

BW - 16

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ENVIRONMENTAL PLUS, INC.

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

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June 16, 2003

JUL 01 2003

Mr. Wayne Price
New Mexico Oil Conservation Division
P.O. Box 6429
1220 S. Saint Francis Drive
Santa Fe, New Mexico 88505

**OIL CONSERVATION
DIVISION**

Subject: Brine Station Delineation, Remediation, and Decommissioning Proposal

Re: CALICO, Inc. - McCasland Brine Station
UL-J, NW¼ of the SE¼ of Section 34 T21S R37E
Latitude 32°26'02.7"N and Longitude 103°09'01.6"W
6th Street and Avenue E, Eunice, Lea County, New Mexico

Dear Mr. Price,

Environmental Plus, Inc. (EPI), on behalf of Mr. Jerry Calhoon, representative for Calico, Inc., submits this Brine Station Delineation, Remediation, and Decommissioning Proposal for the above referenced brine station.

If there are any questions please call Mr. Ben Miller or myself at the office or at 505.390.0288 and 505.390.7864, respectively. All official communication should be addressed to:

Mr. Jerry Calhoon
Calico, Inc.
101 Lake Shore
Bullard, Texas 75757

Sincerely,

Pat McCasland
EPI Technical Services Manager

cc: Jerry Calhoon, Calico, Inc.
NMOCD, Hobbs Field Office
Ben Miller, EPI Vice President and General Manager
Sherry Miller, EPI President
file

ENVIRONMENTAL PLUS, INC.

CALICO, INC.

Delineation, Remediation, and Decommissioning Proposal

for the

McCasland Brine Station

UL-J, NW¼ of the SE¼ of Section 34 T21S R37E
Latitude 32°26'02.7"N and Longitude 103°09'01.6"W
6th Street and Avenue E, Eunice, Lea County, New Mexico

prepared by

Environmental Plus, Inc.

P.O. Box 1558

Eunice, New Mexico 88231

505.394.3481



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1 INTRODUCTION

The McCasland Brine Station was in operation for at least two decades prior to being shut down and the fresh water well plugged in 1995. In May of 2003, the surface facilities, i.e., tanks and building, were removed. The storage tank pad and the lined overflow pit remain. At times in the past, brine water leaked and has impacted part of the site. This document discusses proposed delineation of the extents of contamination and site remediation in accordance with the New Mexico Oil Conservation Division Guidelines.

1.1 Site Description

The brine station is located at 6th Street and Avenue E in Eunice, New Mexico and consisted of three 500 barrel (bbl) brine and fresh water storage tanks, a lined overflow pit, a water well, and a truck loading rack. Aerial and topographical site maps are included as Attachment I.

1.2 Legal Description

The legal description is UL-J NW¼ SE¼ Section 34 T21S R37E in Eunice, Lea County, New Mexico at an elevation of 3,440' amsl at Latitude 32 26' 02.7"N and Longitude 103 09' 01.6"W.

1.3 Photographic documentation

Photographs of the site are included as Attachment II.

1.4 Ecological Description

Being inside a residential area in the City of Eunice, the ecology is typically metropolitan, nevertheless, the area to the south is an intergrade of the Lower Great Plains and the Upper Chihuahuan Desert Biomes consisting primarily of flat to hilly terrain dominated by typical desert grasses and weeds with interspersions of Harvard Shin Oak (*Quercus harvardi*) and Honey Mesquite (*Prosopis glandulosa*). Mammals present, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, and Black Tailed Jackrabbit. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species has not been conducted.

1.5 Environmental Media Characterization

Chemical parameters of the soil will be characterized consistent with the New Mexico Oil Conservation Division (NMOCD) guidelines published in the following documents;

- Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)
- Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable "Site Specific" thresholds for contaminants of concern, i.e., Benzene, Chloride, TPH^{8015m}, and BTEX, will be determined based on the following;

- Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.

