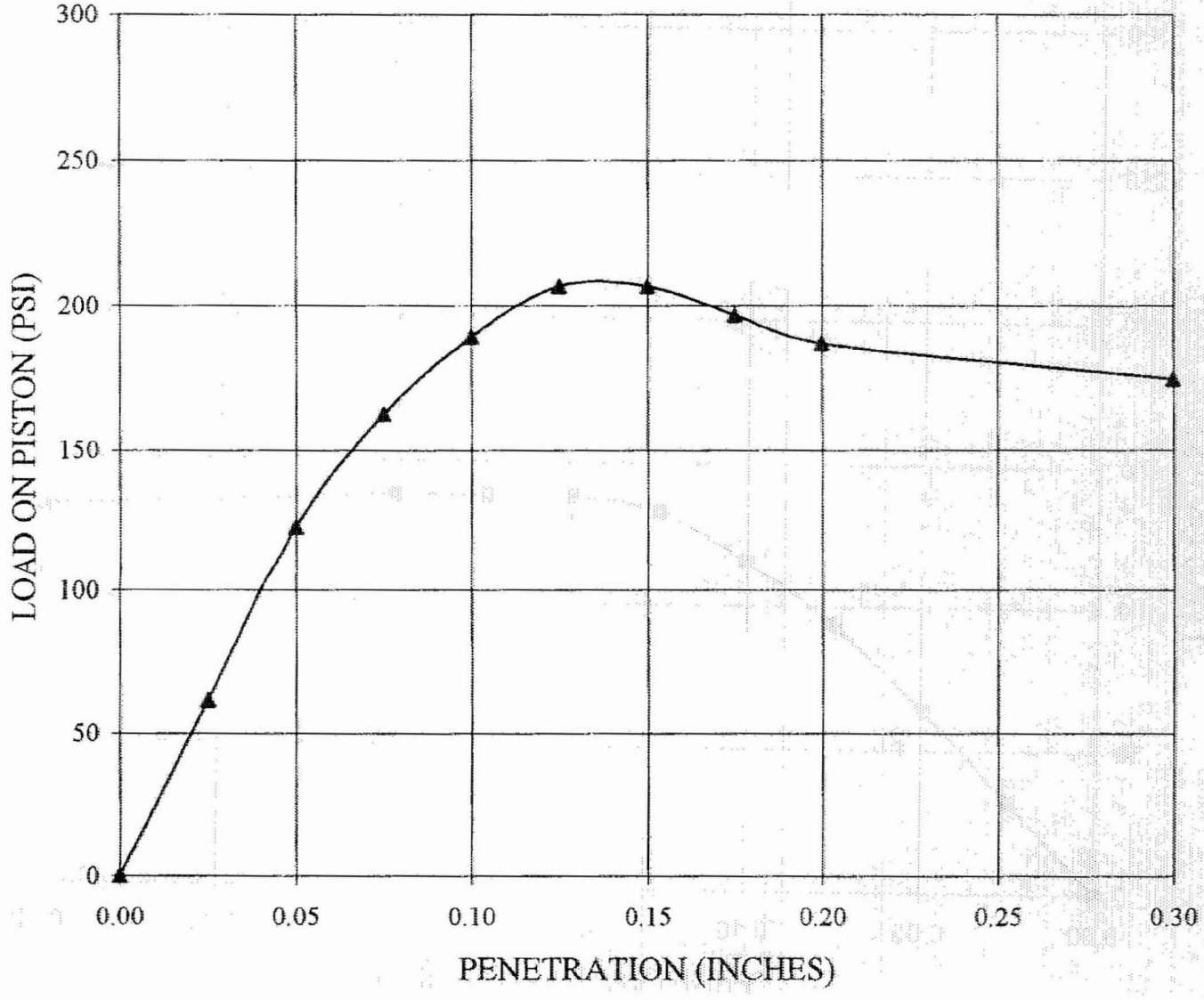
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
TP-B-315	6.0-7.0	Poorly Graded SAND, with silt, tan

CBR (Soaked):	**18.9**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	109.2	Before Soaking:	11.6
After Soaking:	109.1	After Soaking:	12.3
Max. Dry Density:	114.9	Optimum Moisture:	11.4

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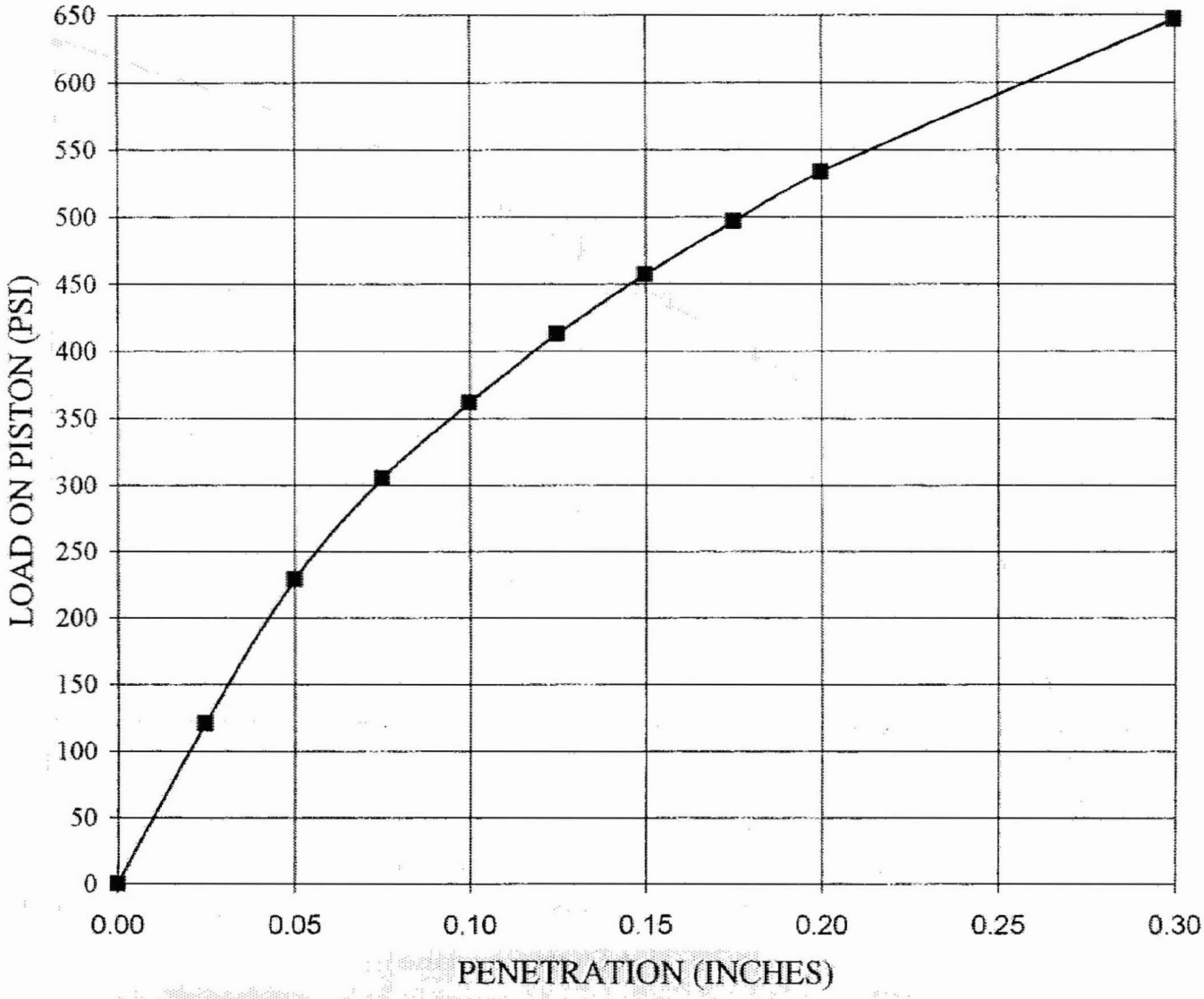
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/27/2006

Boring No.	Depth (ft)	Sample Description
TP-B-335	5.0-6.0	Silty SAND, brown

CBR (Unsoaked):	**36.2**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	124.0	Before Soaking:	7.6
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	130.5	Optimum Moisture:	7.6

