NM1 - __19____

CQA / CQC REPORT

New Evaporation Pond

Date: _July 2009__

COMMERCIAL LAND FARMS
A New Mexico Enterprise
Serving New Mexico's Needs

G M I

New Evaporation Pond

NM- 01- 0019

July 8th , 2009

Gandy Marley, Inc. ◦ Box 1658 ◦ Roswell, NM 88202 ◦ (505) 347-0434 ◦ FAX (505) 347-0435

COMMERCIAL LAND FARMS
A New Mexico Enterprise
Serving New Mexico's Needs

July 8, 2009

Wayne Price
Environmental Bureau Chief
NM Oil Conservation Division
1220 S. Saint Frances Dr.
Santa Fe NM 87505

RECEIVED OCD
2009 JUL 13 A 11:55

Dear Mr. Price,

Please find the enclosed documentation specified in the correspondence received from the OCD office on August 29th 2008. Gandy Marley meets all requirements on the construction of our evaporation pond located in Sections 4, 5 8, & 9 of township 11 south, range 31 east, NMPM, Chaves County NM as specified in our permit NM 01-0019.

Attached is the following information as documented:

1. Copy of emergency order request dated August 28th 2008.
2. The Evaporation Pond as built has met or exceeds the design, construction, material and installation specifications as previously approved on August 2nd 2006. There were no deviations or changes made.
3. Photos of the various stages of construction of the Evaporation Pond.
4. As built drawings, all testing logs and compaction reports as well as free board calculations.
5. All remediated soils were taken to the Landfill prior to construction initiation, furthermore soil sampling was done and the results are provided.
6. The system was designed, constructed and will be operated in a matter that will protect fresh water, public health, and the environment as called for under our permit conditions NM-01-0019

Gandy Marley thanks you for your time and effort in this matter.

Sincerely,

Mike Marley

Mike Marley

Gandy Marley, Inc. ∘ Box 1658 ∘ Roswell, NM 88202 ∘ (505) 347-0434 ∘ FAX (505) 347-0435

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

August 29, 2008

Mr. Larry Gandy
Mr. Bill Marley
P.O. Box 1658
Roswell, NM 88202

Reference:
NMOCD PERMIT NO. NM-01-0019
GANDY MARLEY, INC. SURFACE WASTE MANAGEMENT FACILITY
Located in Sections 4, 5, 8, and 9 of Township 11 South, Range 31 East, NMPM
Chaves County, New Mexico

Subject: Emergency Approval

Gentlemen:

The OCD understands that you are requesting an emergency approval to start the process of replacing part of your existing permitted landfarm area with a minor modification of the current solid waste liquid (removal and evaporation) treatment system that was previously approved as a minor modification on August 02, 2006. OCD hereby approves of this request with the following conditions:

1. Provide written verification within 48 hours that an emergency exists pursuant to our telephone conference calls on August 26th, 27th and 28th.

2. The system shall meet or exceed the design, construction, material, and installation specifications previously approved in the August 02, 2006 approval. Any deviation or change must receive OCD written approval before changes are made.

3. Provide OCD a weekly report with photos by E-mail of the progress of all significant activities and stages of work. All Correspondence shall have the permit number NM-01-0019 included.

4. As-built drawings certified by a professional engineer shall be submitted 60 days after installation and start-up. The drawings shall include size "D" engineering surveyed scaled site plot plans to include all new features, detailed as-built installation scaled drawings including detail section drawings, all material specifications, liner testing QA/QC results,

installation daily log, compaction results, piping and electrical diagrams, flow diagrams, calculated volume sizes, freeboard calculations, and any other information required by OCD.

5. The landfarm area used for this project shall be cleared of any bio-remediated or contaminated soils. The vadose zone shall be sampled to determine if underlying soils are clean and OCD approval must be granted before constructing any device over these areas and documentation must be supplied to OCD where any soils removed are placed on-site. NO soils may be utilized off-site unless approved by OCD.

6. The system shall be designed, constructed, operated and closed so as to contain liquids and solids in a manner that will protect fresh water, public health, and the environment. In addition, all permit conditions for NM-1-0019 and any subsequent amendments, modifications, changes, operating conditions, waste acceptance, reporting and closure requirements from previously approved conditions or any new requirements pursuant to statutes, rules or regulations shall be adhered to including Part 19.15.36 NMAC (Part 36 Surface Waste Management Facilities).

7. OCD will reserve the right to request modifications (albeit minor or major) in a timely fashion in order to protect public health, fresh water, environment, public safety including any other necessary changes including additional financial assurances.

Please be advised that approval of this "minor modification" to permit NM-01-0019 does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

Please sign the certification statement below and return to this office within 10 days. If you have any questions, please contact me at 505-476-3490 or E-mail wayne.price@state.nm.us.

Sincerely,

Wayne Price
Environmental Bureau Chief

Attachments-1
xc: Mark Fesmire-Director
OCD Environment Bureau Staff
OCD District Office

CERTIFICATION

Gandy Marley, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Gandy Marley, Inc. further acknowledges that the Division for good cause shown as necessary to protect fresh water, human health, and the environment may change such terms and conditions administratively. The undersigned also attests to the fact that he or she understands 19.15.1.41 NMAC which states "Any person who conducts any activity pursuant to a permit, administrative order or other written authorization or approval from the division shall comply with every term, condition and provision of such permit, administrative order, authorization or approval."

Accepted:

GANDY MARLEY, INC.

Signature_____Title_____Date_____

COMMERCIAL LAND FARMS
A New Mexico Enterprise
Serving New Mexico's Needs

Mr. Wayne Price
Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

August 28, 2008

Dear Mr. Price,

Gandy Marley, Inc., OCD Permit NM-01-0019, is submitting a request for an emergency permit modification for an additional evaporation pond and cement containment and solidification unit as per rule 19.15.36.19 part B, NMAC. This is submitted as an emergency request because the newly adopted pit rules have overnight increased the demand for evaporation beyond the current capacity. Our existing evaporation pond is nearing capacity as it was not designed to handle the volumes we are currently receiving. If we do not receive this emergency approval we will have to curtail the volumes we receive and this will create a hardship for the producers in our area and curtail drilling operations. These facilities will be built under the same specifications as the existing evaporation pond and cement containment/solidification unit. The proposed facility will be located within the current permitted boundary.

The use of evaporation over stabilization minimizes the volume of waste going to the landfill because of the enormous amount of soil required to stabilize the liquids that are now being received from the working pits of the current drilling operations. By placing these facilities in existing landfarm cells this modification will not increase the overall permitted design capacity.

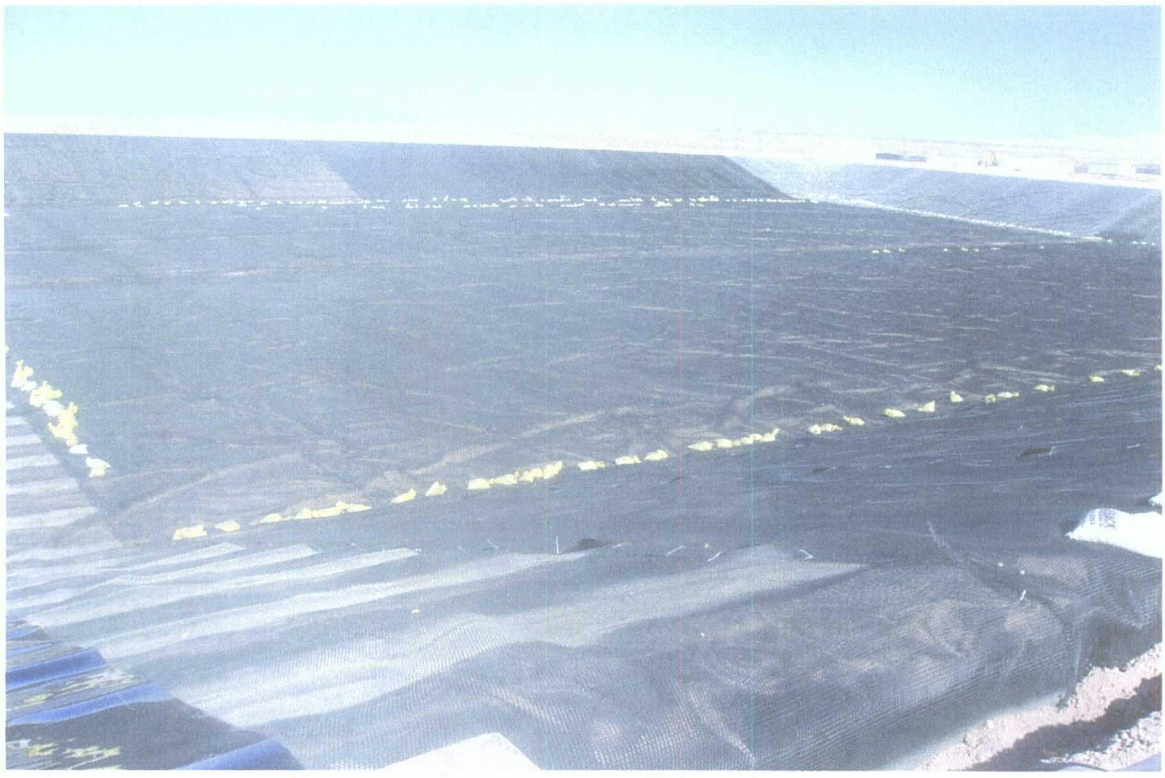
Your prompt attention to this matter is greatly appreciated.

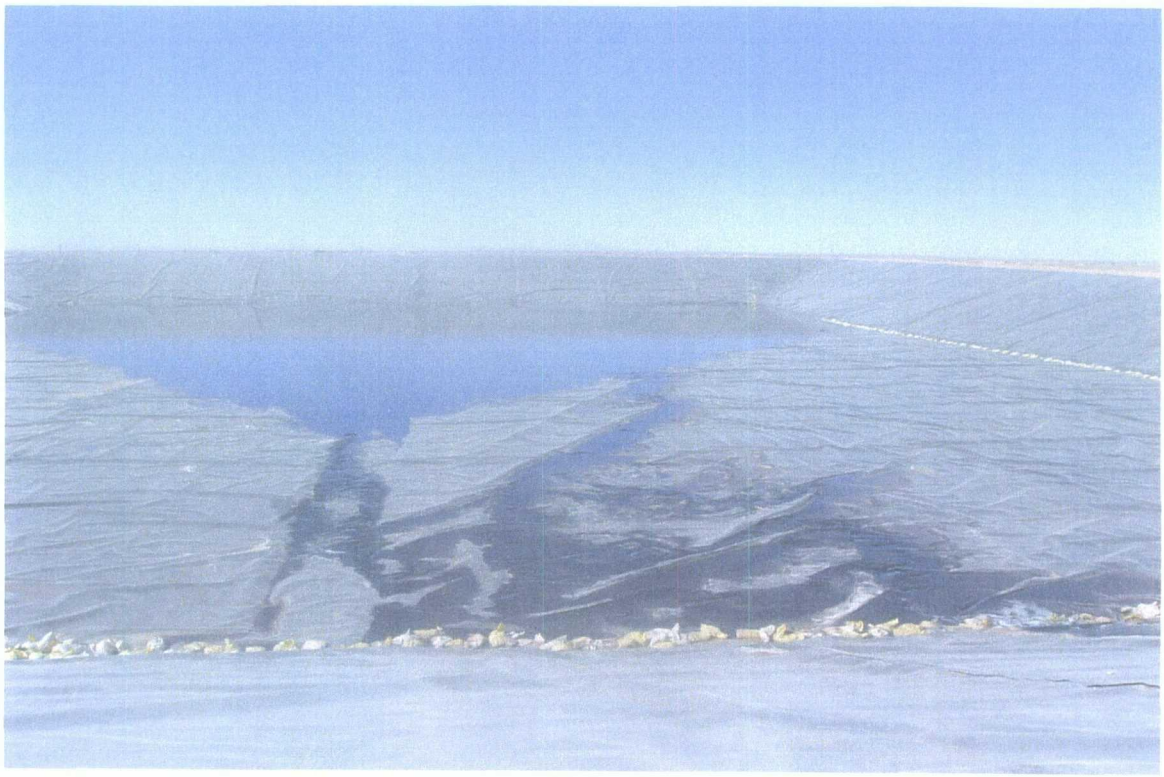
Sincerely,

Bill Marley
Vice President

G M I

New Evaporation Pond Construction Photos





As Built Drawings and Testing Logs For New Evaporation Pond .

