P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410

District IV - (505) 827-7131

## New Mexico

Energy Minerals and Natural Resources Department Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131 Form C-13, Originated 8/8/95

Submit Origina
Plus 1 Copy
to Santa For 1 Copy to appropriate
District Office

# APPLICATION FOR WASTE MANAGEMENT FACILITY (Refer to the OCD Guidelines for assistance in completing the application)

		Commercial	1	Centralized	
ı.	Туре:	Evaporation	Injection	Other	
		Solids/Landfarm	Treating Plant		
2.	Operator	. Gandy Marley Inc.			<del></del>
	Address	P. O. Box 1658 Ro	swell, New Mexico	88202	
	Contact	Person: Larry Gand	ly	Phone: (505)	398-4960
3.	Location	: Parts of Sections 4 Submit large scale topographic	/4 Section, and 9 Town nap showing exact location	nship 11S Ra	ange <u>31E</u>
4.	Is this a r	nodification of an existing facilit	y? 🗓 Yes 🔲 No		
5.	Attach th	ne name and address of the lando	wner of the facility site and lan	adowners of record with	nin one mile of the site.
6.	Attach de	escription of the facility with a d	agram indicating location of f	ences, pits, dikes, and	tanks on the facility.
7.	or ponds	esigns prepared in accordance wi , leak-detection systems, aeratio systems, and landfarm facilities.	ns systems, enhanced evapora	onstruction/installatio tion (spray) systems, v	n of the following: pits vaste treating systems,
8.	Attach a	contingency plan for reporting	and clean-up for spills or relea	ases.	
9.	Attach a	routine inspection and mainten	ance plan to ensure permit co	mpliance.	
10.	Attach a	closure plan.			
11.		eological/hydrological evidence rater. Depth to and quality of gro		of oil field wastes will	not adversely impact
12.	Attach p	roof that the notice requirement	s of OCD Rule 711 have been	met.	
13.	Attach a	contingency plan in the event of	of a release of H <sub>2</sub> S.		
14.	Attach si orders.	uch other information as necess	ary to demonstrate complianc	te with any other OCD	rules, regulations and
15.	CERTIFI	CATION			
	I hereby and belie	certify that the information sub	mitted with this application is	true and correct to the	e best of my knowledge
	Name:_	Larry Gandy	Title:vic	e-pres.	
	Signatur	re: have said		4-94	
		. seiddfi	GMI-10		



A New Mexico Enterprise Serving New Mexico's Needs

Modification for Surface Waste Disposal Facility Gandy Marley, Inc.

#### I. Type of Operation

The facility operates as a soil remediation, recycling and landfarm facility.

#### II. Operator

Gandy Marley, Inc. Attn: Larry Gandy 1109 East Broadway PO Box 827 Tatum, New Mexico 88267 505/398-4960

#### III. Location of Landfarm

The facility is located in Southeastern New Mexico, southeast of Roswell, New Mexico. The facility is situated on privately-owned land in Chaves County, New Mexico, in parts of Section 4, 5, 8, and 9 of T115, R31E.

This location is approximately 39 miles eastsoutheast of Roswell and approximately 33 miles northwest of Tatum. As illustrated in Figure 1, US Highway 380, which runs east and west, is located approximately 2 1/2 miles to the north. State Highway 172, which runs north and south, is approximately four miles to the east and above the Caprock from the proposed site. State Highway 172 does not provide access to the facility.

#### IV. Expansion Request

This permit application relates to proposed construction for a solidification facility to enable it to accept tank bottoms, pit sludge and exempt and nonexempt oilfield hydrocarbon contaminated wastes.



A New Mexico Enterprise Serving New Mexico's Needs

Modification of Surface Waste Disposal Facility Gandy Marley, Inc.

## V. Land and Ownership

As illustrated in Figure 2, the proposed facility site is situated on privately-owned land. There are no other landowners of record within one mile of the proposed facility location and there are no private residences within one mile of the proposed site.

#### VI. Facility Description

The purpose of the proposed solidification facility will be to solidify oil field liquid wastes (not produced water) to be placed into the landfarm for remediation and recycling.

The site will be set inside the existing land farm. The receiving tank, skimmer tank and solidification unit will be underlined with a 20 mil HDPE liner with a berm that will hold 1 1/3 times the capacity of all tanks.