- Wellhead Protection Area, i.e., distance from fresh water supply wells or systems.
- Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.

1.5.1 Area Ground Water Levels

Based on water level information from the Office of the New Mexico State Engineer and the New Mexico Tech "geo-information" website, i.e., <http://geoinfo.nmt.edu/.esrimap> ground water occurs in the area at approximately 50' bgs.

1.5.2 Depth to Ground Water Calculation

Depth to ground water, i.e., "the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water" and will be determined for the hydrocarbon source term, i.e., TPH^{8015m}, Benzene, and BTEX, and Chloride.

1.5.3 Ground Water Gradient

According to the USGS (Nicholson & Clbesch), the gradient is to the southeast.

1.5.4 Wellhead Protection Area

A domestic water well is located approximately 1,100 feet southwest of the site.

1.5.5 Distance to Nearest Surface Water Body

There are no naturally occurring surface water bodies located within a 1 mile radius of the site.

1.6 Soil Assessment

Each soil sample will be surveyed for Volatile Organic Compounds/Constituents (VOCs) headspace and field chloride to determine which samples to send to the laboratory for analysis. The proposed borehole series is primarily to determine the vertical extent of CoC contamination; the horizontal extent will be determined by sampling the excavation for Chloride, BTEX, and TPH^{8015m}. All samples will be 5-point composite of the side wall and bottom samples. To ensure integrity, samples were jarred and refrigerated prior to conducting the VOC headspace survey on the bagged composite sample. Even though Hydrocarbon is not considered to be a concern, VOC headspace readings will be submitted "in lieu" of laboratory analyses. If >100ppm the samples will be sent to the laboratory for TPH^{8015m} and BTEX analyses and field chloride data will be confirmed with laboratory analyses.

1.7 Water Pool Assessment

The water in the lined overflow pit is primarily rain water and will be sampled and laboratory tested to determine disposition, i.e., left in place and backfilled with soil or disposed of in an NMOCD approved facility.

1.8 NMOCD Site Ranking and Remedial Goals

The Site information and Metrics form in Attachment III, summarizes the information about the site, shows a site ranking of 20 points, and sets the following remedial goals for the CoCs.

Benzene	10 ppm
BTEX	50 ppm
TPH ^{8015m}	100 ppm
Chloride	250 ppm

2 DELINEATION PROPOSAL

It is proposed to advance and vertically sample 7 strategically located soil borings to delineate the site. Samples will be collected at 5 foot intervals. The proposed borehole (BH) delineation location map is attached as Attachment I. No boreholes are currently planned in the area covered by the intact pit liner.

2.1 Borehole Drilling, Lithologic Sampling, Logging, and Abandonment

Boreholes will be located strategically to best determine vertical and horizontal extent of contamination in the vadose zone. Borelogs will be developed for each boring noting site lithology. Likewise, laboratory samples may be collected to determine more detailed lithologic characteristics, i.e., porosity, transmissivity, etc. Each borehole will be plugged with Sodium Bentonite in accordance with the NMOCD guidelines.

2.1.1 General Drilling Procedures

The investigation will use the Environmental Plus, Inc. drill rig with hollow stem auger and "thin-wall probe" method of discrete sampling.

2.1.2 Soil Sampling and Logging

Upon advancing to the desired sampling interval the probe will be extended through the end of the hollow stem auger and pushed into the soil matrix to collect the sample. As the 1.5" X 48" stainless steel probe with a vinyl sampling sleeve is detached from the sampling bar, it will be immediately placed on the rack and logged. A 4 oz. sample will then be decanted into the sample jar for refrigeration and preparation with the remainder (~1 Kg) placed in a 1 gallon Ziplock bag, warmed to ambient ~ 70-80 °F and VOC Headspace concentration measured and recorded. All pertinent information will be recorded on the field borelog data sheet.