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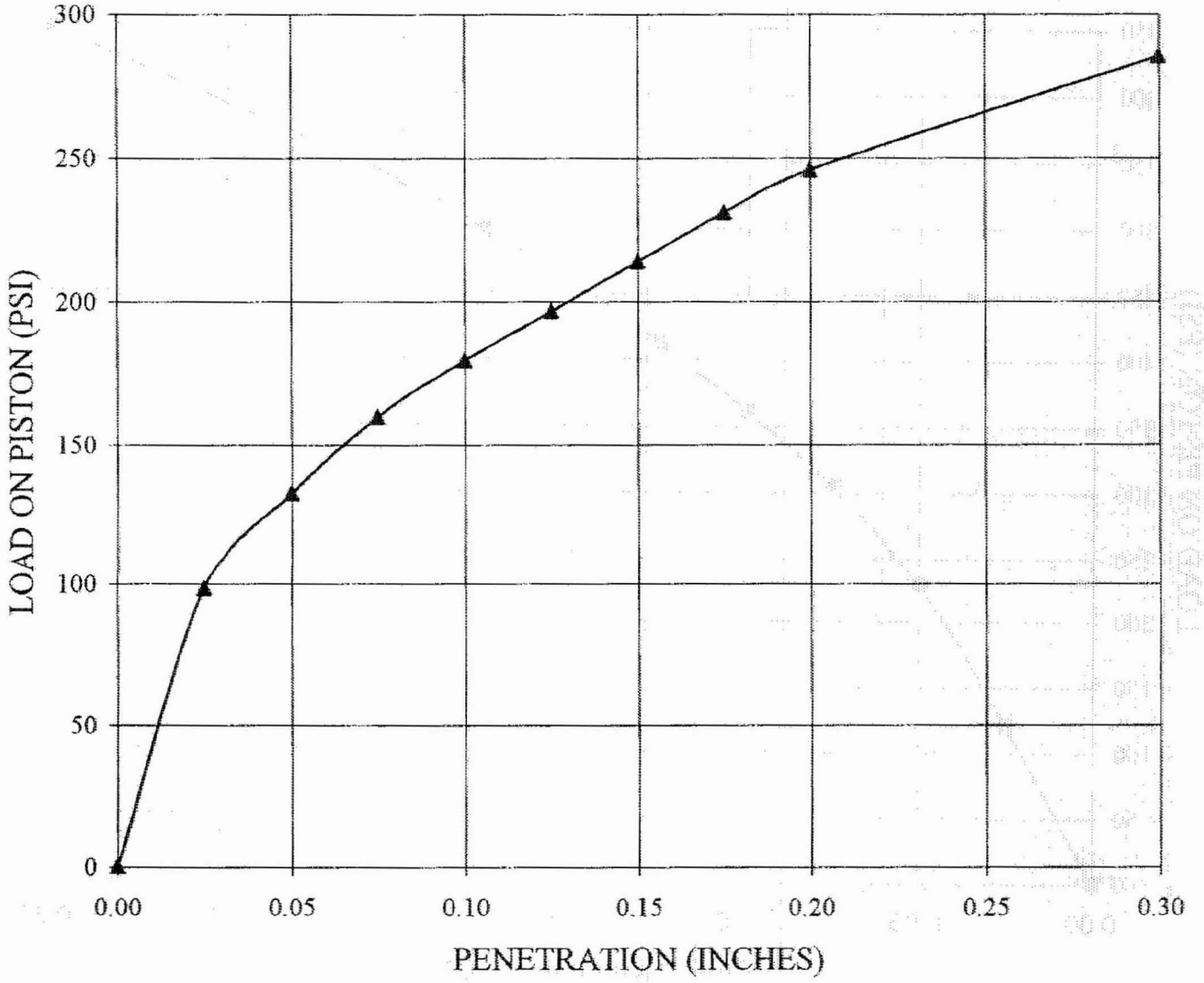
Schnabel Engineering

SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/27/2006

Boring No.	Depth (ft)	Sample Description
TP-B-335	5.0-6.0	Silty SAND, brown

CBR (Soaked):	**18.0**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	0.0%

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	124.0	Before Soaking:	7.6
After Soaking:	123.8	After Soaking:	9.0
Max. Dry Density:	130.5	Optimum Moisture:	7.6

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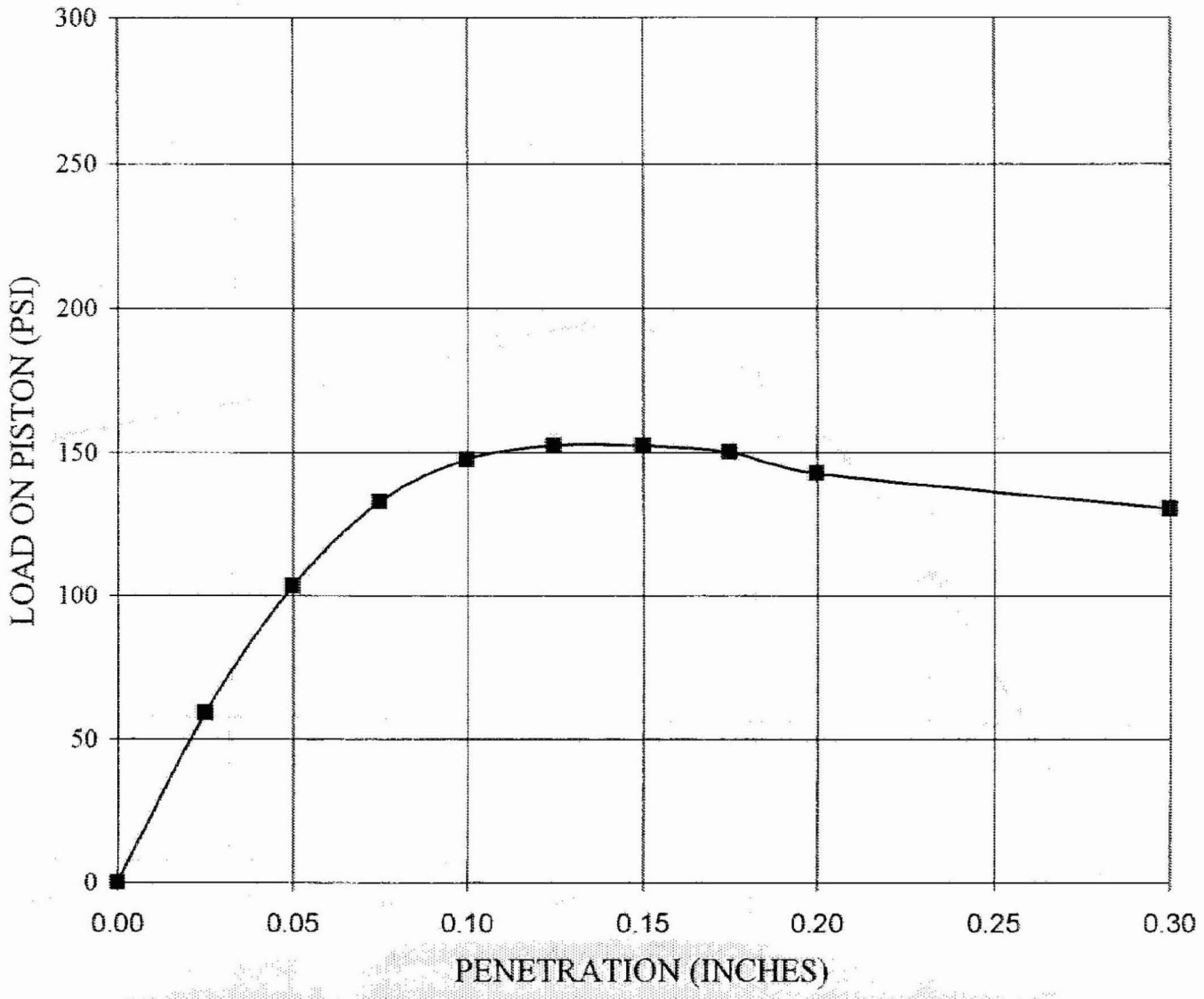
Schnabel Engineering

UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/25/2006

Boring No.	Depth (ft)	Sample Description
TP-B-407	4.5-5.5	Well Graded SAND, with silt, trace gravel, dark

CBR (Unsoaked):	**14.8**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	113.1	Before Soaking:	8.7
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	119.1	Optimum Moisture:	8.6

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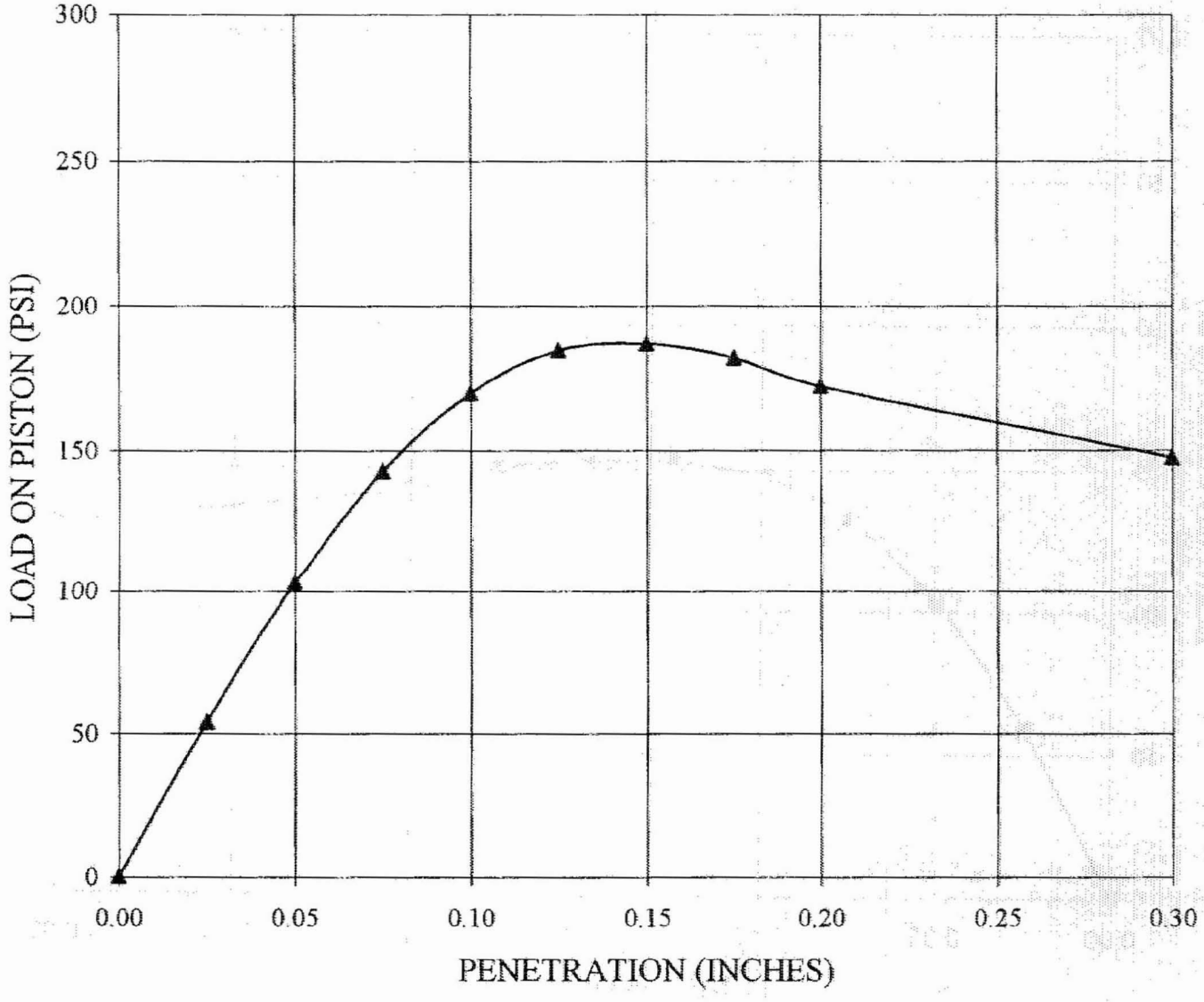
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/25/2006