This area is depicted in Figure 3 and will meet the 100 foot buffer requirements set forth in OCD Rule 711.



A New Mexico Enterprise Serving New Mexico's Needs

Modification of Surface Waste Disposal Facility Gandy Marley, Inc.

## VII. Facility Designs

This area is illustrated in Figure 3A in accordance with Division guidelines. All containments and piping are placed above grade and are underlined with a 20 mil HDPE liner.

## VIII. Spill/Leak Prevention and Reporting (Contingency Plans)

The proposed solidification facility will be placed inside the land farm perimeter berms which will serve to prevent storm water run on and run off. All liquids and sludges will be received into a receiving tank that is placed inside a liquid containment area. Equipment and machinery which could be used in the event of any spill or leak will be at the facility at all times. Should a leak or spill occur, notification to the OCD would be made immediately in accordance with OCD Rule 116 and WQCC Section 120.

## IX. Inspection, Maintenance and Reporting

The facility will be inspected on a regular basis and immediately following significant precipitaion and/or wind. Inspections will include examination of berms, fences and the remediation area. Perimeter and interior berms will be maintained to prevent erosion. General maintenance will be routinely performed. Any necessary repairs will be made immediately.

Inspection and repair records will be maintained and will include time and date of inspection and types of repairs performed. These records will be maintained on site.



A New Mexico Enterprise Serving New Mexico's Needs

Modification of Surface Waste Disposal Facility Gandy Marley, Inc.

#### X. Closure Plan

Upon closure, and following notification to OCD that operations have ceased, existing liquids, sludges and solids will be cleaned from tanks, solidified and placed within the landfarm. Tanks and piping will then be dismantled and hauled off for salvage. The 20 mil liner will be picked up and disposed of at the appropriate land fill. All berms and containments will be leveled off, disced and turned back to the land farm. Any additional closure requirements or conditions of the OCD will be met.

## XI. Site Characteristics-Fresh Water Protection Demonstration

There are no stream drainages or water wells within one mile of the facility boundary. Approximately 1/2 mile east of the site there is a spring at the base of Mescalero Rim. This spring is located topographically higher (200 feet) than the facility and is a result of seepage from an overlying aquifer (Ogallala Fm.) The spring water is collected by the rancher and distributed through an underground pipeline to stock tanks on the ranch property. There are three such stock tanks within one mile of the outside perimeter of the proposed facility.

While there are no water wells within one mile of the outside perimeter of the site, subsurface drilling has encountered groundwater saturation within Upper Triassic sediments. The depth to this groundwater is 150 feet. A sample of the ground water was obtained from three drill holes, the location which are illustrated in Figure 4. The samples were analyzed at Assaigai Analytical Laboratories in Albuquerque, New Mexico. A copy of the analytical results is presented in Attachment A. This groundwater flows eastward and is controlled by stratigraphic and structural features within the Triassic sediments.



A New Mexico Enterprise Serving New Mexico's Needs

Modification of Surface Waste Disposal Facility Gandy Marley, Inc.

This information was obtained from geologic data from a subsurface drilling program conducted in the region in July 1994.

The surface geology consists entirely of Quaternary age alluvial deposits. This alluvium is made up of fine yellow-brown sand and clays and contains abundant granitic and chert cobbles. This material was derived from the Tertiary age Ogallala Fm. which is located topographically higher and east of the site. Thickness of the alluvial materials varies from 5-25 feet.

Immediately underlying the alluvial deposits are Upper Triassic sediments. These sediments were deposited in a fluvial environment and consist of fine to very-fine grained sandstones, interbedded with siltstones and mudstones.

The Upper Triassic sediments underlying the proposed site dip approximately one degree to the east. The thickness of these sediments varies from 150 to 25 feet. Groundwater saturation was encountered in sandstone lenses below depths of 150 feet.

The aquifier material consists of thin (10-30 feet), lenticular fine to very-fine grained sandstones. Due to the fluvial nature of these sands, individual sandstone lenses are discontinuous and difficult to correlate.

