NM1 -

MONITORING REPORTS

YEAR(S):

1989



400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	TC
	St
	T .

Tony Schmitz

tar Route

Lindrith, New Mexico 87029

31044

Job No.

Lab/Invoice No. 31490261

*05/08/89

Reviewed By S. a. Mudu

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client

Date 05/05/89

Tested/Calc. By

R. Day/WT

Source of Material Native

Moisture/Density Relationship ASTM D 698 Meth. A Test Locations Designated By Client

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1 2* 3* 4* 5 6R	05/05/89 05/05/89 05/05/89	In N.W. key way (arroyo) In S.W. key way (arroyo) 75' N. of S.W. corner of dike	98" 92' 86.3' 86.3' 97' 92'

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments •	
1 2* 3* 4* 5 6R		14.9 14.9 14.9 14.9 14.9	133.5 133.5 133.5 133.5 133.5 133.5	15.0 20.8 16.1 13.6 14.4 13.1	116.0 104.2 111.5 117.5 116.2 108.7	100+ 91 98 100+ 100+ 96	Yes No Yes Yes Yes	1-4-8-15 1-4-8-13-15 1-4-8-15 1-4-8-15 1-4-10-15 1-4-8-15	

Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min, req'd.
 - 9. 98% min. req'd.

12.85% min. req'd.

+ 3%

- 10, 95% min. req'd. 11, 90% min, req'd.
- 14. Tested D-1556/AASHTO T-217 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- dry density. AASHTO T-224 的 Opt. Moist. 18. Other _
- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

100'=Top of Fill

† Datum $\frac{100}{*100}$ = Top of Bottom of Pond

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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Client (3)

Billing (1)

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*Revised 05/10/89 to show Optimum Moisture requirements.



400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

Elevation

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Star Route Lindrith, New Mexico	87029	31044 €		31490261 05/08/89 1. Muduel
Project	Lindrith Evaporation	Pond			
	Rio Arriba County, Ne		and in the state of the state o	BOOKSOO EE WOODEN WOODEN WOODEN WOODEN WOODEN AND AND AND AND AND AND AND AND AND AN	DEMONSTRUCTURE OF THE CONTROL OF THE
Type of Material	Clay	Authoriz	ed ByC1	ient	Date 05/05/89
	Native				ting at the property of the state of the sta
Moisture/Density	Relationship ASTM D0698 N	Neth. A Test Loc	ations Designated I	By Client	as si riak i ilipaka, ak, ako isi - si - ak ilip radija pa K, panja isik in - assembation. M. 1988

No.	Date		Location of Test Hole						
1 2* 3* 4* 5 6R	05/05/8 05/05/8 05/05/8 05/05/8 05/05/8	05/89 In N.W. key way (arroyo) 05/89 In S.W. key way (arroyo) 05/89 75' N. of S.W. corner of dike 05/89 90' N. of S.E. corner of dike						98" 92' 86.3' 86.3' 97' 92'	
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2*		14.9	133.5	15.0	116.0	Ī			

٠	Cor	nm	en	ts
---	-----	----	----	----

4. Backfill

5. Pavement Area 6. Below Footing Bottom

7. Above Footing Bottom

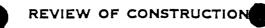
- 1. Subgrade 2. Subbase Fill 3. Base Course
- 8. 100% min. req'd.
- 9. 98% min. req'd.
- 10. 95% min. req'd.
- 11. 90% min. req'd.
- 12. 85% min. req'd.

- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other __
- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

100'=Top of Fill

+ Datum $\frac{100}{*100}$ = Top of Bottom of Pond Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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Project	Lindrith Evaporation Pond	31044	Job No.		
	Lindrith, New Mexico		Lab/Invoice No	31490261	
				Date <u>04/28/</u> 89	
Report By	R. Yongosona/WT	Date <u>04/27/89</u>	_Reviewed By Z. (2	brestack Date 04/28/89	
Prime Contractor _	Tony Schmitz	SuperintendentTony	Schmitz		
Subcontractor		Superintendent			
Work in progress a	nd/or completed since last report: <u>Arr</u>	ived on site and co	ntractor was in	the process of	
compacting	the N. and E. dike embankmen	ts. Compaction equ	ipment used was	a sheepsfoot	
roller, loa	ded scraper and a grader. A	pproximately 6" of	backfill was ad	ded to each dike.	
		the transport of the second of			
			and the second s		
Unexpected site cor	nditions: None				
Sampling and/or te oven drying	sting performed:Four F.D.T.'s v		isture samples	brought in for	
	terials, operations and/or test results to p		t results using	oven dry	
	how adequate compaction was	•			
Person/persons not	tified of nonconformance to project requir	ements: Tony Schmit	Z		
, disen, pareens we	, , , , , , , , , , , , , , , , , , , ,				
Nonconformance co	rrected: Oven dry moisture sam	ples were used to c	orrelate nuclea	r densometer	
	e moisture contents and compa				
Instructions or infor	mation received/from: Tony Schm	itz/Lavne Waresback			
	mation received/ from:				
Weather Cloud	y & Windy. Temperature in 50	0's			
	er time on project today:				
_	1		sit:		
Copies: Cl			The state of the s		

WESTERN TECHNOLOGIES INC.



WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Location Type of I Source o	L Material C of Material 0	indrith indrith, lay/Redd n-Site	e New Mex Evapora New Mex ish Brow	xico wn	1 Autho	orized By _	/	Job No. Lab/Invoice No. 3149 Date 04/2 Reviewed By L. War Client Date R. Yongosona/WT d By R. Yongosona/WT	00261 28/89 estrek 04/27/89
Test No.	Date				Loca	tion of Test Ho	le	·	Elevation of Test Datum †
1 2 3R 4R	04/27/89 04/27/89 04/27/89 04/27/89	160' Retes	S. of N t of Te	.E. corne .E. corne st #1, 04 st #2, 04	er of dil 4/27/89				98' 98' 98' 98'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	haracteristics Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3R 4R		14.5 14.5 14.5 14.5	113.9 113.9 113.9 113.9	18.9 19.5 12.7 12.1	106.0 102.5 108.3 114.2	93 90 95 100+	No No Yes Yes	2-4-10-15 2-4-10-15 2-4-10-15 2-4-10-15	
1	<u> </u>		L	<u> </u>	1	<u> </u>			······································



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Job No. ____

LABORATORY REPORT

PHYSICAL PROPERTIES OF AGGREGATES

Lindrith, New Mexico Sampled By R, Yongosona/WT

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•	100	nt

Project __

Location ___

Tony Schmitz Star Route Lindrith, New Mexico 87029

Lindrith Evaporation Pond

31044

Lab/Invoice No. 31490261

Date of Report _____04/26/89

Reviewed By L. Waresback

_____ Date <u>04/24/89</u>

Type of Aggregate <u>Clayey Sand</u>			Submitted By R. Yongoso	Date	04/24/89		
Source of Age	gregate Mid c	of Evap Pone	d 0-3*	0-3 Authorized By Client			04/24/89
Sieve Analysis,	ASTM C136-		Test Standards ar	e ASTM unless otherwise noted.			
Sieve Size	% Passing Accumulative	Specification		Test	Result	Specification	Test STD
			Fineness Mo	dulus			C125-
4"			Dry Rodded	Unit Weight, pcf			C29-
3"			Lightweight	Pieces, %			C123-
2"			Clay Lumps	and Friable Particles			C142-
11/2"			Organic Imp	urities			C40-
11/8"			Sand Equiva	lent Value			C2419-
1″				% Wear, rev.			C131-
3/4"			Resistance to	% Wear, 500 rev.			Grading
1/2 "			Abrasion	% Wear, rev.			C535-
3/8 "				% Wear, 1000 rev.			Grading
1/4"			Scratch Hard	Iness, % by: Weight Count			C235-
No. 4			Fractured Fa	ices, % by: Weight Count			
8			Liquid Limit	Plasticity Index			D4318-
10			Cleanness V	alue			Calif. 227-
16							
30			Moisture	Max. Dry Density, pcf	113.9	☑ D698- Æ ☐ D1557-	Α
40			Density Relations	Optimum Moisture, %	14.5	│ □ AASHT(O T99-
50				Method	A	□ AASHT	J 1180-
100				Absorption, %			
			Specific Gravity	Bulk (Dry)		☐ C127-	
			Gravity	Bulk (SSD)		☐ C128-	
Finer than 200				Apparent			

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FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz	31044	Invoice No	31490261
Project	Lindrith Evaporation Pond		Report No.	Date 04/25/89
Location	Lindrith, New Mexico	Report By	R. Yougsona/WT	Date <u>04/24/89</u>
Prime Contra	ctorClient	Superinte	ndent <u>Tony Schm</u>	itz
	bcontractor		ndent	
Earthwork in	progress and/or completed since last report: Contr	actor had top	foot of site exc	cavated in
accordan	ce with geotechnical report. They wi	11 try to excav	vate material fo	or N. and E.
dike emb	ankments saturate with water to try a	nd reach optim	um moisture cont	ent for
sub-base	fill.			
Unexpected s	ite conditions: N/A			
Sampling and	/or testing performed: Pick-up sample to ru	n Proctor.		

~ .			A- N/A	
Conformance	of earthwork materials, operations and/or test results	to project requiremen	ts: N/A	
Person/perso	ns notified of nonconformance to project requirements	· N/A		-
r croon, perso	ns notified of noticomormance to project requirements			
Nonconforma	nce corrected: N/A			
Instructions of	r information received/from: Will call when t	hey are ready i	for testing.	The state of the s
Tech./Eng'r	time on project today:		No. of visits today	<u></u>
Time and date	e for next visit: Will call.			
Copies:	Client (3)	0	/	

/tt

L. Wares had Reviewed By

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Р	50	iρ	ct

Lindrith Evaporation Pond

Lindrith Evaporation Pond		Job No		
Rio Arriba County, New Mexico	0	Lab/Invoice No	31490370	
		Report No.	Date 06/13/89	
H. Kuebler/WT	Date 06/09/89	_Reviewed By 7 a	Jarestus Date 06/13/89	
	Superintendent			
and/or completed since last report:Tony	y Schmitz Construct	ion continued	berm building.	
			_ :	
			4.7	
· · · · · · · · · · · · · · · · · · ·				
onditions: None				
testing performed Compaction tests	and visual observa	ation		
testing performed.				
naterials, operations and/or test results to pr	roject requirements. Con	mpaction tests	indicated	
·	,			
notified of nonconformance to project require	ements: N/A			
corrected: N/A				
formation received (from Tony Schmit	t 7			
ormation received/from:	<u>, , , , , , , , , , , , , , , , , , , </u>			
			the second se	
,		sit: 06/12/89		
	Rio Arriba County, New Mexico H. Kuebler/WT	H. Kuebler/WT Date 06/09/89 Tony Schmitz Construction Superintendent Tony Superintendent and/or completed since last report: Tony_Schmitz_Construction onditions: None testing performed: Compaction_tests_and_visual_observations.compaction. compaction. compaction. contified of nonconformance to project requirements: N/A corrected: N/A corrected: N/A corrected: N/A	Rio Arriba County, New Mexico Lab/Invoice No. Report No. Superintendent Tony Schmitz Superintendent and/or completed since last report: Tony Schmitz Construction continued conditions: None desting performed: Compaction tests and visual observation destricts, operations and/or test results to project requirements: Compaction tests compaction. diffied of nonconformance to project requirements: N/A corrected: N/A corrected: N/A corrected: Tony Schmitz	

Copies:

Client (3) Billing (1)

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FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490370
Project	Lindrith Evaporation Pond		Report No.	Date 06/13/89
Location	Rio Arriba County, New Mexico	Report By_	H. Kuebler/WT	Date 06/08/89
Prime Contractor	Tony Schmitz Construction	Superinter	dent Tony Schm	itz
Earthwork Subco	ntractor	Superinter	dent	
Earthwork in prop	gress and/or completed since last report: Tony Schmitz	z Constru	ction continue	d berm
Unexpected site o	conditions: Afternoon rain stopped project.			
_	testing performed: Compaction tests and visual area was brought to the Farmington Lab.			
	arthwork materials, operations and/or test results to project adequate_compaction		cs: <u>Compaction</u>	tests
Person/persons n	otified of nonconformance to project requirements: N/A			
Nonconformance	corrected; N/A			
Instructions or inf	ormation received/from: Tony Schmitz, job will	continue	06/09/89	
	on project today:			
В	lient (3) illing (1) tt		Waresback Reviewed By	



Project _____

TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

PHYSICAL PROPERTIES OF AGGREGATES

Location Rio Arriba County, NM Sampled By H. Kuebler/WT Date 06/08/89

(ı	P	n	t

Tony Schmitz Construction

Lindrith Evaporation Pond

Star Route

Lindrith, NM 87029

31044

Job No. _____ Lab/Invoice No. 31490370

Date of Report _____ 06/14/89

Reviewed By L. Waresberg

Type of Aggr	egate <u>Clay</u>	· · · · · · · · · · · · · · · · · · ·		Submitted By H. Kuel	oler/WT	Date	06/08/89				
				Authorized By <u>Client</u>							
Sieve Analysis,	Sieve Analysis, ASTM C136- Test Standards are ASTM unless otherwise noted.										
Sieve Size	% Passing Accumulative	Specification		Test	Result	Specification	Test STD				
			Fineness Mo	dulus			C125-				
4"			Dry Rodded	Unit Weight, pcf			C29-				
3"			Lightweight	Pieces, %			C123-				
2"			Clay Lumps :	and Friable Particles			C142-				
11/2"			Organic Imp	urities			C40-				
11/8"			Sand Equiva	lent Value			C2419-				
1″				% Wear, rev.			C131-				
3/4"			Resistance to	% Wear, 500 rev.	_		Grading				
1/2"			Abrasion	% Wear, rev.			C535-				
1/8 "				% Wear, 1000 rev.			Grading				
1/4"			Scratch Hard	Iness, % by: Weight Count			C235-				
No. 4			Fractured Fa	ces, % by: Weight Count	1	1					
8			Liquid Limit	Plasticity Index			D4318-				
10			Cleanness Va	alue			Calif. 227-				
16											
30			Moisture	Max. Dry Density, pcf	115.3	☑ D698-A					
40			Density	Optimum Moisture, %	13.3	☐ D1557- ☐ AASHT	O T99-				
50			Relations	Method	A	□ AASHT	O T180-				
100				Absorption, %							
			Specific Gravity	Bulk (Dry)		□ C127-					
			Gravity	Bulk (SSD)	-	☐ C128-					
Finer than 200 ASTM C117-				Apparent							

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LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client		Tony Schm Star Rout Lindrith,	e NM 870	29		3	31044	Job No. Lab/Invoice No. Date Reviewed By	3149037 06/13/8	70 39
Project .		Lindrith Rio Arrib			····			re ver ver ver en		WOODS IN THE THE TANK OF THE T
Type of N	Material	Clay .	A	on annual of the property	Auth	orized By	т ст меторине, ко ле имен фенера, колуротна	Clay		
								d. Kuebler/WT dBy <u>H. Kubbler</u>		
Test No.	Date				Loca	tion of Test Hole	·			Elevation of Test Datum †
1 2	06/12/8 06/12/8		corner o		rm					99 ' 99'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density	Relative Compaction %	Within Specs.	Commen	ts *	
1 2		14.9	113.5 113.5	14.9 15.8	116.2 110.5	100 97	Yes Yes	1-10-13-15 1-10-13-15		
* Comments 1. Subgrac 2. Subbase 3. Base Co	de e Fill	8. 100% m 9. 98% mi 10. 95% mi	n. req'd. 1	5. Tested ASTA	56/AASHTO T-2 14 D-2922/D-301 14 D-2922/AASH	7	20. Specific	cations on Accompanying Site Pla ations Unknown	an	

- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 7. Above Footing Bottom

- 11. 90% min. req'd.
 - 12. 85% min. req'd.
- - + 3%
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. <u>Opt. Moist</u>. 18. Other.

tDatum 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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Client (3) Billing (1)



400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction	3104	4 Job No	e angelian mining and page in a secondarian and a secondarian second
	Star Route Lindrith, NM 87029		Lab/Invoice No	31490370
	,		Date	06/13/89
			Reviewed By	Waresbork
Project	Lindrith Evaporation Pond	to an extraction of the comments of the commen		
Location	Rio Arriba County, New Mex	ico		
Type of Material	Clay	Authorized By	Client	Date06/09/89
Source of Material	Native	Tested/Calc. By	H. Kuebler/WT	
Moisture/Density	Relationship ASTM D698 Meth.	A Test Locations Design	nated By H. Kueb L	er/WT

Test Date	Location of Test Hole	Elevation of Test Datum †
1 06/09/89 2 06/09/89 3 06/09/89 4 06/09/89 5 06/09/89	Center of E. berm S.E. corner of S. berm 85' E. of S.W. corner of S. berm S.W. corner of S. berm 90' S. of N.W. corner of N. berm	99' 98.5' 98' 98' 99'

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1		14.9	113.5	17.6	107.5	95	Yes	1-10-13-15	
2		14.9	113.5	17.1	111.4	98	Yes	1-10-13-15	
3		14.9	113.5	16.4	112.4	99	Yes	1-10-13-15	
4		14.9	113.5	13.2	108.5	96	Yes	1-10-13-15	
5		14.9	113.5	14.7	117.0	100	Yes	1-10-13-15	

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area

- 6. Below Footing Bottom
- 7. Above Footing Bottom
- 10. 95% min, req'd.
- 9. 98% min. req'd. 11. 90% min. req'd.

