	24.4	14.3	8.7	5.6
<u>Spec. Grading E. 100</u>				44/72	30/58					3/12

ASPHALT CONCRETE LABORATORY TEST SUMMARY

Project: Clarendon Hills Filing 3

Sample No.: 3

Date Sampled: August 17, 1989

Time: 3:00 p.m.

Location: Rochelle - 100' West of East End, Center Ribbon, 2nd Lift

Temperature: 250°F

Quantitative Extraction, ASTM D 2172

Asphalt Cement Content: 5.68%

Gradation Analysis of Extracted Aggregate, ASTM C 117 & C 136

<u>Sieve Size</u>	<u>3/4"</u>	<u>1/2"</u>	<u>3/8"</u>	<u>#4</u>	<u>#8</u>	<u>#16</u>	<u>#30</u>	<u>#50</u>	<u>#100</u>	<u>#200</u>
% <u>Passing</u>	100.0	94.9	86.8	68.4	53.9	40.5	27.0	15.6	9.5	6.2
<u>Spec. Grading E</u>	100			44/72	30/58					3/12

Empire Laboratories, Inc.

GEOTECHNICAL ENGINEERING & MATERIALS TESTING

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P.O. Box 503 • (303) 484-0359
301 No. Howes • Fort Collins, Colorado 80522

July 19, 1989

Clarendon Hills Associates
c/o Nordic Construction
309 West Harmony Road
Fort Collins, Colorado 80525

Attention: Mr. Gary Nordic

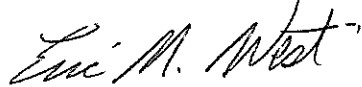
Re: Clarendon Hills Filing 3
Fort Collins, Colorado
ELI Project No. 7927

Gentlemen:

Enclosed are the results of extractions and gradations done on asphalt concrete picked up from the above-referenced site on June 29 and July 5, 1989.

Very truly yours,

EMPIRE LABORATORIES, INC.



Eric R. West, P.E.
Materials and Field Services Manager

t/s



cc: Land Development Services - Mr. Dennis Donovan
Schmidt Earth Builders, Inc. - Mr. Dick Schmidt
City of Fort Collins Engineering Inspection - Mr. Lance Newlin
Sterling Companies



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Cheyenne, WY 82003
(307) 632-9224

Member of Consulting Engineers Council

ASPHALT CONCRETE LABORATORY TEST SUMMARY

Project : Clarendon Hills Filing 3

Sample No.: 1

Date Sampled: 6-29-89

Time: 3:10 pm

Location: Longdale Street, Lot 24 Center Ribbon, 1st Lift

Truck No.: 7510 R

Temperature: 275⁰F

Quantitative Extraction, ASTM D 2172

Asphalt Cement Content - 5.27

Gradation Analysis of Extracted Aggregate, ASTM C 117 & C 136

<u>Sieve Size</u>	<u>3/4"</u>	<u>1/2"</u>	<u>3/8"</u>	<u>#4</u>	<u>#8</u>	<u>#16</u>	<u>#30</u>	<u>#50</u>	<u>#100</u>	<u>#200</u>
% Pass.	100.0	91.4	82.8	65.2	50.2	36.7	24.7	14.1	8.0	5.0
Spec. Grade E.	.100			44/72	30/58					3/12

ASPHALT CONCRETE LABORATORY TEST SUMMARY

Project: Clarendon Hills Filing 3

Sample No.: 2

Date Sampled: 7-5-89

Time: 2:30 pm

Location: Longdale Court, Lot 3, Top Lift

Truck No.: 70G

Temperature: 310⁰F

Quantitative Extraction, ASTM D 2172

Asphalt Cement Content - 6.15

Gradation Analysis of Extracted Aggregate, ASTM C 117 & C 136

Sieve Size	<u>1/2"</u>	<u>3/8"</u>	<u>#4</u>	<u>#8</u>	<u>#16</u>	<u>#30</u>	<u>#50</u>	<u>#100</u>	<u>#200</u>
% Pass.	100.0	82.6	66.9	52.3	38.8	25.9	14.4	7.6	4.4
Spec. Grading									
EX	100		50/78	34/60					3/12