The site consists of two soil types including Alama Loam and Faskin-Roswell Complex. These soils are typically well-drained with slopes of 0 to 15 percent. Vegetation consists primarily of Tobosa, Buffalo Grass, Vine-Mesquite, Mesquite, Cactus, Sand Dropseed, Little Bluestem, Sand Bluestem, Sandur, Three-Awn, Shinnery Oak, Yucca and Sand Sagebrush. No rare or endangered plant species are located near the proposed site or in the surrounding area.



A New Mexico Enterprise Serving New Mexico's Needs

Modification of Surface Waste Disposal Facility Gandy Marley, Inc.

The facility lies outside any 100-year floodplain boundary. The proposed site is in an area found on Federal Insurance Rate Map (FIRM) #3501250850. This map has not been printed because the National Flood Insurance Program has established that this is in an area of minimal flood hazards.

The perimeter berms will be designed to alleviate stormwater run-on and run-off during a 100-year stormwater event. Should such a storm event occur, the OCD will be notified immediately of any flooding or washout.

## XII. Proof of Notice

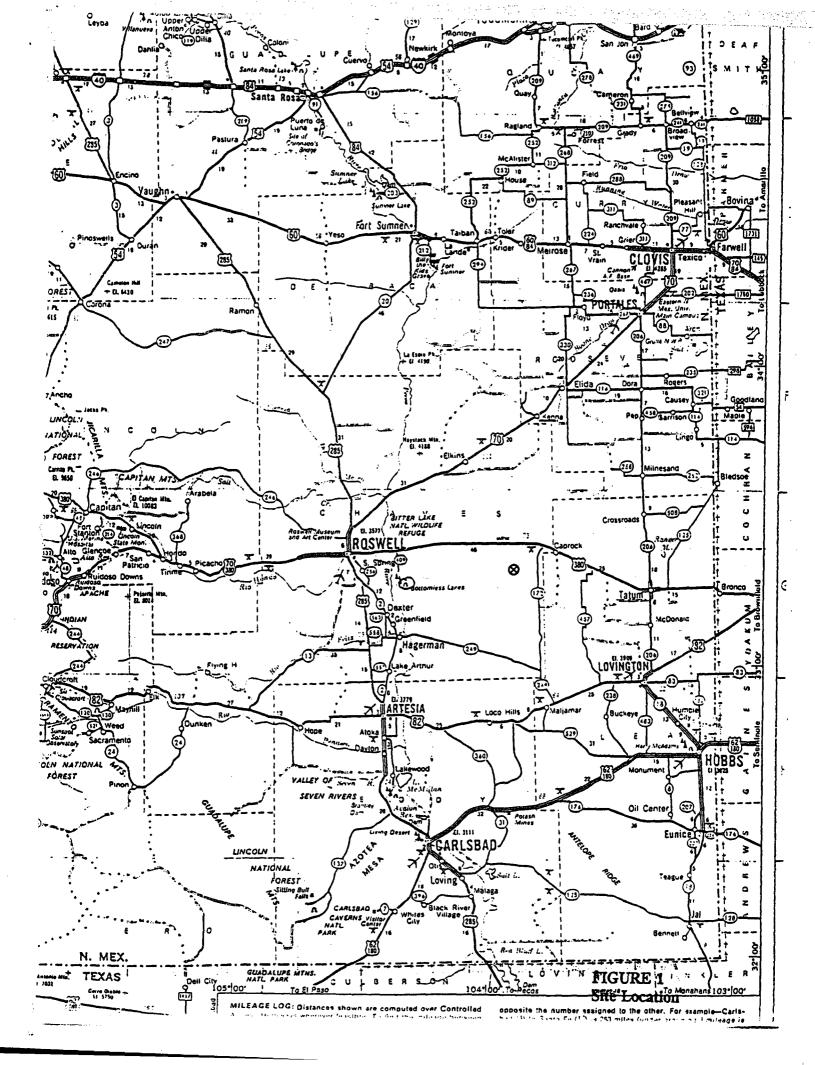
There are no other owners of surface lands or occupants within one mile of the facility boundary. Notification requirements set forth in OCD Rule 117, therefore, do not apply. A legal notice of this pending application was published in the September 29, 1994 issue of the Roswell Daily Record. A copy of the notice, along with an Affidavit of Publication. is included as Attachment B.