8. 100% min. req'd.

- 12.85% min.req'd. 13Opt. Moist.
- - <u>+</u> 3%
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other .

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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LABORATORY REPORT

Elevation

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction	310	044	Job No.	- AND THE COLOR
	Star Route Lindrith, NM 87029			Date	31490370 06/13/89
Project	Lindrith Evaporation Pond			Reviewed By	L. Warestock
	Rio Arriba County, New Mexico		PROPERTY AND AND ASSESSMENT OF THE MA	a gain eithice na mar a gain à faith ann ann ann an ann aithir dhichte nìonn ann an Air Ainbean	A Section of Management of Section 1997
Type of Material	Clay	Authorized By	Clay		Date 06/08/89
Source of Materia	Native	Tested/Calc. By	н. к	Cuebler/WT	the state of the s
Moisture/Density	Relationship ASTM D698 Meth. A	Test Locations Des	signated By	H. Kuebl	er/WT

No.	Date		Location of Test Hole						of Test Datum †
1 2 3	06/08/8	9 S.W.	corner o corner o	f S. ber	m				97' 98' 99'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density	Relative Compaction %	Within Specs.	Comments *	<u> </u>
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	13.5 15.4 15.0	114.5 113.5 117.0	100 100 100	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15	

* Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 7. Above Footing Bottom
- 8. 100% min. req'd.
- 9. 98% min. req'd.
- 10. 95% min. req'd.
- 11. 90% min. req'd.
- 12. 85% min. req'd.

+ 3%

- 13. Opt. Moist. 18. Other
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No.	····
Client	Tony Schmitz	31044	Invoice No	31490261
Project	Lindrith Evaporation Pond		Report No.	Date 04/25/89
Location	Lindrith, New Mexico	Report By_	R. Yougsona/WT	Date 04/24/89
Prime Contractor	Client	Superinten	dent Tony Schm	itz
	tractor			
	ress and/or completed since last report: Contractor with geotechnical report. They will try			
dike embank	ments saturate with water to try and rea	ch optimu	m moisture cont	ent for
sub-base fi	11.			
Unexpected site co	onditions: N/A			
Sampling and/or t	resting performed: Pick-up sample to run Proc	tor.		
			>7 / A	
Conformance of ea	urthwork materials, operations and/or test results to project	requirement	s: <u>N/A</u>	
D/	N/A			
Person/persons no	otified of nonconformance to project requirements: N/A			
<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		······································		White contracting the second s
Na	N/A			
Nonconformance (corrected: N/A	······································		
Instructions or info	ormation received/from: Will call when they are	e ready f	or testing	
mod decions of thic	matori received, nom. The state when they are		OI COOCING.	

Tech./Eng′r time	on project today:		No. of visits today	: 1
	next visit: Will call.			
_				
Copies:	Client (3)	_	-	
- 1	/tt	L1.	lares had	
		- r.u	Reviewed By	



WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

PHYSICAL PROPERTIES OF AGGREGATES

	!	
١	нeп	r

Tony Schmitz Star Route Lindrith, New Mexico 87029

31044

Date of Report ___

04/26/89

			Reviewe	d By <u>L. War</u>	estack
Project	Lindrith Evaporatio	n Pond			
Location	Lindrith, New Mexic	Sampled By <u>R. Yong</u>	osona/WT	Date	04/24/89
Type of Aggregate	Clayey Sand	Submitted By R. Yong	gosona/WT	Date	04/24/89
Source of Aggregations Sieve Analysis, ASTM	te Mid of Evap Pond O	Authorized By Client Standards are ASIM unless otherwise noted.		Date	04/24/89
		Standards are AS1M unless otherwise noted.			
Sieve Size %	Specification	Test	Result	Specification	Test STD

Sieve Size	% Passing Accumulative	Specification	Test		Result	Specification	Test STD
			Fineness Modulus				C125-
4"			Dry Rodded Unit Weight, pcf				C29-
3"			Lightweight	Pieces, %			C123-
2"			Clay Lumps	and Friable Particles			C142-
1½″			Organic Impurities				C40-
11/8"			Sand Equivalent Value		***************************************		C2419-
1″				% Wear, rev.			C131-
3/4 "			Resistance	% Wear, 500 rev.			Grading
1/2 "			Abrasion	% Wear, rev.			C535-
3/8 "				% Wear, 1000 rev.			Grading
1/4"			Scratch Hard	lness, % by: Weight Count		1	C235-
No. 4			Fractured Faces, % by: Weight Count		1	1	
8			Liquid Limit	Plasticity Index		İ	D4318-
10			Cleanness V	alue			Calif. 227-
16							
30			Moisture	Max. Dry Density, pcf	113.9	反 D698-	A
40			Density Relations	Optimum Moisture, %	14.5	☐ D1557- ☐ AASHT	O T99-
50				Method	A	☐ AASHTO T180-	
100				Absorption, %			
			Specific	Bulk (Dry)		□ C127-	
			Gravity	Bulk (SSD)		□ C128-	
iner than 200 ASTM C117-				Apparent			

Copies to:

Client (3)

_		
Р	ro	iect

Lindrith Evaporation Pond Lindrith, New Mexico

31044	Job No

Lab/Invoice No. ____31490261

		<i>"</i>	Report No	Date <u>04/28/</u> 89
Report By	R. Yongosona/WT	Date <u>04/27/89</u>		
	Tony Schmitz		•	
Subcontractor		Superintendent		
Work in progress a	and/or completed since last report:	Arrived on site and co	ontractor was in	the process of
	the N. and E. dike embar			
roller, loa	aded scraper and a grade	r。 Approximately 6" of	backfill was add	led to each dike.
		·		
	nditions. None			
Unexpected site co	nditions: Notice			
Sampling and/or to oven drying	esting performed: Four F.D.7	F.'s were performed. Mo	oisture samples b	prought in for
Conformance of ma	aterials, operations and/or test resu	ults to project requirements. Tes	st results using	oven dry
	show adequate compaction	·····		
		Tony Schmit	- 7	
Person/persons no	otified of nonconformance to project	requirements:	. 2	
	orrected: <u>Oven dry moisture</u> te moisture contents and			densometer
Instructions or info	ormation received/from:Tony	Schmitz/Layne Waresback		
Weather: Cloud	iy & Windy. Temperature	in 50's		
	eer time on project today:			
No. of visits today:		Time and date for next v	isit:	
Copies: Cl	ient (3)			

.es: Client /tt

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LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz	31044	Job No	
	Star Route Lindrith, New Mexico 87029		Lab/Invoice No	31490261
	Lindlith, New Mexico 87029		Date	04/28/89
		;	Reviewed By	04/28/89 Waresback
Project	Lindrith Evaporation Pond		The second section of the second seco	AN TORONOO F SOUTH FROM THE THE TOTAL TO THE THE TOTAL THE THE TOTAL THE THE TOTAL THE TH
Location	Lindrith, New Mexico	e since where the the since we was the constitution of	THEFT AND TO THE PLANTE SHAPE SHAPE FROM THE SHAPE SHA	
Type of Material	Clay/Reddish Brown	Authorized ByC	lient	Date 04/27/89
Source of Material	On-Site	Tested/Calc. By R	• Yongosona/WT	a na an
Moisture/Density	Relationship D968 Meth. A	Test Locations Designated	By R. Yongoso	na/WT

Test No.	Date				Loca	tion of Test Hole	•		Elevation of Test Datum †
2 3R	04/27/89 04/27/89 04/27/89 04/27/89	160' Retes	W. of N. S. of N. St of Tes	E. corne st #1, 04	er of dil 4/27/89				98' 98' 98' 98'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	

Test	Moisture	Optimum	Max. Dry	In-Place Ch	aracteristics	Relative	Within	
No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
1 2		14.5 14.5	113.9 113.9	18.9 19.5	106.0 102.5	93 90	No No	2-4-10-15 2-4-10-15
3R 4R		14.5 14.5	113.9	12.7	108.3 114.2	95 100+	Yes Yes	2-4-10-15 2-4-10-15

1. Subgrade

2. Subbase Fill

3. Base Course 4. Backfill

5. Pavement Area

8. 100% min. req'd.

10. 95% min. req'd.

11. 90% min. req'd. 12, 85% min. reg'd.

6. Below Footing Bottom 7. Above Footing Bottom 9. 98% min. req'd.

15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum dry density. AASHTO T-224

14. Tested D-1556/AASHTO T-217

18. Other

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

100'=Top of Dike

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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/tt

Note: Moisture contents for tests 3R and 4R are oven dry moistures.



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LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, New Mexico 87029

31044

1ob No.

Lab/Invoice No. 31490261

*05/08/89

Reviewed By S. a. Mudue

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client

Date 05/05/89

Source of Material Native

Tested/Calc. By R. Day/WT

Moisture/Density Relationship ASTM D 698 Meth. A Test Locations Designated By Client

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1	05/05/89	60' W. of N.E. corner of dike	98"
2*		In N.W. key way (arroyo)	92 '
3*		In S.W. key way (arroyo)	86.3'
4*	05/05/89	75' N. of S.W. corner of dike	86.3'
5	05/05/89	90' N. of S.E. corner of dike	97 '
6R	05/05/89	Retest of Test #2, 05/05/89	92'

T4	Moisture	Optimum	Max. Dry	In-Place Ch	aracteristics	Relative	Within	
Test No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
1		14.9	133,5	15.0	116.0	100+	Yes	1-4-8-15
2*		14.9	133.5	20.8	104.2	91	No	1-4-8-13-15
3*	ļ	14.9	133.5	16.1	111.5	98	Yes	1-4-8-15
4*		14.9	133.5	13.6	117.5	100+	Yes	1-4-8-15
5		14.9	133.5	14.4	116.2	100+	Yes	1-4-10 - 15
6R	ŀ	14.9	133.5	13.1	108.7	96	Yes	1-4-8-15
)]	
L	<u></u>	L	l		<u> </u>		L	

^{*} Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area 6. Below Footing Bottom

7. Above Footing Bottom

- 8. 100% min. reg'd. 9.98% min, req'd.
- 14. Tested D-1556/AASHTO T-217 15. Tested ASTM D-2922/D-3017
- 10. 95% min. req'd.
- 11. 90% min. req'd. 12.85% min. req'd.
- 16. Tested ASTM D-2922/AASHTO T-217
 - 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other _

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

100'=Top of Fill

+ Datum $\frac{100}{*100}$ = Top of Bottom of Pond Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3)

Billing (1)

+ 3%

/tt

*Revised 05/10/89 to show Optimum Moisture requirements.



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

lob No. ...

Lab/Invoice No. 31490261

05/09/89

Reviewed By L Waresback

Project

Lindrith Evaporation Pond

Location

Test

No.

1

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client

Date 05/08/89

of Test

Datum †

91

Source of Material Native

Date

05/08/89

Tested/Calc. By G. Anaya/WT

Location of Test Hole

N.W. Keyway (arroyo) 120' S. from N.W. corner of dike

Moisture/Density Relationship ASTM D 698 Meth. A Test Locations Designated By Client

Elevation

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *
1		14.9	113.5	8,5	100.0	89	No	1-4-8-13-14

* Comments

- 1. Subgrade
- 2. Subbase Fill

5. Pavement Area

6. Below Footing Bottom

7. Above Footing Bottom

- 3. Base Course 4. Backfill
- 9. 98% min. req'd. 10. 95% min, req'd.
 - 11. 90% min. req'd. 12. 85% min. req'd.

8. 100% min, reg'd.

- 14. Tested D-1556/AASHTO T-217 15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217
 - 17 Rock correction applied to maximum
 - dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other _

+ 3%

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

+ Datum 100' = Top of Bottom of Pond

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)

Project	Lindrith Evaporation Pond	F CONSTRUCTION 31044	loh No	
Tioject	Rio Arriba County, New Mexico		Lab/Invoice No.	
				Date 05/15/89
Panort Ry	H. Kuebler/WT	Date 05/11/89		
	Tony Schmitz			
	.nd/or completed since last report: Contr			
	S.E. corner of pond site.			
		,		
		·		
		:		,
***************************************				The state of the s
Unexpected site co	nditions: <u>None</u>			
	0 - D - 11d			
Sampling and/or te	esting performed: One Permablity,	Compaction Tests	•	***************************************
		0		
	terials, operations and/or test results to pro		mpactions tests	indicated fill
was compac	ted to compaction requirements	•		
		*		
Person/persons no	tified of nonconformance to project requiren	nents: <u>N/ A</u>		
	. 1/4			
Nonconformance co	orrected: N/A			
	rmation received/from: <u>During phone</u>		• •	-
	ion for fill below 10 feet was			
of ASTM D6	98.			
	or C. Hiday Iva			
Weather: Clea				
_	er time on project today: 5 hours			
No of visits today:	7	Time and date for next vi	SIT:	

Copies:

77



TECHNOLOGIES

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Job No. Client Tony Schmitz 31044 Star Route Lab/Invoice No. 31490261 Lindrith, NM 87029 05/15/89 Reviewed By L. Waresback Lindrith Evaporation Pond Project Rio Arriba County, New Mexico Location A BOOK FOR THE STATE OF THE STA Client Date 05/11/89 Type of Material Clay Authorized By H. Kuebler/WT Source of Material Native Tested/Calc. By Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kueb1er/WT

Test No.	Date	_	Location of Test Hole								
1 R 2 3 4 R 5	05/11/8 05/11/8 05/11/8 05/11/8 05/11/8	9 S.E. 9 N.W. 9 Rete	arroyo, st of Te	150' N. 120' S. st #2, 0	of S.E. of N.W. 5/11/89	corner corner	of di	ke	87' 80' 87' 80' 88.5'		
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *			
1R		14.9	113.5	13.8	119.5	100	Yes	1-9-13-15			

	Moisture	Optimum	Max. Dry	In-Place Ch	naracteristics	Relative	Within	
Test No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
1R 2		14.9	113.5	13.8	119.5	100	Yes No	1-9-13-15
3		14.9	113.5	12.3	109.5	97	Yes	1-9-13-15 1-9-13-15
5R		14.9 14.9	113.5 113.5	14.0 17.9	113.2	100 98	Yes Yes	1-9-13-15 1-9-13-15

* Comments

- 1. Subgrade
- 2 Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 7. Above Footing Bottom
- 8. 100% min. reg'd.