2.1.3 Borehole Abandonment

The boreholes will be filled with a mixture of fresh water and Sodium Bentonite and a wooden marker denoting the borehole number driven into the center of each backfilled hole.

2.2 Sample Handling

Soil samples will be collected and prepared in accordance with accepted ASTM and EPA SW846 methods.

2.2.1 Sampling protocols

1. Decontaminate sampling equipment and area with Alconox distilled water after each sample.
2. Prepare samples and refrigerate as soon as practicable.

Duplicates or blanks may be submitted to the laboratory to establish reproducibility and identify laboratory contamination, respectively.

2.2.2 Sample Containers

Laboratory and field analyses of soil requires specific containers and are listed in the matrix below.

	TPH	BTEX	VOC Headspace	Metals	PAH	General Chemistry
Soil	4 oz. Jars with Teflon seal	4 oz. Jars with Teflon seal	1-gallon Ziplock® bags	NA	NA	NA

2.2.3 Sample Custody

All analytical request forms will be completed and signed by EPI as sampler. EPI personnel will ascension the samples to the laboratory sample-receiving personnel under chain-of-custody signature.

2.2.4 Quality Control Samples

Quality control samples will be analyzed to ensure data quality.

2.2.4.1 Field Blank

A field blank for soil is not deemed necessary.

2.2.4.2 Equipment Blank

None will be collected.

2.2.4.3 Field Duplicate or Co-located Samples

For water and soil samples, one duplicate or co-located sample will be collected for analysis every 10th sample or at least one per sampling day.

2.2.4.4 Trip Blank

A laboratory prepared trip blank will accompany each water sample batch.

2.3 Field Measurements

Each sample will be analyzed in the field for VOC headspace and chloride.

2.3.1 VOC Headspace

The VOC Headspace concentration for each soil sample will be measured. The instrument used will be the Ultra-Rae PID manufactured by Rae Systems. The calibration gas will be 100.0 ppm isobutylene standard from Scott Specialty Gases, Freemont, Colorado.

2.3.2 Chloride

Reagents used in the soil chloride field surveys will be viable and distilled water will be used as the leaching agent.

2.4 Equipment Calibration and Quality Control

The PID will be calibrated at least 3 times daily and checked with the calibration gas hourly. When a check with the calibration gas indicates the instrument reading is 10 ppm too high or low it will be calibrated. Variation in the daytime ambient temperature will cause the variation.

2.5 Equipment Maintenance and Decontamination

All sampling and survey equipment will be routinely decontaminated between samples. Nitrile gloves will be worn and changed with each sampling iteration.

2.6 Analyses

Soil and ground water will be analyzed in accordance with the following EPA Methods.

The analytical suite for soil samples will include;

- TPH (EPA method 8015M)
- BTEX (EPA method 8020 or equivalent)

The analytical suite for water samples may include:

- BTEX (EPA method 8021B)
- Total Dissolved Solids (EPA method 150.1)
- Chloride

2.7 Sample Identification

An example of the sample identification scheme is as follows

Company-EPI	Site: Eunice	Date 6-3-2002	Borehole #1	Interval - 20'bgs	Qualification: Cutting/Probe Sample
E	E	60302	BH1	20'	C or P

Example: EE60302BH1-20C

2.8 Data Quality Objectives

All data will be reviewed within the context of documented and verified analytical information derived from quality control samples. If data is within the specifications it will be deemed quantitative and acceptable for use in making environmental management decisions.

- Laboratory data must have extraction recovery for TPH, BTEX and general chemistry parameters •30.0%. Or a "%Extraction Accuracy" between 70 and 130%.
- Laboratory data must have <30% Relative Percent Difference or a "%Instrument Accuracy" between 70 and 130%.