Boring No.	Depth (ft)	Sample Description
TP-B-407	4.5-5.5	Well Graded SAND, with silt, trace gravel, dark

CBR (Soaked):	**17.0**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	113.1	Before Soaking:	8.7
After Soaking:	113.0	After Soaking:	11.9
Max. Dry Density:	119.1	Optimum Moisture:	8.6

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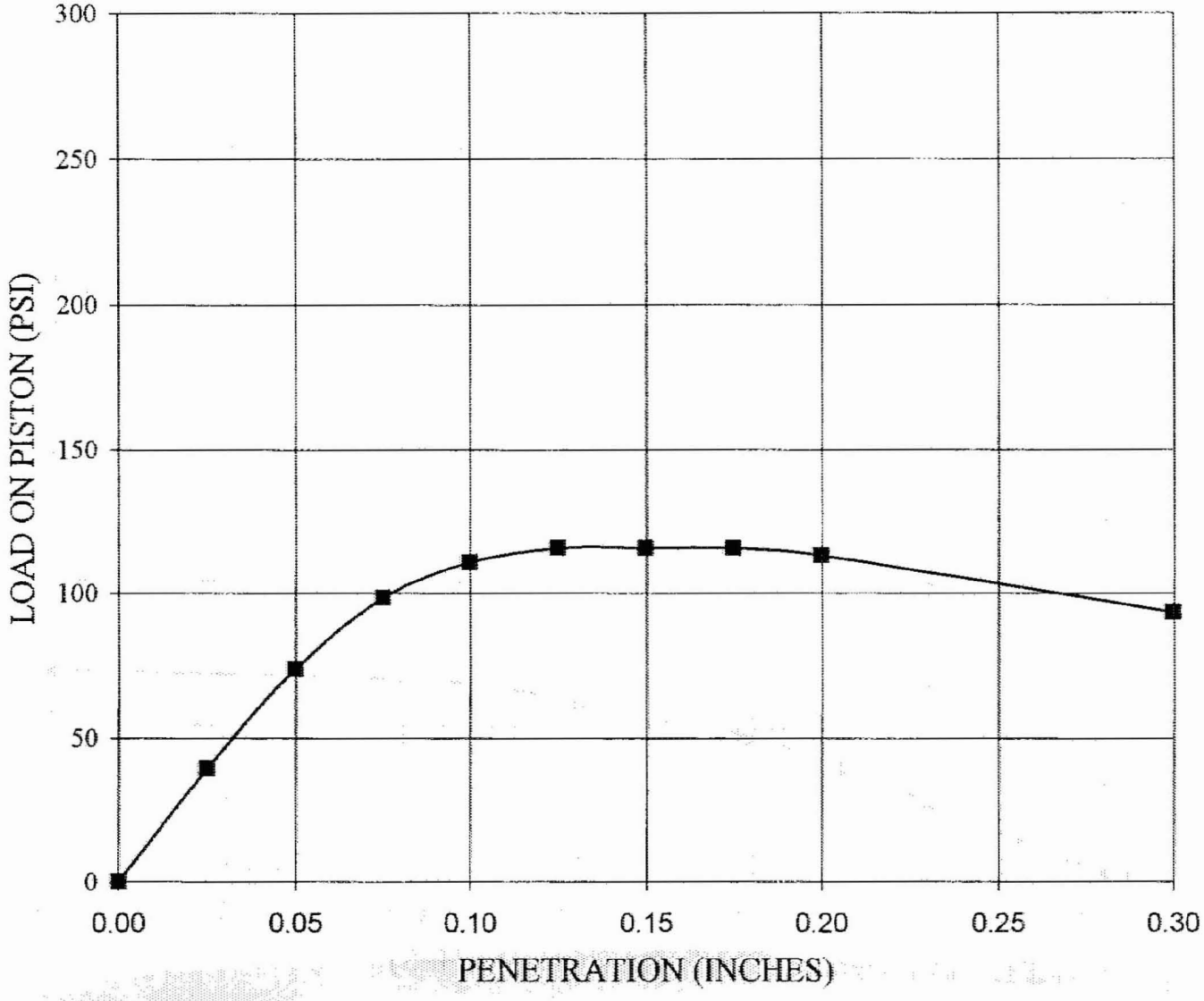
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/25/2006

Boring No.	Depth (ft)	Sample Description
TP-B-415	3.0-4.0	Poorly Graded SAND, trace silt, light brown

CBR (Unsoaked):	**11.1**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	111.1	Before Soaking:	9.7
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	116.7	Optimum Moisture:	9.8

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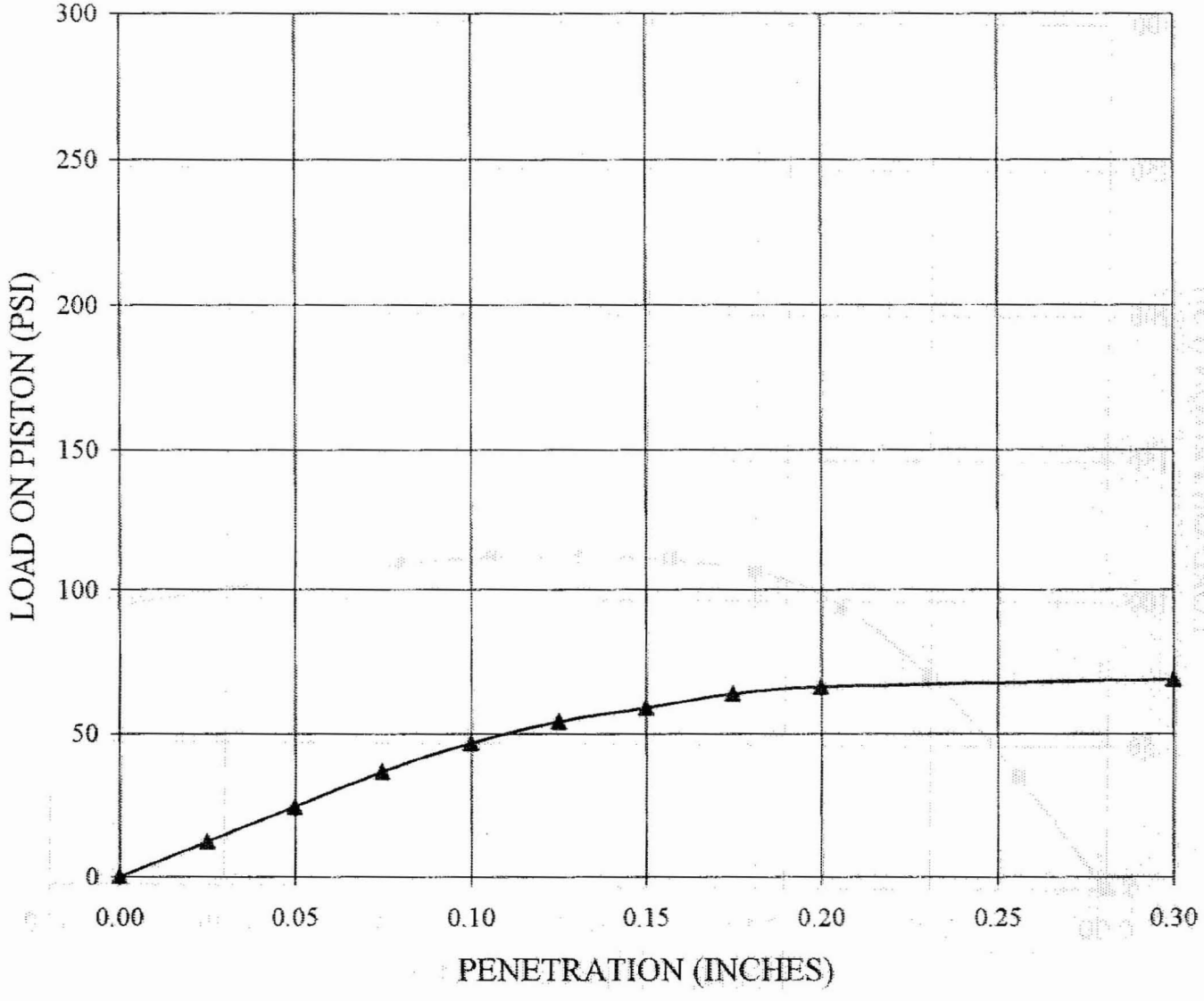
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/25/2006

Boring No.	Depth (ft)	Sample Description
TP-B-415	3.0-4.0	Poorly Graded SAND, trace silt, light brown

CBR (Soaked):	**4.7**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	111.1	Before Soaking:	9.7
After Soaking:	111.0	After Soaking:	13.0
Max. Dry Density:	116.7	Optimum Moisture:	9.8