- 9. 98% min. req'd.
- 10. 95% min. req'd.
- 11. 90% min. reg'd. 12.85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217 17. Rock correction applied to maximum
- dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other_
- + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

Datum 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. ___ 31490261

05/15/89

Reviewed By L. Wares back

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By _____

Client Date 05/11/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date		Location of Test Hole							
6 7 8 9R	05/11/89 05/11/89 05/11/89 05/11/89	N.W. S.E.	arroyo, arroyo, arroyo,	120' S. 150' N.	of N.W. of S.E.	corner	of di	ke	81' 89' 82' 82'	
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	paracteristics Dry Density pcf	Relative Compaction %	Within Specs.	Comments *		

T	Moisture	Optimum	Max. Dry	In-Place Ch	naracteristics	Relative	Within	
Test No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
6		14.9	113.5	17.0	110.7	98	Yes	1-9-13-15
7	}	14.9	113.5	15.2	112.9	100	Yes	1-9-13-15
8]	14.9	113.5	15.1	103.4	91	No	1-9-13-15
9 R		14.9	113.5	11.9	115.7	100	Yes	1-9-13-15
1]		<u> </u>					

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area

7. Above Footing Bottom

- 6. Below Footing Bottom
- 10. 95% min. req'd.
- 11. 90% min. req'd. 12. 85% min. req'd.

8. 100% min. reg'd.

9. 98% min. req'd.

- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other _
 - + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+ Datum · 100 '=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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Client (3) Billing (1)



17.1

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



FIELD REPORT

Reviewed By

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490261
Project	Evaporation Ponds - Lindrith	A. Carlo, a. ***********************************	Report No.	Date 05/19/89
Location	Rio Arriba County, New Mexico	Report By I	I. Kuebler/WT	Date 05/12/89
Prime Contractor	Client	Superintend	dent <u>Tony Sch</u>	mitz
Earthwork Subcon	ntractorClient	Superintend	dent Tony Sch	mitz
Earthwork in prog	ress and/or completed since last report: Crew contond site.			
	onditions: None			
Sampling and/or t	testing performed: Compaction Tests			
	arthwork materials, operations and/or test results to prong placed to compaction requirements.			
Person/persons no	otified of nonconformance to project requirements:1			
Nonconformance o	corrected: N/A			
Monday, 05/1	ormation received/from:_Tony_Schmitz - Work 5/89			
Tech./Eng′r time	on project today:next visit:		No. of visits too	day:
Copies:	Client (3) Billing (1) /tt	S. C.	mudiel	



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H. Kuebler/WT

LABORATORY REPORT

PHYSICAL PROPERTIES OF AGGREGATES

__ Sampled By __

Client

Project __

Location _

Tony Schmitz Construction

Lindrith Evaporation Pond

Rio Aribba County, NM

Star Route

Lindrith, NM 87029

31044

Job No. _____

Lab/Invoice No. 31490261

Date of Report _

05/23/89

Date 05/12/89

Reviewed By 7. Wares ba

Type of Aggr	egate <u>Clay</u>			Submitted By H. Kue	bler/WT	Date	05/12/89
Source of Age	37 .	ive		Authorized ByClient		Date	05/12/89
Sieve Analysis,			Test Standards ar	e ASTM unless otherwise noted.			
Sieve Size	% Passing Accumulative	Specification		Test	Result	Specification	Test STD
			Fineness Mo	dulus			C125-
4"			Dry Rodded	Unit Weight, pcf			C29-
3"			Lightweight	Pieces, %			C123-
2"			Clay Lumps	and Friable Particles			C142-
11/2"			Organic Imp	urities			C40-
11/8"			Sand Equiva	lent Value			C2419-
1"				% Wear, rev.			C131-
3/4 "			Resistance to	% Wear, 500 rev.			Grading
1/2"			Abrasion	% Wear, rev.			C535-
3/8 "				% Wear, 1000 rev.			Grading
1/4 "			Scratch Hard	Iness, % by: Weight Count			C235-
No. 4			Fractured Fa	ces, % by: Weight Count			
8			Liquid Limit	Plasticity Index			D4318-
10			Cleanness Va	alue			Calif. 227-
16			Constant cm/sec	Head Permeability	9.8x10 ⁻⁸		
30			Moisture	Max. Dry Density, pcf		□ D698-	
40			Density Relations	Optimum Moisture, %		☐ D1557- ☐ AASHT	O T99-
50				Method		□ AASHT	O 1180-
100				Absorption, %			
			Specific	Bulk (Dry)		☐ C127-	
			Gravity	Bulk (SSD)		□ C128-	
Finer than 200				Apparent			

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/tt

95% compaction at optimum moisture content



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LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490261

Date

05/15/89

Reviewed By L. Waresback

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By ...

Client Date 05/12/89

Source of Material Native

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698

Meth. A Test Locations Designated By H. Kuebler/WT

No.	Date		Location of Test Hole								
1 2 3 4 5R 6	05/12/89 05/12/89 05/12/89 05/12/89 05/12/89	S.E. N.W. S.E. Retes	.W. arroyo, 120' S. of N.E. corner of berm .E. arroyo, 150' N. of S.E. corner of berm .W. arroyo, 120' S. of N.W. corner of berm .E. arroyo, 150' N. of S.E. corner of berm etest of Test #4, 05/12/89 .W. corner arroyo, 120' S. of N.W. corner berm							90' 82' 90' 83' 83' 92'	
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.		Comments *		
1		14.9	113.5	16.0	114.7	100	Yes	1-9-13-15		`	
2		14.9	113,5	17.5	112.8	100	Yes	1-9-13-15			
3	1	71 0	1 110 6	1 10 /	1 110 7	1 00	1 37	1 1 0 10 15			
		14.9	113,5	13.4	110.7	98	Yes	1-9-13-15			
4		14,9	113.5	12.7	110.5	97	No	1-9-13-15			
5R		14.9 14.9	113.5 113.5	12.7 11.9	110.5 111.7	97 98	No Yes	1-9-13-15 1-9-13-15			
		14,9	113.5	12.7 11.9	110.5	97	No	1-9-13-15			

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. reg'd. 9.98% min, req'd.
- 10. 95% min. req'd.
- 11. 90% min. req'd. 12. 85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other_
 - + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

t Datum 100 = Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490261
Project	Lindrith Evaporation Ponds		Report No.	Date 05/19/89
Location	Rio Arriba County, New Mexico	Report By	H. Kuebler/WT	Date 05/15/89
Prime Contractor	Tony Schmitz Construction	Superinter	dent Tony Schm	itz
Earthwork Subcor	ntractor Tony Schmitz Construction	Superinter	dent Tony Schm	itz
Earthwork in prog	ress and/or completed since last report: Crew o			
Unexpected site of	onditions: None			
Sampling and/or t	testing performed: Compaction Tests and	Visual Observa		
	arthwork materials, operations and/or test results to		-	
Person/persons no	otified of nonconformance to project requirements:	N/A		
Nonconformance o	corrected: N/A			
Instructions or info	ormation received/from: Tony Schmitz = J	ob will start	at 8:30 a.m.,	05/16/89
	on project today:next visit:			
Copies:	Client (3) Billing (1)	Sa	madial	1

/tt

Reviewed By



400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, New Mexico 87029

31044

Job No. 🛴

Lab/Invoice No. 31490261

Reviewed By <u>Aa</u> maduel

Project

Lindrith Evaporation Ponds

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client Date 05/15/89

Source of Material Native

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date	Location of Test Hole	Elevation of Test Datum t
1	05/15/89	S.E. corner arroyo, 150' N. of S.E. corner of dike	84'
2R -	05/15/89	Retest of Test #1, 05/15/89 Center of W. berm	84 87 '
4	05/15/89	S.E. corner arroyo, 150' N. of S.E. corner of dike	84' 84'
5R .	05/15/89 05/15/89	Retest of Test #4, 05/15/89 S.E. corner arroyo, 150' N. of S.E. corner of dike	85 '
7R	05/15/89	Restes to Test #6, 05/15/89	84*

T	Moisture	Optimum	Max. Dry	In-Place Ch	naracteristics	Relative	Within	
Test No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
1		14.9	113.5	17.6	105.0	93	No	1-9-13-15
2R		14.9	113.5	14.7	117.7	100+	Yes	1-9-13-15
3		14.9	113.5	17.3	112.5	99	Yes	1-9-13-15
4		14.9	113.5	14.7	107.7	95	No	1-9-13-15
5R		14.9	113.5	14.1	113.5	100	Yes	1-9-13-15
6		14.9	113.5	12.1	106.2	94	No	1-9-13-15
7R)	14.9	113.5	13.9	113.7	100	Yes	1-9-13-15
		12						

* Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd. 9. 98% min. req'd.
- 10. 95% min. reg'd.
- 11. 90% min. req'd.
- 12. 85% min. reg'd. 13.Opt. Moist.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16 Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other ___

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 = Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1) /tt

+3%



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490261
Project	Lindrith Evaporation Ponds		Report No.	Date 05/19/89
Location	Rio Arriba County, New Mexico	Report By	H. Kuebler/W	T Date 05/16/89
Prime Contrac	tor Tony Schmitz Construction	Superinter	ndent Tony Sc	hmitz
Earthwork Sub	ocontractor Tony Schmitz Construction	Superinter	ndent Tony Sc	hmitz
Earthwork in p	progress and/or completed since last report: Crew bega			
Unexpected si	te conditions: None			
Sampling and	or testing performed: Compaction Tests		A	
	of earthwork materials, operations and/or test results to pro		-	
Person/person	ns notified of nonconformance to project requirements:N	/A		
Nonconforman	oce corrected: N/A			
Instructions or	information received/from: Work will begin at 8	:30 a.m., 0	5/17/89	
	ime on project today:			day:
I ime and date	for next visit:			
F	Client (3) 3illing (1) /tr	1.0.	inadial	

Reviewed By



Clay

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



Authorized By Client Date 05/16/89

Tested/Calc. By H. Kuebler/WT

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction Star Route	31044	Job No.
	Lindrith, NM 87029		Lab/Invoice No. 31490261
			Date 05/19/89
			Reviewed By Sa Muduel
Project	Lindrith Evaporation Ponds		THE STATE OF THE S
Location	Rio Arriba County, New Mexico		THE STATE OF THE S

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1	05/16/89	S.E. arroyo, 150' N. of S.E. corner of dike S.E. arroyo, 150' N. of S.E. corner of dike S.E. arroyo, 150' N. of S.E. corner of dike	86'
2	05/16/89		87'
3	05/16/89		88'

Moisture/Density Relationship ASTM D698 Meth. A. Test Locations Designated By H. Kuebler/WT

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	13.5 12.4 13.4	111.7 111.0 111.8	98 98 98	Yes Yes Yes	1-9-13-15 1-9-13-15 1-9-13-15	

- * Comments
- 1. Subgrade
- 2. Subbase Fill

Type of Material

Source of Material Native

- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 7. Above Footing Bottom
- 10. 95% min. req'd. 11. 90% min. req'd.
- 12.85% min. req'd.

+ 3%

8. 100% min. req'd.

9. 98% min, req'd.

- 13.Opt. Moist.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other _

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

tDatum 100 -Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:



WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490261
Project	Lindrith Evaporation Ponds		Report No.	Date 05/19/89
Location	Río Arriba County, New Mexico	Report By_	H. Kuebler/WT	Date 05/17/89
Prime Contractor	Tony Schmitz Construction	Superinten	dent <u>Tony Sch</u> m	itz
Earthwork Subcor	ntractor Tony Schmitz Construction	Superinten	dent Tony Schm	itz
Earthwork in prog	ress and/or completed since last report: <u>Crew co</u>	ontinued to bu	ild west and s	outh_berms.
Unexpected site co	onditions: None	allithin was and these constitutions as a serious and the way of the was and the term of the		
Sampling and/or t	esting performed: Compaction Tests			
Conformance of ea	arthwork materials, operations and/or test results to	project requirement	s: Compaction t	ests indicated
adequate com	paction.			
D	Art Art	27/2		
Person/persons n	otified of nonconformance to project requirements:	N/ A		
Nonconformance of	corrected: N/A			
Instructions or info	ormation received/from: <u>Work will begin at</u>	8:30 a.m., 0	5/18/89	
Tech./Eng'r time	on project today:		No. of visits toda	y:
Time and date for	next visit:			
Copies:	Client (3)		Λ	
	Billing (1) /tt	S.a.	Mudus Reviewed By	



Source of Material Native

WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



Tested/Calc By H. Kuebler/WT

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction	31044	Job No.	
	Star Route Lindrith, NM 87029		Lab/Invoice No.	
			Date Reviewed By	
Project	Lindrith Evaporation Ponds	÷		AND THE RESIDENCE AND A STREET OF THE PARTY
Location	Rio Arriba County, New Mexico	,	on to make our way the control of th	
Type of Material	Clay .	Authorized By	ient	Date 05/17/89

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date		Location of Test Hole						Elevation of Test Datum †
1	05/17/89	I	100' W. of S.E. corner of S. berm						
2	05/17/89			E. corner		berm			88' 88'
3R	05/17/89	1 '	Retest of Test #1, 05/17/89						
4	05/17/89	90' 9	90' S. of N.W. corner of N. berm						93'
5R	05/17/89	Retes	st of Te	st #3, 05	5/17/89			•	88'
6	05/17/89	70' 9	5. of N.V	V. corner	c of N. 1	berm			93'
7	05/17/89	60' 1	N. of S.	V. corner	r of S. 1	berm			88 '
8	05/17/89	Cente	Center of S. berm						88'
Test No.	Moisture Density Lab No.	Optimum Moisture %	isture Density Moisture Dry Density Compaction Specs. Comments *						

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *
1		14.9	113.5	15.8	109.4	96	No	1-9-13-15
2		14.9	113.5	14.8	115.4	100+	Yes	1-9-13-15
3R		14.9	113.5	15.8	107.5	95	No	1-9-13-15
4		14.9	113.5	13.9	117.2	100+	Yes	1-9-13-15
5R		14.9	113.5	16.9	112.9	100	Yes	1-9-13-15
6		14.9	113.5	16,6	113.3	100	Yes	1-9-13-15
7	}	14.9	113.5	15.4	117.0	100+	Yes	1-9-13-15
8		14.9	113.5	13.2	114.8	100+	Yes	1-9-13-15

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area

- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd. 9. 98% min. reg'd.
- 10. 95% min. reg'd.
- 11. 90% min. reg'd.
- 12. 85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
 - 15. Tested ASTM D-2922/D-3017
 - 16. Tested ASTM D-2922/AASHTO T-217
 - 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other_

 - + 3%

- 20. Specifications Unknown
- +Datum 100 =Top of Berm

19. Test Locations on Accompanying Site Plan

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:



WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No.	Michigan III and a property of the control of the c
Client	Tony Schmitz Construction		Invoice No	31490261
Project	Lindrith Evaporation Pond		Report No.	Date 05/30/89
Location	Rio Arriba County, New Mexico	_ Report By	H. Kuebler/WT	Date 05/18/89
Prime Contractor	Client	Superinten	dent Tony Schmi	tz
Earthwork Subcor	ntractor Client	Superinten	dent Tony Schmi	tz
Earthwork in prog	ress and/or completed since last report: Tony Schmitz	z Construc	ction continued	W. and S.
berm constr	uction.			
National Association of the Control				
Unexpected site co	onditions: None			
A				
Sampling and/or t	testing performed: Compaction test and visual	observat	ion.	