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company
(505)622-8866

RECEIVED
JAN 0 3 RECD
AG SERVICES
ROSWELL, NEW MEXICO

PROJECT: *Gandy Marley Landfill Extension 2*

LAB NO: *308905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *12/30/08*

MATERIAL: *Padding Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
33	Pond floor, SW. corner	11.3	117.2	103%	90%
34	Pond floor, South side middle	15.3	111.0	98%	90%
35	Pond floor, SE. corner	9.9	114.9	101%	90%
36	Pond floor, NE. corner	16.9	114.8	101%	90%
37	Pond floor, N. side middle	10.9	112.6	99%	90%
38	Pond floor, NW. corner	12.3	115.5	102%	90%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *13.5*

OPTIMUM DENSITY: *113.5*

COPIES TO:

Gandy Marley
AG Services

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company
(505)622-8866

RECEIVED
JAN 0 6 REC'D
AG SERVICES
ROSWELL, NEW MEXICO

PROJECT: *Gandy Marley Landfill Extension 2*

LAB NO: *308905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT / SA*

CONTRACTOR: *AG Services*

DATE TESTED: *12/17/08*

MATERIAL: *Natural Ground Padding*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
25	West slope S. end, top	10.5	116.2	102%	90%
26	West slope N. end, top	11.8	118.0	104%	90%
27	North slope West end Middle	11.6	120.8	106%	90%
28	North slope East end Middle	11.1	119.3	105%	90%
29	East slope North end	16.1	115.7	102%	90%
30	East slope South end	16.4	108.3	95%	90%
31	South slope East end	10.8	109.2	96%	90%
32	South slope West end	11.2	108.9	96%	90%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *13.5*

OPTIMUM DENSITY: *113.5*

COPIES TO:

Gandy Marley
AG Services

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company
(505) 822-8866

RECEIVED
DEC 17 2008
ROSWELL, NEW MEXICO

PROJECT: *Gandy Marley Landfill Extension 2*

LAB NO: *308905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *12/08/08*

MATERIAL: *Natural Ground Padding*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
17	East slope, North end	12.9	118.5	104%	95%
18	East slope, South end	13.8	115.7	102%	95%
19	South slope West end	13.9	110.9	98%	95%
20	South slope East end	13.7	115.3	102%	95%
21	Pond floor North East corner	14.0	110.5	97%	95%
22	Pond floor North West corner	13.6	111.7	98%	95%
23	Pond floor South East corner	12.8	114.9	101%	95%
24	Pond floor South West corner	13.8	112.4	99%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *13.5*

OPTIMUM DENSITY: *113.5*

COPIES TO:

Gandy Marley
AG Services

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

RECEIVED
DEC 9 2008
AG SERVICES
ROSWELL, NEW MEXICO

PROJECT: *Gandy Marley Landfill Extension 2*

LAB NO: *308905*

CLIENT: *Gandy Marley*

TESTED BY: *ISD / SA*

CONTRACTOR: *AG Services*

DATE TESTED: *12/03/08*

MATERIAL: *Padding Material*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
13	N. slope E. end	10.9	116.4	103%	90%
14	N. slope W. end	14.3	110.4	97%	90%
15	W. slope N. end	13.7	109.4	96%	90%
16	W. slope S. end	12.4	114.6	101%	90%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *13.5*

OPTIMUM DENSITY: *113.5*

COPIES TO:

Gandy Marley
AG Services

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

RECEIVED
NOV 26 2008
AG SERVICES
ROSWELL, NEW MEXICO

PROJECT: *Gandy Marley Landfill Extension 2*

LAB NO: *308905*

CLIENT: *Gandy Marley*

TESTED BY: *ISD*

CONTRACTOR: *AG Services*

DATE TESTED: *11/20/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
1	Pond, SW. area of bottom	8.8	106.2	94%	90%
2	Pond, SE area of bottom	13.5	104.6	92%	90%
3	Pond, E. bank, S. end	9.9	104.1	92%	90%
4	Pond, E. bank, N. end	13.6	108.2	95%	90%
5	Pond, N. bank, E. end	11.8	116.5	103%	90%
6	Pond, N. bank, N. end	11.4	105.5	93%	90%
7	Pond, NE. area of bottom	10.7	108.0	95%	90%
8	Pond, NW. area of bottom	7.4	107.4	95%	90%
9	Pond, W. bank, W. end	9.5	105.6	93%	90%
10	Pond, W. bank, S. end	12.5	114.7	101%	90%
11	Pond, S. bank, E. end	8.5	105.5	93%	90%
12	Pond, S. bank, W. end	10.3	110.5	97%	90%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *13.5*

OPTIMUM DENSITY: *113.5*

COPIES TO:

Gandy Marley
AG Services

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company
(505)622-8866

PROJECT: *Gandy Marley Landfill Extension*

LAB NO: *307905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *01/22/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
25	2nd lift pit area middle section E. end	8.1	121.0	101%	95%
26	2nd lift pit area middle section middle	10.2	117.9	98%	95%
27	2nd lift pit area middle section W. end	8.0	119.8	100%	95%
8	2nd lift pit area North end on NW. corner	10.0	123.3	103%	95%
29	2nd lift pit area North end middle of area	10.2	119.8	100%	95%
30	2nd lift pit area North end on SE. corner	10.9	116.1	97%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *11.5*

OPTIMUM DENSITY: *120.0*

COPIES TO:

Gandy Marley

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

PROJECT: *Gandy Marley Landfill Extension*

LAB NO: *307905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *01/28/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
31	N. slope 1st lift bottom of slope	12.3	120.5	100%	95%
32	N. slope 1st lift top of slope	12.8	117.7	98%	95%
33	N. slope 1st lift top of slope	11.9	125.1	104%	95%
34	N. slope 1st lift top of slope	12.0	120.2	100%	95%
35	N. slope 1st lift bottom of slope	11.9	121.7	101%	95%
36	N. slope 1st lift bottom of slope	12.8	126.8	106%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *11.5*

OPTIMUM DENSITY: *120.0*

COPIES TO:

Gandy Marley

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

PROJECT: *Gandy Marley Landfill Extension*

LAB NO: *307905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *01/28/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
37	N. slope 2nd lift bottom of slope on W. end	13.5	118.1	98%	95%
38	N. slope 2nd lift top of slope on W. end	11.5	119.5	100%	95%
39	N. slope 2nd lift top of slope middle section	13.3	120.6	101%	95%
40	N. slope 2nd lift top of slope E. end	14.0	114.2	95%	95%
41	N. slope 2nd lift bottom of slope on E. end	15.0	115.5	96%	95%
42	N. slope 2nd lift bottom of slope middle section	13.2	118.3	99%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *11.5*

OPTIMUM DENSITY: *120.0*

COPIES TO:

Gandy Marley

Jim Landfair, Project Manager

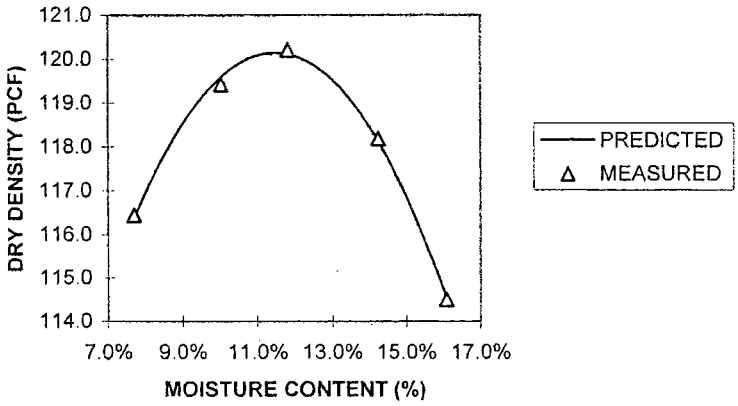
Smith Engineering Company
A Full-Service Engineering Company

SOIL REPORT FORM

PROJECT	Gandy-Marley-Landfill Extension	LAB NO.	308801		
CLIENT	Gandy-Marley	SAMPLE NO.	J070301		
CONTRACTOR	AG Services	SAMPLED BY	Client	DATE	12/31/2008
A SAMPLE OF	NG	TESTED BY	ISD/MDT	DATE	12/3/2008
LOCATION	On Site				

TEST METHOD - *ASTM D-698 A*

MOISTURE-DENSITY CURVE



AGGREGATE SIEVE ANALYSIS

ASTM C136

SIEVE SIZE (U.S.B.S.)	CUMULATIVE % PASSING	SPECIFICATION LIMITS
2"	NT	
1 1/2"	NT	
1"	NT	
3/4"	NT	
1/2"	NT	
3/8"	NT	
No. 4	NT	
No. 10	NT	
No. 40	NT	
No. 80	NT	
No. 200	NT	

% GRAVEL	NT
%SAND	NT
%SILT AND CLAY	NT

MAX. DRY DENSITY 120.0 OPTIMUM MOISTURE 11.5%

CORRECTED FOR OVERSIZE FRACTION: (ASTM D4718)

MODIFIED M.D. NT MODIFIED O.M. NT

ATTERBERG LIMITS *(ASTM D4318)*

LIQUID LIMIT NT PLASTICITY INDEX NT

Jim Landfair
Project Manager

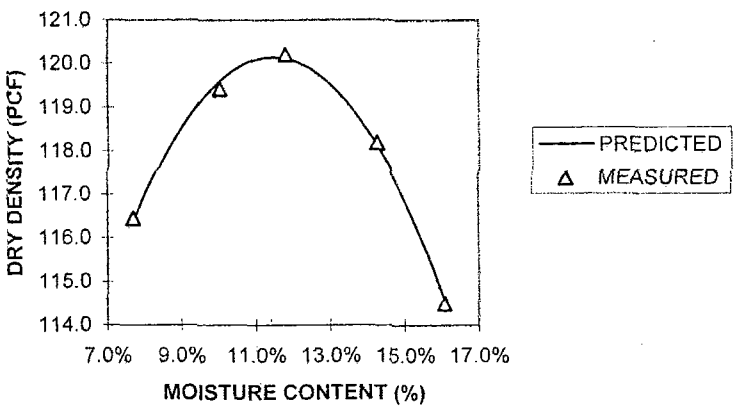
Smith Engineering Company
A Full-Service Engineering Company

SOIL REPORT FORM

PROJECT	*Gandy Marley Landfill Extension*	LAB NO.	*307905*		
CLIENT	*Gandy Marley*	SAMPLE NO.	*J070301*		
CONTRACTOR	*AG Services*	SAMPLED BY	*Client*	DATE	*12/31/2008*
A SAMPLE OF	*NG*	TESTED BY	*ISD/MDT*	DATE	*12/3/2008*
LOCATION	*On Site*				

TEST METHOD - *ASTM D-698 A*

MOISTURE-DENSITY CURVE



AGGREGATE SIEVE ANALYSIS

ASTM C136

SIEVE SIZE (U.S.B.S.)	CUMULATIVE % PASSING	SPECIFICATION LIMITS
2"	NT	
1 1/2"	NT	
1"	NT	
3/4"	NT	
1/2"	NT	
3/8"	NT	
No. 4	NT	
No. 10	NT	
No. 40	NT	
No. 80	NT	
No. 200	NT	

% GRAVEL	NT
%SAND	NT
%SILT AND CLAY	NT

MAX. DRY DENSITY 120.0 OPTIMUM MOISTURE 11.5%

CORRECTED FOR OVERSIZE FRACTION: (ASTM D4718)

MODIFIED M.D. NT MODIFIED O.M. NT

ATTERBERG LIMITS *(ASTM D4318)*

LIQUID LIMIT NT PLASTICITY INDEX NT

Jim Landfair
Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

PROJECT: *Gandy Marley Landfill Extention*

LAB NO: *307905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *Gandy Marley*

DATE TESTED: *01/15/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
1	South Bank (top of Embankment)	12.4	124.9	104%	95%
2	South Bank (top of Embankment)	12.4	124.3	104%	95%
3	South Bank (top of Embankment)	11.0	126.5	105%	95%
4	South Bank (bottom of Embankment)	12.0	124.7	104%	95%
5	South Bank (bottom of Embankment)	14.1	114.2	95%	95%
6	South Bank (bottom of Embankment)	12.2	124.7	104%	95%
7	Pit Area Southeast	10.7	125.6	105%	95%
8	Pit Area Southend Middle	14.2	122.0	102%	95%
9	Pit Area Southwest	12.5	122.0	102%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *11.5*

OPTIMUM DENSITY: *120.0*

COPIES TO:

Gandy Marley

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

PROJECT: *Gandy Marley Landfill Extension*

LAB NO: *307905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *01/17/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
10	Pit area middle section, 1st lift, middle of pit area	11.9	128.4	107%	95%
11	Pit area middle section, 1st lift, West end of pit area	9.7	124.0	103%	95%
12	Pit area middle section, 1st lift, East end of pit area	11.8	125.5	105%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *11.5*

OPTIMUM DENSITY: *120.0*

COPIES TO:

Gandy Marley

Jim Landfair, Project Manager

REPORT OF MOISTURE FIELD DENSITY TESTS

Smith Engineering Company
A Full-Service Engineering Company

(505)622-8866

PROJECT: *Gandy Marley Landfill Extension*

LAB NO: *307905*

CLIENT: *Gandy Marley*

TESTED BY: *MDT*

CONTRACTOR: *AG Services*

DATE TESTED: *01/18/08*

MATERIAL: *Natural Ground*

TEST NO.	LOCATION OF TEST	PERCENT MOISTURE	DRY DENSITY LBS/CU FT	PERCENT PROCTOR	REQUIRED COMPACTION
13	Pit area (1st lift) Northeast end of pit	11.4	125.8	105%	95%
14	Pit area North middle	10.4	120.5	100%	95%
15	Pit area North end on NW. corner	11.3	114.3	95%	95%
16	2nd lift South end, pit area SE. corner	13.1	119.2	99%	95%
17	2nd lift Southend on middle	9.5	122.7	102%	95%
18	2nd lift South end on SW. corner	11.3	127.1	106%	95%
19	Slope (2nd lift) bottom NW. end	11.0	124.9	104%	95%
20	Slope (2nd lift) Middle	10.6	125.7	105%	95%
21	Slope (2nd lift) NE. end	14.5	124.9	104%	95%
22	Slope (2nd lift) top NE. corner	12.3	115.1	96%	95%
23	Slope (2nd lift) Middle	13.3	122.4	102%	95%
24	Slope (2nd lift) NW. corner	10.4	124.0	103%	95%

REMARKS:

TEST METHOD: *ASTM-D-2922, bs*

OPTIMUM MOISTURE: *11.5*

OPTIMUM DENSITY: *120.0*

COPIES TO:

Gandy Marley

Jim Landfair, Project Manager

Ag Services

This is to confirm that Ag Services is a recognized installer of Agru America's Geomembrane Liner and that the manufacturer's qualifications have also been achieved. This is to confirm that Agru America, Inc. recognizes Ag Services' liner installation procedures and their QA/QC manual as acceptable standards for our industry.

Paul W. Barker
Technical Director
Agru America, Inc.