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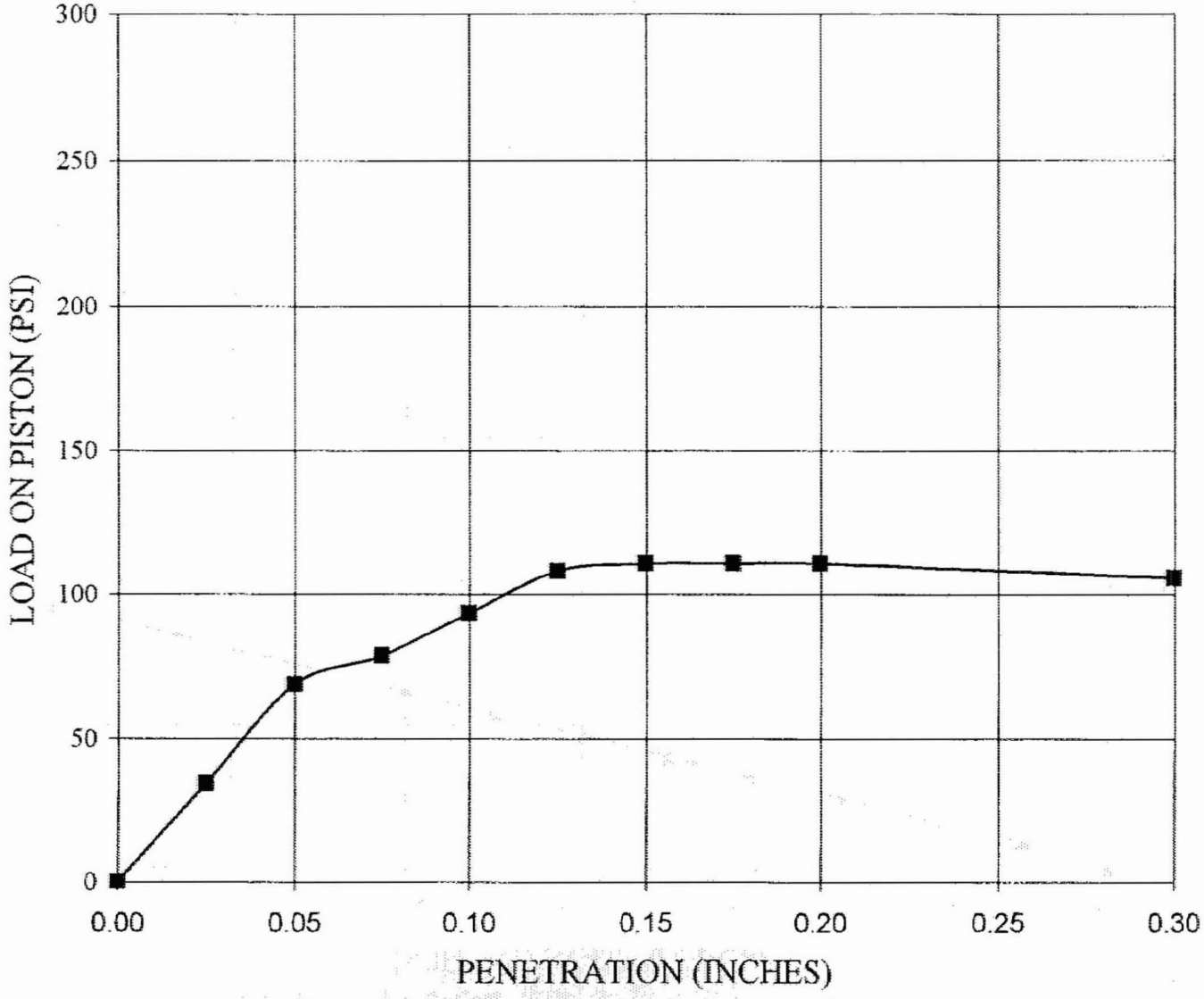
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/27/2006

Boring No.	Depth (ft)	Sample Description
TP-B-434	2.0-3.0	Sandy LEAN CLAY, dark brown

CBR (Unsoaked):	9.3	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	120.6	Before Soaking:	10.1
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	127.1	Optimum Moisture:	10.1

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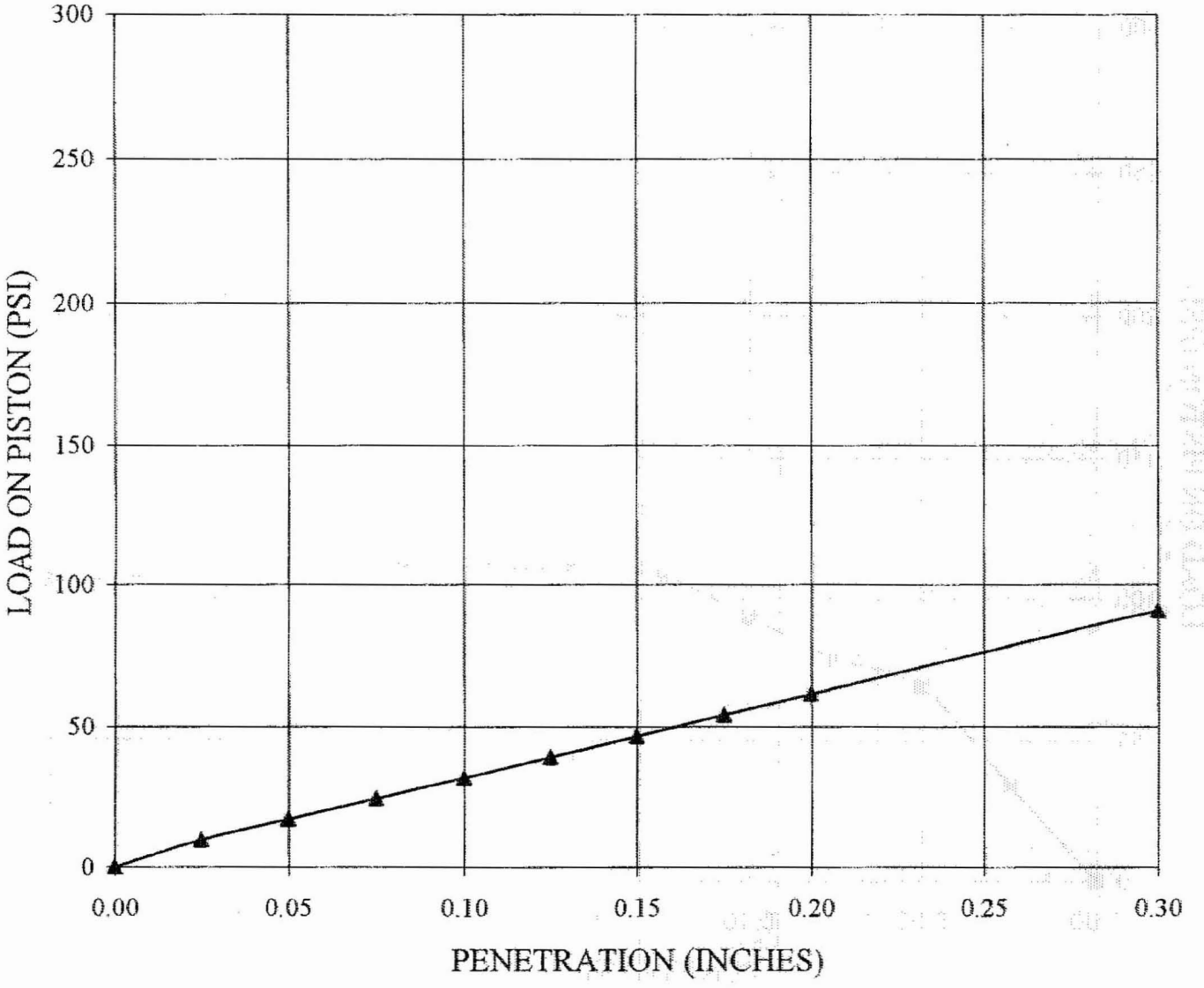
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/27/2006

Boring No.	Depth (ft)	Sample Description
TP-B-434	2.0-3.0	Sandy LEAN CLAY, dark brown

CBR (Soaked):	**3.2**	Soaking Time:	4 Days
Surcharge:	10 PSF	Swell:	0.0%
DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	120.6	Before Soaking:	10.1
After Soaking:	120.5	After Soaking:	13.3
Max. Dry Density:	127.1	Optimum Moisture:	10.1

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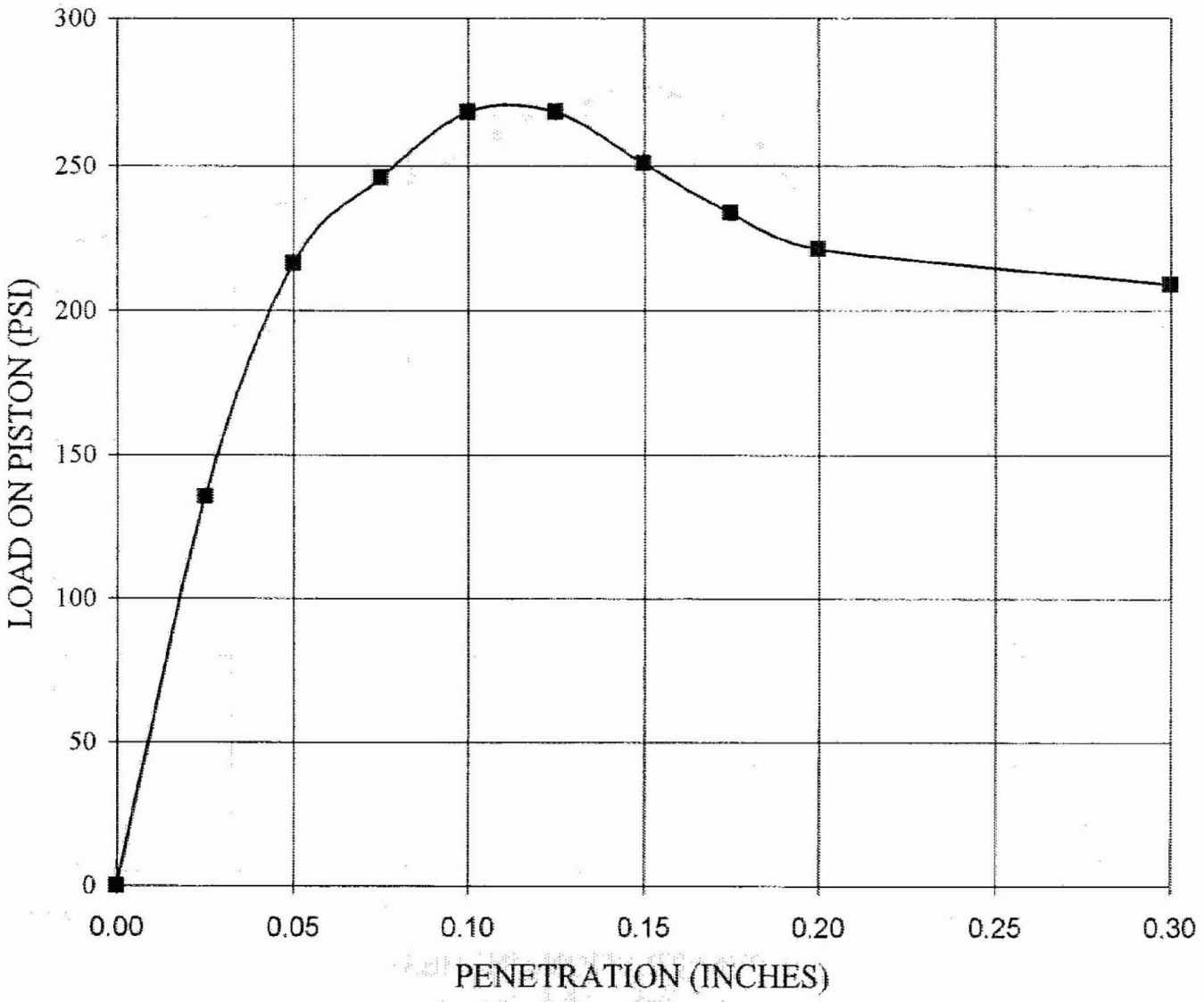
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/25/2006