Conformance of ea	arthwork materials, operations and/or test results to project	t requirement	s: Compaction t	ests
_indicated_c	ompacted fill met compaction requirement	S		
Person/persons no	otified of nonconformance to project requirements:N/A			
	27/1			
Nonconformance of	corrected: N/A			
Instructions on infe	annotice uses in all frame. The second secon			4
instructions or info	ormation received/from: Tony Schmitz			
			-	
V				
Tech /Eng'r time	on project today:		No of visits today	
	next visit:			7
and date 101				
Copies:	Client (3)		,	
00 b ± 09 •	Billing (1)	*	Wirestack	
	/tt	/\.	www.	

Reviewed By



INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

05/30/89

Reviewed By L. Waresback

\$ 2 mag mg 1 5 m

Project

Evaporation Pond - Lindrith

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client ____ Date 05/18/89

Elevation

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated ByClient

Test No.	Date				Loca	tion of Test Hole	e 	,	of Test Datum †
1 2	05/18/8 05/18/8		er of S.						89 ' 89 '
1	05/18/89 Center of W. berm								
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2		14.9 14.9	113.5 113.5	15.9 12.3	111.3 120.2	98 100+	Yes Yes	1-9-13-15 1-9-13-15	·

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill

- 5. Pavement Area

- 6. Below Footing Bottom 7. Above Footing Bottom

- 10. 95% min. req'd. 11. 90% min. req'd. 12. 85% min. req'd.

8, 100% min. req'd.

9. 98% min. reg'd.

- + 3%
- 14. Tested D-1556/AASH1O T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18 Other.

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)





REVIEW OF EARTHWORK CONSTRUCTION

		Job No.	
Client	Tony Schmitz Construction	Invoice No	31490261
Project	Lindrith Evaporation Pond	Report No.	Date 05/30/89
Location	Rio Arriba County, New Mexico	Report By H. Kuebler/W	T Date 05/19/89
Prime Contra	ctor_Client	Superintendent Tony Sc	hmitz
Earthwork Su	bcontractorClient	Superintendent Tony Sc	hmitz
	progress and/or completed since last report: Tony Sch		
W. and S	. berms.		
Unexpected s	ite conditions: None		
Sampling and	/or testing performed: Compaction tests and vi	sual observation.	
C (
	of earthwork materials, operations and/or test results to pr	•	
_Indicate	d berm fill was being place according to	compaction requirements	•
Person/perso	ns notified of nonconformance to project requirements:N	/A	
Nonconforma	nce corrected: N/A		
	nice corrected. 17/21		
Instructions o	rinformation received/from: Tony Schmitz		
Tech./Eng′r	time on project today:	No. of visits to	oday:
	e for next visit:		
Copies:	Client (3) Billing (1)	1./	_
	/++ /++	L Warestone	<u>_</u>

/tt

K. Warestach Reviewed By



400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029 31044

Job No.

Lab/Invoice No.

31490261

05/30/89

The state of the Company of the Market State Company of the Market State Company of the Company

Reviewed By L. Waresback

Project

Evaporation Pond - Lindrith

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client Date 05/19/89

Source of Material Native

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By H. Kuebler/WT

Test No.	Date		Location of Test Hole									
1 2 3	05/19/89 05/19/89 05/19/89	80' S. of N.W. corner of N. berm										
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *				
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	14.2 14.2 17.0	115.2 116.0 112.8	100 100 100	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15				

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd.
- 9. 98% min. req'd.
- 10. 95% min. req'd.
- 11. 90% min. req'd. 12, 85% min, req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other
 - + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

05/30/89

Reviewed By L. Waresbord

Project

Evaporation Pond - Lindrith

Location

Test

No.

1

Rio Arriba County, New Mexico

Type of Material Clay

Location of Test Hole

Authorized By Client Date 05/22/89

Elevation

of Test

Datum †

91'

Source of Material Native

Tested/Calc. By H. Kuebler/WT

Date

05/22/89

80' W. of S.E. corner of S. berm

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	17.0 14.1 14.2	109.0 110.0 109.2	96 97 96	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15	

- Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8, 100% min. req'd.
- 9. 98% min. req'd. 10, 95% min. reg'd.
- 11. 90% min. req'd.

+ 3%

- 12.85% min. req'd. 13 Opt. Moist
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217 17. Rock correction applied to maximum
 - dry density. AASHTO T-224
 - 18. Other _

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)





REVIEW OF EARTHWORK CONSTRUCTION

		Job No		
Client	Tony Schmitz Construction			
Project	Lindrith Evaporation Pond	Report No.	Date 05/30/89	
Location	Rio Arriba County, New Mexico	Report By H. Kuebler/WT	Date 05/23/89	
Prime Contra	ctorClient	Superintendent Tony Schmi	ltz	
Earthwork Su	bcontractor Client	Superintendent Tony Schmi	ltz	
Earthwork in	progress and/or completed since last report: Tony Sch	nmitz Construction continue	ed to build	
S. and W.	berms.			
Unexpected s	ite conditions: None			
Sampling and	l/or testing performed: Compaction tests and v	isual observation.		
	of earthwork materials, operations and/or test results to p	•		
Person/perso	ns notified of nonconformance to project requirements:	J/A		
Nonconforma	nce corrected: N/A			
	r information received/from: I informed Tony Sch			
	time on project today:		ay:	
i ime and date	e for next visit:			
Copies:	Client (3) Billing (1)	L. Warsbock		

Reviewed By



WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

05/30/89

Reviewed By L. Warestack

Project

Evaporation Pond - Lindrith

Location

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By

Client

Date 05/23/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By ... H. Kuebler/WT

Test No.	Date		Location of Test Hole								
2	05/23/89 05/23/89 05/23/89	20' E	70' W. of S.E. corner of S. berm 20' E. of S.W. corner of S. berm 50' S. of N.W. corner of N. berm								
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *			
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	17.7 13.8 14.4	110.5 108.5 109.3	97 96 96	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15			

Comments

1. Subgrade

2. Subbase Fill

3. Base Course

4. Backfill

5. Pavement Area

6. Below Footing Bottom

7. Above Footing Bottom

8. 100% min, req'd.

9. 98% min. req'd.

10. 95% min. reg'd.

11. 90% min. req'd.

+ 3%

12, 85% min. req'd.

13. Opt. Moist

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017

16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum dry density. AASHTO T-224

18. Other .

19. Test Locations on Accompanying Site Plan

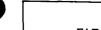
20. Specifications Unknown

+Datum 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:





FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job N	0	
Client	Tony Schmitz Construction		Invoid	e No	31490261
Project	Lindrith Evaporation Pond		Repor	t No.	Date 05/30/89
Location	Rio Arriba County, New Mexico	Report By_	H. Kı	uebler/WT_	Date 05/24/89
Prime Contractor	Client	Superintend	dent _	Tony Schm	Ĺtz
Earthwork Subcon	tractorClient	Superintend	dent _	Tony Schm	itz
Earthwork in prog	ress and/or completed since last report: Tony Schmitz erms.				to build
Unexpected site co	onditions: None				
Sampling and/or t	esting performed: Compaction tests and visua	l inspect:	ion		
_indicated_f	irthwork materials, operations and/or test results to project ill met compaction requirements.		***		
	otified of nonconformance to project requirements:N/A				
	ormation received/from: An average of 10 inches	s to one i	foot	is being p	placed
	on project today:				
Copies:	Client (3) Billing (1) /tt		War	restach	,

Reviewed By



WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction		31044	Job No.	
	Star Route Lindrith, NM 87029			Lab/Invoice No.	31490261
	•			Date	05/30/89
				Reviewed By	05/30/89 Warestree
Project	Evaporation Pond - Lindrith			e de la composición del composición de la composición de la composición del composición de la composic	The appropriate of the law set and the law set
Location	Rio Arriba County, New Mexi	co		المرافقة والمواددة بن المهرورية المادة وسوارات	
Type of Material	Clay	Authorized By		ient	Date 05/24/89
Source of Material	Native	Tested/Calc. B	у Н.	Kuebler/WT	
Moisture/Density	Relationship ASTM D698 Meth A	Test Locations I	Designated B	v H. Kueble	er/WT

Test No.	Date		Location of Test Hole									
1 2 3	05/24/89 05/24/89 05/24/89	401	90' W. of S.E. corner of S. berm 40' E. of S.W. corner of S. berm 50' S. of N.W. corner of W. berm									
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *				
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	13.7 12.4 18.0	109.7 112.5 111.4	97 99 98	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15				

* Comment	S
-----------	---

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 7. Above Footing Bottom
- 8. 100% min, req'd. 9. 98% min. reg'd.
- 10. 95% min. req'd.
- 11. 90% min. req'd.
- 12.85% min. req'd.

+ 3%

- 13. Opt. Moist 18. Other_
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:





FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No		
Client	Tony Schmitz Construction	31044	Invoice No	•	31490370
Project	Lindrith Evaporation Pond				
Location	Rio Arriba County, New Mexico	Report By.	H. Kueb	ler/WT	Date 06/02/89
Prime Contractor	Tony Schmitz Construction	Superinten	ndent Tony	Schmit	Z
	ontractor Tony Schmitz Construction				
	gress and/or completed since last report: Tony Schmitz west berms.		ction co	ntinued	to build
Unexpected site of	conditions: None				
Sampling and/or	testing performed: Compaction tests and visual	l observa	tion		
	earthwork materials, operations and/or test results to project				ests met
Person/persons r	notified of nonconformance to project requirements: N/A				
Nonconformance	corrected: N/A				
Instructions or in	formation received/from: Tony Schmitz				
	e on project today:r next visit:			isits today	: 1
Copies:	Client (3)		/ .		

Billing (1) /tt

L. Warestock Reviewed By



TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

Elevation

of Test

Datum t

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Star Route Lindrith, NM		3104	L	.ab/Invoice No Date	31490370 06/13/89 Waresback
Project	Lindrith Evap	oration Pond	THE STREET IS STREET IN THE ST	······································		
Location	Rio Arriba Co	unty, New Mexico	and the state of t			
Type of Material	Clay	to the property of the propert	Authorized By	Clay	· vo Stantinana and analysis and an experience of the control of t	Date 06/12/89
Source of Material	Native	dang Mara da kalaminan and anamangamahan mangapit PRI MAN 1988-888 1991 1994 1994 1994 1994 1994	Tested/Calc. By	н. к	uebler/WT	
Moisture/Density	Relationship ASTM	D698 Meth. A	Test Locations Design	nated By	H. Kubbleı	-/WT

Location of Test Hole

	06/12/89 06/12/89	1	corner c		rm				99' 99'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2		14.9 14.9	113.5 113.5	14.9 15.8	116.2 110.5	100 97	Yes Yes	1-10-13-15 1-10-13-15	

* Comments

Test

No.

Date

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 8. 100% min, req'd.
- 9. 98% min. req'd. 10. 95% min. req'd.
- 11. 90% min, req'd. 12. 85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- 13. Opt. Moist. 18. Other_
- 7. Above Footing Bottom
- + 3%

- dry density. AASHTO T-224
- †Datum 100 =Top of Berm

20. Specifications Unknown

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

19. Test Locations on Accompanying Site Plan

Copies to:

Client (3) Billing (1)



TECHNOLOGIES

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction Star Route	310	044	Job No.	MINI IMPINE - FINISE F. T. S. ST. ST. ST. S.
	Lindrith, NM 87029			Lab/Invoice No	31490370
				Date	06/13/89
				Reviewed By	Varesbook
Project	Lindrith Evaporation Pond	THE STATE OF THE S	CONTRACTOR AND A STATE OF THE S		
Location	Rio Arriba County, New Mexico	O	Make trade acres and acres accessors		no material consistence of the control of the contr
Type of Material	Clay	Authorized By	Cli	ent	Date 06/09/89
Source of Material	Native	Tested/Calc. By	н.	Kuebler/WT	par till par at tal a sammentemakka ka sameka iki i a a sammen kan sameka.
Moisture/Density I	Relationship ASTM D698 Meth. A	Test Locations Desi	ignated By	H. Kuebler	r/WT

Test No.	Date		Location of Test Hole								
1 2 3 4 5	06/09/89 06/09/89 06/09/89 06/09/89 06/09/89	S.E. 85' I	Center of E. berm S.E. corner of S. berm 85' E. of S.W. corner of S. berm S.W. corner of S. berm 90' S. of N.W. corner of N. berm								
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *			

Test	Moisture Density	Optimum Moisture	Max. Dry Density	In-Place Ch Moisture	Dry Density	Relative Compaction	Within Specs.	Comments *
No.	Lab No.	%	pcf	%	pcf	%	1	
1		14.9	113.5	17.6	107.5	95	Yes	1-10-13-15
2		14.9	113.5	17.1	111.4	98	Yes	1-10-13-15
3		14.9	113.5	16.4	112.4	99	Yes	1-10-13-15
4	}	14.9	113.5	13.2	108.5	96	Yes	1-10-13-15
5		14.9	113.5	14.7	117.0	100	Yes	1-10-13-15
				;				

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 9. 98% min. req'd. 10. 95% min. req'd. 11. 90% min. req'd.

8. 100% min. req'd.

- 12. 85% min. req'd. 13Opt. Moist.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- dry density. AASHTO T-224 18. Other
- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown
- 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1) /tt

+ 3%



TECHNOLOGIES

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz Construction Star Route Lindrith, NM 87029	31044	Lab/Invoice No	31490370 06/13/89 L. Waresback
Project	Lindrith Evaporation Pond			
	Rio Arriba County, New Mexico)	***************************************	MANUFACTURE AND
Type of Material	Clay	Authorized ByC	Lay .	Date06/08/89
Source of Materia	Native	Tested/Calc. By H.	. Kuebler/WT	TO THE STATE OF TH
Moisture/Density	Relationship ASTM D698 Meth. A	. Test Locations Designated	By H. Kueble	r/WT
	·			
				Elevation

Test No.	Date		Location of Test Hole of Test Datum †									
1 2 3		9 S.W.	corner o corner o corner o	f S. ber	m				97 ' 98 ' 99'			
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *				
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	13.5 15.4 15.0	114.5 113.5 117.0	100 100 100	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15				

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill

- 6. Below Footing Bottom
- 5. Pavement Area 12. 85% min. reg'd.
- 7. Above Footing Bottom
- 13. Opt. Moist. 18. Other_

8. 100% min. req'd.

9. 98% min. req'd.

10. 95% min. reg'd.

11. 90% min. reg'd.

