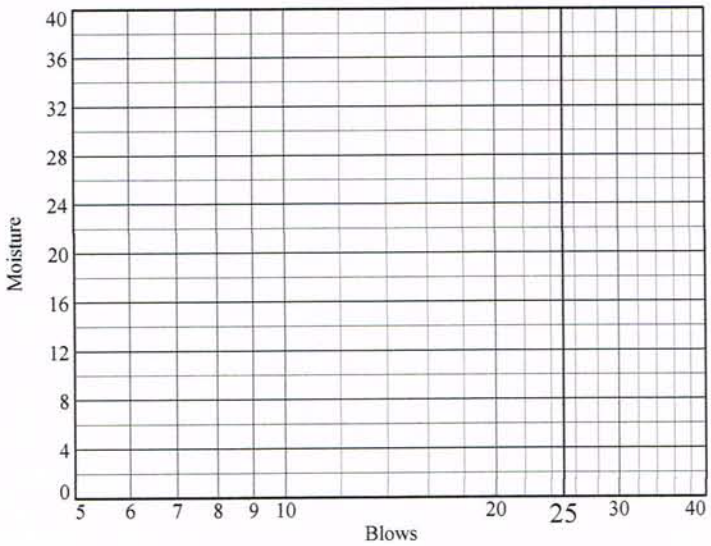
LIQUID AND PLASTIC LIMIT TEST DATA

1/10/2018

Client: [redacted]
Project: MELROSE RANGE
Location: 18-CL2
Sample Number: 18-CL2
Material Description: CALICHE BASE SNP
%<#40: 43.0 **%<#200:** 17.6
Tested by: LL **Checked by:** ROBERT C LYDICK PE & LS
Testing Remarks: TEST DATE 1-9-18
SAMPLE DATE 1-9-18

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	0	0	0			
Dry+Tare	0	0	0			
Tare	0	0	0			
# Blows	0	0	0			
Moisture						



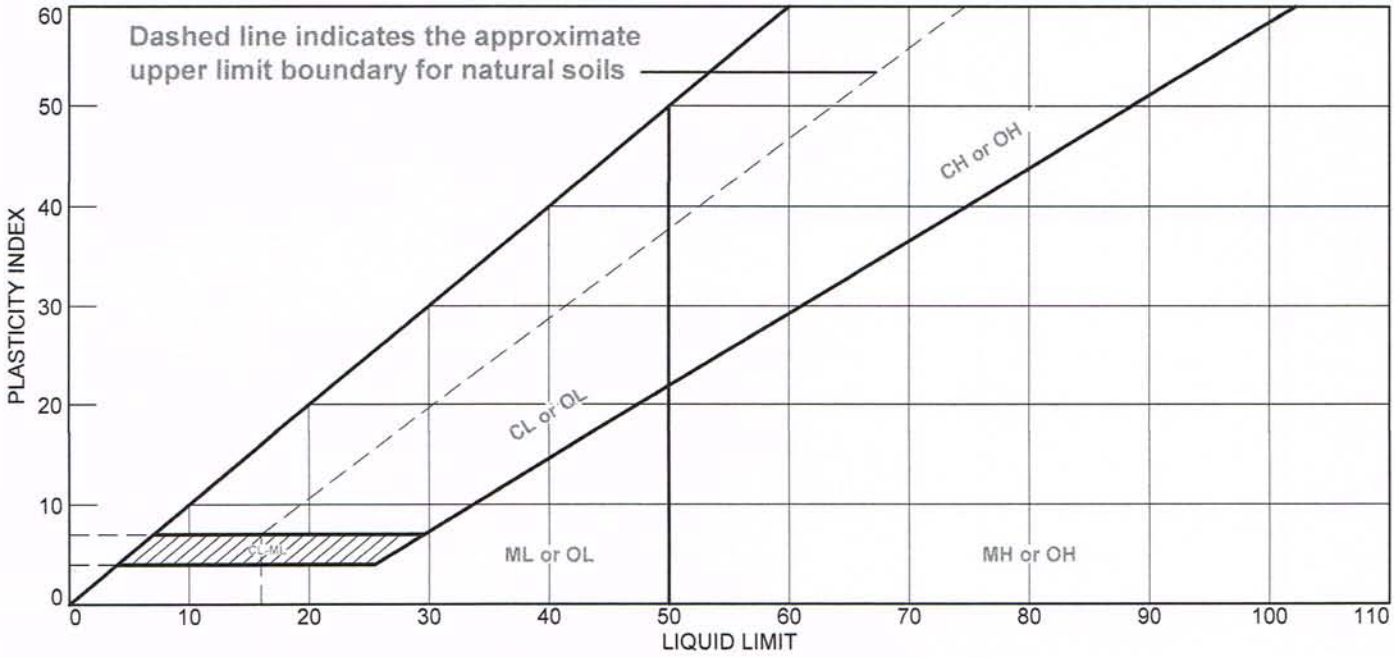
Liquid Limit= _____
Plastic Limit= _____
Plasticity Index= _____