Boring No.	Depth (ft)	Sample Description
B-435	7.0-8.0	Poorly Graded SAND, with silt, trace gravel, light brown

CBR (Unsoaked):	**26.8**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	118.2	Before Soaking:	8.9
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	123.9	Optimum Moisture:	8.9

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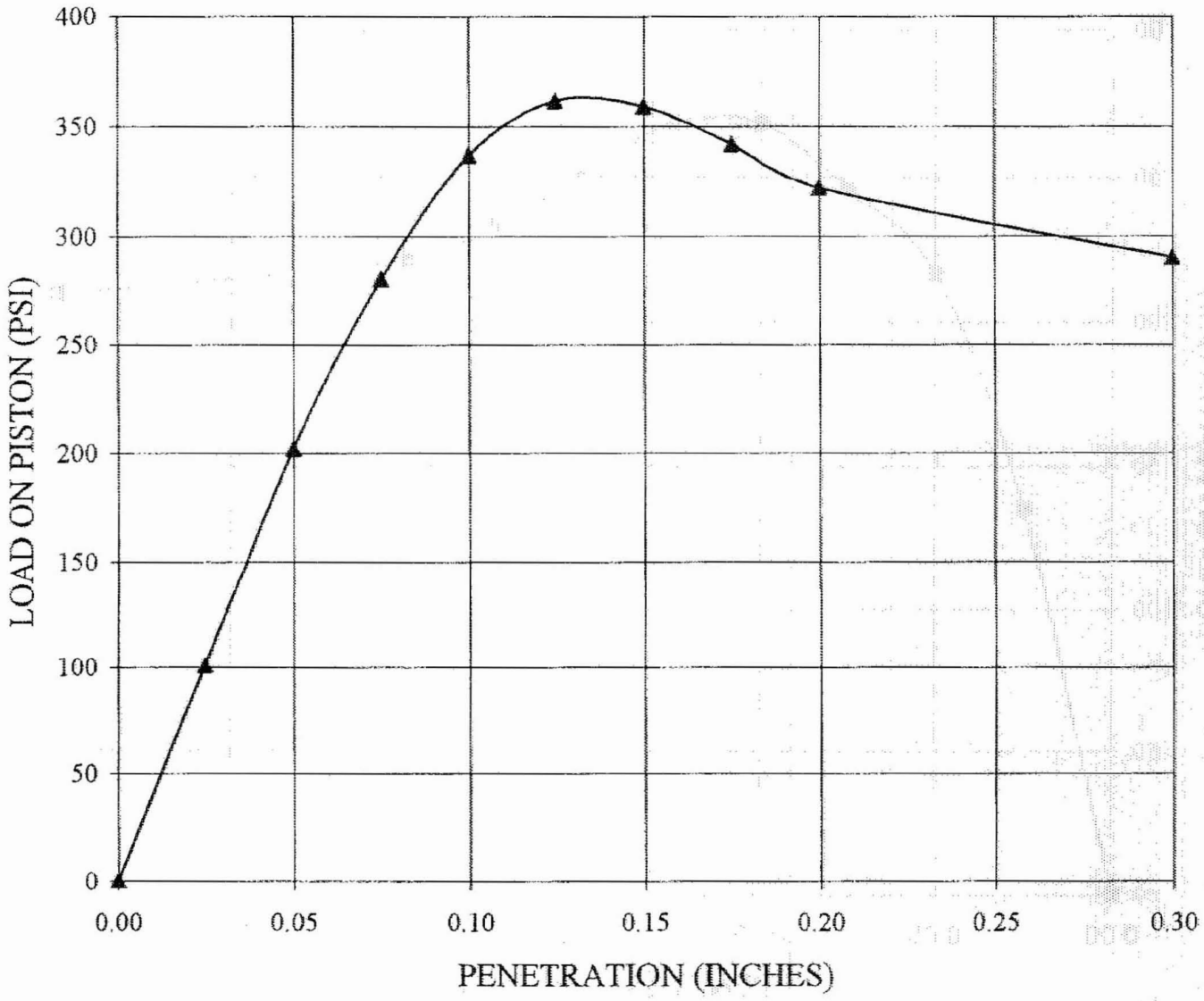
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/25/2006

Boring No.	Depth (ft)	Sample Description
B-435	7.0-8.0	Poorly Graded SAND, with silt, trace gravel, light brown

CBR (Soaked):	**33.7**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	0.0%
DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	118.2	Before Soaking:	8.9
After Soaking:	118.1	After Soaking:	12.0
Max. Dry Density:	123.9	Optimum Moisture:	8.9

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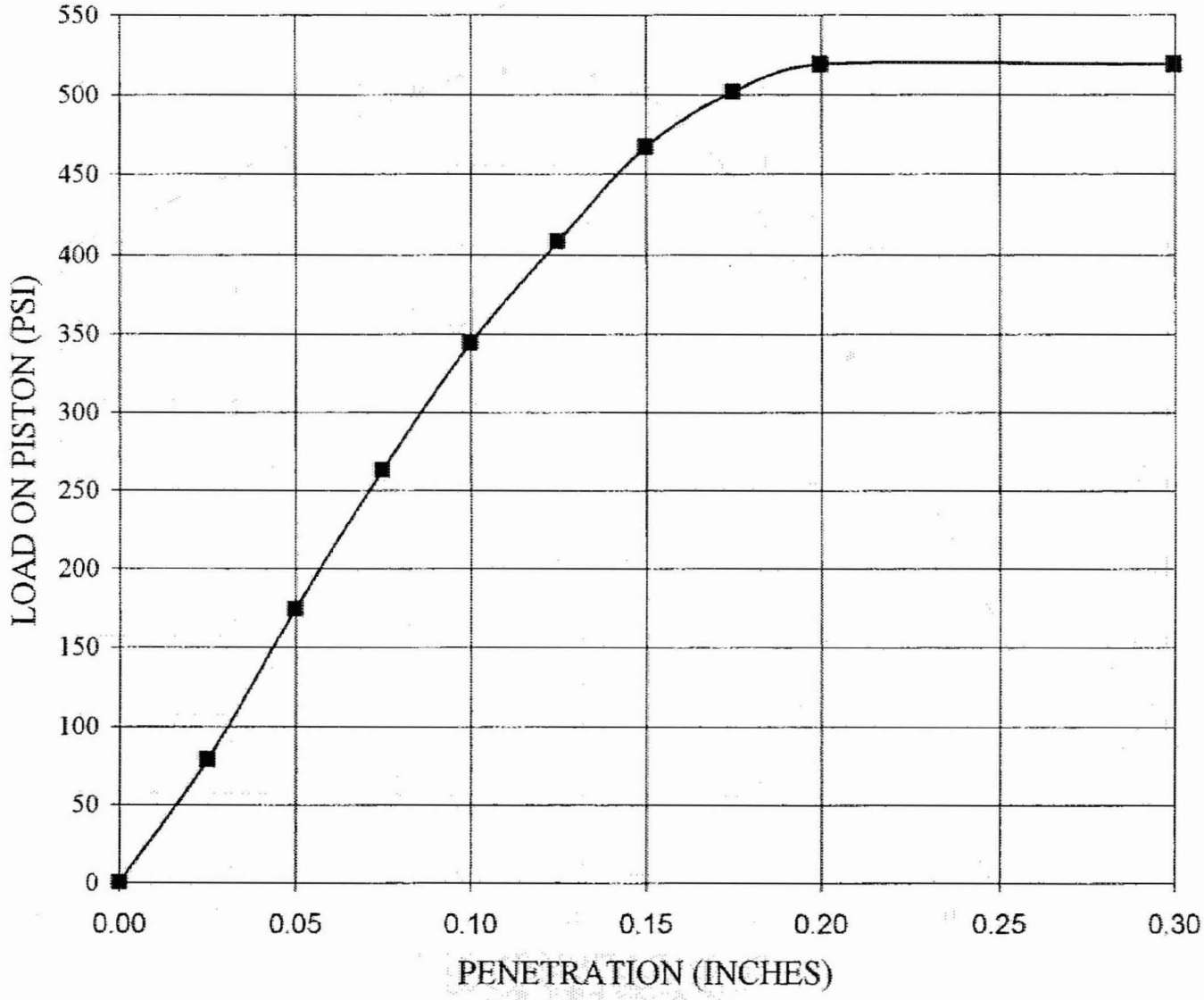
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
B-435	9.0-10.0	Clayey SAND, brown