Date: November 25, 2008

Executive Offices: 500 Garrison Road, Georgetown, SC 29440 • 843 546-0600 • 800 321-1379 • Fax 843 546-0516
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agru america quality control dept

quality certificate

ROLL # **949447-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.591** mm	**63** mil
	MAX:	**1.646** mm	**65** mil
	AVE:	**1.616** mm	**64** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	- g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%			**2.15**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**162** ppi	**2,695** psi	
		Average Strength @ Break	**52** N/mm	**298** ppi	**4,968** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%			**16.55**
		Average Elongation @ Break	%			**879.6**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**295** N		**66.361** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**429** N		**96.401** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**593** N		**133.32** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: _____

Quality Control Department

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ROLL # **949448-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.586**	mm	**62**	mil
	MAX:	**1.628**	mm	**64**	mil
	AVE:	**1.609**	mm	**63**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min					**.25**
Carbon Black Content ASTM D4218		Range		%			**2.15**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**162**	ppi	**2,695** psi
		Average Strength @ Break	**52**	N/mm	**298**	ppi	**4,968** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%			**16.55**
Lo = 2.0" Break		Average Elongation @ Break		%			**879.6**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**295**	N			**66.361** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**429**	N			**96.401** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**593**	N			**133.32** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs				**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs				**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *M. Holmes*

Quality Control Department

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ROLL # **949449-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.585** mm	**62** mil
	MAX:	**1.658** mm	**65** mil
	AVE:	**1.609** mm	**63** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet
OIT(Standard) ASTM D3895		minutes	**211**

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	- g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%			**2.15**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**162** ppi	**2,695** psi	
		Average Strength @ Break	**52** N/mm	**298** ppi	**4,968** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%			**16.55**
		Average Elongation @ Break	%			**879.6**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**295** N		**66.361** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**429** N		**96.401** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**593** N		**133.32** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *[signature]*
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ROLL # **949452-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.54**	mm	**61**	mil
	MAX:	**1.616**	mm	**64**	mil
	AVE:	**1.562**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc		**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range		%		**2.09**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**29**	N/mm	**165** ppi	**2,742** psi
		Average Strength @ Break	**52**	N/mm	**297** ppi	**4,956** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%		**16.34**
Lo = 2.0" Break		Average Elongation @ Break		%		**868.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300**	N		**67.474** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**428**	N		**96.230** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**605**	N		**135.98** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *H. Holmes*

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ROLL # **949453-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.522** mm	**60** mil
	MAX:	**1.596** mm	**63** mil
	AVE:	**1.555** mm	**61** mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc		**.947**	
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min			**.25**	
Carbon Black Content ASTM D4218		Range	%		**2.09**	
Carbon Black Dispersion ASTM D5596		Category			**10 in Cat 1**	
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**29** N/mm	**165** ppi	**2,742**	psi
		Average Strength @ Break	**52** N/mm	**297** ppi	**4,956**	psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%		**16.34**	
Lo = 2.0" Break		Average Elongation @ Break	%		**868.3**	
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%		**-0.31**	
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300** N		**67.474**	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**428** N		**96.230**	lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**605** N		**135.98**	lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs		**certified**	
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs		**ongoing**	

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

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ROLL # **949454-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

Thickness Measurement ASTM D5199 (Modified)		METRIC		ENGLISH		Thickness	1.5mm	60mil
	MIN:	1.485	mm	58	mil	Length	128 m	420 feet
	MAX:	1.621	mm	64	mil	Width	7.00 m	23.0 feet
	AVE:	1.561	mm	61	mil	OIT(Standard) ASTM D3895	minutes	211

Specific Gravity ASTM D792		Density	g/cc			.947
MFI ASTM D1238 COND. E GRADE:	K307	Melt Flow Index 190°C /2160 g - g /10 min				.25
Carbon Black Content ASTM D4218		Range	%			2.09
Carbon Black Dispersion ASTM D5596		Category				10 in Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	29	N/mm	165 ppi	2,742 psi
		Average Strength @ Break	52	N/mm	297 ppi	4,956 psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%			16.34
Lo = 2.0" Break		Average Elongation @ Break	%			868.3
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			-0.31
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	300	N		67.474 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	428	N		96.230 lbs
Puncture Resistance ASTM D4833 (Modified)		Load	605	N		135.98 lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			certified
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			ongoing

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: _____

Quality Control Department

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ROLL # **949455-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.504**	mm	**59**	mil
	MAX:	**1.622**	mm	**64**	mil
	AVE:	**1.556**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min			**.25**
Carbon Black Content ASTM D4218		Range		%			**2.09**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**29**	N/mm	**165**	ppi	**2,742** psi
		Average Strength @ Break	**52**	N/mm	**297**	ppi	**4,956** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%			**16.34**
Lo = 2.0" Break		Average Elongation @ Break		%			**868.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300**	N			**67.474** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**428**	N			**96.230** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**605**	N			**135.98** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs				**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs				**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *[signature]*

Quality Control Department

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ROLL # **949456-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.53**	mm	**60**	mil
	MAX:	**1.617**	mm	**64**	mil
	AVE:	**1.567**	mm	**62**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min			**.25**
Carbon Black Content ASTM D4218		Range		%			**2.09**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield		**29** N/mm	**165** ppi	**2,742**	psi
		Average Strength @ Break		**52** N/mm	**297** ppi	**4,956**	psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield		%			**16.34**
		Average Elongation @ Break		%			**868.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance		**300** N		**67.474**	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load		**428** N		**96.230**	lbs
Puncture Resistance ASTM D4833 (Modified)		Load		**605** N		**135.98**	lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**	
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**	

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: _____

Quality Control Department

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ROLL # **949457-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.529** mm	**60** mil
	MAX:	**1.633** mm	**64** mil
	AVE:	**1.566** mm	**62** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range	%			**2.21**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**158** ppi	**2,634** psi	
		Average Strength @ Break	**53** N/mm	**304** ppi	**5,068** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%			**16.58**
		Average Elongation @ Break	%			**902.7**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**293** N		**65.792** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**422** N		**94.795** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**580** N		**130.45** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: H. Holmes

Quality Control Department

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ROLL # **949458-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.499** mm	**59** mil
	MAX:	**1.612** mm	**63** mil
	AVE:	**1.544** mm	**61** mil

Thickness	**1.5mm**	**60mil**	
Length	**128** m	**420**	feet
Width	**7.00** m	**23.0**	feet
OIT(Standard) ASTM D3895	minutes	**211**	

Specific Gravity ASTM D792		Density	g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	- g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%			**2.21**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**158** ppi	**2,634**	psi
		Average Strength @ Break	**53** N/mm	**304** ppi	**5,068**	psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%		**16.58**	
Lo = 2.0" Break		Average Elongation @ Break	%		**902.7**	
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%		**-0.31**	
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**293** N		**65.792**	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**422** N		**94.795**	lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**580** N		**130.45**	lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs		**certified**	
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs		**ongoing**	

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *M. Holmes*

Quality Control Department

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ROLL # **949459-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

Thickness Measurement ASTM D5199 (Modified)		METRIC		ENGLISH		Thickness	1.5mm	60mil
	MIN:	1.512	mm	60	mil	Length	128 m	420 feet
	MAX:	1.626	mm	64	mil	Width	7.00 m	23.0 feet
	AVE:	1.561	mm	61	mil	OIT(Standard) ASTM D3895	minutes	211

Specific Gravity ASTM D792		Density	g/cc		.947
MFI ASTM D1238 COND. E GRADE:	K307	Melt Flow Index 190°C /2160 g - g /10 min			.25
Carbon Black Content ASTM D4218		Range	%		2.21
Carbon Black Dispersion ASTM D5596		Category			10 in Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	28 N/mm	158 ppi	2,634 psi
		Average Strength @ Break	53 N/mm	304 ppi	5,068 psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%		16.58
		Average Elongation @ Break	%		902.7
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%		-0.31
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	293 N		65.792 lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	422 N		94.795 lbs
Puncture Resistance ASTM D4833 (Modified)		Load	580 N		130.45 lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs		certified
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs		ongoing

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: 12-4-08

Signature: [signature]
Quality Control Department

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ROLL # **949460-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.522**	mm	**60**	mil
	MAX:	**1.618**	mm	**64**	mil
	AVE:	**1.56**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc		**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min		**.25**
Carbon Black Content ASTM D4218		Range		%		**2.21**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**158** ppi	**2,634** psi
		Average Strength @ Break	**53**	N/mm	**304** ppi	**5,068** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield		%		**16.58**
		Average Elongation @ Break		%		**902.7**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance		**293** N		**65.792** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load		**422** N		**94.795** lbs
Puncture Resistance ASTM D4833 (Modified)		Load		**580** N		**130.45** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *M. Holmes*

Quality Control Department

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ROLL # **949461-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.51**	mm	**59**	mil
	MAX:	**1.625**	mm	**64**	mil
	AVE:	**1.566**	mm	**62**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc		**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min		**.25**
Carbon Black Content ASTM D4218		Range		%		**2.21**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**158** ppi	**2,634** psi
		Average Strength @ Break	**53**	N/mm	**304** ppi	**5,068** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%		**16.58**
Lo = 2.0" Break		Average Elongation @ Break		%		**902.7**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**293**	N		**65.792** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**422**	N		**94.795** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**580**	N		**130.45** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: *D. H. Holmes*

Quality Control Department

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ROLL # **949462-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.519** mm	**60** mil
	MAX:	**1.577** mm	**62** mil
	AVE:	**1.552** mm	**61** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc		**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%		**2.23**
Carbon Black Dispersion ASTM D5596		Category			**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**27** N/mm	**156** ppi	**2,594** psi
		Average Strength @ Break	**51** N/mm	**290** ppi	**4,827** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%		**16.09**
Lo = 2.0" Break		Average Elongation @ Break	%		**879.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305** N		**68.583** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**423** N		**95.082** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**601** N		**135.03** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs		**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs		**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-4-08**

Signature: .....

Quality Control Department

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ROLL # **949563-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.536** mm	**60** mil
	MAX:	**1.578** mm	**62** mil
	AVE:	**1.565** mm	**62** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet
OIT(Standard) ASTM D3895		minutes	**211**

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	- g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%			**2.23**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**27** N/mm	**156** ppi	**2,594** psi	
		Average Strength @ Break	**51** N/mm	**290** ppi	**4,827** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%			**16.09**
Lo = 2.0" Break		Average Elongation @ Break	%			**879.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305** N		**68.583** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**423** N		**95.082** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**601** N		**135.03** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: .....

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ROLL # **949564-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.546**	mm	**61**	mil
	MAX:	**1.6**	mm	**63**	mil
	AVE:	**1.569**	mm	**62**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	- g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%			**2.23**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**27** N/mm	**156** ppi	**2,594** psi	
		Average Strength @ Break	**51** N/mm	**290** ppi	**4,827** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%			**16.09**
		Average Elongation @ Break	%			**879.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305** N		**68.583** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**423** N		**95.082** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**601** N		**135.03** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: [signature]

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ROLL # **949565-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.553**	mm	**61**	mil
	MAX:	**1.595**	mm	**63**	mil
	AVE:	**1.57**	mm	**62**	mil

Thickness	**1.5mm**	**60mil**		
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min					**.25**
Carbon Black Content ASTM D4218		Range		%			**2.23**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**27**	N/mm	**156**	ppi	**2,594** psi
		Average Strength @ Break	**51**	N/mm	**290**	ppi	**4,827** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield		%			**16.09**
		Average Elongation @ Break		%			**879.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305**	N			**68.583** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**423**	N			**95.082** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**601**	N			**135.03** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs				**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs				**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: _____

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ROLL # **949566-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.535** mm	**60** mil
	MAX:	**1.599** mm	**63** mil
	AVE:	**1.564** mm	**62** mil

Thickness **1.5mm** **60mil**
Length **128** m **420** feet
Width **7.00** m **23.0** feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc		**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%		**2.23**
Carbon Black Dispersion ASTM D5596		Category			**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**27** N/mm	**156** ppi	**2,594** psi
		Average Strength @ Break	**51** N/mm	**290** ppi	**4,827** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%		**16.09**
		Average Elongation @ Break	%		**879.3**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305** N		**68.583** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**423** N		**95.082** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**601** N		**135.03** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs		**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs		**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: _____

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ROLL # **949567-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.515**	mm	**60**	mil
	MAX:	**1.57**	mm	**62**	mil
	AVE:	**1.556**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range	%			**2.19**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**157** ppi	**2,622** psi	
		Average Strength @ Break	**52** N/mm	**296** ppi	**4,928** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%			**16.67**
		Average Elongation @ Break	%			**900.9**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305** N		**68.583** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**419** N		**94.244** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**572** N		**128.65** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *[signature]*
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ROLL # **949568-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

Thickness Measurement ASTM D5199 (Modified)		METRIC		ENGLISH		Thickness	1.5mm	60mil
	MIN:	1.487	mm	59	mil	Length	128 m	420 feet
	MAX:	1.588	mm	63	mil	Width	7.00 m	23.0 feet
	AVE:	1.538	mm	61	mil	OIT(Standard) ASTM D3895	minutes	211

Specific Gravity ASTM D792		Density	g/cc			.946
MFI ASTM D1238 COND. E GRADE:	K307	Melt Flow Index 190°C /2160 g - g /10 min				.25
Carbon Black Content ASTM D4218		Range	%			2.19
Carbon Black Dispersion ASTM D5596		Category				10 in Cat 1
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	28 N/mm	157 ppi	2,622 psi	
		Average Strength @ Break	52 N/mm	296 ppi	4,928 psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%			16.67
Lo = 2.0" Break		Average Elongation @ Break	%			900.9
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			-0.31
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	305 N		68.583 lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	419 N		94.244 lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	572 N		128.65 lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			certified
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			ongoing

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: _____

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ROLL # **949569-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.543**	mm	**61**	mil
	MAX:	**1.613**	mm	**64**	mil
	AVE:	**1.576**	mm	**62**	mil