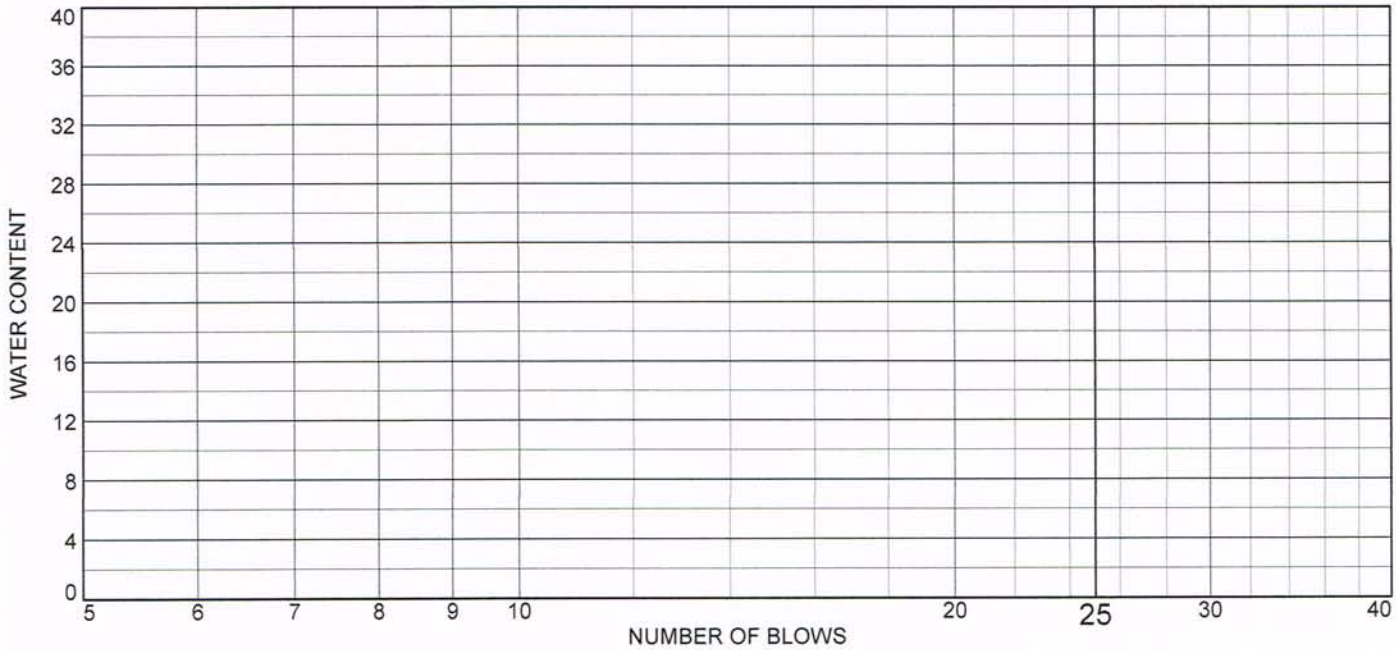
Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	0	0			
Dry+Tare	0	0			
Tare	0	0			
Moisture					

ROBERT CHAD LYDICK
NEW MEXICO
LAND SURVEYOR
REGISTERED PROFESSIONAL ENGINEER

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	CALICHE BASE SNP				43.0	17.6	

Project No. **Client:** [redacted]

Project: MELROSE RANGE

Source of Sample: 18-CL2
Sample Number: 18-CL2

LYDICK ENGINEERS & SURVEYORS, INC.
205 E. Second Street
Clovis, NM 88101

Remarks:
● TEST DATE 1-9-18
SAMPLE DATE 1-9-18

Figure

Tested By: LL **Checked By:** ROBERT C LYDICK PE & LS

GRAIN SIZE DISTRIBUTION TEST DATA

1/10/2018

Client: [redacted]
Project: MELROSE RANGE
Location: 18-CL2
Sample Number: 18-CL2
Material Description: CALICHE BASE SNP
Sample Date: 1-9-18
Date Received: 1-9-18
Tested By: LL
Test Date: 1-9-18
Checked By: ROBERT C LYDICK
Title: PE & LS

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 3188.30
Tare Wt. = 0.00
Minus #200 from wash = 9.3%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
3517.10	0.00	0.00	1"	175.00	95.0
			1/2"	838.70	76.2
			3/8"	1027.60	70.8
			#4	1373.70	60.9
			#8	1619.00	54.0
			#16	1787.60	49.2
			#30	1928.20	45.2
			#50	2120.50	39.7
			#100	2498.20	29.0
			#200	2898.40	17.6