+ 3%

- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224

20. Specifications Unknown

19. Test Locations on Accompanying Site Plan

+Datum 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client	Tony Schmitz (Star Route Lindrith, NM		310		Lab/Invoice No	
Project	Lindrith Evapo	oration Pond				
Location	Rio Arriba Cou	ınty, New Mexico				Administratory and considerant copholographic patentifecturing \$25.55 and \$25.55 are \$2.55 are \$2.55 are \$2.55
Type of Material	Clay	The state of the s	Authorized By	Clay	У	Date 06/08/89
Source of Material	Native		Tested/Calc. By	н. г	Kuebler/WT	
		D698 Meth. A				r/WT

Test No.	Date		Location of Test Hole										
1 2 3	06/08/89	$\mathbf{S} \cdot \mathbf{W}_{\bullet}$	corner o corner o corner o	f S. ber	m				97 ' 98 ' 99 '				
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *					
1 2 3		14.9 14.9 14.9	113,5 113.5 113,5	13.5 15.4 15.0	114.5 113.5 117.0	100 100 100	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15					

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 10. 95% min. req'd. 11. 90% min. req'd.

8. 100% min. req'd.

9. 98% min. req'd.

- 12.85% min. req'd.
- 13. Opt. Moist. 18. Other_

+ 3%

- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

t Datum 100 =	Cop of	Berm	

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:



REVIEW OF CONSTRUCTION

Job No. _____

Project

Lindrith Evaporation Pond Rio Arriba County, New Mexico

	Rio Arriba County, New Mexico		Lab/Invoice No	31490370		
				Date 06/13/89		
Report By	H. Kuebler/WT	Date 06/09/89	_ Reviewed By <u> </u>	/ arestud Date <u>06/13/</u> 89		
	Tony Schmitz Construction					
Subcontractor		Superintendent				
	and/or completed since last report:Tony					
	onditions:None testing performed: Compaction_tests					
	oaterials, operations and/or test results to pro		mpaction tests	indicated		
Person/persons n	otified of nonconformance to project requirer	ments: N/A				
Nonconformance of	corrected: N/A					
Instructions or inf	ormation received/from: Tony Schmit.	z				
Weather:						
Technician/Engir	neer time on project today:		WELL 1			
No. of visits today	: <u>1</u>	Time and date for next vi	isit: <u>06/12/89</u>			

Copies:

Client (3) Billing (1)





FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490370
Project	Lindrith Evaporation Pond		Report No	Date <u>06/13/89</u>
Location	Rio Arriba County, New Mexico	Report By_	H. Kuebler/WT	Date 06/08/89
Prime Contractor	Tony Schmitz Construction	Superinten	dent <u>Tony Schmi</u>	tz
	ntractor			
	ress and/or completed since last report: Tony Schmitz		ction continued	lberm
Unexpected site c	onditions: Afternoon rain stopped project.			
	testing performed: Compaction tests and visual area was brought to the Farmington Lab.			
	arthwork materials, operations and/or test results to project			
Person/persons n	otified of nonconformance to project requirements: N/A			
Nonconformance	corrected: N/A			
Instructions or info	ormation received/from: Tony Schmitz, job will	continue	06/09/89	
	on project today:		No. of visits today	<u>/:_1</u>
I ime and date for	next visit: <u>06/09/89</u>			
Conies: C	lient (3)			

Client (3)
Billing (1)



TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490370

Date

06/01/89

Reviewed By L. Waresback

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexcio

Type of Material

Clay

Authorized By Client

Date 05/30/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date		Location of Test Hole									
1 2 3	05/30/89 50' W. of S.E. corner of S. berm 70' N. of S.W. corner of S. berm 50' S. of N.W. corner of N. berm											
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	<u> </u>			
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	15.9 13.7 18.0	113.0 111.7 110.5	100 98 97	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15				

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom
- 7. Above Footing Bottom
- 8. 100% min. req'd.
- 9. 98% min. req'd.
- 10. 95% min. req'd.
- 11. 90% min, req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- dry density. AASHTO T-224 12. 85% min. reg'd. 13. Opt. Moist. 18. Other
 - + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 = Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490370

06/05/89

AR NO AR CONTACTOR OF THE AMERICAN ASSAULT AND ARCONOMIC ASSAULT ASSAULTS.

Reviewed By L. Warestock

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client Date 06/02/89

Source of Material Native

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1	06/02/89	60' W. of S.E. corner of S. berm	95'
2	06/02/89	85' E. of S.W. corner of S. berm	95 '
3	06/02/89	40' N. of S.W. corner of S. berm	95 '
4	06/02/89	70' S. of N.W. corner of N. berm	97 '
5	06/02/89	50' N. of S.W. corner of S. berm	95 '
6	06/02/89	120' S. of N.W. corner of N. berm	95'
7	06/02/89	Center of S. berm	95'

Moisture Density	Optimum Moisture	Max. Dry Density	In-Place Cl Moisture	Dry Density	Relative Compaction	Within Specs.	Comments *
Lab No.	%	pcf	%	pcf	%	1	
	14.9	113.5	12.0	109.7	97	Yes	1-10-13-15
	14.9	113.5	13.7	108.9	96	Yes	1-10-13-15
	14.9	113.5	12.5	107.8	95	Yes	1-10-13-15
	14.9	113.5	14.8	113.8	100	Yes	1-10-13-15
	14.9	113.5	13.8	110.7	98	Yes	1-10-13-15
	14.9	113.5	12.9	111.2	98	Yes	1-10-13-15
	14.9	113.5	14.3	110.7	98	Yes	1-10-13-15
	Density	Density Lab No. Moisture % 14.9 14.9 14.9 14.9 14.9 14.9 14.9	Density Lab No. Moisture % Density pcf 14.9 113.5 14.9 113.5 14.9 113.5 14.9 113.5 14.9 113.5 14.9 113.5 14.9 113.5 14.9 113.5	Density Lab No. Moisture % Density pcf Moisture % 14.9 113.5 12.0 14.9 113.5 13.7 14.9 113.5 12.5 14.9 113.5 14.8 14.9 113.5 13.8 14.9 113.5 12.9	Density Lab No. Moisture % Density pcf Moisture % Dry Density pcf 14.9 113.5 12.0 109.7 14.9 113.5 13.7 108.9 14.9 113.5 12.5 107.8 14.9 113.5 14.8 113.8 14.9 113.5 13.8 110.7 14.9 113.5 12.9 111.2	Density Lab No. Moisture % Density pcf Moisture % Dry Density pcf Compaction % 14.9 113.5 12.0 109.7 97 14.9 113.5 13.7 108.9 96 14.9 113.5 12.5 107.8 95 14.9 113.5 14.8 113.8 100 14.9 113.5 13.8 110.7 98 14.9 113.5 12.9 111.2 98	Density Lab No. Moisture % Density pcf Moisture % Dry Density pcf Compaction % Specs. I 14.9 113.5 12.0 109.7 97 Yes 14.9 113.5 13.7 108.9 96 Yes 14.9 113.5 12.5 107.8 95 Yes 14.9 113.5 14.8 113.8 100 Yes 14.9 113.5 13.8 110.7 98 Yes 14.9 113.5 12.9 111.2 98 Yes

* Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area 6. Below Footing Bottom
- 7. Above Footing Bottom
- 8. 100% min, reg'd.
- 9. 98% min. req'd.
- 10. 95% min. reg'd.
- 11. 90% min. req'd.
- 12.85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other
 - + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 = Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:



Type of Aggregate Clay

INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

L	. A	В	0	R	A	т	0	R	Υ	R	Ε	P	O	R	т

PHYSICAL PROPERTIES OF AGGREGATES

Client	Tony Schmitz Construction	31044	Job No	
	Star Route Lindrith, NM 87029		Lab/Invoice No	. 31490370
			Date of Report.	06/14/89
			Reviewed By	L. Waresbord
Project	Lindrith Evaporation Pond		trong a real of Street and Hall to	
Location	Rio Arriba County, NM Sampleo	IBv H. Kueb	ler/WT	Date 06/08/89

Source of Aggregate Borrow Area, E. of Site Authorized By Client _____ Date <u>06/08/89</u>

Submitted By H. Kuebler/WT Date 06/08/89

Sieve Size	% Passing Accumulative	Specification		Test	Result	Specification	Test STD
			Fineness Mo	dulus			C125-
4"			Dry Rodded	Unit Weight, pcf			C29-
3″			Lightweight	Pieces, %			C123-
2″			Clay Lumps a	and Friable Particles			C142-
11/2"			Organic Imp	urities			C40-
11/8"			Sand Equival	lent Value			C2419-
1″				% Wear, rev.			C131-
3/4 "			Resistance to	% Wear, 500 rev.			Grading
1/2 "			Abrasion	% Wear, rev.			C535-
3/8 "				% Wear, 1000 rev.			Grading
1/4 "			Scratch Hard	Scratch Hardness, % by: Weight Count			C235-
No. 4			Fractured Fa	ces, % by: Weight Count	1		
8			Liquid Limit	Plasticity Index			D4318-
10			Cleanness Va	alue			Calif. 227-
16							
30			Moisture	Max. Dry Density, pcf	115.3	☑ D698-A	
40			Density Relations	Optimum Moisture, %	13.3	☐ D1557- ☐ AASHT	O T99-
50			Method		A	□ AASHT	O 1 180-
100				Absorption, %			
			Specific Gravity	Bulk (Dry)		□ C127-	
			Gravity	Bulk (SSD)		☐ C128-	
Finer than 200 ASTM C117-				Apparent			

Copies to:



Project _____

WESTERN TECHNOLOGIES INC.

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

PHYSICAL PROPERTIES OF AGGREGATES

:	_	_	
п	Ω	n	t

Tony Schmitz Construction

Lindrith Evaporation Pond

Location Rio Arriba County, NM Sampled By H. Kuebler/WT

Star Route

Lindrith, NM 87029

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⊀.	1	0	4	4	

Job No. _____

Lab/Invoice No. 31490370

Date of Report ______06/08/89

Reviewed By L. Wares back

____ Date <u>05/24/89</u>

Type of Aggro	egate <u>CL-C</u>	Lay		Submitted By H • Kue	ebler/W1	Date	00/0//89
Source of Agg	regate Right	Permeamete	er	Authorized ByClient	t	Date	05/24/89
Sieve Analysis, A				e ASTM unless otherwise noted.			
Sieve Size	% Passing Accumulative	Specification		Test	Result	Specification	Test STD
			Fineness Mo	dulus			C125-
4"			Dry Rodded I	Unit Weight, pcf			C29-
3″			Lightweight I	Pieces, %			C123-
2"			Clay Lumps a	and Friable Particles			C142-
11/2"			Organic Imp	urities			C40-
11/8"			Sand Equival	lent Value			C2419-
1″				% Wear, rev.			C131-
3/4 "			Resistance	% Wear, 500 rev.			Grading
1/2 "			Abrasion	% Wear, rev.			C535-
3/8 "				% Wear, 1000 rev.			Grading
. 1/4"			Scratch Hard	Iness, % by: Weight Count			C235-
No. 4			Fractured Fa	ces, % by: Weight Count			
8			Liquid Limit	Plasticity Index			D4318-
10			Constant	Head Permeability,			Calif. 227-
16			cm/sec		7.3x10 ⁻⁸		
30			Moisture	Max. Dry Density, pcf		□ D698-	
40			Density Relations	Optimum Moisture, %		☐ D1557- ☐ AASHT(☐ AASHT(O T99-
50				Method		LI AASHII	J 1 10U-
100				Absorption, %			
			Specific Gravity	Bulk (Dry)		□ C127-	
			Gravity	Bulk (SSD)		☐ C128-	
Finer than 200 ASTM C117-				Apparent			

Copies to:

Client (3)

Billing (1)

/tt

95% compaction at optimum moisture content



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

				Job No.	
Client	Tony Schmitz Constructi	on	31044	Invoice No	31490370
Project	Lindrith Evaporation Po	nd		Report No.	Date 06/05/89
Location	Rio Arriba County, New 1	Mexico	Report By	H. Kuebler/WT	Date 05/30/89
Prime Contracto	or Tony Schmitz Constructi	on	Superinten	dent Tony Schmit	Z
Earthwork Subo	contractor Tony Schmitz Cons	truction	Superinten	dent Tony Schmit	Z
		port: Tony Schmitz			
	conditions: None				
Sampling and/o	or testing performed: Compaction	n tests and visua	l observ	ation.	
	earthwork materials, operations and/adequate_compaction.				
Person/persons	notified of nonconformance to project	requirements: N/A			
Nonconformanc	e corrected: N/A				
	nformation received/from: Scrape Tony Schmitz will call V				-
	ne on project today: or next visit:			·	:_1
Copies:	Client (3) Billing (1) /tt		2.6	areoback Reviewed By	

FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490370
Project	Lindrith Evaporation Pond		Report No.	Date 06/22/89
Location	Rio Arriba County, New Mexico	Report By_	H. Kuebler/WT	Date 06/12/89
Prime Contrac	ctor_Client	Superinter	dent	
Earthwork Sul	bcontractor	Superinter	dent	
Earthwork in p	progress and/or completed since last report: Tony Sch	mitz Constru	ction continued	berm building
Unexpected si	ite conditions: None			
Sampling and	/or testing performed: Compaction test and vis	ual observat	ion.	
compactio	of earthwork materials, operations and/or test results to p			
	ns notified of nonconformance to project requirements:N			
Nonconformar	nce corrected: N/A			
to 95% an (three fe have mois placed al	information received/from: Native soil in pond d have moisture content ± 3% optimum of et in depth) shall be placed in lifts s ture content ± 3% optimum of standard p ong interior berm walls since berm was ity specifications.	standard pro ix inches or roctor. No	octor. Clay li less and compa clay lining mat	ning material cted to 95% and erial shall be
	ime on project today:			
i ime and date	for next visit: 06/14/89	en registration of the second		
Copies:	Client (3) Billing (1) /tt	1.0	Varesback Reviewed By	



REVIEW OF CONSTRUCTION

Project	Lindrith Evaporation Pond		210//	Job No	
Project	Rio Arriba County, New Mexico		31044	Lab/Invoice No.	
					Date 06/22/8
Report By	H. Kuebler/WT	Date_	06/14/89		JanushuchDate 06/22/8
Prime Contracto	orClient				
Subcontractor_		Super	rintendent		
Native soi	ss and/or completed since last report: Tony I in pond bottom was scarified a	and co	ompacted to a	it least 95% of	standard
proctor.	Clay liner in pond bottom starte	ed to	be placed.		
The state of the s					
		gyn offenskie'r Mal II feliniaego, aeddol Myddig			***************************************
					A CAMPANIA AND AND AND AND AND AND AND AND AND AN
Unexpected site	conditions: None				
				_	
Sampling and/o	or testing performed. <u>Compaction tests</u>	s and	visual obser	vation.	
Conformance of	materials, operations and/or test results to pro	oiost so	ouisaments. Com	Daction tosts	mo+
	specifications.	oject ret	quirements;oom	paceron ceses	
Person/persons	notified of nonconformance to project requirer	ments:	N/A		
Nonconformanc	e corrected: <u>N/A</u>				
Instructions or i	nformation received/from: N/A				
A SWITTER TO THE SWIT					
The state of the s					
	:				
_	gineer time on project today:ay:ay:				
Cond a -	ay		and dute for HEAL VI	00/13/89	

WESTERN TECHNOLOGIES INC.