Thickness	**1.5mm**	**60mil**		
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min			**.25**
Carbon Black Content ASTM D4218		Range		%			**2.19**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**157**	ppi	**2,622** psi
		Average Strength @ Break	**52**	N/mm	**296**	ppi	**4,928** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%			**16.67**
Lo = 2.0" Break		Average Elongation @ Break		%			**900.9**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305**	N			**68.583** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**419**	N			**94.244** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**572**	N			**128.65** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs				**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs				**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *[signature]*

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ROLL # **949570-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.53**	mm	**60**	mil
	MAX:	**1.583**	mm	**62**	mil
	AVE:	**1.564**	mm	**62**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range	%			**2.19**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**157** ppi	**2,622** psi	
		Average Strength @ Break	**52** N/mm	**296** ppi	**4,928** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%			**16.67**
Lo = 2.0" Break		Average Elongation @ Break	%			**900.9**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**305** N		**68.583** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**419** N		**94.244** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**572** N		**128.65** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: [signature]
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ROLL # **949571-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.535** mm	**60** mil
	MAX:	**1.608** mm	**63** mil
	AVE:	**1.565** mm	**62** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792	Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE: **K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218	Range	%			**2.19**
Carbon Black Dispersion ASTM D5596	Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Yield	**28** N/mm		**157** ppi	**2,622** psi
	Average Strength @ Break	**52** N/mm		**296** ppi	**4,928** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Yield	%			**16.67**
	Average Elongation @ Break	%			**900.9**
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)	Average Tear Resistance	**305** N			**68.583** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	**419** N			**94.244** lbs
Puncture Resistance ASTM D4833 (Modified)	Load	**572** N			**128.65** lbs
ESCR ASTM D1693	Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397	pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *[signature]*
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ROLL # **949572-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.522** mm	**60** mil
	MAX:	**1.607** mm	**63** mil
	AVE:	**1.561** mm	**61** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792	Density		g/cc		**.947**
MFI ASTM D1238 COND. E GRADE: **K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218	Range		%		**2.23**
Carbon Black Dispersion ASTM D5596	Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Yield	**28**	N/mm	**158** ppi	**2,635** psi
	Average Strength @ Break	**49**	N/mm	**277** ppi	**4,619** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break	Average Elongation @ Yield		%		**16.67**
	Average Elongation @ Break		%		**837.0**
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional Change		%		**-0.31**
Tear Resistance ASTM D1004 (Modified)	Average Tear Resistance		**302** N		**67.794** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load		**418** N		**93.979** lbs
Puncture Resistance ASTM D4833 (Modified)	Load		**604** N		**135.70** lbs
ESCR ASTM D1693	Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397	pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: H. Holmes

Quality Control Department

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ROLL # **949573-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH					
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.53**	mm	**60**	mil	Thickness	**1.5mm**		**60mil**	
	MAX:	**1.59**	mm	**63**	mil	Length	**128**	m	**420**	feet
	AVE:	**1.558**	mm	**61**	mil	Width	**7.00**	m	**23.0**	feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range	%			**2.23**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**158** ppi	**2,635** psi	
		Average Strength @ Break	**49** N/mm	**277** ppi	**4,619** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%			**16.67**
Lo = 2.0" Break		Average Elongation @ Break	%			**837.0**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**302** N		**67.794** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**418** N		**93.979** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**604** N		**135.70** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: [signature]
Quality Control Department

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ROLL # **949574-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.496** mm	**59** mil
	MAX:	**1.581** mm	**62** mil
	AVE:	**1.548** mm	**61** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet
OIT(Standard) ASTM D3895		minutes	**211**

Specific Gravity ASTM D792		Density		g/cc		**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g		- g /10 min		**.25**
Carbon Black Content ASTM D4218		Range		%		**2.23**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**158** ppi	**2,635** psi
		Average Strength @ Break	**49**	N/mm	**277** ppi	**4,619** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%		**16.67**
Lo = 2.0" Break		Average Elongation @ Break		%		**837.0**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**302**	N		**67.794** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**418**	N		**93.979** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**604**	N		**135.70** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: H. Holmes

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ROLL # **949575-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.519** mm	**60** mil
	MAX:	**1.572** mm	**62** mil
	AVE:	**1.549** mm	**61** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet
OIT(Standard) ASTM D3895		minutes	**211**

Specific Gravity ASTM D792		Density	g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range	%			**2.23**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**158** ppi	**2,635** psi	
		Average Strength @ Break	**49** N/mm	**277** ppi	**4,619** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%			**16.67**
Lo = 2.0" Break		Average Elongation @ Break	%			**837.0**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**302** N		**67.794** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**418** N		**93.979** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**604** N		**135.70** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: H. Holmes

Quality Control Department

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ROLL # **949576-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.534** mm	**60** mil
	MAX:	**1.603** mm	**63** mil
	AVE:	**1.565** mm	**62** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet
OIT(Standard) ASTM D3895		minutes	**211**

Specific Gravity ASTM D792		Density	g/cc			**.947**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min				**.25**
Carbon Black Content ASTM D4218		Range	%			**2.23**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**158** ppi	**2,635** psi	
		Average Strength @ Break	**49** N/mm	**277** ppi	**4,619** psi	
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	%			**16.67**
		Average Elongation @ Break	%			**837.0**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**302** N		**67.794** lbs	
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**418** N		**93.979** lbs	
Puncture Resistance ASTM D4833 (Modified)		Load	**604** N		**135.70** lbs	
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *M Holmes*

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ROLL # **949577-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.501**	mm	**59**	mil
	MAX:	**1.593**	mm	**63**	mil
	AVE:	**1.552**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min			**.25**
Carbon Black Content ASTM D4218		Range		%			**2.19**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**160**	ppi	**2,664** psi
		Average Strength @ Break	**54**	N/mm	**308**	ppi	**5,125** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%			**16.43**
Lo = 2.0" Break		Average Elongation @ Break		%			**905.2**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300**	N			**67.388** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**420**	N			**94.315** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**566**	N			**127.26** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs				**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs				**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *M. Holmes*

Quality Control Department

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ROLL # **949578-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.53** mm	**60** mil
	MAX:	**1.579** mm	**62** mil
	AVE:	**1.556** mm	**61** mil

Thickness	**1.5mm**		**60mil**
Length	**128**	m	**420** feet
Width	**7.00**	m	**23.0** feet
OIT(Standard) ASTM D3895		minutes	**211**

Specific Gravity ASTM D792		Density		g/cc		**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	-	g /10 min		**.25**
Carbon Black Content ASTM D4218		Range		%		**2.19**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**160** ppi	**2,664** psi
		Average Strength @ Break	**54**	N/mm	**308** ppi	**5,125** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%		**16.43**
Lo = 2.0" Break		Average Elongation @ Break		%		**905.2**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%		**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300**	N		**67.388** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**420**	N		**94.315** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**566**	N		**127.26** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs			**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs			**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *[signature]*

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ROLL # **949579-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.507**	mm	**59**	mil
	MAX:	**1.572**	mm	**62**	mil
	AVE:	**1.555**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet
OIT(Standard) ASTM D3895		minutes	**211**	

Specific Gravity ASTM D792		Density		g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g - g /10 min					**.25**
Carbon Black Content ASTM D4218		Range		%			**2.19**
Carbon Black Dispersion ASTM D5596		Category					**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28**	N/mm	**160**	ppi	**2,664** psi
		Average Strength @ Break	**54**	N/mm	**308**	ppi	**5,125** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield		%			**16.43**
Lo = 2.0" Break		Average Elongation @ Break		%			**905.2**
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change		%			**-0.31**
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300**	N			**67.388** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**420**	N			**94.315** lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**566**	N			**127.26** lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs				**certified**
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs				**ongoing**

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *H. Holmes*

Quality Control Department

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ROLL # **949580-08** Lot # **8181179** **Liner Type:SMOOTH HDPE**

		METRIC	ENGLISH
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.515** mm	**60** mil
	MAX:	**1.591** mm	**63** mil
	AVE:	**1.588** mm	**63** mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**7.00**	m	**23.0**	feet

OIT(Standard) ASTM D3895 minutes **211**

Specific Gravity ASTM D792		Density	g/cc			**.946**
MFI ASTM D1238 COND. E GRADE:	**K307**	Melt Flow Index 190°C /2160 g	- g /10 min			**.25**
Carbon Black Content ASTM D4218		Range	%			**2.19**
Carbon Black Dispersion ASTM D5596		Category				**10 in Cat 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)		Average Strength @ Yield	**28** N/mm	**160** ppi	**2,664**	psi
		Average Strength @ Break	**54** N/mm	**308** ppi	**5,125**	psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield		Average Elongation @ Yield	%		**16.43**	
Lo = 2.0" Break		Average Elongation @ Break	%		**905.2**	
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change	%		**-0.31**	
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	**300** N		**67.388**	lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)		Load	**420** N		**94.315**	lbs
Puncture Resistance ASTM D4833 (Modified)		Load	**566** N		**127.26**	lbs
ESCR ASTM D1693		Minimum Hrs w / o Failures	1500 hrs		**certified**	
Notched Constant Tensile Load ASTM D5397		pass / fail @ 30%	300 hrs		**ongoing**	

Customer: **AG Services**
PO: **7539**
Destination **Roswell, NM**

Date: **12-5-08**

Signature: *[signature]*

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ROLL # **436755-07** Lot # **MM197957** **Liner Type:SMOOTH HDPE**

		METRIC		ENGLISH	
Thickness Measurement ASTM D5199 (Modified)	MIN:	**1.47**	mm	**58**	mil
	MAX:	**1.595**	mm	**63**	mil
	AVE:	**1.541**	mm	**61**	mil

Thickness	**1.5mm**		**60mil**	
Length	**128**	m	**420**	feet
Width	**6.86**	m	**22.5**	feet

OIT(Standard) ASTM D3895 minutes **174**

Specific Gravity ASTM D792	Density		g/cc			**.946**
MFI ASTM D1238 COND. E GRADE: **7002**	Melt Flow Index 190°C /2160 g - g /10 min					**.22**
Carbon Black Content ASTM D4218	Range		%			**2.38**
Carbon Black Dispersion ASTM D5596	Category					**10 In Cat. 1**
Tensile Strength ASTM D6693 ASTM D638 (Modified) (2 inches / minute)	Average Strength @ Yield	**27**	N/mm	**152**	ppi	**2,539** psi
	Average Strength @ Break	**50**	N/mm	**287**	ppi	**4,777** psi
Elongation ASTM D-6693 ASTM D638 (Modified) (2 inches / minute) Lo = 1.3" Yield	Average Elongation @ Yield		%			**16.85**
Lo = 2.0" Break	Average Elongation @ Break		%			**894.2**
Dimensional Stability ASTM D1204 (Modified)	Average Dimensional Change		%			**0.01**
Tear Resistance ASTM D1004 (Modified)	Average Tear Resistance	**221**	N			**49.739** lbs
Puncture Resistance FTMS 101 Method 2065 (Modified)	Load	**456**	N			**102.54** lbs
Puncture Resistance ASTM D4833 (Modified)	Load	**603**	N			**135.64** lbs
ESCR ASTM D1693	Minimum Hrs w / o Failures	1500 hrs				**CERTIFIED**
Notched Constant Tensile Load ASTM D5397	pass / fail @ 30%	300 hrs				**pass**

Customer: **AG Services**
PO: **5082**
Destination **Hobbs, NM**

Date: **9-10-07**

Signature: *[signature]*
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Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Top Liner

AIR TESTING LOG

PROJECT Conoly Manure

MATERIAL 40 mil HDPE

MINIMUM STARTING PRESSURE (PSIG) 30 psi TEST TIME (MINUTES) 5 min

MAXIMUM PRESSURE DROP (PSIG) 2 psi

Dustin Land

DATE	SEAM NUMBER	STARTING TIME	STARTING PRESSURE	ENDING TIME	ENDING PRESSURE	PASS/ FAIL	TESTER
1-19-09	W1-W2	12:05	33	12:10	32	P	DS
"	W2-W3	12:15	35	12:20	35	P	DS
"	W3-W4	12:30	34	12:35	34	P	DS
"	W4-W5	1:20	37	1:25	37	P	DS
"	W5-W6	1:40	38	1:45	37	P	DS
"	W6-W7	1:53	36	1:58	35	P	DS
"	W7-W8	2:15	35	2:20	35	P	DS
"	W8-W9	2:38	33	2:43	33	P	DS
"	W9-W10	3:00	36	3:05	35	P	DS
"	W10-W11	3:30	32	3:35	32	P	DS
"	W11-W12	4:05	30	4:10	30	P	DS
1-20-09	N13-N14	8:30	32	8:35	32	P	DS
"	N14-N15	8:15	34	8:20	33	P	DS
"	N15-N16	7:55	33	8:00	33	P	DS
"	S20-S21	10:30	34	10:35	34	P	DS
"	S21-S22	10:55	30	11:00	30	P	DS
"	S22-S23	11:10	35	11:15	34	P	DS
"	W1-W17	9:30	34	9:35	33	P	DS
"	W17-W18	9:45	32	9:50	32	P	DS
"	W18-W19	10:10	34	10:15	34	P	DS
"	B24-all W panels	1:20	34	1:25	33	P	DS
"	B24-B25	2:55	35	3:00	34	P	DS
"	B25-B26	3:30	37	3:35	37	P	DS
"	B26-B27	4:10	36	4:15	35	P	DS
1-21-09	B27-B28	8:30	36	8:35	35	P	DS
"	B28-B29	10:05	34	10:10	33	P	DS
"	B29-B30	10:40	35	10:45	34	P	DS
"	B30-B31	11:30	38	11:35	38	P	DS
"	B31-B32	12:20	35	12:25	35	P	DS
"	B32-B33A	12:35	33	12:40	33	P	DS
"	B32-B33B	12:40	35	12:45	34	P	DS
"	B33-B34	3:15	34	3:20	32	P	DS
"	B34-B35	3:45	39	3:50	39	P	DS
"	B35-B36	4:30	36	4:35	35	P	DS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Top Layer