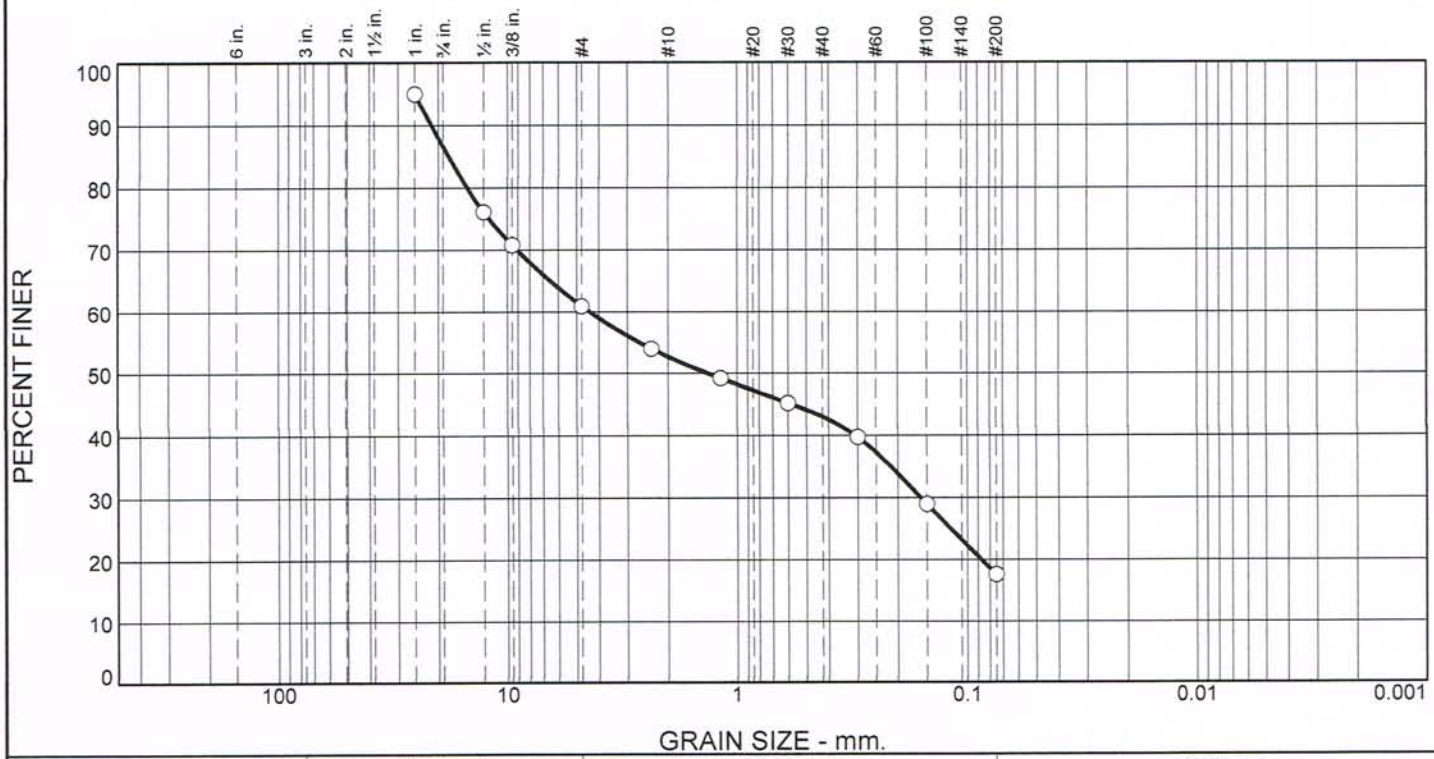
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
		25.6		8.2	9.7	25.4	43.3			17.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
			0.0870	0.1594	0.3076	1.3482	4.3808	14.9744	18.0641	21.4761	25.3795

Fineness Modulus
3.65

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
		25.6	8.2	9.7	25.4	17.6	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	95.0		
1/2"	76.2		
3/8"	70.8		
#4	60.9		
#8	54.0		
#16	49.2		
#30	45.2		
#50	39.7		
#100	29.0		
#200	17.6		

* (no specification provided)

Material Description

CALICHE BASE SNP

Atterberg Limits (ASTM D 4318)

PL= LL= PI=

Classification

USCS (D 2487)= AASHTO (M 145)=

Coefficients

D_{90}= 21.4761 D_{85}= 18.0641 D_{60}= 4.3808
D_{50}= 1.3482 D_{30}= 0.1594 D_{15}=
D_{10}= C_u= C_c=

Remarks

Date Received: 1-9-18 **Date Tested:** 1-9-18
Tested By: LL
Checked By: ROBERT C LYDICK
Title: PE & LS

Source of Sample: 18-CL2
Sample Number: 18-CL2
Date Sampled: 1-9-18

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205 E. Second Street
Clovis, NM 88101

Client: [redacted]
Project: MELROSE RANGE
Project No:
Figure