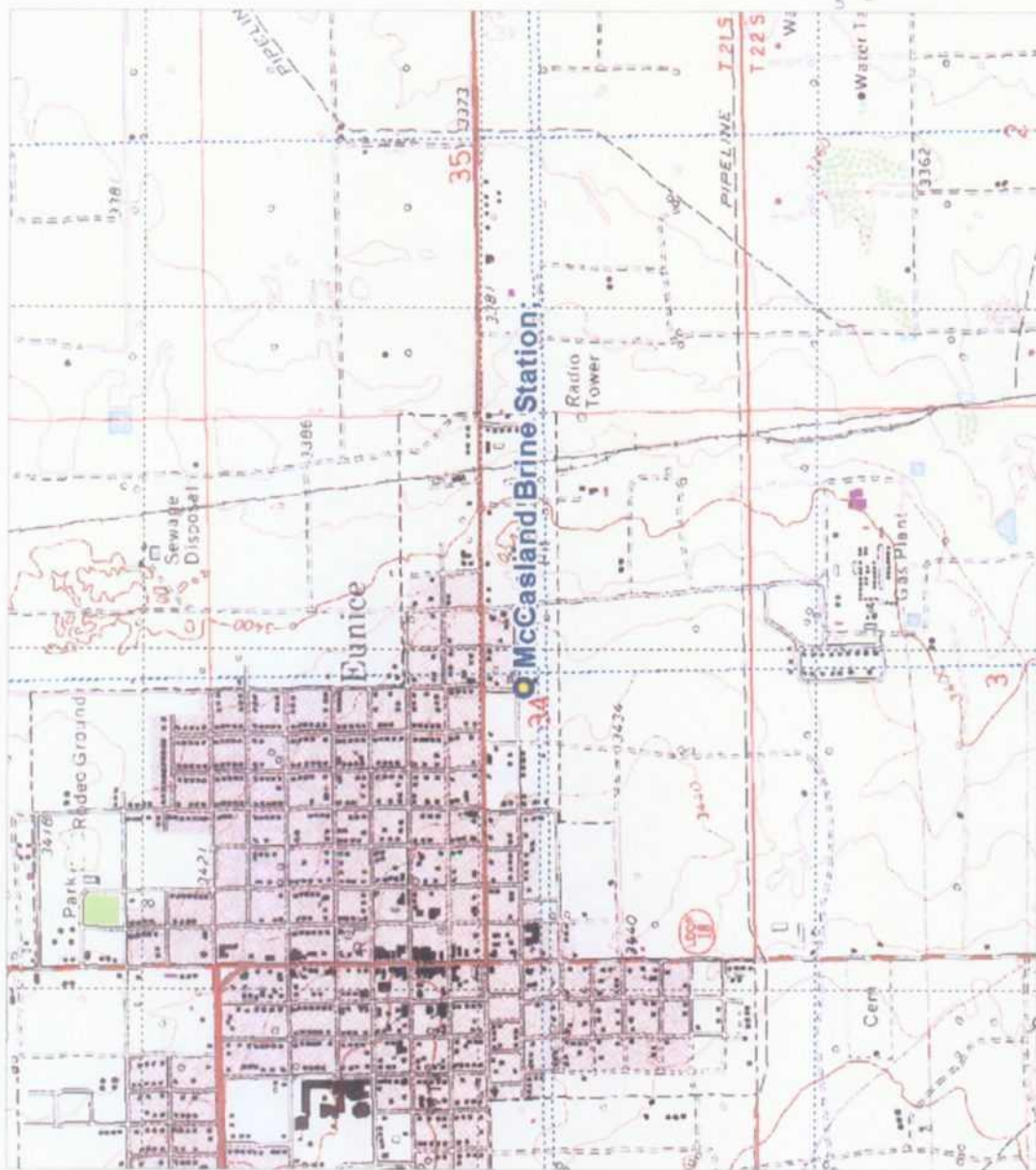
- Field headspace analyses must be supported with instrument calibration data and calibration gas certification.