AIR TESTING LOG

PROJECT Grandview Meadows

MATERIAL 60 mil. Liner

MINIMUM STARTING PRESSURE (PSIG) 30 psi TEST TIME (MINUTES) 5 min

MAXIMUM PRESSURE DROP (PSIG) 2 psi

DATE	SEAM NUMBER	STARTING TIME	STARTING PRESSURE	ENDING TIME	ENDING PRESSURE	PASS/ FAIL	TESTER
1-22-09	B36 - add E Cable A	11:40	38	11:45	37		DS
"	S37 - S38	8:20	36	8:25	35	P	DS
"	S38 - S39	9:00	35	9:05	34	P	DS
"	E40 - E41	9:40	35	9:45	35	P	DS
"	E41 - E42	9:20	35	9:25	35	P	DS
"	E42 - E43	9:40	37	9:45	36	P	DS
"	E43 - E44	10:10	34	10:15	34	P	DS
"	E44 - E45	10:30	32	10:35	32	P	DS
"	E45 - E46	10:50	39	10:55	38	P	DS
1-23-09	E46 - E47	8:00	37	8:05	37	P	DS
"	E47 - E48	8:30	36	8:35	35	P	DS
"	E48 - E49	9:00	37	9:05	36	P	DS
"	E49 - E50	9:30	32	9:35	31	P	DS
1-28-09	E50 - E51	7:55	34	8:00	34	P	DS
1-28-09	E51 - E52	8:15	31	8:20	31	P	DS
	E52 - E53	8:40	38	8:45	35	P	DS
	N54 - N55	9:15	34	9:20	33	P	DS
	N55 - N56	10:00	33	10:05	33	P	DS
	B36 add E Cable B	11:25	36	11:30	35	P	DS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Top Layer

Project: Granby Morley
Material: Geomembrane

Vacuum Test Record

Repair Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
1	N13-N14-W12	NW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
2	W14-W12-N15	NW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
3	N15-N16-W11	NW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
4	W11-W10-N16	NW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
5	W10-N16-B24	NW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
6	W9-W10-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
7	W9-W8-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
8	W7-W8-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
9	W6-W7-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
10	W6-W5-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
11	W5-W4-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
12	W4-W3-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
13	W3-W2-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
14	W2-W1-B24	West Panels	1/23/08	GJ	T	0	0	1/23/08	HS
15	W1-W17-S20	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
16	W17-S20-S21	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
17	W11-W18-S21	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
18	S22-S21-W18	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
19	W18-W19-S22	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
20	S23-S22-W19	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Top Liner

Project: Gandy Marley
Material: 60 Liner

Vacuum Test Record

Repair Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
21	W1-W17-B24	SW Corner	1/23/08	GJ	T	0	0	1/23/08	HS
22	B32-B33	80' from SAT	1/28/08	GJ	Patch	0	0	1/28/08	HS
23	S38-E42-E41	50' from SE Corner AT	1/28/08	GJ	Patch	0	0	1/28/08	HS
24	S38	40' from SAT	1/28/08	GJ	Patch	0	0	1/28/08	HS
25	B35	35' from SAT	1/28/08	GJ	Patch	0	0	1/28/08	HS
26	B36-E43-S37	SE Corner	1/28/08	GJ	T	0	0	1/28/08	HS
27	E43-E42-S37	SE Corner	1/28/08	GJ	T	0	0	1/28/08	HS
28	E42-S37-S38	SE Corner	1/28/08	GJ	T	0	0	1/28/08	HS
29	E41-S38-S39	SE Corner	1/28/08	GJ	T	0	0	1/28/08	HS
30	E40-E41-S39	SE Corner	1/28/08	GJ	T	0	0	1/28/08	HS
31	S39-E40-E41	SE Corner	1/28/08	GJ	T	0	0	1/28/08	HS
32	E43-E44	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
33	E45-E46	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
34	E44-E45	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
35	E46-E47	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
36	E47-E48	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
37	E48-E49	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
38	E49-E50	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
39	E50-E51	East Panels	1/28/08	GJ	T	0	0	1/28/08	HS
40	E51-E52-N54	North East Corner	1/28/08	GJ	T	0	0	1/28/08	HS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Project: Gandy Marley
Material: Liner

Top Layer

Vacuum Test Record

Repair Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
41	ES1-036-NS4	Northeast Corner	1/28/08	GS	T	0	0	1/28/08	HS
42	ES1-ES2-NS4	North East Corner	1/28/08	GS	T	0	0	1/28/08	HS
43	ES2-ES3-NS5	North east Corner	1/28/08	GS	T	0	0	1/28/08	HS
44	NS5-NS6-ES3	Northeast Corner	1/28/08	GS	T	0	0	1/28/08	HS
45	ES3-ES6	Northeast Corner	1/28/08	GS	T	0	0	1/28/08	HS
46	ES7	66' from East AT	1/28/08	GS	Patch	0	0	1/28/08	HS
47	Northeast Corner	Seam	1/28/08	GS	Seam	0	0	1/28/08	HS
48	Northeast Corner	Seam	1/28/08	GS	Seam	0	0	1/28/08	HS
49	Southwest Corner	Seam	1/28/08	GS	Seam	0	0	1/28/08	HS
50	Southeast Corner	Seam	1/28/08	GS	Seam	0	0	1/28/08	HS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Bottom Layer

AIR TESTING LOG

PROJECT Gandy Marley

MATERIAL 60 mill hdpe

MINIMUM STARTING PRESSURE (PSIG) 30 TEST TIME (MINUTES) 5 mins

MAXIMUM PRESSURE DROP (PSIG) 2 psi

DATE	SEAM NUMBER	STARTING TIME	STARTING PRESSURE	ENDING TIME	ENDING PRESSURE	PASS/ FAIL	TESTER
11/8/09	S1 - S2	8:00	35	8:05	35	Pass	DTS
11/8/09	S2 - S3	8:12	36	8:17	36	pass	DTS
11/8/09	S3 - S4	8:20	34	8:25	34	Pass	DTS
11/8/09	S4 - S5	8:20	30	8:25	30	pass	DTS
11/8/09	S5 - S6	8:33	39	8:38	39	Pass	DTS
11/8/09	S6 - S7	8:45	37	8:50	37	pass	DTS
11/8/09	S7 - S8	8:55	33	9:00	33	pass	DTS
11/8/09	S8 - S9	9:05	36	9:10	36	pass	DTS
11/8/09	S9 - S10	9:15	33	9:20	34	pass	DTS
11/8/09	S10 - S11	9:25	34	9:30	34	pass	DTS
11/8/09	S11 - S12	9:30	33	9:35	33	pass	DTS
11/8/09	S12 S13	9:40	32	9:45	31	pass	DTS
11/8/09	S13 - S14	9:55	34	10:00	33	pass	DTS
11/8/09	S14 - S15	10:10	34	10:15	33	Pass	DTS
11/8/09	S15 - S16	10:27	32	10:32	31	pass	DTS
11/8/09	E18 - E18	10:44	34	10:45	33	pass	DTS
11/8/09	F19 - E19	11:05	36	11:10	36	pass	DTS
11/8/09	SE CORNER Seam	VT				Pass	DTS
11/8/09	S-1 - S-20	12:20	33	12:25	34	pass	DTS
11/8/09	S-20 - S-21	12:30	28	12:35	30	pass	DTS
11/8/09	S-21 - S-22	12:40	36	12:45	35	pass	DTS
11/8/09	S-22 - S-23	1:04	32	1:09	32	pass	DTS
11/8/09	W 24 - W 25	1:20	33	1:25	33	pass	DTS
11/8/09	W-25 - W-26	1:34	32	1:39	32	pass	DTS
11/8/09	Southwest Corner Seam	VT				Pass	DTS
11/8/09	B-27 Butt	2:30	33	2:35	33	pass	DTS
11/8/09	B-27 - and Southpanel	3:40	32	3:45	31	pass	DTS
11/9/09	B-28 Butt	7:45	34	7:50	34	pass	DTS
11/9/09	B-28 - B27	8:50	33	8:55	31	pass	DTS
11/9/09	B-24 Butt	9:10	35	9:15	34	pass	DTS
11/9/09	B-29 - B-28	9:30	35	9:35	35	pass	DTS
11/9/09	B-30	10:20	32	10:25	32	pass	DTS
11/9/09	B-30 - B-29	11:05	36	11:10	36	pass	DTS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Bottom Layer 2 of 3

AIR TESTING LOG

PROJECT Grady Marley

MATERIAL 60 mil Liner

MINIMUM STARTING PRESSURE (PSIG) 30 TEST TIME (MINUTES) 5 mins

MAXIMUM PRESSURE DROP (PSIG) 2 psi

DATE	SEAM NUMBER	STARTING TIME	STARTING PRESSURE	ENDING TIME	ENDING PRESSURE	PASS/ FAIL	TESTER
1-12-09	B-31 Butt	8:15	32	8:20	32	pass	DJS
1-12-09	B-31 - B-30	9:00	33	9:05	32	pass	DJS
1-14-09	B-32 Butt	8:10	35	8:15	34	pass	DJS
1-14-09	B-31 - B32	8:20	34	8:25	34	pass	DJS
1-14-9	B-33 Butt	9:10	33	9:15	32	pass	DJS
1-14-09	B-32 - B-32 A	10:00	32	10:05	31	pass	DJS
1-14-09	B-33 - B-33 B	10:10	32	10:15	32	pass	DJS
1-14-09	B-34 Butt	11:05	30	11:10	30	pass	DJS
1-14-09	B-34 - B-33	12:30	36	12:35	35	pass	DJS
1-14-09	B-35 Butt	1:10	35	1:15	34	pass	DJS
1-14-09	B-35 - B 34	2:00	34	2:05	33	pass	DJS
1-14-09	B-35 - W 36	2:15	34	2:20	33	pass	DJS
1-14-09	W-36 - W 37	3:00	37	3:05	36	pass	DJS
1-14-09	W-37 - W 38	3:10	35	3:15	34	pass	DJS
1-14-09	N-42 - N43	3:35	32	3:40	31	pass	DJS
1-14-09	N-41 - N42	4:00	31	4:05	30	pass	DJS
1-14-09	N 40 - N41	4:10	35	4:15	35	pass	DJS
1-14-09	N 40 - N 39	4:30	34	4:35	34	pass	DJS
1-14-09	NW Corner	VT				Pass	D.J.S
1-17-08	B35 - W36 - N42 - N43 N44	4:40	33	4:45	32	pass	DJS
1-14-08	N43 - N44	4:50	34	4:55	34	pass	DJS
1-15-08	N 44 - N 45	7:45	38	7:50	38	pass	DJS
1-15-08	N 45 - N 46	8:10	37	8:15	37	pass	DJS
1-15-08	N 46 - N 47	9:30	35	8:35	34	pass	DJS
1-15-08	N 47 - N 48	9:10	33	9:15	32	pass	DJS
1-15-08	N 48 - N 49	9:30	36	9:35	35	pass	DJS
1-15-08	N 49 - N 50	9:55	38	10:00	38	pass	DJS
1-15-08	N 50 - N 51	10:15	34	10:20	34	pass	DJS
1-15-08	N 51 - N 52	10:30	32	10:35	32	pass	DJS
1-15-08	N 52 - N 53	10:50	37	10:55	36	pass	DJS
1-15-08	N 53 - N 54	11:10	35	11:15	34	pass	DJS
1-15-08	N 54 - N 55	11:50	37	11:55	37	pass	DJS
1-15-08	N 55 - N 56	12:30	35	12:31	34	pass	DJS
1-15-08	N 56 - N 57	17:50	36	12:55	35	pass	DJS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Bottom Layer
Page 3 of 3

AIR TESTING LOG

PROJECT Gandy Marley

MATERIAL 60 mil LLDPE

MINIMUM STARTING PRESSURE (PSIG) 30 TEST TIME (MINUTES) 5+

MAXIMUM PRESSURE DROP (PSIG) 2psi

DATE	SEAM NUMBER	STARTING TIME	STARTING PRESSURE	ENDING TIME	ENDING PRESSURE	PASS/ FAIL	TESTER
1-15-09	M57 - M58	12:40	39	12:45	38	PASS	DJS
1-15-09	E59 - F60	1:05	37	1:10	37	PASS	DJS
1-15-09	F60 - F61	1:30	34	1:35	34	PASS	DJS
1-15-09	NE Corner	UT	UT	UT	UT	P	DJS

W19 W18 W17 W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12

B24 344	949454-08 1-20-09
B25	949571-08 1-20-09
B26	949452-08 1-20-08
B27	949450-08 1-20-09
B28	949462-08 1-21-09
B29	949458-08 1-21-09
B30	949459-08 1-21-09
B31	949449-08 1-21-09
B32	949456-08 1-21-09
B33	949577-08 1-21-09
B34	949453-08 1-21-09
B35	949567-08 1-21-09
B36 324'	949563-08 1-21-09

S37 949454-08 1-22-09
S38 949579-08 1-22-09
S39 9494 [illegible]

N54 949569-08 1-08-09
N55 949579-08 1-08-09
N56 949579-08 [illegible]

E40 E41 E42 E43 E44 E45 E46 E47 E48 E49 E50 E51 E52 E53

60 mil [illegible]

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Project: Gandy Marley
Material: 60 mill Landfil
Bottom Layer