CBR (Soaked):	**34.4**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	124.4	Before Soaking:	6.9
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	130.2	Optimum Moisture:	7.3

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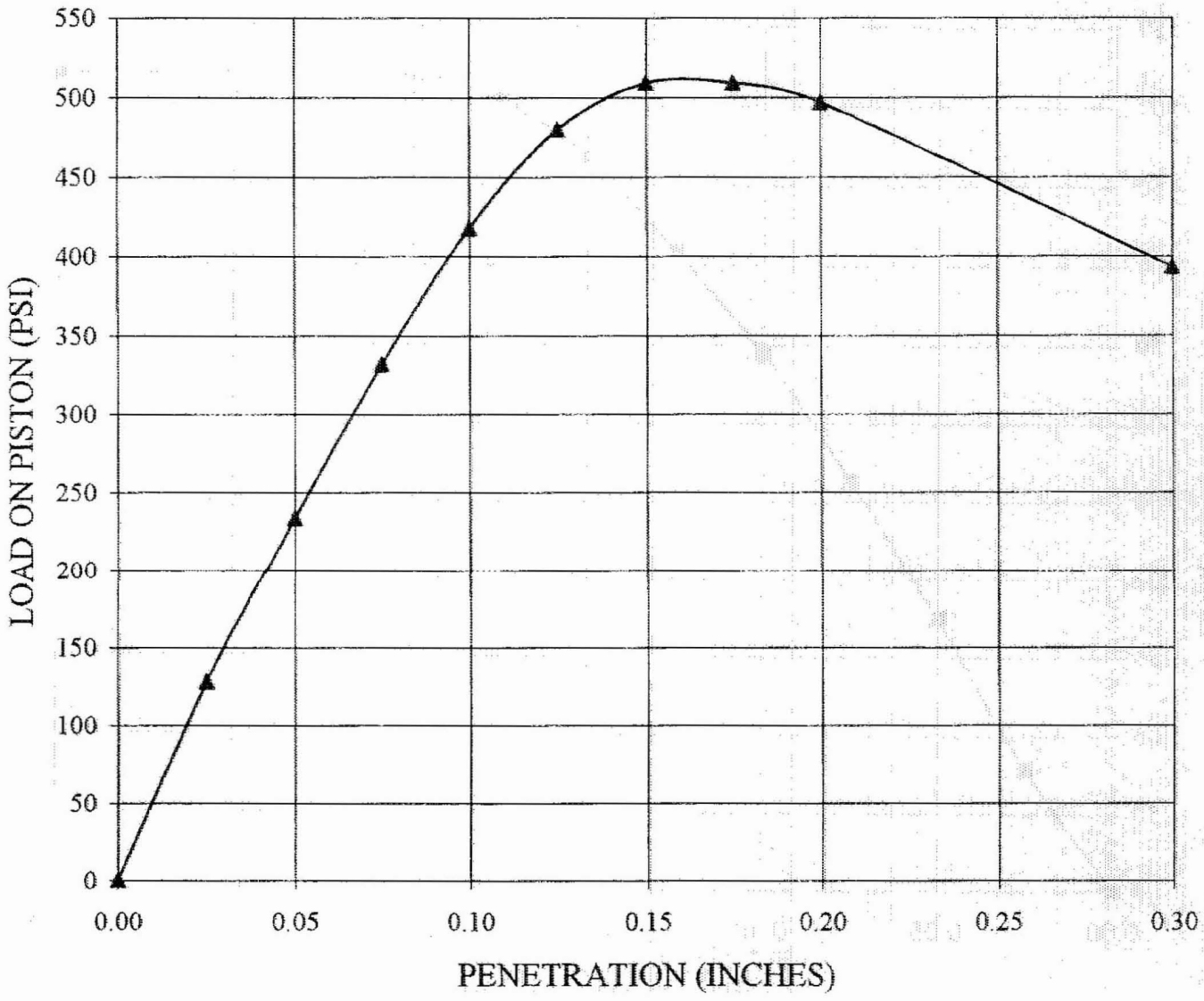
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
B-435	9.0-10.0	Clayey SAND, brown

CBR (Unsoaked):	**41.8**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	0.0%

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	124.4	Before Soaking:	6.9
After Soaking:	124.2	After Soaking:	7.9
Max. Dry Density:	130.2	Optimum Moisture:	7.3

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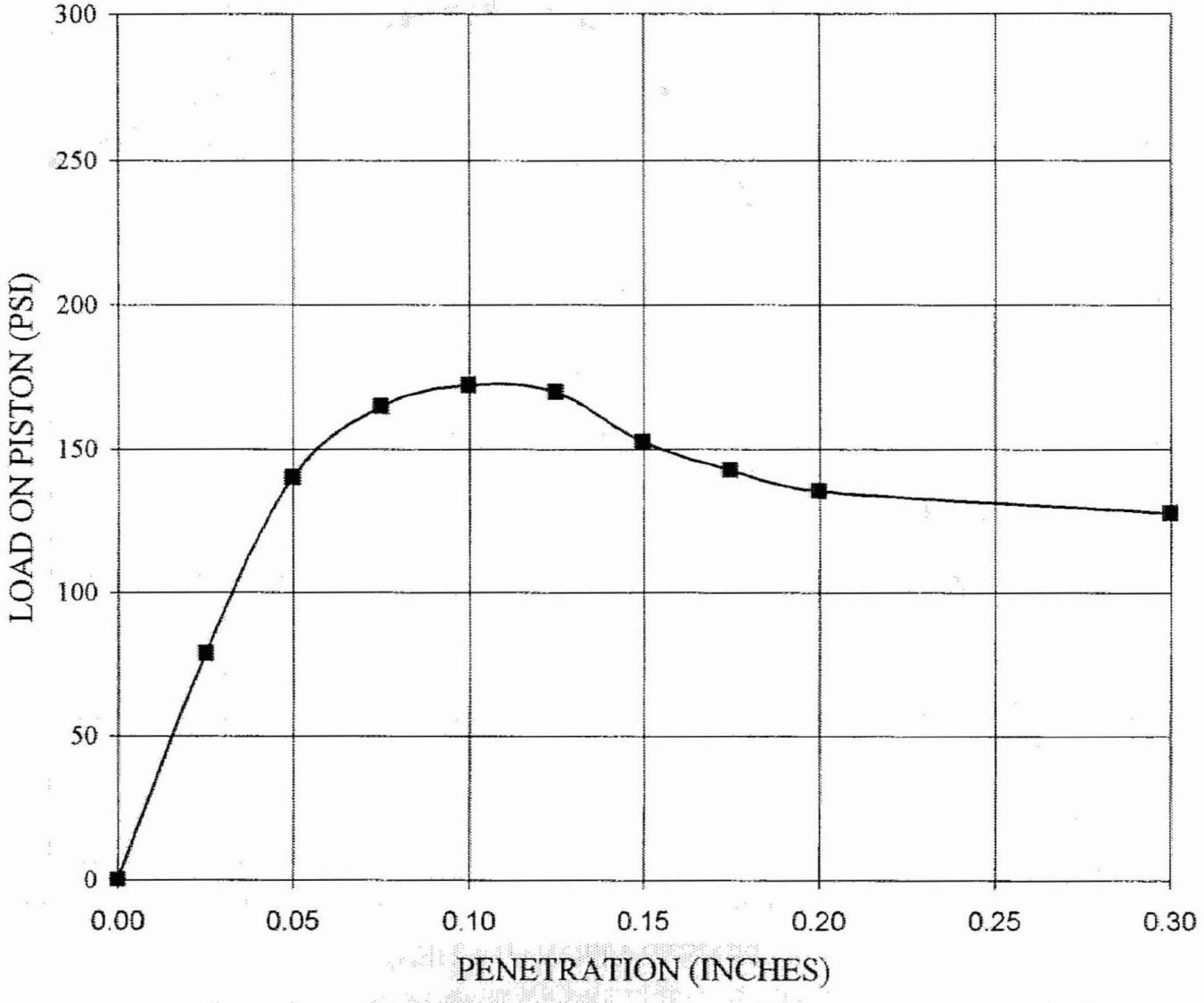
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
TP-B-717	7.0-8.0	Poorly Graded SAND, with silt, trace gravel, light brown

CBR (Unsoaked):	**17.2**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A
DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	117.8	Before Soaking:	10.0
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	123.8	Optimum Moisture:	10.2