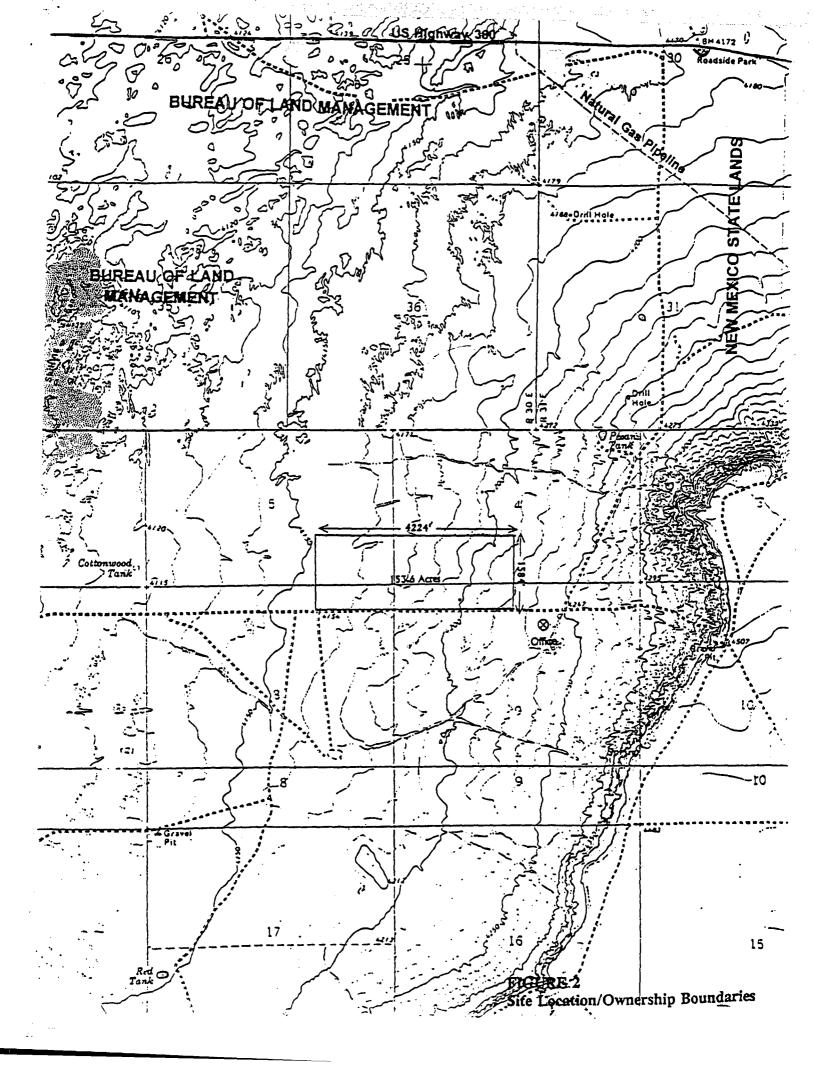
#### XIII. H2S Contingency Plan

Hydrogen Sulfide can be expected at the receiving tank and solidification unit. Appropriate signs will be placed and H2S training will be provided to all personnel and all provisions set forth in OCD Rule 118 will be met.

#### XIV. Additional Information

All regulatory requirements and OCD rules applicable to this facility will be fully complied with.