Vacuum Test Record

~~Repair~~ Test Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
1	S16-E19-S15	SE Corner Seam	1/4/09	GT	T	0	0	1/9/09	HS
2	E19-E18-S15	SE Corner Seam	1/9/09	GT	T	0	0	1-9-09	HS
3	E18-E17-S15	SE Corner Seam	1/9/09	GT	T	0	0	1-9-09	HS
4	S15-S14-E17	SE Corner Seam	1/9/09	GT	T	0	0	1-9-09	HS
5	S14-E17-B27	SE Corner Seam	1/9/09	GT	T	0	0	1-9-09	HS
6	S14-S13-B27	SE Corner Seam	1/9/09	GT	T	0	0	1-9-09	HS
7	S13-S12-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
8	S12-S11-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
9	S11-S10-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
10	S10-S9-B-27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
11	S9-S8-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
12	S8-S7-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
13	S7-S6-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
14	S6-S5-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
15	S5-S4-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
16	S4-S3-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
17	S3-S2-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
18	S2-S1-B27	B27-South Panels	1/9/09	GT	T	0	0	1-9-09	HS
19	S1-S20-B27	B27-South Panels	1/9/09	GT	2Ts	0	0	1-9-09	HS
20	S20-B27-W24	~~B~~ SW Corner Seam	1/9/09	GT	T	0	0	1-9-09	HS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Project: ~~Cottonwood~~ Gandy Morley
Material: 60 mil LLDPE Bottom Layer

Vacuum Test Record

Repair Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
21	S20-S21-W24	SW Corner	1/9/09	GJ	T	0	0	1-9-09	~~HS~~
22	W25-W24-S21	SW Corner	1/9/09	GJ	T	0	0	1-9-09	HS
23	W25-W26-S22	SW Corner	1/9/09	GJ	T	0	0	1-9-09	HS
24	S21-S22-W25	SW Corner	1/9/09	GJ	T	0	0	1-9-09	HS
25	S22-S23-W26	SW Corner	1/9/09	GJ	T	0	0	1-9-09	HS
26	B27-B28	93' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
27	B27-B28	128' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
28	B28-B27	128' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
29	B26-B29	165' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
30	B29-B30	165' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
31	B27	93' from W AT	1/9/09	GJ	Patch	0	0	1-9-09	HS
32	B30-B31	200' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
33	B30-B32	200' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
34	B31-B30	243' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
35	B32-B33	243' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
36	B31-B32	50' from E AT	1/9/09	GJ	Patch	0	0	1-9-09	HS
37	B32-B33	251' from W AT	1/9/09	GJ	Patch	0	0	1-9-09	HS
38	B32-B33	251' from W AT	1/9/09	GJ	Patch	0	0	1-9-09	HS
39	B33-B34	251' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS
40	B33-B34	289' from W AT	1/9/09	GJ	T	0	0	1-9-09	HS

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Bottom Liner

Project: County Manley
Material:

Vacuum Test Record

Repair Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
41	B34-B35	289' W AT	1-9-09	GJ	T	0	0	1-9-09	HS
42	B34-B35	131' from W AT	1-9-09	GJ	T	0	0	1-9-09	HS
43	B35-N54	131' from W AT	1-9-09	GJ	T	0	0	1-9-09	HS
44	W36-N41-N42	NW Corner	1-9-09	GJ	T	0	0	1-9-09	HS
45	B35	51' from W AT	1-9-09	GJ	Patch	0	0	1-9-09	HS
46	B35	55' from W AT	1-9-09	GJ	Patch	0	0	1-9-09	HS
47	B35-W36-N42	NW Corner	1-9-09	GJ	T	0	0	1-9-09	HS
48	W36-W37-N41	NW Corner	1-9-09	GJ	T	0	0	1-9-09	HS
49	W37-N40-N41	NW Corner	1-9-09	GJ	T	0	0	1-9-09	HS
50	W37-W38-N40	NW Corner	1-9-09	GJ	T	0	0	1-9-09	HS
51	W38-N39-N40	NW Corner	1-9-09	GJ	T	0	0	1-9-09	HS
52	N42-N43	North Panels	1-9-09	GJ	T	0	0	1-9-09	HS
53	N43-N44	North Panels	1-9-09	GJ	T	0	0	1-9-09	HS
54	N44-N45	North Panels	1-9-09	GJ	T	0	0	1-9-09	HS
55	N45-N46	North panels	1-9-09	GJ	T	0	0	1-9-09	HS
56	N46-N47	North Panels	1-9-09	GJ	T	0	0	1-9-09	HS
57	N47-N48	North Panels	1-9-09	GJ	T	0	6	1-9-09	HS
58	N48-N49	North Panels	1-9-09	GJ	T	0	0	1-9-09	HS
59	N49-N50	North Panels	1-9-09	GJ	T	0	6	1-9-09	HS
60	N50-N51	North Panels	1-9-09	GJ	T	6	0	1-9-09	HS

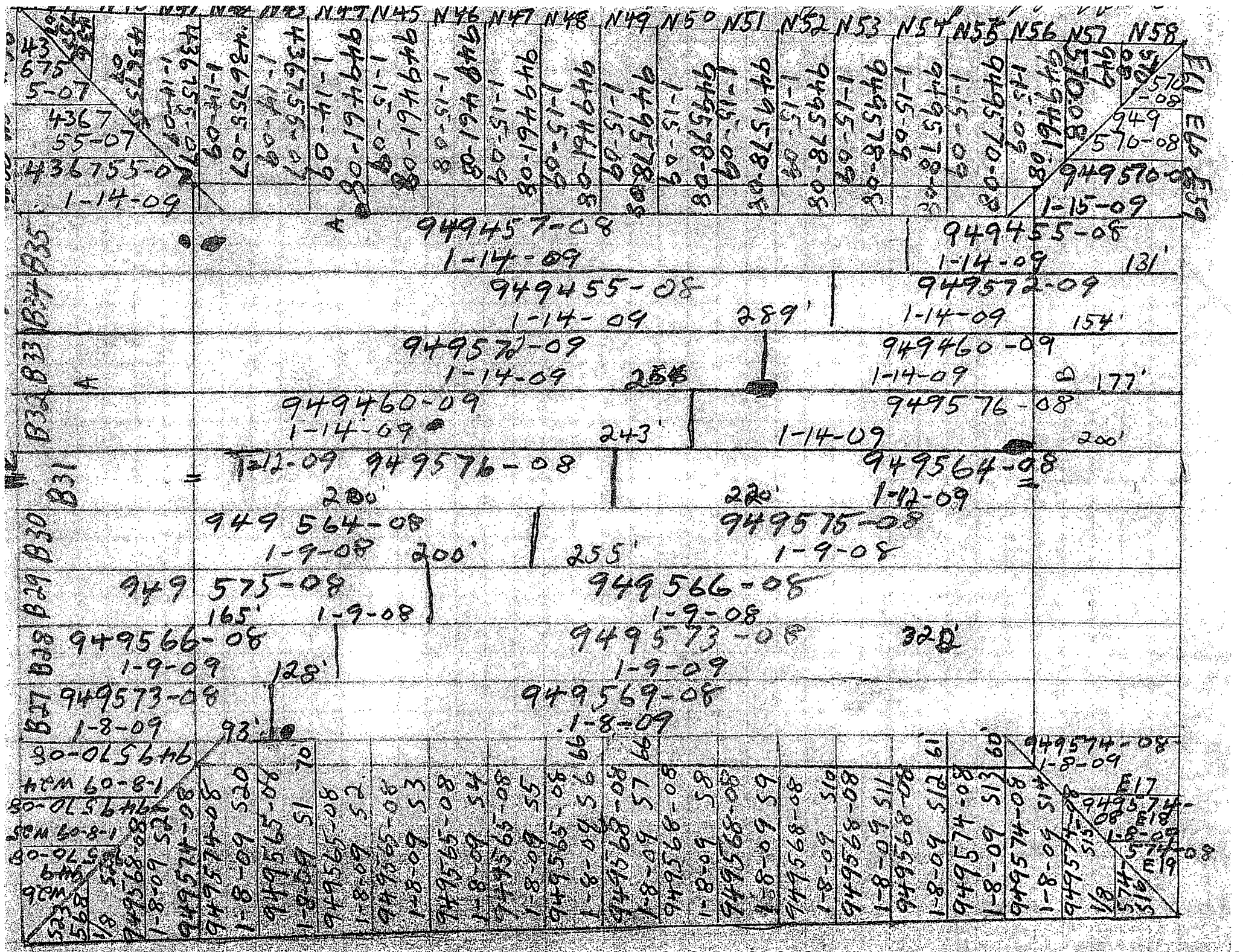
Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Bottom Liner

Project: Family Medical
Material: 60 mil HDPE

Vacuum Test Record

Repair Number	Seam Number	Seam Location	Date Repaired	Repaired By	Type of Repair	Number of Leaks	Retest	Date Accepted	Tester
61	Southeast Corner	—	1/9/09	GJ	NA	0	0	1/9/09	HS
62	Southwest Corner	—	1/9/09	GJ	NA	0	0	1/9/09	HS
63	Northwest	—	1/9/09	GJ	NA	0	0	1/9/09	HS
64	Northeast	—	1/9/09	GJ	NA	0	0	1/9/09	HS


N44 N45 N46 N47 N48 N49 N50 N51 N52 N53 N54 N55 N56 N57 N58
E61 E60 E59
B35 B34 B33 B32 B31 B30 B29 B28 B27
949457-08
1-14-09
949455-08
1-14-09
131'
949455-08
1-14-09
289'
949572-09
1-14-09
154'
949570-09
1-14-09
255'
949460-09
1-14-09
177'
949460-09
1-14-09
243'
949576-08
1-14-09
200'
T=12-09 949576-08
200'
949564-08
1-12-09
220'
949564-08
1-9-08
200'
949575-08
1-9-08
255'
949575-08
165'
1-9-08
949566-08
1-9-08
949566-08
1-9-09
128'
949573-08
1-9-09
949573-08
1-8-09
93'
949569-08
1-8-09
949574-08
1-8-09
E17
E18
E19

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Project: Gandy Marley
Material: 60 mil Poly

Wedge welder

Trial Field Seam Test

Date	Time	Welder Initial	Machine Number	Temp Setting	Speed Setting	Test #1 Peel	Test #1 Shear	Test #2 Peel	Test #2 Shear	Test #3 Peel	Test #3 Shear
11/8/09	9:15	JC	672	365°C	63'	159	199	151	186	151	188
11/8/09	9:15	GJ	721	365°C	63'	150	190	137	173	142	181
11/9/09	8:00	JC	672	365°	63'	135	164	146	181	143	182
11/9/09	8:00	GJ	721	365°	63'	139	182	113	184	138	181
11/10/09	8:00	GJ	721	365°	63'	142	179	138	180	141	179
11/14/09	8:00	JC	672	365°	63'	169	180	178	178	152	189
11/14/09	8:15	GJ	721	365°	63'	164	173	152	181	151	182
11/15/09	8:00	JC	672	365°	63'	170	177	162	173	165	178
11/15/09	8:00	GJ	721	365°	63'	163	181	164	179	172	180
11/15/07	12:00	GJ	672	365°	63°	163	159	152	191	165	187
1/2/07	8:00	GJ	672	365	63'	132	152	138	158	123	149
1/21/07	8:00	GJ	672	365	63'	129	151	128	156	131	150
1/22/07	8:15	GJ	672	365	63'	131	149	141	147	129	136
1/23/07	8:00	GJ	672	365	63'	133	152	139	158	136	129
1/26/07	8:00	GJ	672	365	63'	140	151	136	164	129	133

Ag Services Construction, Inc.
1905 Old Dexter Highway
Roswell, NM 88203

Project: Gamely Manley
Material: 60 mils Felipe

Trial Field ~~Seam~~ Extruder Test

Date	Time	Welder Initial	Machine Number	AIR ~~Temp~~ Setting	Extruder ~~Speed~~ Setting	Test #1 Peel	Test #1 Shear	Test #2 Peel	Test #2 Shear	Test #3 Peel	Test #3 Shear
11/7/08	8:30	GT		235	245	129	195	150	190	164	199
11/15/08	9:00	GT		235	245	131	184	138	190	151	193
11/23/08	12:00	GT		235	245	137	179	141	187	149	189
11/28/08	12:00	GT		225	245	128	177	139	188	182	188

Georet - Gardy Manley

1-13-09 → | 1-16-09

#1	No Number.	1-10-09
	541540-06	1-10-09
	541522-06	1-10-09
	513720-08	1-10-09
	517415-08	1-10-09
#6	521128-08	1-10-09
	521271-08	1-10-09
	521251-08	1-10-09
	517375-08	1-10-09
	No number.	1-10-09
	521251-08	1-10-09
#12	518520-08	1-10-09
	513721-08	1-10-09
	518658-08	1-10-09
	521126-08	1-10-09
	513402-08	1-10-09
	518522-08	1-10-09
#18	521269-08	1-10-09
	519618-08	1-10-09
	521127-08	1-10-09
	521253-08	1-10-09
	509467-08	1-10-09

512569-08, 512569, 569, 569, 569, 512569, 512569, 509793-08, 509793-08, 509793-08, 509793-08, 512331-08, 512331-08, 512331-08, 512331-08, No #, No #, No #, 518640-08, 518640-08, 518640-08, 518640-08, No #, No #, Last

518640-08, 518640-08, No #, No #, No #, No #, No #

518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518521-08, 518658-08, 518658-08, 518658-08, 518658-08, 518658-08, 518658-08, 518658-08, 518658-08

517374-08, 517374-08, 517374-08, 517374-08, 517374-08, 517374-08, 517374-08, 517374-08, 517374-08

1st, No #, No #, No #, 522101-08, 522101-08, 522101-08, 522101-08, 522101-08, 521703-08, 521703-08, 521703-08, 521703-08, 521703-08, 517374-08, 517374-08, 517374-08

1-13-08 | 1-22-09

Soil Samples Testing results and Site Map .