3 REMEDIATION WORK PLAN

The Site Specific Remediation Work Plan, to be developed using the initial site delineation information, will provide quality analytical information and document remediation activities justifying the NMOCD require "no further action" at this site. The vertical extent of CoC contamination will be delineated by soil boring and the horizontal extent during excavation. Soil disposal will be the remediation strategy. The plan will restore the site to acceptable site specific remedial goals in accordance with the New Mexico Oil Conservation Division (NMOCD) guidelines. The Constituents of Concern (CoCs) are Total Petroleum Hydrocarbon using EPA method 8015M (TPH^{8015m}), Benzene, BTEX, i.e., the mass sum of Benzene, Toluene, Ethyl Benzene, and m, p, & o Xylene, and soil Chloride.

ATTACHMENT I: SITE MAPS

CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2IS R37E



N

SCALE 1:20,000



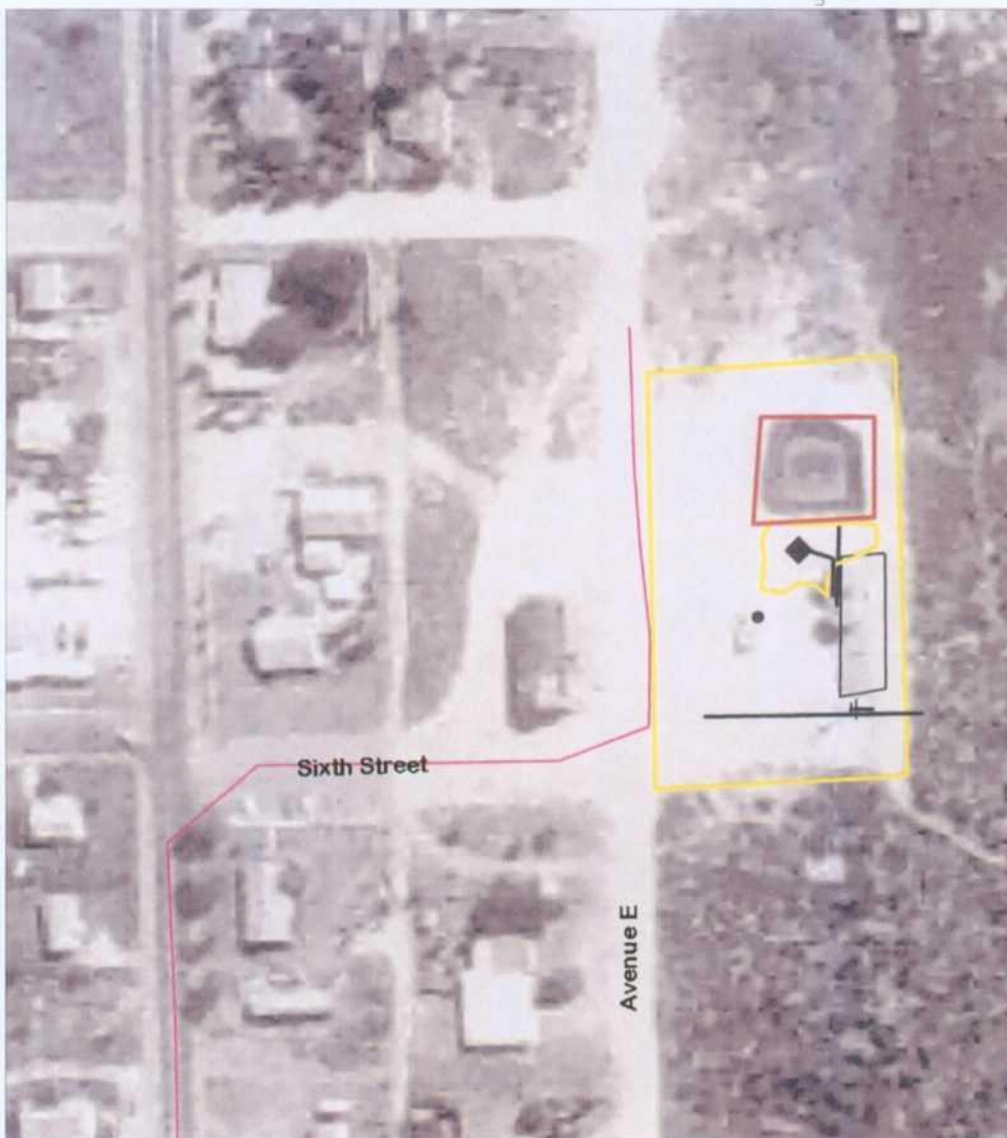
FEET

UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 1983 IPON (NEW MEXICO)

6/16/2003



CALICO
McCASLAND
BRINE STATION
UL-J SEC 34
T2S R34E



N

SCALE 1:1,500



FEET

UNIVERSAL TRANSVERSE MERCATOR
3 NORTH
NAD 1983 HPCN (NEW MEXICO)