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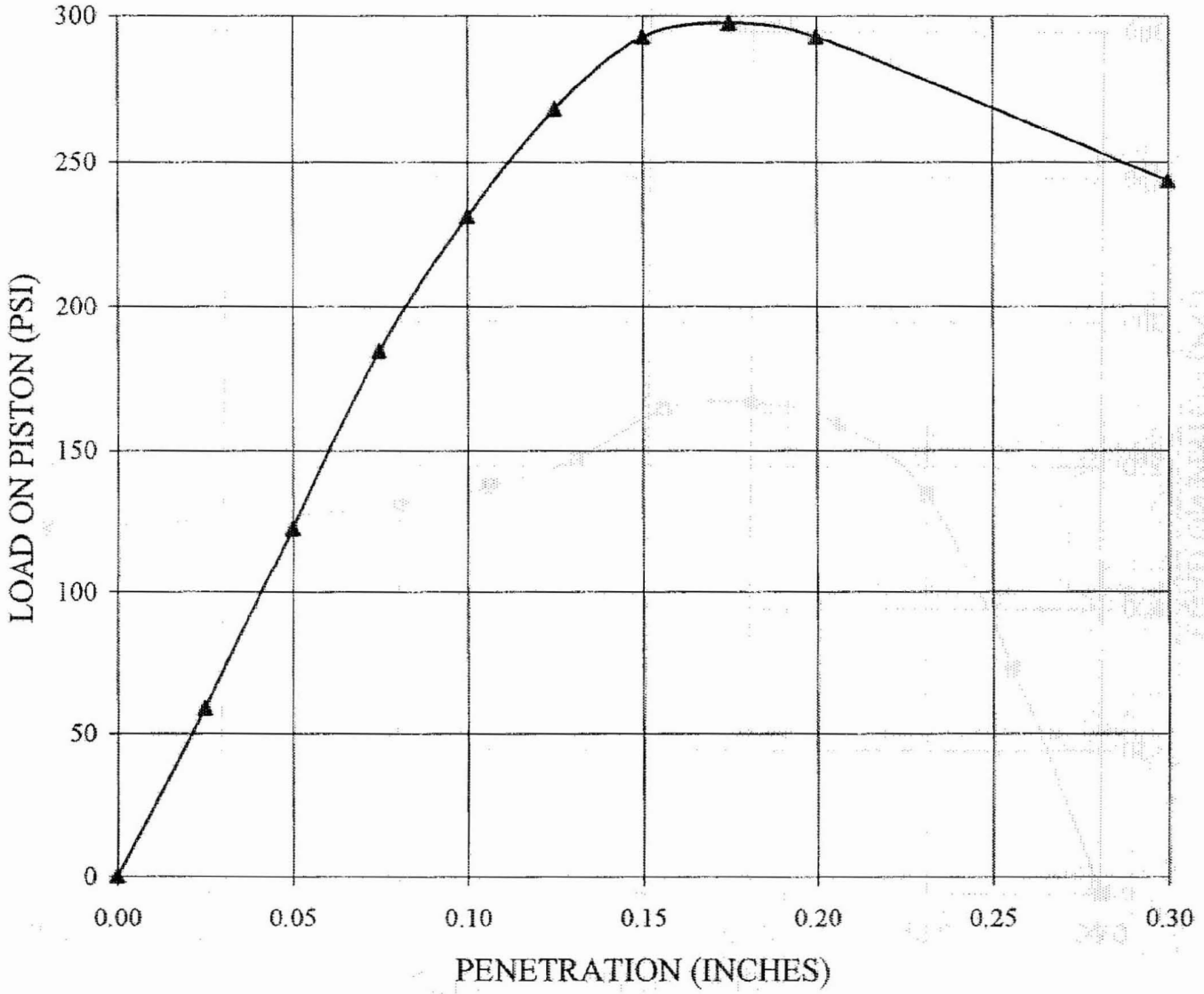
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
TP-B-717	7.0-8.0	Poorly Graded SAND, with silt, trace gravel, light brown

CBR (Soaked):	**23.1**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	0.0%

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	117.8	Before Soaking:	10.0
After Soaking:	117.7	After Soaking:	10.5
Max. Dry Density:	123.8	Optimum Moisture:	10.2

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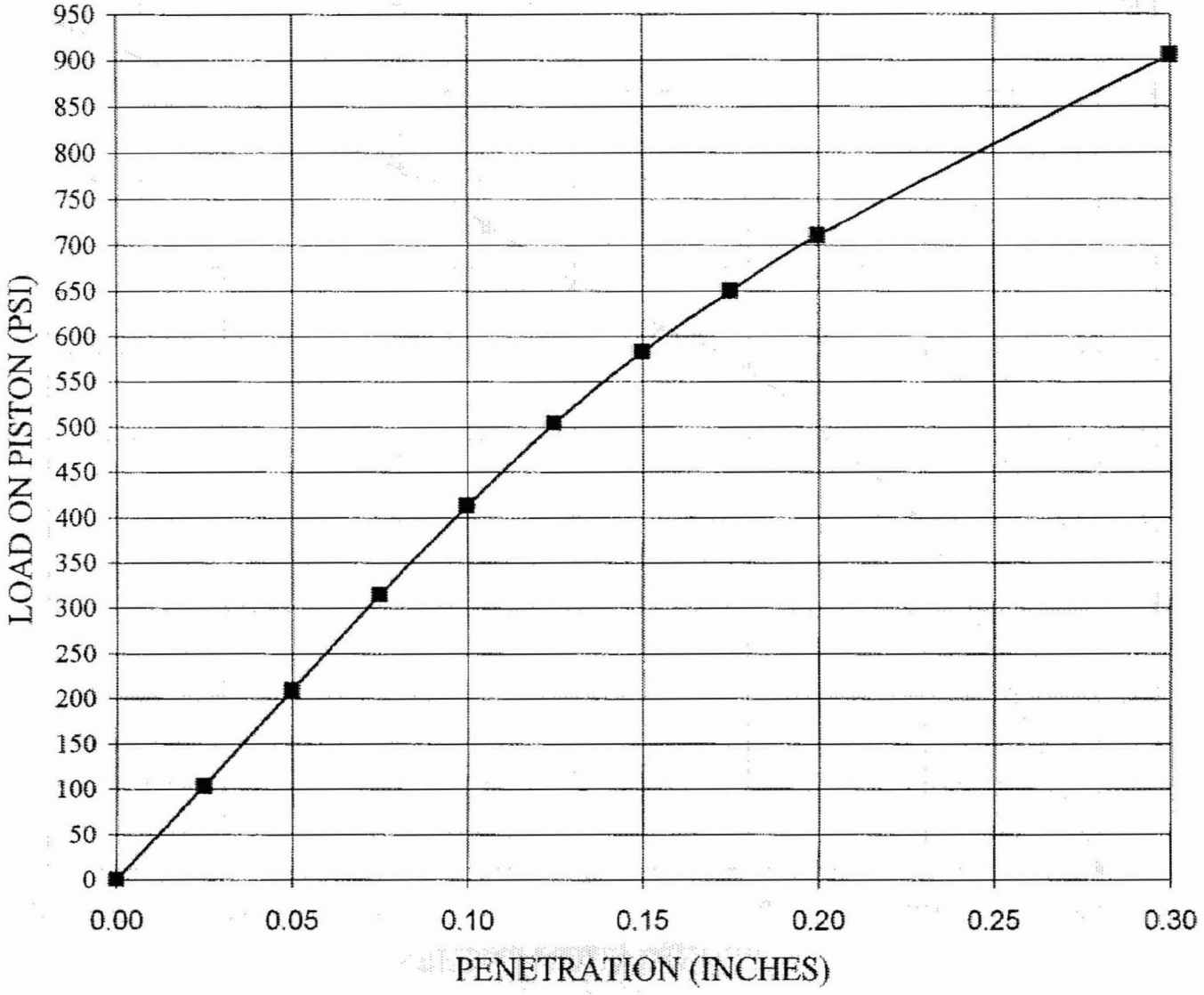
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
TP-B-719	7.0-8.0	Silty SAND, gray

CBR (Unsoaked):	**41.3**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	113.5	Before Soaking:	10.1
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	119.6	Optimum Moisture:	10.0

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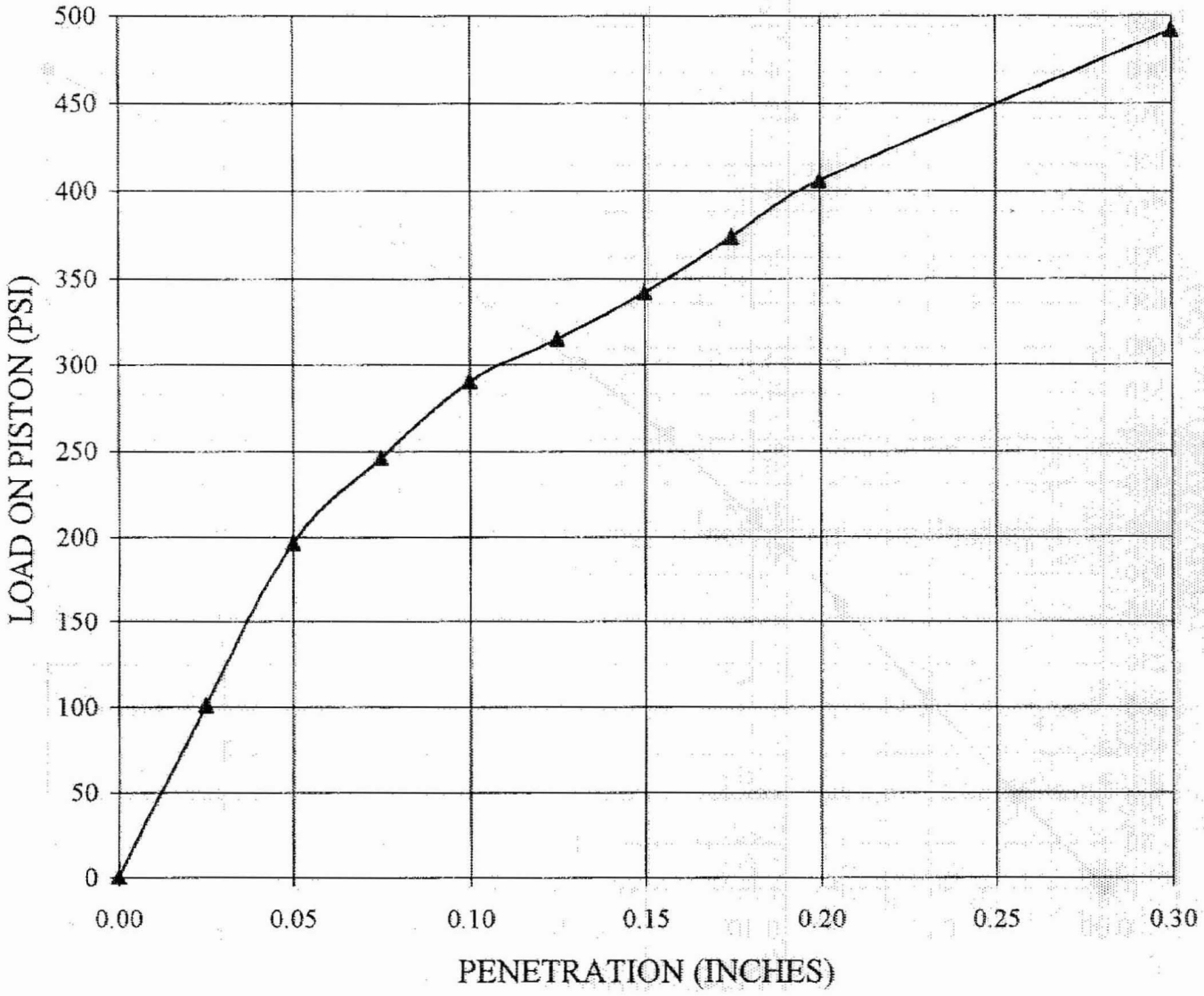
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/26/2006