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LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490370

Date 06/22/89

Reviewed By L. Waresback

Project

Lindrith Evaporation Pond

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By

Client Date 06/14/89

Elevation

of Test

Datum †

Source of Material Native

Date

Location of Test Hole

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

*1 *2 *3 *4 *5 6 7 8	06/14/89 06/14/89 06/14/89 06/14/89 06/14/89 06/14/89 06/14/89	Cente 70' N 20' S 60' E 50' S 50' N	of S.W. of N.W. of N.W. 60' E.	. corner berm . corner . corner . corner of N.W. of S.W. of S.E.	of S. b of N. b of N. b corner	erm erm erm of pond of pond	botto	m	100' 100' 100' 100' 100' 97' 97'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
*1 *2 *3 *4 *5 6		14.9 14.9 14.9 14.9 14.9 14.9	113.5 113.5 113.5 113.5 113.5 113.5	17.9 16.6 15.7 16.7 17.1 12.8 13.3	109.0 110.2 107.2 111.4 107.2 109.0 112.5	96 97 95 98 95 96	Yes Yes Yes Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15	
8		14.9	113.5	16.5	112.0	99	Yes	1-10-13-15	

- * Comments
- 1. Subgrade 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area 6. Below Footing Bottom
- 7. Above Footing Bottom
- 8. 100% min, reg'd.
- 9. 98% min. req'd.
- 10. 95% min. req'd.
- 11. 90% min. reg'd. .
- 12. 85% min. req'd.
- 13. + 3% of
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017

18. Other

- 16. Tested ASTM D-2922/AASHTO T-217 17. Rock correction applied to maximum
- dry density. AASHTO T-224
- Opt. Moisture

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+Datum 100'=Top of Pond Bottom

*100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

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Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Lab/Invoice No. _ 31490370

06/22/89

Reviewed By L. Waresbord

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material Clay

THE RESERVE OF THE SECOND PROPERTY OF THE SEC

Authorized By Client Date 06/14/89

Source of Material Native

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
*9	06/14/89	90' N. 40' W. of S.E. corner of pond bottom	97'
*10	06/14/89	20' S. 25' W. of N.E. corner of pond bottom	97'
11		N.E. corner of N. berm	100 '
12	06/14/89	Center of E. berm	100'
*13	06/14/89	Center of Pond	97 '
*K14	06/14/89	Retest of Test #13, 06/14/89	97'

Total	Moisture	Optimum	Max. Dry	In-Place Ch	naracteristics	Relative	Within	
Test No.	Density Lab No.	Moisture %	Density pcf \	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
*9		14.9	113,5	14.2	109.0	96	Yes	1-10-13-15
*10		14.9	113.5	13.5	111.0	98	Yes	1-10-13-15
11		14.9	113.5	16.0	109.5	97	Yes	1-10-13-15
12	!	14.9	113.5	15.8	111.0	98	Yes	1-10-13-15
*13		14.9	113.5	14.6	105.0	92	No	1-10-13-15
*R14		14.9	113.5	16.6	110.2	97	Yes	1-10-13-15
	1	1		L	L	l <u></u>	<u> </u>	

^{*} Comments

+Datum 100 =Top of Berm

*100'=Top of Pond Bottom

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)

^{1.} Subgrade

^{2.} Subbase Fill

^{3.} Base Course

^{4.} Backfill

^{5.} Pavement Area

^{6.} Below Footing Bottom 7. Above Footing Bottom

^{8. 100%} min. req'd.

^{9. 98%} min. reg'd.

^{10. 95%} min. req'd.

^{11. 90%} min. req'd.

^{12.85%} min. req'd.

^{14.} Tested D-1556/AASHTO T-217

^{15.} Tested ASTM D-2922/D-3017

^{16.} Tested ASTM D-2922/AASHTO T-217

^{17.} Rock correction applied to maximum dry density. AASHTO T-224

^{18.} Other ___

^{13 + 3%} of 18 Opt. Moisture

^{19.} Test Locations on Accompanying Site Plan

^{20.} Specifications Unknown





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

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Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490370

Reviewed By R. Waresback

Project

Lindrith Evaporation Pond

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By

Location of Test Hole

Client

Date 06/16/89

Elevation

of Test

Datum †

Source of Material Borrow Site, 150' E. of Pond Tested/Calc. By

Date

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By Client

1 : 2 3	06/16/89 06/16/89 06/16/89	Cent	N. 40' W er of poi N. 30' E	nd botto	m	-			98† 98† 98†
Test No.	Moisture Density	Optimum	Max. Dry	In-Place Cl Moisture	haracteristics Dry Density	Relative Compaction	Within Specs.	Comments *	
110.	Lab No.	Moisture %	Density pcf	%	pcf	%	3pecs.	Comments	

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd.
- 9. 98% min. reg'd.
- 10. 95% min. req'd. 11. 90% min. req'd.
- 12. 85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17.. Rock correction applied to maximum dry density. AASHTO T-224
- 13.+ 3% of 18. Other _ Opt. Moisture

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

100 =Top of Pond Bottom

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



FIELD REPORT

Reviewed By

REVIEW OF EARTHWORK CONSTRUCTION

		Job No	
Client	Tony Schmitz Construction		31490370 ′
Project	Lindrith Evaporation Pond		
Location	Rio Arriba County, New Mexico	Report By H. Kuebler/	WT Date 06/19/89
Prime Contra	ctor_Client	Superintendent Tony S	chmitz
Earthwork Su	bcontractor	Superintendent	
	progress and/or completed since last report: Tony Scoond bottom.		
	ite conditions: <u>None</u>		
Sampling and	/or testing performed: Compaction tests and v	visual observation.	
Conformance	of earthwork materials, operations and/or test results to percentage compaction.	-	on tests indicat
Person/perso	ns notified of nonconformance to project requirements:	N/A	
Nonconforma	nce corrected: N/A		
nstructions o	r information received/from:Job_completion_sho	ould be by 06/21/89	
	time on project today:		oday: 1
Time and date	e for next visit:		
Copies:	Client (3) Billing (1) /tt	L. Waresbar	L



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

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Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490370

06/22/89

Reviewed By

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By Client Date 06/19/89

Source of Material Borrow Area - E. of Pond

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By Client

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1 2 3 4	06/19/89 06/19/89 06/19/89 06/19/89	18' W. 35' N. of S.E. corner of pond bottom Center of pond bottom 60' S. 60' E. of N.W. corner of pond bottom 20' N. 20' E. of S.W. corner of pond bottom	99' 99' 99' 99'

Test	Moisture	Optimum	Max. Dry	In-Place Ch	aracteristics	Relative	Within		
No.	Density Lab No.	,		Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *	
1		13.2	115.2	11.2	110.7	96	Yes	1-10-13-15	
2		13.2	115.2	10.4	111.3	97	Yes	1-10-13-15	
3		13.2	115,2	11.4	116.4	100	Yes	1-10-13-15	
4		13,2	115.2	11.4	108.9	95	Yes	1-10-13-15	
			,]	·	
	,								

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd.
- 9. 98% min, rea'd.
- 10. 95% min. req'd. 11. 90% min. req'd.
- 12.85% min. req'd.
- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other _
- 13. <u>+ 3% of</u> Opt. Moisture

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 = Top of Pond Bottom

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

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Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490370

06/22/89

Reviewed By L. Waresbach

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By

Client Date 06/20/89

Source of Material Borrow Area-E. of Pond Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1	06/20/89	45' W. 75' S. of N.E. corner of pond bottom	100'
2	06/20/89	70' W. 60' N. of S.E. corner of pond bottom	100'
3	06/20/89	60' E. 70' S. of N.W. corner of pond bottom	100'
4	06/20/89	80' N' 20' E. of S.W. corner of pond bottom	100
4	06/20/89	80' N' 20' E. of S.W. corner of pond bottom	

Test	Moisture	Optimum	Max. Dry	In-Place Ch	aracteristics	Relative	Within	
No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
1		13.2	115.2	11.6	117.6	100	Yes	1-10-13-14
2		13.2	115.2	13.3	109.4	95	Yes	1-10-13-14
3		13.2	115.2	13,3	109.7	95	Yes	1-10-13-14
4		13.2	115.2	14.3	111.2	97	Yes	1-10-13-14
					<u> </u>		1	

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd.
- 9. 98% min. req'd. 10. 95% min. reg'd.
- 11. 90% min. req'd.
- 12, 85% min. reg'd.

- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other _

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+ Datum 100 = Top of Pond Bottom

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Iob No.

Lab/Invoice No. 31490370

Date

06/05/89

Reviewed By L. Warestown

Project-

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client

Date 06/02/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1	06/02/89	60' W. of S.E. corner of S. berm	95
2	06/02/89	85' E. of S.W. corner of S. berm	95'
3	06/02/89	40' N. of S.W. corner of S. berm	95'
4	06/02/89	70' S. of N.W. corner of N. berm	97'
5	06/02/89	50' N. of S.W. corner of S. berm	95'
6	06/02/89	120' S. of N.W. corner of N. berm	95'
7	06/02/89	Center of S. berm	95'

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *
1 2 3 4 5 6 7		14.9 14.9 14.9 14.9 14.9 14.9	113.5 113.5 113.5 113.5 113.5 113.5 113.5	12.0 13.7 12.5 14.8 13.8 12.9 14.3	109.7 108.9 107.8 113.8 110.7 111.2 110.7	97 96 95 100 98 98 98	Yes Yes Yes Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15 1-10-13-15

- * Comments
- 1. Subgrade 2. Subbase Fill

3. Base Course

5. Pavement Area

4. Backfill

8. 100% min, reg'd. 9. 98% min. req'd. 10. 95% min. req'd.

11. 90% min, reg/d.

12. 85% min. req'd.

- 14. Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- dry density. AASHTO T-224 13. Opt. Moist. 18. Other_
- 6. Below Footing Bottom 7. Above Footing Bottom
- + 3%

- 19. Test Locations on Accompanying Site Plan 20. Specifications Unknown

+Datum 100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No.	31490370
Project	Lindrith Evaporation Pond			Date 06/05/89
	Rio Arriba County, New Mexico	Report By		NT Date 06/02/89
Prime Contract	tor Tony Schmitz Construction	Superinten	dent Tony Schm	nitz
Earthwork Sub	contractor Tony Schmitz Construction	Superinten	dent Tony Schn	nitz
	rogress and/or completed since last report: Tony Schmdwest berms.	itz Constru	ction continu	ed to build
Unexpected sit	re conditions: None			
Sampling and/	or testing performed: Compaction tests and vis	ual observa	tion	•
	on requirements.	ject requirement	s: Compaction	n tests met
Person/person	s notified of nonconformance to project requirements: N/	Α		
Nonconforman	ce corrected: N/A			
Instructions or	information received/from: Tony Schmitz			
Tech./Eng'r ti	me on project today:		No. of visits to	day: 1
	for next visit:			
Copies:	Client (3)	_		
	Billing (1) /tt	7.6	arestock Reviewed By	

17.1

FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

	<u>-</u>		Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490370
Project	Lindrith Evaporation Pond		Report No.	Date 06/05/89
Location	Rio Arriba County, New Mexico	Report By	H. Kuebler/	WT Date 05/30/89
Prime Contract	or Tony Schmitz Construction	Superinte	ndent Tony Sch	mitz
Earthwork Subo	contractor Tony Schmitz Construction	Superinte	ndent Tony Sch	mitz
	rogress and/or completed since last report: Tony Scand west berms.			
Unexpected site	e conditions: None			
Sampling and/o	or testing performed: Compaction tests and	visual observ		
	earthwork materials, operations and/or test results to pladequate compaction.		•	
Person/persons	s notified of nonconformance to project requirements:	N/A		
Nonconformanc	re corrected: N/A			
	nformation received/from: Scraper broke down Tony Schmitz will call WTI when wor			
Tech./Eng'r tir	ne on project today:		No. of visits to	oday:1
Time and date f	or next visit:			
Copies:	Client (3) Billing (1) /tt	1.0	Jaroback Reviewed By	



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490370

Date

06/01/89

Reviewed By L. Waresback

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexcio

Clay Type of Material

Authorized By Client

Date 05/30/89

Elevation

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date				Loca	tion of Test Hole			of Test Datum †
1 2 3	05/30/8 05/30/8 05/30/8	9 70 ' 1	N. of S.E N. of S.W S. of N.W	. corner	of S. t	erm			94' 94' 97'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	in-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	15.9 13.7 18.0	113.0 111.7 110.5	100 98 97	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15	

* Comments

1. Subgrade

2. Subbase Fill

3. Base Course

4 Backfill 5. Pavement Area

6. Below Footing Bottom

8. 100% min. req'd. 9. 98% min. req'd. 10. 95% min. req'd. 11. 90% min. req'd.

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum dry density. AASHTO T-224

7. Above Footing Bottom

12. 85% min. req'd. 13. Opt. Moist, 18. Other _

+ 3%

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

†Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:



REVIEW OF EARTHWORK CONSTRUCTION

	-	Job No	
Client	Tony Schmitz Construction	31044 Invoice No	31490261
Project	Lindrith Evaporation Pond		
Location	Rio Arriba County, New Mexico	Report By H. Kuebler/W	Date 05/24/89
Prime Contracto	or Tony Schmitz Construction	SuperintendentTony Sch	nmitz
Earthwork Subc	ontractor Tony Schmitz Construction	Superintendent Tony Sch	nmitz
Earthwork in pro	ogress and/or completed since last report: Tony Sch	mitz Construction contin	nued south and
east berm	building.		
Unexpected site	conditions: Water wagon was broke down. F	depairs will take several	days. No
work unti	1 05/30/89.		
Sampling and/o	rtesting performed: Compaction tests and visu	al inspection	
Conformance of	earthwork materials, operations and/or test results to pro	ject requirements: Compaction	tests met
compactio	n requirements.		
	-		
Person/persons	notified of nonconformance to project requirements:	N/A	
			·
Nonconformance	e corrected: N/A		
	, m Glita Pala		•
	nformation received/from: Tony Schmitz: Pocke		-
located 1	10' S. of N.E. berm. A permeability te	st will be performed on	this material.
		-	
·	· · · · · · · · · · · · · · · · · · ·		MARKETTA,
Tech /Eng/rtim	no on project today.	No. of the	. 1
	ne on project today:		
i nne anu date 10	DI HEAL VISIL. U.J. J. DV OZ		
Copies:	Client (3)		
	Billing (1)		

L. Wares back Reviewed By



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

Reviewed By

Project

Evaporation Pond - Lindrith

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client

Date 05/24/89

Elevation

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

Test No.	Date				Loca	tion of Test Hole			of Test Datum †
1 2 3	05/24/89 05/24/89 05/24/89	40' E	V. of S.E. of S.W S. of N.W	. corner	r of S. 1	oerm			93' 93' 96'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	13.7 12.4 18.0	109.7 112.5 111.4	97 99 98	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15	

- * Comments
- 1. Subgrade
- 2. Subbase Fill 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min, req'd. 9. 98% min. req'd.

+ 3%

- 10. 95% min. req'd.
- 11. 90% min. req'd.
- 12.85% min. req'd.
- 13. Opt. Moist
- dry density. AASHTO T-224
 - 18. Other _

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017

16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

05/30/89

Reviewed By L. Waresback

Project

Evaporation Pond - Lindrith

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By

Client Date 05/23/89

Elevation

of Test

Datum †

921

Source of Material Native

Date

05/23/89

Location of Test Hole

Tested/Calc. By H. Kuebler/WT

70' W. of S.E. corner of S. berm

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

	05/23/89 05/23/89	1		l. corner					92'96'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1		14.9	113.5	17.7	110.5	97	Yes	1-10-13-15	
2	}	14,9	113.5	13.8	108.5	96	Yes	1-10-13-15	
3		14.9	113.5	14.4	109.3	96	Yes	1-10-13-15	

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill 5. Pavement Area
- 6. Below Footing Bottom

7. Above Footing Bottom

- 11. 90% min. req'd.
- 10. 95% min. req'd. 12. 85% min. req'd.