MCCASLAND BRINE STATION COR
6/16/2003



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2IS R34E

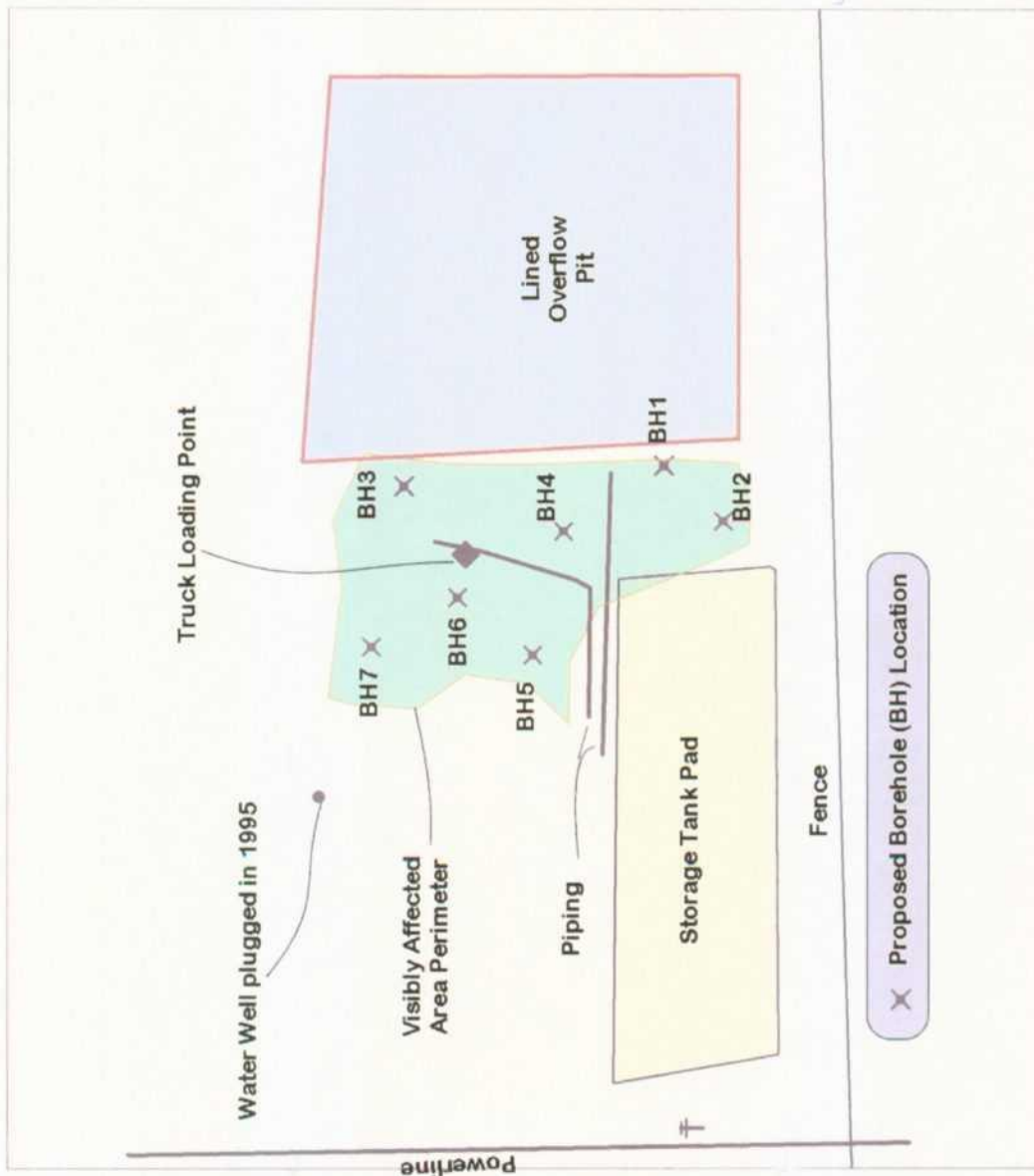


University, Technology, Migration
13 North
MAD 1993 REGION (New Mexico)