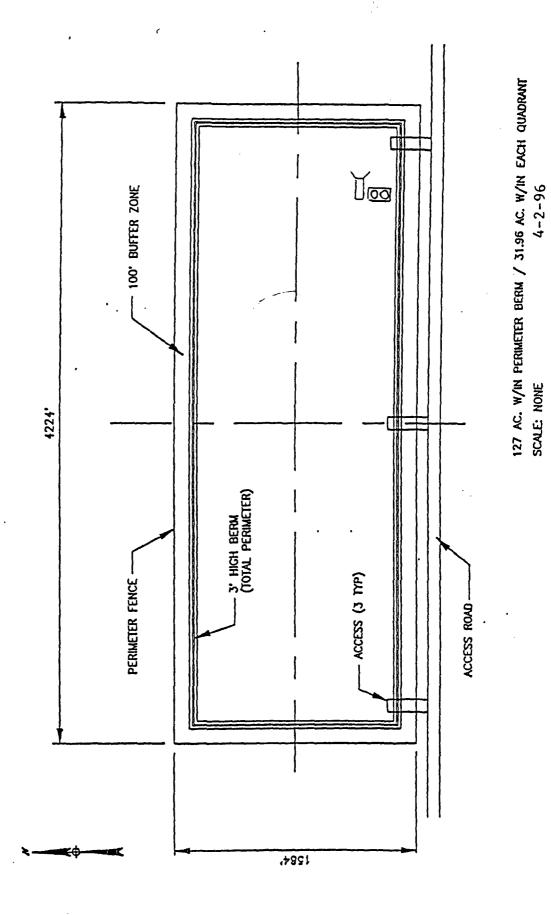
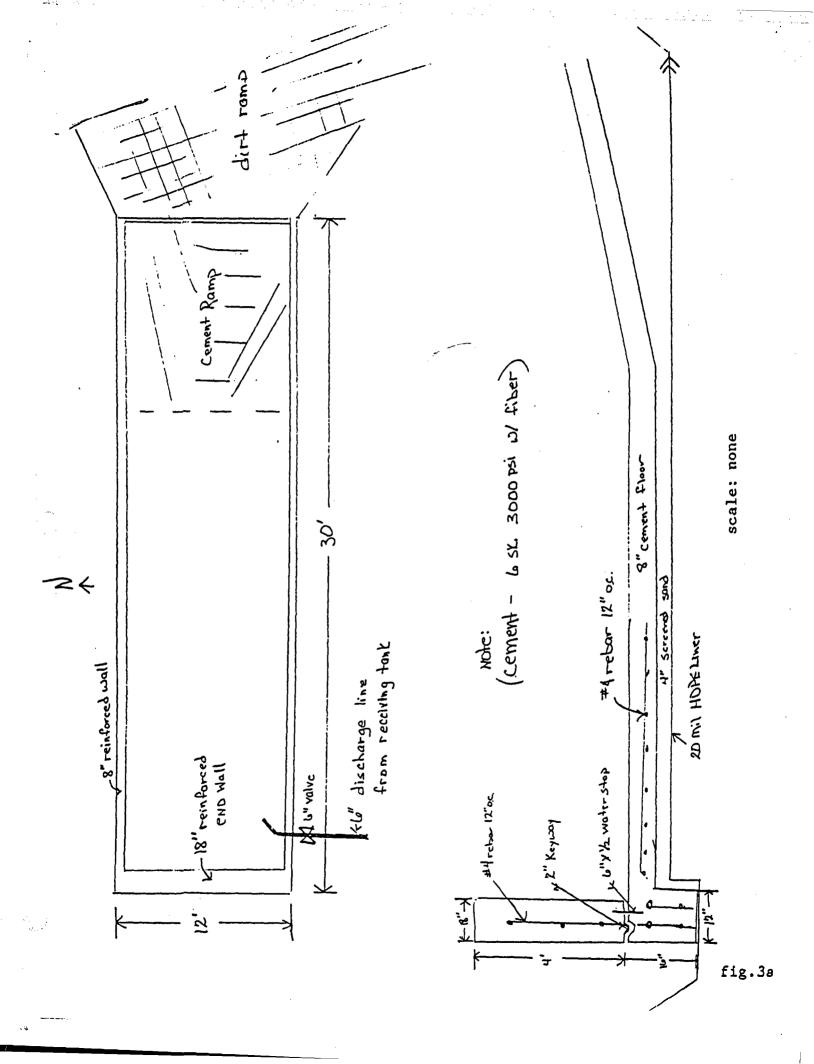