<u>+</u> 3%

13. Opt. Moist

8. 100% min. req'd.

9. 98% min. req'd.

- 14. Tested D-1556/AASHTO T-217 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
 - 18. Other _

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:



REVIEW OF EARTHWORK CONSTRUCTION

	•		Job N	0	
Client	Tony Schmitz Construction		Invoic	e No	31490261
Project	Lindrith Evaporation Pond		Repor	t No	Date <u>05/30/89</u>
Location	Rio Arriba County, New Mexico	Report By	Η. Κι	ebler/WT	Date 05/24/89
Prime Contract	or_Client	Superinten	dent _	Tony Schm	itz
Earthwork Sub	contractorClient	Superinten	dent _	Tony Schm	itz
Earthwork in pi	rogress and/or completed since last report: Tony Schmitz	Construc	tion	continued	to build
S. and W.	berms.				
Unexpected site	e conditions: None				
Sampling and/	or testing performed: Compaction tests and visual	l inspect	ion		
	fill met compaction requirements. s notified of nonconformance to project requirements: N/A				
Nonconforman	ce corrected: N/A				
	information received/from: An average of 10 inches	s to one	foot	is being p	olaced
	me on project today:				·
Copies:	Client (3) Billing (1)		. , /		

/tt

L. Waresboch Reviewed By



REVIEW OF CONSTRUCTION Lindrith Evaporation Pond 31044 Job No. _____ Project Rio Arriba County, New Mexico Lab/Invoice No. 31490370 _Date_06/22/89 Report No. ___ Reviewed By Thandard Date 06/22/89 Report By H. Kuebler/WT Date 06/15/89 Superintendent Tony Schmitz Prime Contractor Client Superintendent _____ Subcontractor ____ Work in progress and/or completed since last report: Tony Schmitz Construction began to place 1st lift of clay liner in pond bottom. Unexpected site conditions: None Sampling and/or testing performed: <u>Visual observation</u>. Conformance of materials, operations and/or test results to project requirements: Clay liner appears to be uniform throughout the lift. Person/persons notified of nonconformance to project requirements: None Nonconformance corrected: None Instructions or information received/from: Weathered claystone lenses appeared under red clay liner material. I informed Tony Schmitz Construction not to place claystone in pond bottom. Weather:____ Technician/Engineer time on project today: Time and date for next visit: 06/16/89 No. of visits today: 1

WESTERN TECHNOLOGIES INC



REVIEW OF CONSTRUCTION

Job No. _____ Project Lindrith Evaporation Pond 31044 Rio Arriba County, New Mexico Lab/Invoice No. 31490370 Report No. ___ Date 06/22/89 Report By H. Kuebler/WT Date 06/16/89 Reviewed By Thanksak Date 06/22/89 _____Superintendent __Tony_Schmitz_____ Prime Contractor Client Superintendent _____ Subcontractor ____ Work in progress and/or completed since last report: Tony Schmitz Construction continued to place clay liner in pond bottom. Unexpected site conditions: None Sampling and/or testing performed: Compaction tests and visual observation Conformance of materials, operations and/or test results to project requirements: Compaction tests indicated _adequate compaction. Person/persons notified of nonconformance to project requirements: N/A Nonconformance corrected: N/A Instructions or information received/from: Work shall resume on Monday, 06/19/89 Weather:____ Technician/Engineer time on project today: Time and date for next visit: 06/19/89No. of visits today: 1 Copies: Client (3)

WESTERN TECHNOLOGIES INC.



REVIEW OF EARTHWORK CONSTRUCTION

	_	Job No	
Client	Tony Schmitz Construction		
	Lindrith Evaporation Pond		
	Rio Arriba County, New Mexico		
Prime Contrac	ctorClient	Superintendent Tony Schmi	tz
Earthwork Sul	bcontractor Client	Superintendent Tony Schmi	tz
Earthwork in p	progress and/or completed since last report: Tony Schm	itz Construction continue	d to build
S. and W.	berms.		
Unexpected si	ite conditions: None		
Sampling and	or testing performed: Compaction tests and vis	ual observation.	·
	of earthwork materials, operations and/or test results to pro	-	
Person/person	ns notified of nonconformance to project requirements: N/	A	
Nonconforma	nce corrected: N/A		
	r information received/from: I informed Tony Schm	•	
	time on project today:		y:
Time and date	e for next visit:		
Copies:	Client (3) Billing (1)	Lulansbook	

/tt

Reviewed By



TECHNOLOGIES

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966

LABORATORY REPORT

PHYSICAL PROPERTIES OF AGGREGATES

~ 1		
1	iont	
	lent	

Tony Schmitz Construction Star Route

Lindrith, NM 87029

31044

Job No. _____

Lab/Invoice No. 31490261

05/23/89 Date of Report _

Reviewed By _

Project	Lindr	ith Evapora	tion Pond		- <u></u>		
Location		ribba Count	y, NM	Sampled By H. Kue	ebler/WT	Date	05/12/89
Type of Aggre	egate Clay			Submitted By H. Kue	ebler/WT	Date	05/12/89
	regate <u>Na</u> t			Authorized By Client ASTM unless otherwise noted.		Date	
Sieve Size	% Passing Accumulative	Specification		Test	Result	Specification	Test STD
			Fineness Mo	dulus			C125-
4"			Dry Rodded	Unit Weight, pcf			C29-
3″			Lightweight	Pieces, %			C123-
2″			Clay Lumps a	and Friable Particles			C142-
11/2"			Organic Imp	urities			C40-
11/8"			Sand Equival	ent Value			C2419-
1″				% Wear, rev.		1,	C131-
3/4 "			Resistance to	% Wear, 500 rev.			Grading
1/2 "			Abrasion	% Wear, rev.			C535-
3/8 "		* <u></u> ,		% Wear, 1000 rev.			Grading
1/4"			Scratch Hard	Iness, % by: Weight Count			C235-
No. 4			Fractured Fa	ces, % by: Weight Count		1	
8			Liquid Limit	Plasticity Index		1	D4318-
10			Cleanness Va				Calif. 227-
16			Constant cm/sec	Head Permeability	9.8x10 ⁻⁸		
30			Moisture	Max. Dry Density, pcf		□ D698-	
40			Density Relations	Optimum Moisture, %		□ D1557- □ AASHTO) T99-
50				Method		□ AASHTO) 1180-
100				Absorption, %			
			Specific	Bulk (Dry)		☐ C127-	
•			Gravity	Bulk (SSD)		□ C128-	
Finer than 200 ASTM C117-				Apparent			

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Client (3) Billing (1)

/tt

95% compaction at optimum moisture content

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

05/30/89

Reviewed By L. Waresbord

Project

Evaporation Pond - Lindrith

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client

Date 05/22/89

Elevation

of Test

Datum †

Source of Material

Native

Tested/Calc. By

Location of Test Hole

H. Kuebler/WT

Moisture/Density Relationship ASTM D698

Date

Meth. A

Test Locations Designated By H. Kuebler/WT

2	05/22/89 05/22/89 05/22/89	60' S	of S.E. of N.W	. corner	of N. b	erm			91' 95' 91'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	paracteristics Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	17.0 14.1 14.2	109.0 110.0 109.2	96 97 96	Yes Yes Yes	1-10-13-15 1-10-13-15 1-10-13-15	

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 8. 100% min. req'd. 9. 98% min. reg'd.
- 10, 95% min. req'd.

+ 3%

- 11. 90% min. req'd.
- 12, 85% min, req'd. 13. Opt. Moist
- 15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217

14. Tested D-1556/AASHTO T-217

- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. .

31490261

05/30/89

Project

Evaporation Pond - Lindrith

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client

Date 05/19/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By H. Kuebler/WT

Test No.	Date		Location of Test Hole					Elevation of Test Datum †	
1 2 3	05/19/89 05/19/89 05/19/89	80' S	140' W. of S.E. corner of S. berm 80' S. of N.W. corner of N. berm 50' N. of S.W. corner of S. berm					91' 94' 91'	
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	

Test	Moisture Density	Optimum Moisture	Max. Dry Density	In-Place Cl Moisture	Dry Density	Relative Compaction	Within Specs.	Comments *
No.	Lab No.	%	pcf	%	pcf	%	1	Comments
1		14.9	113.5	14.2	115.2	100	Yes	1-10-13-15
2		14.9	113.5	14.2	116.0	100	Yes	1-10-13-15
3		14.9	113.5	17.0	112.8	100	Yes	1-10-13-15
	ļ				ľ			
	<u> </u>							

^{*} Comments

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

†Datum 100 = Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

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Client (3) Billing (1) /tt

^{1.} Subgrade

^{2.} Subbase Fill

^{3.} Base Course 4. Backfill

^{5.} Pavement Area 6. Below Footing Bottom

^{8. 100%} min. reg'd. 9. 98% min. req'd. 10. 95% min. req'd.

^{14.} Tested D-1556/AASHTO T-217

^{15.} Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217

^{17.} Rock correction applied to maximum dry density. AASHTO T-224

^{7.} Above Footing Bottom

^{11. 90%} min req'd. 12. 85% min. reg'd.

^{13.} Opt. Moist. 18. Other_

^{+ 3%}





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, New Mexico 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

05/19/89

Reviewed By Aa maduel

Project

Lindrith Evaporation Ponds

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client

Date 05/15/89

Elevation

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By H. Kuebler/WT

No.	Date				Loca	tion of Test Hole	•			of Test Datum †
1 2R 3	05/15/89 05/15/89 05/15/89	Retes	corner a st of Tes er of W.	st #1, 0		of S.E.	cornei	of dike		84 ' 84 .87 '
4 5R	05/15/89	S.E.		arroyo,		of S.E.	corner	of dike		84 ' 84 '
6 7R	05/15/89 05/15/89		corner a			of S.E.	cornei	of dike		85 ' 84 '
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	paracteristics Dry Density pcf	Relative Compaction %	Within Specs.		Comments *	
1 2R 3		14.9 14.9 14.9	113.5 113.5 113.5	17.6 14.7 17.3	105.0 117.7 112.5	93 100+ 99	No Yes Yes	1-9-13-15 1-9-13-15 1-9-13-15		
4 5R 6 7R		14.9 14.9 14.9	113.5 113.5 113.5 113.5	14.7 14.1 12.1 13.9	107.7 113.5 106.2 113.7	95 100 94 100	No Yes No Yes	1-9-13-15 1-9-13-15 1-9-13-15 1-9-13-15		
/ K		14.7	113.3	13.9	113./	100	res	1-9-13-13	and the second s	

Comments

4. Backfill

1. Subgrade 2. Subbase Fill

3. Base Course

8. 100% min. req'd. 9. 98% min. req'd.

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017

10. 95% min. req'd. 11. 90% min. reg'd.

13 Opt. Moist.

12.85% min. req'd.

16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum dry density. AASHTO T-224

18. Other

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

7. Above Footing Bottom

6. Below Footing Bottom

5. Pavement Area

Client (3) Billing (1)

+3%

/tt

Copies to:



TECHNOLOGIES

400 South Lorena Avenue Farmington, New Mexico 87401 (505) 327-4966



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No. ...

Lab/Invoice No.

31490261

Date

05/19/89

Reviewed By Sa Muduel

Project

Lindrith Evaporation Ponds

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material

Authorized By ____Client

Date 05/16/89

Elevation

of Test

Datum †

Source of Material Native

Date

Location of Test Hole

Tested/Calc By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

1 2 3	05/16/89 05/16/89 05/16/89	S.E.	arroyo, arroyo,	150' N.	of S.E.		of dik	ce	. 86' . 87' 88'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	paracteristics Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3		14.9 14.9 14.9	113.5 113.5 113.5	13.5 12.4 13.4	111.7 111.0 111.8	98 98 98	Yes Yes Yes	1-9-13-15 1-9-13-15 1-9-13-15	

- * Comments
- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 10. 95% min. reg'd. 11. 90% min. reg'd. 12.85% min. reg'd.

8. 100% min. reg'd.

9. 98% min. req'd.

- 14 Tested D-1556/AASHTO T-217
- 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum dry density. AASHTO T-224
- 18. Other
- 13.Opt. Moist. **+** 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)

LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490261

05/19/89

Reviewed By Sa. madicel

Project

Lindrith Evaporation Ponds

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client Date 05/17/89

of Test

Datum †

Source of Material Native

Date

Location of Test Hole

Tested/Calc. By H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

1 2 3R 4 5R 6 7	05/17/89 05/17/89 05/17/89 05/17/89 05/17/89 05/17/89 05/17/89	60' N Retes 90' S Retes 70' S	W. of S. N. of S. I st of Tes S. of N. West of Tes S. of N. West of S. Wer of S. Wer of S.	E. corner st #1, 05 I. corner st #3, 05 I. corner V. corner	of S. 1 5/17/89 of N. 1 5/17/89 of N. 1	oerm oerm			88' 88' 88' 93' 88' 93' 88' 88'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2 3R 4 5R 6		14.9 14.9 14.9 14.9 14.9	113.5 113.5 113.5 113.5 113.5 113.5 113.5	15.8 14.8 15.8 13.9 16.9 16.6 15.4	109.4 115.4 107.5 117.2 112.9 113.3 117.0	96 100+ 95 100+ 100 100	No Yes No Yes Yes Yes Yes	1-9-13-15 1-9-13-15 1-9-13-15 1-9-13-15 1-9-13-15 1-9-13-15	

^{*} Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course 4. Backfill
- 5. Pavement Area
- 6. Below Footing Bottom 7. Above Footing Bottom
- 10. 95% min. req'd. 11. 90% min. reg'd. 12, 85% min. rea'd.
- 8. 100% min. req'd. 9. 98% min. req'd.
- 14. Tested D-1556/AASHTO T-217
 - 15. Tested ASTM D-2922/D-3017
 - 16. Tested ASTM D-2922/AASHTO T-217
 - 17. Rock correction applied to maximum dry density. AASHTO T-224
- 13. Opt. Moist. 18. Other _
 - + 3%

- 19. Test Locations on Accompanying Site Plan
- 20. Specifications Unknown

+Datum 100 =Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



REVIEW OF EARTHWORK CONSTRUCTION

		Job No	
Client	Tony Schmitz Construction	Invoice No	31490261
	Lindrith Evaporation Pond		
Location	Rio Arriba County, New Mexico	Report By H. Kuebler/W	Date 05/19/89
Prime Contrac	ctor_Client	Superintendent Tony Sch	ımitz
Earthwork Sul	bcontractorClient	Superintendent Tony Sch	ımitz
Earthwork in p	progress and/or completed since last report: Tony Sch	mitz Construction continu	ied to build
W. and S.	. berms.		
Unexpected si	ite conditions: None		
Sampling and,	/or testing performed: Compaction tests and vi	sual observation.	•
	d herm fill was being place according to no notified of nonconformance to project requirements: N		
Nonconformar	nce corrected: N/A		
Instructions or	r information received/from: Tony Schmitz		
Tech /Eng/r+	time on project today:	No of visits to	dan
	e for next visit:		Jay:
Copies:	Client (3)	, ,	

Billing (1)

/tt

L. Warestock
Reviewed By





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz Construction

Star Routè

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

Date

05/30/89

L. Waresback

Project

Evaporation Pond - Lindrith

Location

Rio Arriba County, New Mexico

Clay Type of Material

Authorized By

Client

Date 05/18/89

Elevation

of Test

Source of Material Native

Date

Tested/Calc. By

Location of Test Hole

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By

Client

No.	Date						, 		Datum †
1 2	05/18/89 05/18/89		er of S. er of W.						89 ' 89 '
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1 2		14.9 14.9	113.5 113.5	15.9 12.3	111.3 120.2	98 100+	Yes Yes	1-9-13-15 1-9-13-15	

* Comments

1. Subgrade 3. Base Course

2. Subbase Fill

8. 100% min. req'd. 9. 98% min. req'd. 10. 95% min. req'd.