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Bill Marley
Gandy Marley Inc.
Box 1658
Roswell, NM, 88202

Report Date: October 24, 2008

Work Order: 8100619

Project Location: Sec. 4, 5, 8, 9, T11S-R31E, Chaves, NM
Project Name: GMI Landfarm/Soil Characterization
Project Number: Evaporation Pond #2

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
175651	Comp. Grab Sample Evap. Pond #2	soil	2008-10-03	16:00	2008-10-06

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 23 pages and shall not be reproduced except in its entirety, without written approval of

TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project GMI Landfarm/Soil Characterization were received by TraceAnalysis, Inc. on 2008-10-06 and assigned to work order 8100619. Samples for work order 8100619 were received intact at a temperature of 2.8 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
Ag, Total	S 6010B
Alkalinity	SM 2320B
As, Total	S 6010B
Ba, Total	S 6010B
BTEX	S 8021B
Ca, Extractable	S 6010B
Cd, Total	S 6010B
Chloride (IC)	E 300.0
Conductivity	E 120.1
Cr, Total	S 6010B
Hg, Total	S 7471A
K, Extractable	S 6010B
Mg, Extractable	S 6010B
Na, Extractable	S 6010B
Pb, Total	S 6010B
pH	E 150.1
Se, Total	S 6010B
SO4 (IC)	E 300.0
TPH 418.1	E 418.1

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 8100619 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	53510	Date Analyzed:	2008-10-21	Analyzed By:	RG
Prep Batch:	45828	Sample Preparation:	2008-10-21	Prepared By:	RG

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/Kg as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/Kg as CaCo3	1	1.00
Bicarbonate Alkalinity		**94.0**	mg/Kg as CaCo3	1	4.00
Total Alkalinity		**94.0**	mg/Kg as CaCo3	1	4.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	53053	Date Analyzed:	2008-10-06	Analyzed By:	ER
Prep Batch:	45456	Sample Preparation:	2008-10-06	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.907	mg/Kg	1	1.00	91	68.6 - 115.1
4-Bromofluorobenzene (4-BFB)		0.981	mg/Kg	1	1.00	98	71.7 - 123.8

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Ca, Extractable	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	53416 [a]	Date Analyzed:	2008-10-17	Analyzed By:	TP
Prep Batch:	45666	Sample Preparation:	2008-10-15	Prepared By:	KV

[a]Not enough sample quantity for MS/MSD Preparation.

Parameter	Flag	RL Result	Units	Dilution	RL
Extractable Calcium		**2530**	mg/Kg	10	1.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	53158	Date Analyzed:	2008-10-09	Analyzed By:	RD
Prep Batch:	45543	Sample Preparation:	2008-10-08	Prepared By:	RD

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**210**	mg/Kg	10	1.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Conductivity	Analytical Method:	E 120.1	Prep Method:	N/A
QC Batch:	53255	Date Analyzed:	2008-10-14	Analyzed By:	RD
Prep Batch:	45615	Sample Preparation:	2008-10-08	Prepared By:	RD

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		**1700**	uMHOS/cm	10	0.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	K, Extractable	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	53416 [a]	Date Analyzed:	2008-10-17	Analyzed By:	TP
Prep Batch:	45666	Sample Preparation:	2008-10-15	Prepared By:	KV

[a]Not enough sample quantity for MS/MSD Preparation.

Parameter	Flag	RL Result	Units	Dilution	RL
Extractable Potassium		**13.2**	mg/Kg	1	1.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Mg, Extractable	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	53416 [a]	Date Analyzed:	2008-10-17	Analyzed By:	TP
Prep Batch:	45666	Sample Preparation:	2008-10-15	Prepared By:	KV

[a]Not enough sample quantity for MS/MSD Preparation.

Parameter	Flag	Result	RL Units	Dilution	RL
Extractable Magnesium		**83.9**	mg/Kg	1	1.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Na, Extractable	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	53416 [a]	Date Analyzed:	2008-10-17	Analyzed By:	TP
Prep Batch:	45666	Sample Preparation:	2008-10-15	Prepared By:	KV

[a]Not enough sample quantity for MS/MSD Preparation.

Parameter	Flag	Result	RL Units	Dilution	RL
Extractable Sodium		**260**	mg/Kg	1	1.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	pH	Analytical Method:	E 150.1	Prep Method:	N/A
QC Batch:	53091	Date Analyzed:	2008-10-07	Analyzed By:	RG
Prep Batch:	45486	Sample Preparation:	2008-10-07	Prepared By:	RG

Parameter	Flag	Result	RL Units	Dilution	RL
pH		**6.59**	s.u.	1	0.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	SO4 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	53158	Date Analyzed:	2008-10-09	Analyzed By:	RD
Prep Batch:	45543	Sample Preparation:	2008-10-08	Prepared By:	RD

Parameter	Flag	RL Result	Units	Dilution	RL
Sulfate		**86.1**	mg/Kg	10	2.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 7471A	Prep Method:	N/A
QC Batch:	53310	Date Analyzed:	2008-10-15	Analyzed By:	TP
Prep Batch:	45660	Sample Preparation:	2008-10-15	Prepared By:	TP
Laboratory:	Lubbock				
Analysis:	Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	S 3050B
QC Batch:	53384	Date Analyzed:	2008-10-17	Analyzed By:	RR
Prep Batch:	45713	Sample Preparation:	2008-10-17	Prepared By:	KV

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.250	mg/Kg	1	0.250
Total Arsenic		<2.00	mg/Kg	1	2.00
Total Barium		**81.2**	mg/Kg	1	1.00
Total Cadmium		<0.200	mg/Kg	1	0.200
Total Chromium		**5.15**	mg/Kg	1	0.500
Total Mercury		<0.0400	mg/Kg	1	0.0400
Total Lead		**1.60**	mg/Kg	1	1.00
Total Selenium		<2.00	mg/Kg	1	2.00

Sample: 175651 - Comp. Grab Sample Evap. Pond #2

Laboratory:	Lubbock				
Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	53334	Date Analyzed:	2008-10-16	Analyzed By:	CM
Prep Batch:	45674	Sample Preparation:	2008-10-15	Prepared By:	CM

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Method Blank (1) QC Batch: 53053

QC Batch:	53053	Date Analyzed:	2008-10-06	Analyzed By:	ER
Prep Batch:	45456	QC Preparation:	2008-10-06	Prepared By:	ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00193	mg/Kg	0.01
Toluene		<0.00268	mg/Kg	0.01
Ethylbenzene		<0.00488	mg/Kg	0.01
Xylene		<0.00432	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.888	mg/Kg	1	1.00	89	68 - 107.9
4-Bromofluorobenzene (4-BFB)		0.941	mg/Kg	1	1.00	94	57.9 - 114.6

Method Blank (1) QC Batch: 53158

QC Batch: 53158 Date Analyzed: 2008-10-09 Analyzed By: RD
Prep Batch: 45543 QC Preparation: 2008-10-08 Prepared By: RD

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.353	mg/Kg	1

Method Blank (1) QC Batch: 53158

QC Batch: 53158 Date Analyzed: 2008-10-09 Analyzed By: RD
Prep Batch: 45543 QC Preparation: 2008-10-08 Prepared By: RD

Parameter	Flag	MDL Result	Units	RL
Sulfate		<0.399	mg/Kg	2

Method Blank (1) QC Batch: 53255

QC Batch: 53255 Date Analyzed: 2008-10-14 Analyzed By: RD
Prep Batch: 45615 QC Preparation: 2008-10-08 Prepared By: RD

Parameter	Flag	MDL Result	Units	RL
Specific Conductance		2.01	uMHOS/cm	

Method Blank (1) QC Batch: 53310

QC Batch:	53310	Date Analyzed:	2008-10-15	Analyzed By:	TP
Prep Batch:	45660	QC Preparation:	2008-10-15	Prepared By:	TP

Parameter	Flag	MDL Result	Units	RL
Total Mercury		<0.00390	mg/Kg	0.04

Method Blank (1) QC Batch: 53334

QC Batch:	53334	Date Analyzed:	2008-10-16	Analyzed By:	CM
Prep Batch:	45674	QC Preparation:	2008-10-16	Prepared By:	CM

Parameter	Flag	MDL Result	Units	RL
TRPHC		<1.06	mg/Kg	10

Method Blank (1) QC Batch: 53384

QC Batch:	53384	Date Analyzed:	2008-10-17	Analyzed By:	RR
Prep Batch:	45713	QC Preparation:	2008-10-17	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
Total Silver		<0.200	mg/Kg	0.25
Total Arsenic		<0.609	mg/Kg	2
Total Barium		<0.171	mg/Kg	1
Total Cadmium		<0.0804	mg/Kg	0.2
Total Chromium		<0.138	mg/Kg	0.5
Total Lead		<0.528	mg/Kg	1
Total Selenium		<1.56	mg/Kg	2

Method Blank (1) QC Batch: 53416

QC Batch:	53416	Date Analyzed:	2008-10-17	Analyzed By:	TP
Prep Batch:	45666	QC Preparation:	2008-10-15	Prepared By:	KV

Parameter	Flag	MDL Result	Units	RL
Extractable Potassium		<0.654	mg/Kg	1

Method Blank (1) QC Batch: 53416

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Parameter	Flag	MDL Result	Units	RL
Extractable Magnesium		<0.296	mg/Kg	1

Method Blank (1) QC Batch: 53416

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Parameter	Flag	MDL Result	Units	RL
Extractable Calcium		<0.351	mg/Kg	1

Method Blank (1) QC Batch: 53416

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Parameter	Flag	MDL Result	Units	RL
Extractable Sodium		<0.487	mg/Kg	1

Method Blank (1) QC Batch: 53510

QC Batch: 53510 | Date Analyzed: 2008-10-21 | Analyzed By: RG
Prep Batch: 45828 | QC Preparation: 2008-10-21 | Prepared By: RG

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/Kg as CaCo3	1
Carbonate Alkalinity		<1.00	mg/Kg as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/Kg as CaCo3	4
Total Alkalinity		<4.00	mg/Kg as CaCo3	4

Duplicates (1) Duplicated Sample: 175651

QC Batch: 53091 | Date Analyzed: 2008-10-07 | Analyzed By: RG
Prep Batch: 45486 | QC Preparation: 2008-10-07 | Prepared By: RG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	6.63	6.59	s.u.	1	1	20

Duplicates (1) Duplicated Sample: 175651

QC Batch: 53255 | Date Analyzed: 2008-10-14 | Analyzed By: RD
Prep Batch: 45615 | QC Preparation: 2008-10-08 | Prepared By: RD

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	1710	1700	uMHOS/cm	10	1	20

Duplicates (1) Duplicated Sample: 175651

QC Batch: 53510 | Date Analyzed: 2008-10-21 | Analyzed By: RG
Prep Batch: 45828 | QC Preparation: 2008-10-21 | Prepared By: RG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/Kg as CaCo3	1	0	20
Carbonate Alkalinity	<1.00	<1.00	mg/Kg as CaCo3	1	0	20
Bicarbonate Alkalinity	96.0	94.0	mg/Kg as CaCo3	1	2	20
Total Alkalinity	96.0	94.0	mg/Kg as CaCo3	1	2	20

Laboratory Control Spike (LCS-1)

QC Batch: 53053 | Date Analyzed: 2008-10-06 | Analyzed By: ER
Prep Batch: 45456 | QC Preparation: 2008-10-06 | Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.993	mg/Kg	1	1.00	<0.00193	99	81.9 - 106.8
Toluene	0.995	mg/Kg	1	1.00	<0.00268	100	82.4 - 106.6
Ethylbenzene	0.984	mg/Kg	1	1.00	<0.00488	98	82.4 - 106.9
Xylene	2.98	mg/Kg	1	3.00	<0.00432	99	81.3 - 108.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.992	mg/Kg	1	1.00	<0.00193	99	81.9 - 106.8	0	20
Toluene	0.992	mg/Kg	1	1.00	<0.00268	99	82.4 - 106.6	0	20
Ethylbenzene	0.968	mg/Kg	1	1.00	<0.00488	97	82.4 - 106.9	2	20

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Xylene	2.92	mg/Kg	1	3.00	<0.00432	97	81.3 - 108.4	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.953	0.901	mg/Kg	1	1.00	95	90	79.1 - 116.9
4-Bromofluorobenzene (4-BFB)	1.03	0.976	mg/Kg	1	1.00	103	98	78.3 - 123.5

Laboratory Control Spike (LCS-1)

QC Batch: 53158 | Date Analyzed: 2008-10-09 | Analyzed By: RD
Prep Batch: 45543 | QC Preparation: 2008-10-08 | Prepared By: RD

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	[1]	13.1	mg/Kg	1	12.5	<0.353	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	[2]	12.5	mg/Kg	1	12.5	<0.353	100	90 - 110	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53158 | Date Analyzed: 2008-10-09 | Analyzed By: RD
Prep Batch: 45543 | QC Preparation: 2008-10-08 | Prepared By: RD

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Sulfate	[3]	11.9	mg/Kg	1	12.5	<0.399	95	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Sulfate	[4]	11.8	mg/Kg	1	12.5	<0.399	94	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[1]Matrix spikes run with batch, but spiked sample reran in another batch. Use LCS/LCSD to show analysis is in control.
[2]Matrix spikes run with batch, but spiked sample reran in another batch. Use LCS/LCSD to show analysis is in control.
[3]Matrix spikes run with batch, but spiked sample reran in another batch. Use LCS/LCSD to show analysis is in control.
[4]Matrix spikes run with batch, but spiked sample reran in another batch. Use LCS/LCSD to show analysis is in control.