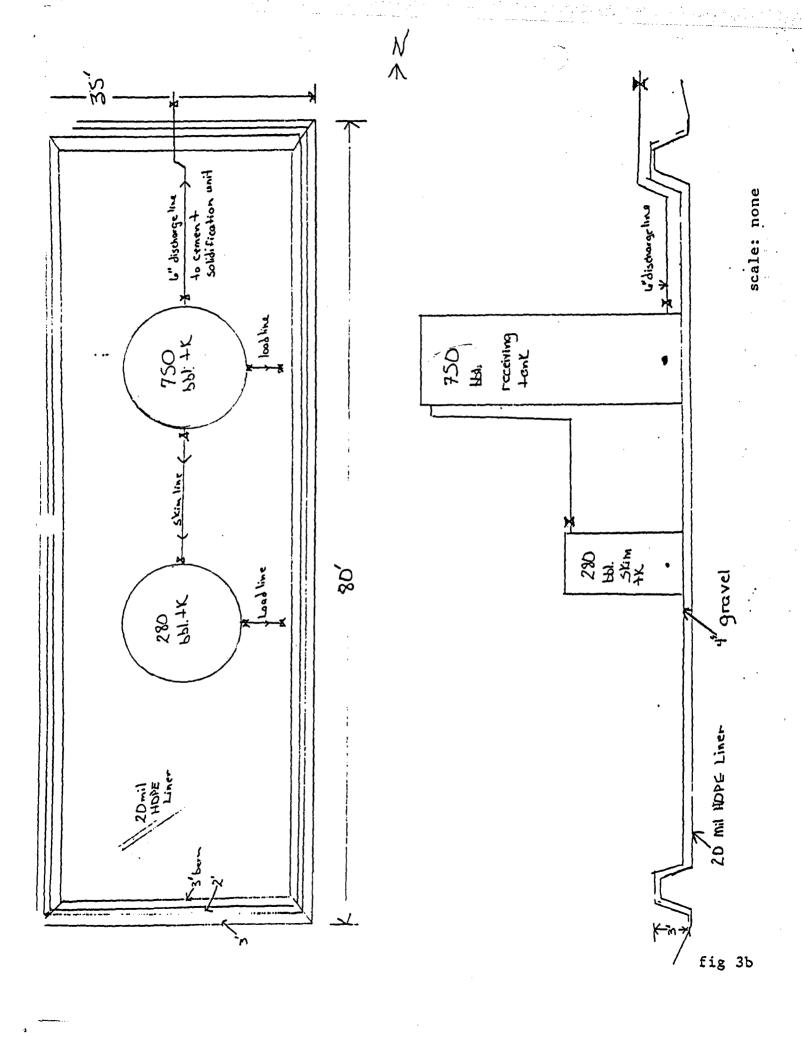
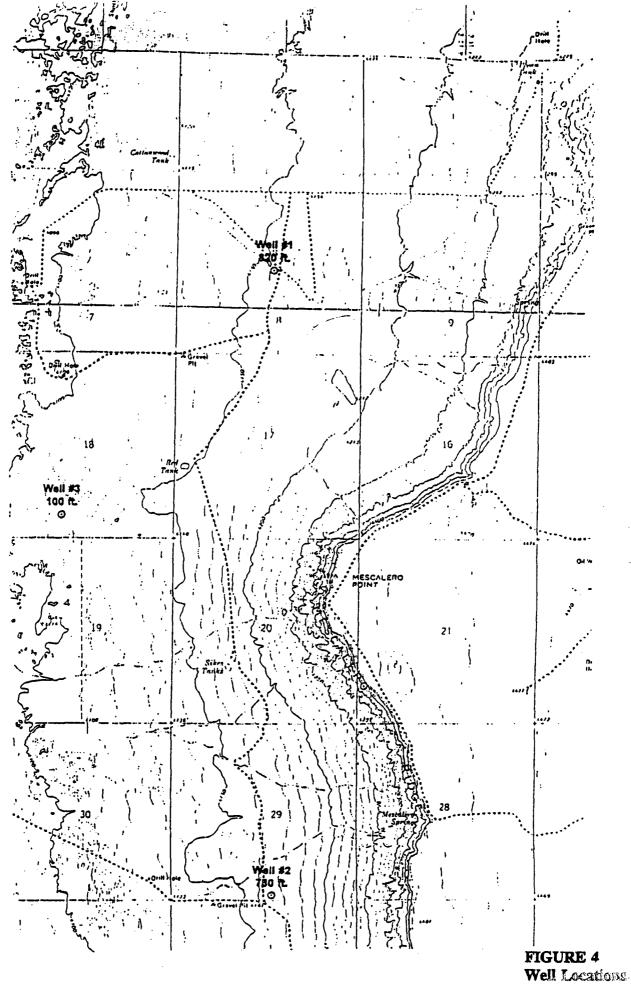