14 Tested D-1556/AASHTO T-217

18. Other _

15. Tested ASTM D-2922/D-3017

4. Backfill 11. 90% min. req'd. 12. 85% min. req'd. 5. Pavement Area

16. Tested ASTM D-2922/AASHTO T-217 17. Rock correction applied to maximum dry density. AASHTO T-224

6. Below Footing Bottom 7. Above Footing Bottom 13 Opt. Moist. + 3%

+Datum 100 =Top of Berm

20. Specifications Unknown

19. Test Locations on Accompanying Site Plan

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)



REVIEW OF EARTHWORK CONSTRUCTION

	_	Job N	lo	
Client	Tony Schmitz Construction	Invoi	ce No	31490261
Project	Lindrith Evaporation Pond	Repo	rt No	Date 05/30/89
Location	Rio Arriba County, New Mexico	Report By H · K	Luebler/WT	Date <u>05/18/89</u>
Prime Contracto	or Client	Superintendent _	Tony Schmi	tz
Earthwork Subc	ontractor Client	Superintendent _	Tony Schmi	tz
Earthwork in proberm cons	ogress and/or completed since last report: Tony Schmit truction.			W. and S.
Unexpected site	conditions: None			
Sampling and/o	r testing performed: Compaction test and visua	l observation.		
indicated	earthwork materials, operations and/or test results to project compacted fill met compaction requirement notified of nonconformance to project requirements: N/	ts.		
Nonconformanc	e corrected: N/A			
Instructions or in	nformation received/from: <u>Tony</u> Schmitz			
	ne on project today:			/:
Copies:	Client (3) Billing (1) /tt	L. Wa	restack eviewed By	

2



REVIEW OF EARTHWORK CONSTRUCTION

	_	Job N	0	
Client	Tony Schmitz Construction	31044 Invoice	e No	31490261
Project	Lindrith Evaporation Ponds	Repor	t No	Date 05/19/89
Location	Rio Arriba County, New Mexico	Report By H. Ki	ebler/WT	Date 05/17/89
Prime Contract	or Tony Schmitz Construction	Superintendent _	Tony Schm	itz
Earthwork Sub	contractor Tony Schmitz Construction	Superintendent	Tony Schm	itz
Earthwork in pr	rogress and/or completed since last report: Crew co	entinued to build w	rest and so	outh berms.
Unexpected site	e conditions: None			
Sampling and/o	or testing performed: Compaction Tests			
Conformance of	earthwork materials, operations and/or test results to proceed to the control of	project requirements: Con	paction to	ests indicated
adequate co	ompaction.			
Person/persons	s notified of nonconformance to project requirements:	N/A		
Nonconformanc	ce corrected: N/A			
Instructions or i	nformation received/from: Work will begin at	8:30 a.m., 05/18/	89	
				·
Tech./Eng'r tir	ne on project today:	No	. of visits today	y:
Time and date f	or next visit:			
Copies:	Client (3) Billing (1)	10 000	<i>a</i> · <i>D</i>	

/tt

Reviewed By

FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

	.		Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490261
Project	Lindrith Evaporation-Ponds		Report No.	Date 05/19/89
	Rio Arriba County, New Mexico			
Prime Contr	actor Tony Schmitz Construction	Superinter	ndent Tony Schn	nitz
Earthwork S	ubcontractor Tony Schmitz Construction	Superinter	ndent Tony Schn	nitz
Earthwork in	n progress and/or completed since last report: Crew bega		west and south	berms.
Unexpected	site conditions: None			
Sampling an	nd/or testing performed: Compaction Tests			•
Conformanc	e of earthwork materials, operations and/or test results to pr	oject requiremen	ts:_Compaction_t	ests indicated
adequate	e compaction.			
Person/pers	sons notified of nonconformance to project requirements:	N/A		
Nonconform	nance corrected: N/A			
Instructions	or information received/from: Work will begin at 8	3:30 a.m., 0	5/17/89	
	r time on project today:			y:
i ime and da	ite for next visit:			
Copies:	Client (3) Billing (1)	1 1		

/tt

S. a. madiel
Reviewed By



FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

	-	Job No	
Client	Tony Schmitz Construction	31044 Invoice No	31490261
Project	Lindrith Evaporation Ponds	Report No	Date 05/19/89
	Rio Arriba County, New Mexico		
Prime Contractor	Tony Schmitz Construction	SuperintendentTony Sc	chmitz
Earthwork Subcor	ntractor Tony Schmitz Construction	Superintendent Tony Sc	chmitz
Earthwork in prog	gress and/or completed since last report: Crew con	inued to fill N.W. and	S.E. arroyos in
pond site.			
The second secon			
Unexpected site o	onditions: None		
	Company to the Company West	1 Ob a serve to i	•
Sampling and/or	testing performed: Compaction Tests and Vis	sual Observation	
Conformance of e	arthwork materials, operations and/or test results to pro	piect requirements: Compact i	on tests indicat
	paction.		
arodunes oru	g w u > . w u		
Person/persons n	otified of nonconformance to project requirements:N	'A	
	corrected: N/A		
A			
nstructions or info	ormation received/from: Tony Schmitz - Job	will start at 8:30 a.m.	, 05/16/89
Tech./Eng'r time	on project today:	No of visite to	odav:
	next visit:		ouay
and date for	TION VISIT.		
Cami	(3)		
Copies:	Client (3)		

Billing (1)

Project	Lindrith Evaporation Pond	310		Job No			
, , , , , ,	Rio Arriba County, New Mexico				31490261		
				Report No	Date 05/15/8		
Report By	H. Kuebler/WT	Date 05/11/89	l	. Reviewed By 📝	Ward and Date 05/15/8		
	Tony Schmitz						
Subcontractor		Superintendent		-			
	nd/or completed since last report: <u>Contr</u> S.E. corner of pond site.						
Unexpected site cor	nditions: None						
Sampling and/or te	esting performed: One Permablity,	Compaction Tes	sts.				
	terials, operations and/or test results to proted to compaction requirements	•	Comp	Dactions test	s indicated fill		
Person/persons no	tified of nonconformance to project requirem	nents: N/A					
Nonconformance co	orrected: N/A						
specificat	rmation received/from: During phone of ion for fill below 10 feet was			•	·		
of ASTM D6	98.		· · · · · ·				
TT Cathlet	r & Windy						

Time and date for next visit:

Copies:

No. of visits today: _____1

Client (3)
Billing (1)
/tt





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No.

31490261

05/15/89

Reviewed By L. Waresback

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By Client

Date 05/11/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By _____ H. Kuebler/WT

Test No.	Date	Location of Test Hole	Elevation of Test Datum †
1R	05/11/89	S.E. arroyo, 150' N. of S.E. corner of dike N.W. arroyo, 120' S. of N.W. corner of dike Retest of Test #2, 05/11/89	87'
2	05/11/89		80'
3	05/11/89		87'
4R	05/11/89		80'
5	05/11/89		88.5'

Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
1R		14.9	113.5	13.8	119.5	100	Yes	1-9-13-15	
2		14.9	113.5	12.3	109.5	97	No	1-9-13-15	
3		14.9	113.5	12.4	117.0	100	Yes	1-9-13-15	
4		14.9	113.5	14.0	113.2	100	Yes	1-9-13-15	
5R		14.9	113.5	17.9	111.7	98	Yes	1-9-13-15	

^{*} Comments

- 1. Subgrade
- 2. Subbase Fill
- 3. Base Course
- 4. Backfill
- 6. Below Footing Bottom
- 5. Pavement Area

7. Above Footing Bottom

- 8. 100% min. req'd. 9. 98% min. req'd.
- 10. 95% min, reg'd.
- 11. 90% min. req'd. 12.85% min. req'd.
- 14. Tested D-1556/AASHTO T-217 15. Tested ASTM D-2922/D-3017
- 16. Tested ASTM D-2922/AASHTO T-217
- 17. Rock correction applied to maximum
- dry density. AASHTO T-224
- + 3%
- 13. Opt. Moist. 18. Other _

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

100'=Top of Berm

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. 31490261

05/09/89

Reviewed By L. Wriesbach

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client

Date 05/08/89

Source of Material Native

Tested/Calc. By

G. Anaya/WT

Moisture/Density Relationship ASTM D 698 Meth. A Test Locations Designated By Client

Test No.	Date				Local	tion of Test Hole	•		Elevation of Test Datum †
1	05/08/89	N.W. I	Keyway (a	arroyo)	120' S.	from N.W	. corr	er of dike	91'
									-
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Ch Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
			I	1					
1		14.9	113.5	8.5	100.0	89	No	1-4-8-13-14	
1		14.9	113.5	8,5	100.0	89	No	1-4-8-13-14	
1		14.9	113.5	8.5	100.0	89	No	1-4-8-13-14	

* Comments

1. Subgrade

2. Subbase Fill

5. Pavement Area

3. Base Course 10. 95% min. req'd. 4. Backfill 11. 90% min. req'd.

8. 100% min. reg'd. 9. 98% min. req'd.

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum dry density. AASHTO T-224

6. Below Footing Bottom 7. Above Footing Bottom 12. 85% min. req'd. + 3%

13. Opt. Moist. 18. Other_

+ Datum 100 = Top of Bottom of Pond

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1) /tt

302



LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

Job No.

Lab/Invoice No. _ 31490261

05/15/89

Project

Lindrith Evaporation Pond

Location

Rio Arriba County, New Mexico

Type of Material Clay

Authorized By

Client

Date 05/12/89

Source of Material Native

Tested/Calc. By

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A

Test Locations Designated By H. Kuebler/WT

Test Date	•	Location of Test Hole	Elevation of Test Datum †
2 05/12 3 05/12 4 05/12 5R 05/12	2/89 2/89 2/89 2/89	N.W. arroyo, 120' S. of N.E. corner of berm S.E. arroyo, 150' N. of S.E. corner of berm N.W. arroyo, 120' S. of N.W. corner of berm S.E. arroyo, 150' N. of S.E. corner of berm Retest of Test #4, 05/12/89 N.W. corner arroyo, 120' S. of N.W. corner berm	90' 82' 90' 83' 83' 92'

Test	Moisture	Optimum	Max. Dry	In-Place Characteristics		Relative	Within	
No.	Density Lab No.	Moisture %	Density pcf	Moisture %	Dry Density pcf	Compaction %	Specs.	Comments *
1		14.9	113.5	16.0	114.7	100	Yes	1-9-13-15
2		14.9	113,5	17.5	112.8	100	Yes	1-9-13-15
3		14.9	113,5	13.4	110.7	98	Yes	1-9-13-15
4		14,9	113.5	12,7	110.5	97	No	1-9-13-15
5R		14.9	113.5	11.9	111.7	98	Yes	1-9-13-15
6		14.9	113.5	15,2	110.8	98	Yes	1-9-13-15
					ł		}	
	l	l			1		1	

^{*} Comments

1. Subgrade

5. Pavement Area

3. Base Course

4. Backfill

2. Subbase Fill

8. 100% min. reg'd. 9. 98% min. req'd. 10. 95% min. req'd.

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017

16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum

6. Below Footing Bottom 7. Above Footing Bottom

11. 90% min. req'd. 12. 85% min. req'd. 13. Opt. Moist. 18. Other.

+ 3%

dry density. AASHTO T-224

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

100'=Top of Berm

19. Test Locations on Accompanying Site Plan

20. Specifications Unknown

Copies to:

Client (3) Billing (1)





LABORATORY REPORT

SOIL/AGGREGATE FIELD DENSITY TESTS

Client

Tony Schmitz

Star Route

Lindrith, NM 87029

31044

10b No.

Lab/Invoice No. 31490261

05/15/89

Reviewed By L. Wares back

Project

Lindrith Evaporation Pond

Location

Test

No.

Rio Arriba County, New Mexico

Type of Material

Clay

Authorized By

Client Date 05/11/89

Elevation

of Test

Datum †

Source of Material Native

Date

Tested/Calc. By

Location of Test Hole

H. Kuebler/WT

Moisture/Density Relationship ASTM D698 Meth. A Test Locations Designated By H. Kuebler/WT

6 7 8 9R	05/11/8 05/11/8 05/11/8 05/11/8	9 N.W. 9 S.E.	arroyo, arroyo, arroyo, est of Te	120' S. 150' N.	of N.W. of S.E.	corner	of di	ke	81' 89' 82' 82'
Test No.	Moisture Density Lab No.	Optimum Moisture %	Max. Dry Density pcf	In-Place Cl Moisture %	Dry Density pcf	Relative Compaction %	Within Specs.	Comments *	
6 7 8 9R		14.9 14.9 14.9 14.9	113.5 113.5 113.5 113.5	17.0 15.2 15.1 11.9	110.7 112.9 103.4 115.7	98 100 91 100	Yes Yes No Yes	1-9-13-15 1-9-13-15 1-9-13-15 1-9-13-15	

* Comments

4. Backfill

1. Subgrade

2. Subbase Fill 3. Base Course

5. Pavement Area

10. 95% min. req'd.

8. 100% min. req'd. 9. 98% min. req'd.

14. Tested D-1556/AASHTO T-217

15. Tested ASTM D-2922/D-3017 16. Tested ASTM D-2922/AASHTO T-217

17. Rock correction applied to maximum dry density. AASHTO T-224

6. Below Footing Bottom

11. 90% min. req'd. 12.85% min. reg'd. 13. Opt. Moist. 18. Other_

100'=Top of Berm

20. Specifications Unknown

19. Test Locations on Accompanying Site Plan

7. Above Footing Bottom

+ 3%

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly apply only to the actual location tested.

Copies to:

Client (3) Billing (1)





FIELD REPORT

REVIEW OF EARTHWORK CONSTRUCTION

			Job No	
Client	Tony Schmitz Construction	31044	Invoice No	31490261
	Evaporation Ponds - Lindrith			
	Rio Arriba County, New Mexico			
Prime Contrac	tor Client	Superinte	ndent Tony Scl	nmitz
Earthwork Sub	contractor Client	Superinter	ndent Tony Sci	nmitz
Earthwork in p	rogress and/or completed since last report: Crew co	ntinued to f	ill arroyos i	n N.W. and S.E.
	pond site.			
Unexpected sit	e conditions: None			
Sampling and/	or testing performed: Compaction Tests			•
Conformance o	f earthwork materials, operations and/or test results to p	project requiremen	ts: <u>Compaction</u>	n tests indicate
fill was b	eing placed to compaction requirements	•		
		······································		
Person/person	s notified of nonconformance to project requirements:	N/A		
Nonconforman	ce corrected: N/A			
		······································		
			0.20	0.00
	information received/from: Tony Schmitz - Wor		8:30 a.m. EO	9:00 a.m. on
Monday, 05	/15/89		· · · · · · · · · · · · · · · · · · ·	
		*		
Tech /Fng'r ti	me on project today:		No of visite to	dav
	for next visit:			ч ч у
Copies:	Client (3)			
	Billing (1)	1		1

/tt

D.C. Muduel Reviewed By