Boring No.	Depth (ft)	Sample Description
TP-B-719	7.0-8.0	Silty SAND, gray

CBR (Soaked):	**29.0**	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	0.1%

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	113.5	Before Soaking:	10.1
After Soaking:	113.2	After Soaking:	10.8
Max. Dry Density:	119.6	Optimum Moisture:	10.0

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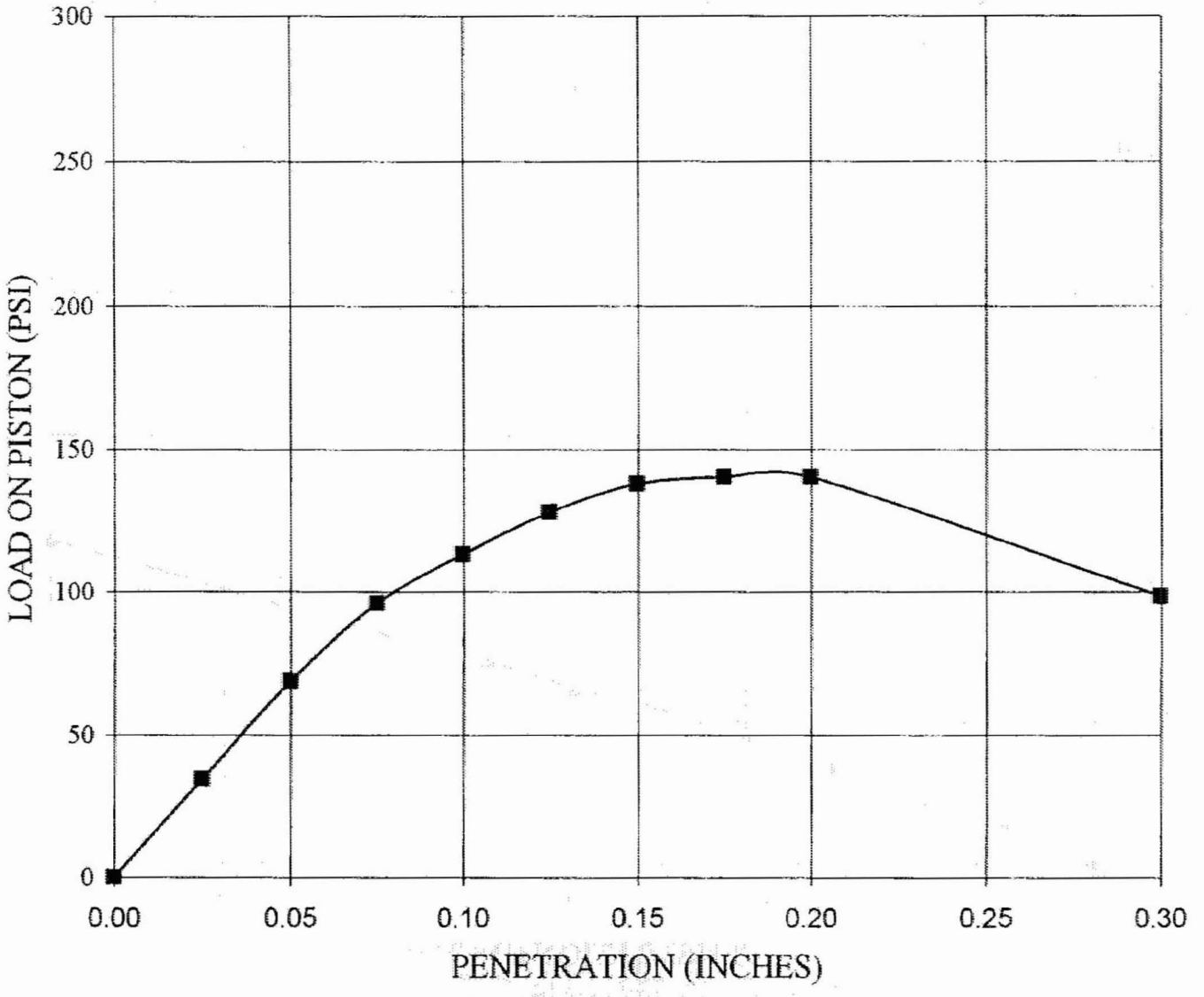
UNSOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland		Contract No.:	06120048.00	Date: 9/27/2006
Boring No.	Depth (ft)	Sample Description			
TP-B-758	7.5-8.5	Silty SAND, trace gravel, light brown			

CBR (Unsoaked):	**11.3**	Soaking Time:	N/A
Surcharge:	50 PSF	Swell:	N/A
DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	121.2	Before Soaking:	8.9
After Soaking:	N/A	After Soaking:	N/A
Max. Dry Density:	127.3	Optimum Moisture:	8.9

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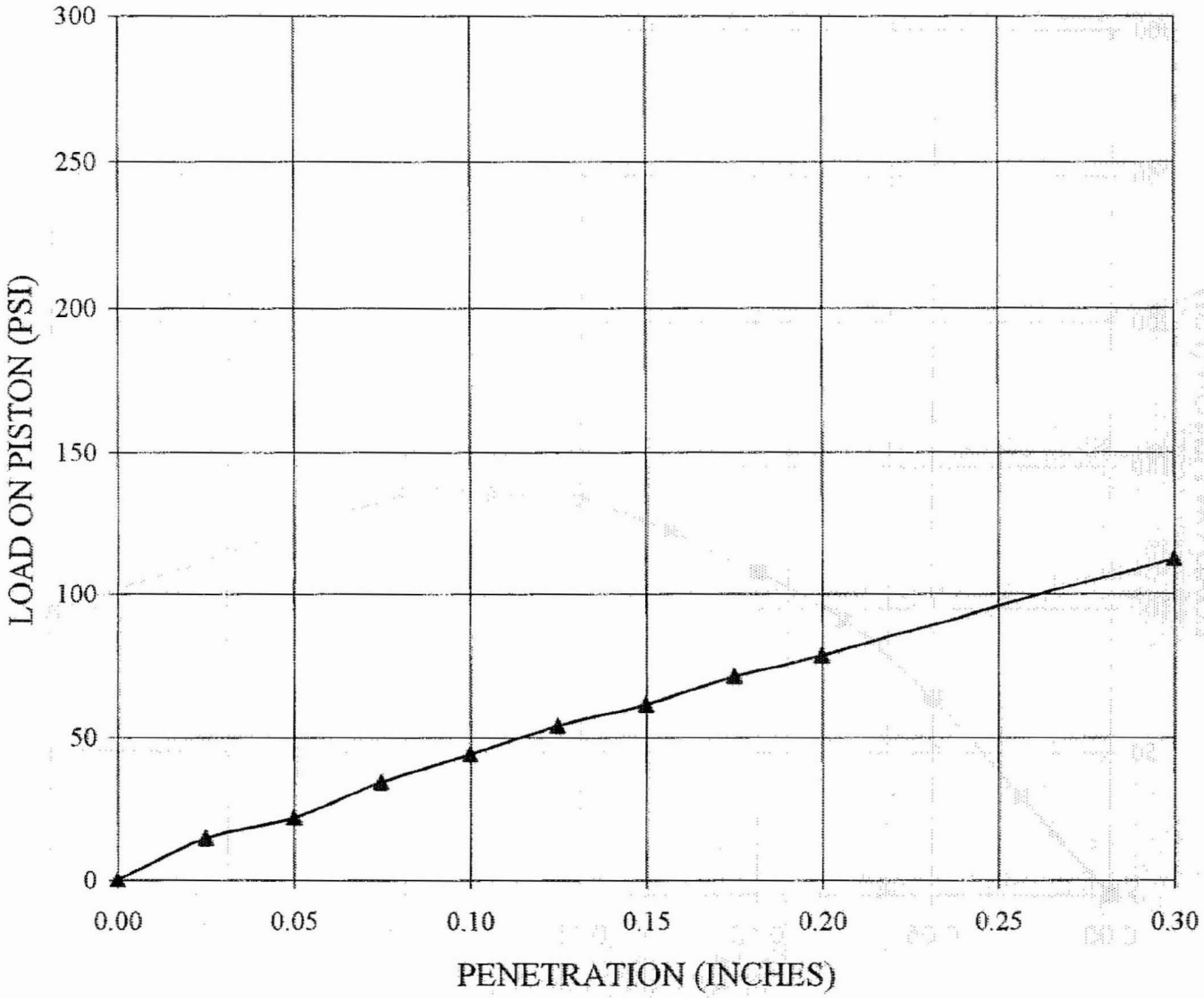
SOAKED CBR



CALIFORNIA BEARING RATIO

ASTM D-1883

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/27/2006

Boring No.	Depth (ft)	Sample Description
TP-B-758	7.5-8.5	Silty SAND, trace gravel, light brown

CBR (Soaked):	4.4	Soaking Time:	4 Days
Surcharge:	50 PSF	Swell:	0.2%

DRY DENSITY, PCF		MOISTURE CONTENT, %	
Before Soaking:	121.2	Before Soaking:	8.9
After Soaking:	120.9	After Soaking:	11.1
Max. Dry Density:	127.3	Optimum Moisture:	8.9

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