FIGURE 3 Site Diagram







7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

3332 Wedgewood, E-5 • El Paso, Texas 79925 1910 N. Big Springs • Midland, Texas 79705

STOLLER CORPORATION 1717 LOUISIANA BLVD.

ABQ., NM 87110

Attn: JIM BONNER Invoice Number:

Order #: 94-08-072 Date: 08/19/94 16:28

Work ID: GANDY

Date Received: 08/05/94 Date Completed: 08/19/94

Client Code: ST001

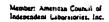
#### SAMPLE IDENTIFICATION

Sample	Sample	Sample	Sample	
Number	Description	Number	Description	
01	WELL #1	03	WELL #3	
02	WELL #2			

ND = None Detected D\_F = Dilution Factor NT = Not Tested

B = Analyte was present in the blank

E = Estimated Value or Result exceeds calibration range MULTIPLY THE LIMIT(= AAL'S DETECTION LIMIT) BY DILUTION FACTOR



ATTACHMENT A Water Sample Analysis Results Page 1

REPORT

Work Order # 94-08-072

Received: 08/05/94

Results By Test

TEST CODE	I	Sample <u>01</u> (entered units)	Sample <u>02</u> (entered units)	Sample <u>03</u> (entered units)
WPRAX	1	н/х	N/A	n/a
N/A	1			

Notes and Definitions for this Report:

N/A

Page 4

REPORT

RESULTS REFLECT TOTAL METALS ANALYSIS

Work Galer # 94-08-072

Received: 08/05/94

Results by Sample

SAMPLE ID	WELL #1		TION <u>01B</u> & Time Col			NAME MAC	ENESION (PAA Category	MATER
	PARAMETER		RESULT	LIMIT	D_P	DATE_EXT	DATE_ANAL	
	Magnesium, Mg		51.4	1.0	10	08/09/94	08/19/94	
		Notes and De	finitions f	or this Re	port:			
		ANALYST KH	mg/L					

BATCH\_ID WFAA-181

COMMENTS \_

Page 5 Received: 08/05/94 REPORT

Work Order # 94-08-072

Results by Sample

FRACTION 01B TEST CODE WPANNA NAME SODIUM (PAA) / EPA 273.1 . .AFE ID METT #1 Date & Time Collected 07/20/94 Category WATER

PARAMETER

RESULT

LIMIT D\_F DATE\_EXT DATE\_ANAL

Sodium, Na

4,600 1.0 500 08/09/94 08/19/94

Notes and Definitions for this Report:

ANALYST KH

mq/L UNITS \_\_\_\_

BATCH\_ID WFAA-181

COMMENTS RESULTS REFLECT TOTAL METALS ANALYSIS

ceineg: de e	08/05/94	Results by Samp	EPORT ole	Work Order # 94-	08-072
Z ID	WRLL #2	FRACTION 02A TES Date & Time Collect		NAME TOS/EPA 160.1  Category M	ATER
•	PARAMETER	RESULT LIM	IT D_F	DATE_ANAL	
	Total Dissolved Solids	18800	1.0 1.0	08/09/94	
	Noce	s and Definitions for t	his Report:		
		ACTEDYST JCB	<b>-</b> .		

N/A

WTDS-140

BATCH\_ID COMMENTS

rege /		KEPOKT WORK Order # 94-08-072
ceived:	08/05/94	Results by Sample
SAMPLE ID	WELL #2	FRACTION 02A TEST CODE WALK NAME ALKALINITY/EPA 310.1
		Date & Time Collected 07/20/94 Category WATER
	PARAMETER	RESULT LIMIT D_F DATE_ANAL
	Alkalinity	<u>83.0 2.0 1.0 08/09/94</u>
		Notes and Definitions for this Report:
		EXTRACTED ANALYST DES
		BATCH_IDWALK-66

COMMENTS

N/A

٠:

COMMENTS RESULTS REFLECT TOTAL METALS ANALYSIS

Page 9 Received: 08/05/94 REPORT

Work Order # 94-08-072

Results by Sample

'PLE ID WELL #2

FRACTION 02B TEST CODE WFRANA NAME SODIUM (FAA) / EPA 273.1

Date & Time Collected 07/20/94 Category WATER

PARAMETER

RESULT LIMIT D\_F DATE\_EXT DATE\_ANAL

Sodium, Na

7,030 1.0 1,000 08/09/94 08/19/94

Notes and Definitions for this Report:

ANALYST KH

mq/L UNITS \_\_\_\_

BATCH\_ID WFAA-181

COMMENTS RESULTS REFLECT FOTAL METALS ANALYSIS

Page 10			REPORT	1	fork Order # 94-08-072
Received.	08/05/94	Results by	/ Sample		
CAMPLE ID	WELL #3	PRACTION 03A	TEST CODE I	DS NAME	TDS/BPA 160.1
		Date & Time Co	llected <u>07/20</u>	/94	Category WATER
		•			•
	PARAMETER	RESULT	LIMIT D	_f date_a	NAL
	Total Dissolved Solids	4920	1.0	1.0 08/09/	94
	Not	es and Definitions	for this Repo	rt:	
	EXT	RACTED	<del></del>		
	ANA	LYST <u>JCB</u>	•		
	UNI	TS mg/L			

N/A

BATCH\_ID WTDS-140

COMMENTS \_

ceived.	08/05/94	Results by Sample
LE ID	WELL #3	FRACTION 03A TEST CODE WALK NAME ALKALINITY/EPA 310.1
		Date & Time Collected 07/20/94 Category WATER
		·
	PARAMETER	RESULT LIMIT D_F DATE_ANAL
	Alkalinity	396 2.0 1.0 08/09/94
	,	
		Notes and Definitions for this Report:
		EXTRACTED
		ANALYST DES
		UNITSmq/L
		BATCH_IDWALK-66

COMMENTS \_

N/A

Page 12	REPORT	Work Order # 94-08-072
Ruceived. 08/05/94	Results by Sample	
Sample ID Well #3	FRACTION DIB TEST COD	DE WPARMS NAME MAGNESION (PAR)/EPA 242
•	Date & Time Collected <u>07</u>	
Ì	•	
PARAMETER	RESULT LIMIT	D_F DATE_EXT DATE_ANAL
Magnesium, Mg	103 1.0	20 08/09/94 08/19/94
Ì	Notes and Definitions for this R	eport:
	ANALYST KH	
	INITS ma/I	

WFAA-181

BATCH\_ID

COMMENTS

Page 13 REPORT Work Order # 94-08-072 Received: 08/05/94 Results by Sample FRACTION 03B TEST CODE WFAANA NAME SODIUM (FAA) / EPA 273.1 SAMPLE ID WELL #3 Date & Time Collected 07/20/94 Category WATER RESULT LIMIT D\_F DATE\_EXT DATE\_ANAL PARAMETER 1,640 1.0 200 08/09/94 08/19/94 Sodium, Na Notes and Definitions for this Report: ANALYST KH UNITS \_\_\_\_ mq/L BATCH\_ID \_\_\_WFAA-181

COMMENTS RESULTS REFLECT FOTAL METALS ANALYSIS

ATTACHMENT B

**Proof of Public Notice** 

#### AFFIDAVIT OF PUBLICATION

County of Chaves

tate of New Mexico

I, Jean M. Pettit, Bus. Manager,

Of the Roswell Daily Record, a daily newspaper published at Roswell, New Mexico, do solemnly swear that the clipping hereto attached was published once a week in the regular and entire issue of said paper and tot in a supplement thereof for a period

one time

weeks

neginning with issue dated September 29th , 1994

and ending with the issue dated september 29th ,1994

(1 50 F

Manager

iworn and subscribed to before me

his 29th

day of

September

,1994

Jarylon & Shippe

Notary Public

My Commission expires

July = 25, 19 98

SEAL)

Publish September 29, 1994

LEGAL NOTICE

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Gandy Marley, Inc. will be filling an application for surface waste storage and remediation facility. The proposed facility will encompass approximately 154 acres of deeded land located in Sections 4, 5, 8, and 9, Township 11 South, Range 31 East. The facility site will be situated in Chaves County, approximately 39 miles eastsoutheast of Roswell, New Mexico and 33 miles northwest of Tatum, New Mexico. The purpose of the proposed facility is provide a safe place for remediation of contaminated soils from oil and gas operations. No produced water or tank bottoms will be allowed.

Any questions about the Application can be directed to Trey Greenwood, of the S.M. Stoller Corporation, at (505) 885-0172. Any comments or objections must be made to Roger Anderson, State of New Mexico, Oil Conservation Division, PO Box 2088, Santa Fe, NM 89501, within 30 days.