Laboratory Control Spike (LCS-1)

QC Batch: 53310 | Date Analyzed: 2008-10-15 | Analyzed By: TP
Prep Batch: 45660 | QC Preparation: 2008-10-15 | Prepared By: TP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury	0.504	mg/Kg	1	0.500	<0.0390	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury	0.505	mg/Kg	1	0.500	<0.0390	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53334 | Date Analyzed: 2008-10-16 | Analyzed By: CM
Prep Batch: 45674 | QC Preparation: 2008-10-16 | Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	201	mg/Kg	1	250	<1.06	80	75.5 - 136

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC	206	mg/Kg	1	250	<1.06	82	75.5 - 136	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53384 | Date Analyzed: 2008-10-17 | Analyzed By: RR
Prep Batch: 45713 | QC Preparation: 2008-10-17 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	11.8	mg/Kg	1	12.5	<0.200	94	85 - 115
Total Arsenic	46.2	mg/Kg	1	50.0	<0.609	92	85 - 115
Total Barium	92.8	mg/Kg	1	100	<0.171	93	85 - 115
Total Cadmium	23.4	mg/Kg	1	25.0	<0.0804	94	85 - 115
Total Chromium	8.81	mg/Kg	1	10.0	<0.138	88	85 - 115
Total Lead	48.6	mg/Kg	1	50.0	<0.528	97	85 - 115

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Selenium	43.9	mg/Kg	1	50.0	<1.56	88	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	12.1	mg/Kg	1	12.5	<0.200	97	85 - 115	2	20
Total Arsenic	45.1	mg/Kg	1	50.0	<0.609	90	85 - 115	2	20
Total Barium	94.2	mg/Kg	1	100	<0.171	94	85 - 115	2	20
Total Cadmium	23.7	mg/Kg	1	25.0	<0.0804	95	85 - 115	1	20
Total Chromium	8.90	mg/Kg	1	10.0	<0.138	89	85 - 115	1	20
Total Lead	50.3	mg/Kg	1	50.0	<0.528	101	85 - 115	3	20
Total Selenium	43.1	mg/Kg	1	50.0	<1.56	86	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Extractable Potassium	50.1	mg/Kg	1	50.0	<0.654	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Extractable Potassium	49.3	mg/Kg	1	50.0	<0.654	99	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Extractable Magnesium	48.8	mg/Kg	1	50.0	<0.296	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Extractable Magnesium	48.4	mg/Kg	1	50.0	<0.296	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Extractable Calcium	49.7	mg/Kg	1	50.0	<0.351	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Extractable Calcium	49.3	mg/Kg	1	50.0	<0.351	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP
Prep Batch: 45666 | QC Preparation: 2008-10-15 | Prepared By: KV

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Extractable Sodium	50.2	mg/Kg	1	50.0	<0.487	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Extractable Sodium	49.4	mg/Kg	1	50.0	<0.487	99	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 175618

QC Batch: 53053 | Date Analyzed: 2008-10-06 | Analyzed By: ER
Prep Batch: 45456 | QC Preparation: 2008-10-06 | Prepared By: ER

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[5]	1.47	mg/Kg	1	1.00	<0.00193	147	38.9 - 123.1
Toluene	[6]	1.55	mg/Kg	1	1.00	<0.00268	155	46.7 - 124.7
Ethylbenzene	[7]	1.64	mg/Kg	1	1.00	<0.00488	164	47.6 - 133.5
Xylene	[8]	4.92	mg/Kg	1	3.00	<0.00432	164	43 - 141.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	[9]	1.43	mg/Kg	1	1.00	<0.00193	143	38.9 - 123.1	3	20
Toluene	[10]	1.51	mg/Kg	1	1.00	<0.00268	151	46.7 - 124.7	3	20
Ethylbenzene	[11]	1.59	mg/Kg	1	1.00	<0.00488	159	47.6 - 133.5	3	20
Xylene	[12]	4.78	mg/Kg	1	3.00	<0.00432	159	43 - 141.4	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.01	1.06	mg/Kg	1	1	101	106	80.1 - 122.4
4-Bromofluorobenzene (4-BFB)	1.01	1.06	mg/Kg	1	1	101	106	77.4 - 138.2

Matrix Spike (MS-1) Spiked Sample: 175574

QC Batch: 53310 | Date Analyzed: 2008-10-15 | Analyzed By: TP
Prep Batch: 45660 | QC Preparation: 2008-10-15 | Prepared By: TP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury	0.484	mg/Kg	1	0.500	0.00833	95	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Mercury	0.483	mg/Kg	1	0.500	0.00833	95	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[5]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[8]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[9]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[10]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[11]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[12]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Matrix Spike (MS-1) Spiked Sample: 45674

QC Batch: 53334 | Date Analyzed: 2008-10-16 | Analyzed By: CM
Prep Batch: 45674 | QC Preparation: 2008-10-16 | Prepared By: CM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	842	mg/Kg	1	250	<1.06	337	10 - 354

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC	831	mg/Kg	1	250	<1.06	332	10 - 354	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 176235

QC Batch: 53384 | Date Analyzed: 2008-10-17 | Analyzed By: RR
Prep Batch: 45713 | QC Preparation: 2008-10-17 | Prepared By: KV

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	11.1	mg/Kg	1	12.5	<0.200	89	75 - 125
Total Arsenic	45.0	mg/Kg	1	50.0	<0.609	90	75 - 125
Total Barium	115	mg/Kg	1	100	<0.171	115	75 - 125
Total Cadmium	23.5	mg/Kg	1	25.0	<0.0804	94	75 - 125
Total Chromium	9.25	mg/Kg	1	10.0	<0.138	92	75 - 125
Total Lead	60.4	mg/Kg	1	50.0	23	75	75 - 125
Total Selenium	40.1	mg/Kg	1	50.0	<1.56	80	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	11.0	mg/Kg	1	12.5	<0.200	88	75 - 125	1	20
Total Arsenic	48.1	mg/Kg	1	50.0	<0.609	96	75 - 125	7	20
Total Barium	110	mg/Kg	1	100	<0.171	110	75 - 125	4	20
Total Cadmium	23.8	mg/Kg	1	25.0	<0.0804	95	75 - 125	1	20
Total Chromium	9.25	mg/Kg	1	10.0	<0.138	92	75 - 125	0	20
Total Lead	62.8	mg/Kg	1	50.0	23	80	75 - 125	4	20
Total Selenium	40.5	mg/Kg	1	50.0	<1.56	81	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 53053 | Date Analyzed: 2008-10-06 | Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0978	98	85 - 115	2008-10-06
Toluene		mg/Kg	0.100	0.0977	98	85 - 115	2008-10-06
Ethylbenzene		mg/Kg	0.100	0.0961	96	85 - 115	2008-10-06
Xylene		mg/Kg	0.300	0.292	97	85 - 115	2008-10-06

Standard (CCV-1)

QC Batch: 53053 Date Analyzed: 2008-10-06 Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0980	98	85 - 115	2008-10-06
Toluene		mg/Kg	0.100	0.0978	98	85 - 115	2008-10-06
Ethylbenzene		mg/Kg	0.100	0.0951	95	85 - 115	2008-10-06
Xylene		mg/Kg	0.300	0.286	95	85 - 115	2008-10-06

Standard (ICV-1)

QC Batch: 53091 Date Analyzed: 2008-10-07 Analyzed By: RG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.95	99	98 - 102	2008-10-07

Standard (CCV-1)

QC Batch: 53091 Date Analyzed: 2008-10-07 Analyzed By: RG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.98	100	98 - 102	2008-10-07

Standard (ICV-1)

QC Batch: 53158 Date Analyzed: 2008-10-09 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.5	100	90 - 110	2008-10-09

Standard (ICV-1)

QC Batch: 53158 Date Analyzed: 2008-10-09 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/Kg	12.5	12.5	100	90 - 110	2008-10-09

Standard (CCV-1)

QC Batch: 53158 Date Analyzed: 2008-10-09 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2008-10-09

Standard (CCV-1)

QC Batch: 53158 Date Analyzed: 2008-10-09 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/Kg	12.5	11.6	93	90 - 110	2008-10-09

Standard (ICV-1)

QC Batch: 53255 Date Analyzed: 2008-10-14 Analyzed By: RD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		uMHOS/cm	1410	1460	104	90 - 110	2008-10-14

Standard (CCV-1)

QC Batch: 53255 Date Analyzed: 2008-10-14 Analyzed By: RD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		uMHOS/cm	1410	1420	100	90 - 110	2008-10-14

Standard (ICV-1)

QC Batch: 53310 Date Analyzed: 2008-10-15 Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00500	0.00528	106	90 - 110	2008-10-15

Standard (CCV-1)

QC Batch: 53310 Date Analyzed: 2008-10-15 Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00500	0.00493	99	90 - 110	2008-10-15

Standard (ICV-1)

QC Batch: 53334 Date Analyzed: 2008-10-16 Analyzed By: CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	90.3	90	80 - 120	2008-10-16

Standard (CCV-1)

QC Batch: 53334 Date Analyzed: 2008-10-16 Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	89.5	90	80 - 120	2008-10-16

Standard (ICV-1)

QC Batch: 53384 Date Analyzed: 2008-10-17 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/Kg	0.125	0.123	98	90 - 110	2008-10-17
Total Arsenic		mg/Kg	1.00	0.998	100	90 - 110	2008-10-17
Total Barium		mg/Kg	1.00	1.02	102	90 - 110	2008-10-17
Total Cadmium		mg/Kg	1.00	0.996	100	90 - 110	2008-10-17
Total Chromium		mg/Kg	1.00	1.01	101	90 - 110	2008-10-17
Total Lead		mg/Kg	1.00	0.978	98	90 - 110	2008-10-17
Total Selenium		mg/Kg	1.00	0.993	99	90 - 110	2008-10-17

Standard (CCV-1)

QC Batch: 53384 Date Analyzed: 2008-10-17 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/Kg	0.125	0.127	102	90 - 110	2008-10-17
Total Arsenic		mg/Kg	1.00	1.02	102	90 - 110	2008-10-17
Total Barium		mg/Kg	1.00	1.02	102	90 - 110	2008-10-17
Total Cadmium		mg/Kg	1.00	1.00	100	90 - 110	2008-10-17
Total Chromium		mg/Kg	1.00	1.01	101	90 - 110	2008-10-17
Total Lead		mg/Kg	1.00	0.992	99	90 - 110	2008-10-17
Total Selenium		mg/Kg	1.00	1.01	101	90 - 110	2008-10-17

Standard (ICV-1)

QC Batch: 53416 Date Analyzed: 2008-10-17 Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Potassium		mg/Kg	50.0	48.4	97	90 - 110	2008-10-17

Standard (ICV-1)

QC Batch: 53416 Date Analyzed: 2008-10-17 Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Magnesium		mg/Kg	50.0	48.5	97	90 - 110	2008-10-17

Standard (ICV-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Calcium		mg/Kg	50.0	48.3	97	90 - 110	2008-10-17

Standard (ICV-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Sodium		mg/Kg	50.0	47.6	95	90 - 110	2008-10-17

Standard (CCV-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Potassium		mg/Kg	50.0	49.2	98	90 - 110	2008-10-17

Standard (CCV-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Magnesium		mg/Kg	50.0	49.9	100	90 - 110	2008-10-17

Standard (CCV-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Calcium		mg/Kg	50.0	49.7	99	90 - 110	2008-10-17

Standard (CCV-1)

QC Batch: 53416 | Date Analyzed: 2008-10-17 | Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Extractable Sodium		mg/Kg	50.0	50.8	102	90 - 110	2008-10-17

Standard (ICV-1)

QC Batch: 53510 | Date Analyzed: 2008-10-21 | Analyzed By: RG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/Kg as CaCo3	250	250	100	95 - 105	2008-10-21

Standard (CCV-1)

QC Batch: 53510 | Date Analyzed: 2008-10-21 | Analyzed By: RG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/Kg as CaCo3	250	242	97	95 - 105	2008-10-21

LAB Order ID # 8100619 Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296

5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313

200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: Gandy Marley Inc.
Phone #: 575-347-0434

Address: (Street, City, Zip) PO Box 1658 Roswell, NM 88202
Fax #: 575-347-0435

Contact Person: Larry Gandy (575) 399-5721
E-mail: gmi@dfn.com

Invoice to: (If different from above)

Project #: Soil Characterization Evaporation Pond #2
Project Name: GMI Landfarm

Project Location (including state): Sec. 8, 9, 4, 5 T.11-S. R31E. Chaves Co N.M.
Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	WATER	SOIL	AIR	SLUDGE		HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX (8021B) / 602 / 8260B / 624	(TPH 418.1) / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	~~TCLP Metals Ag As Ba Cd Cr Pb Se Hg~~	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Na, Ca, Mg, K, Cl, SO4, CO3, HCO3, pH, Conductivity, Total Alkalinity			Turn Around Time if different from standard	Hold
175651	Composite Grab Sample Evaporation Pond #2 Background Pond Bottom	2	8oz/G		X								X	X	10/03/08	1600		X	X			X	X											X				
	Temp Blank																																					

per Clay 10/6/08

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp °C:
[signature]	GMI	10/05/08	1000					
				[signature]		100608	1015	2.8

LAB USE ONLY
Intact (Y) / N
Headspace Y / N / (NA)
Log-in-Review [initials]

REMARKS: Send Copy of Results to Ombenviro@dfn.com

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Bus GLI 3045348181 (3coc)

ORIGINAL COPY

Location GMI Land farm Date 10/03/08

Purpose 3rd Quarter 2008 Soil Sampling

For Plants Environmental & Geotechnical Services, Inc.

Page 3 of 4
NMOCD SIDE

Cell #	Time	GPS Coords	Remarks
17	13:25	33° 23. 197 103° 50. 230	Brown clayey Sand w/caliche No odor or Stain @ 1'BGS
18	14:00	33° 23. 159 103° 50. 267	Brown clayey Sand No odor or stain @ 1'BGS
19	13:35	33° 23. 207 N 103° 50. 326 W	Red Brown Sand, well sorted No odor or stain @ 3'BGS
21	13:45	33° 23. 203 N 103° 50. 421	Red Brown Sand w/caliche No odor or Stain. @ 1'BGS

Location GMI Land farm Date 10/03/08

Purpose 3rd Quarter 2008 Soil Sampling

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NMOCD SIDE