MCCASLAND BRINE STATION.COR
6/16/2003



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2IS R37E
PROPOSED
DELINEATION
BOREHOLE
LOCATION MAP



N

SCALE 1:425

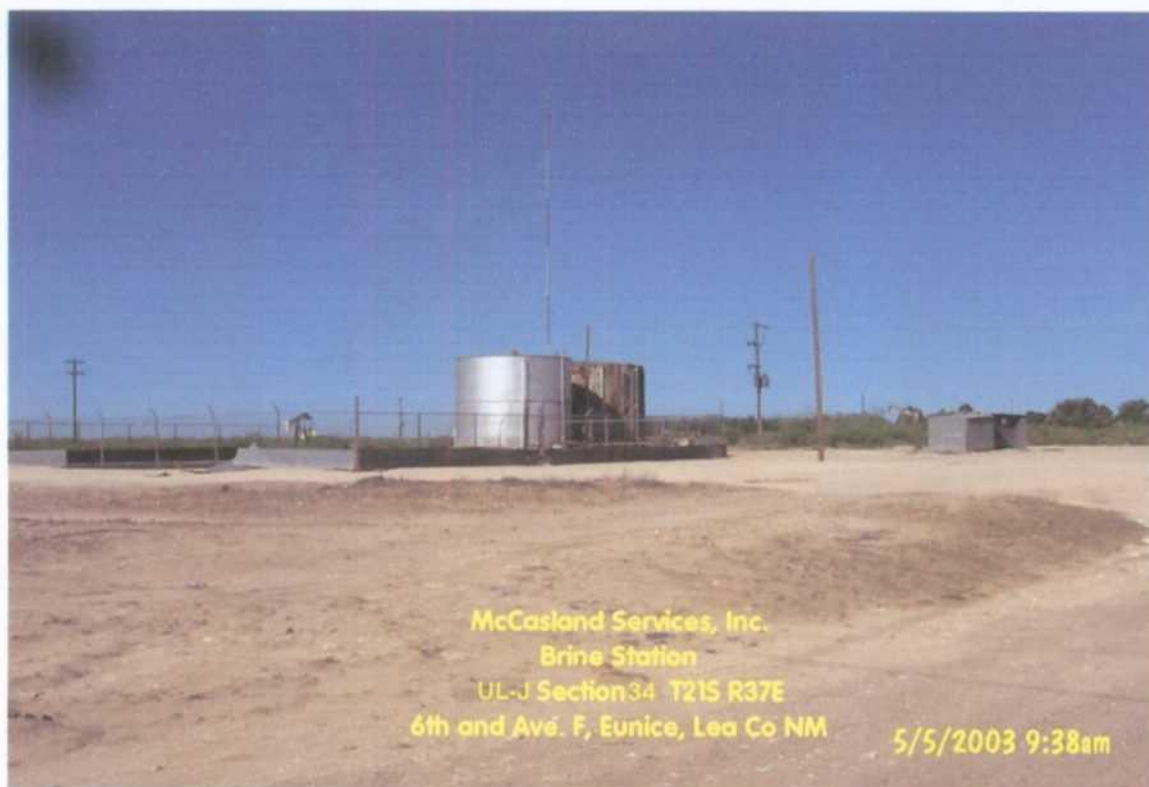


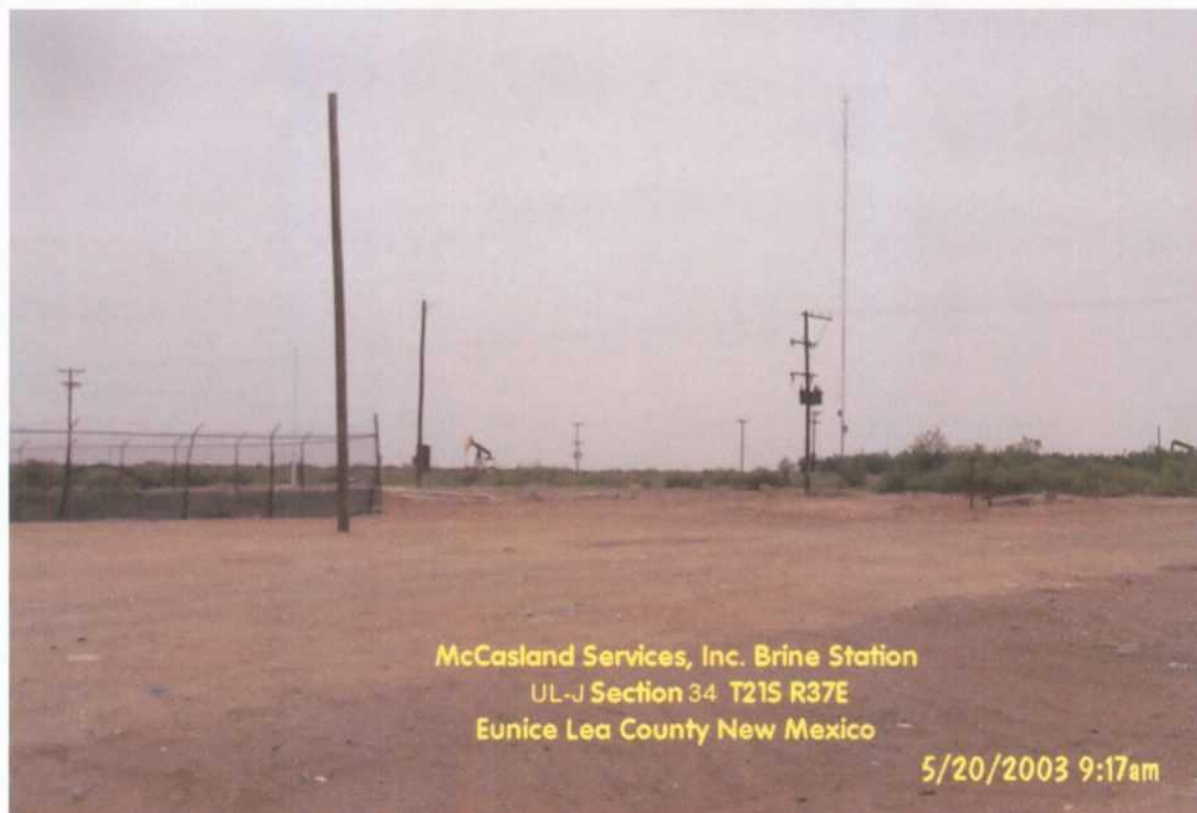
UNIVERSAL TRANSVERSE MERCATOR
15 NORTH
NAD 1983 (NAD 83) (NAD 1983)

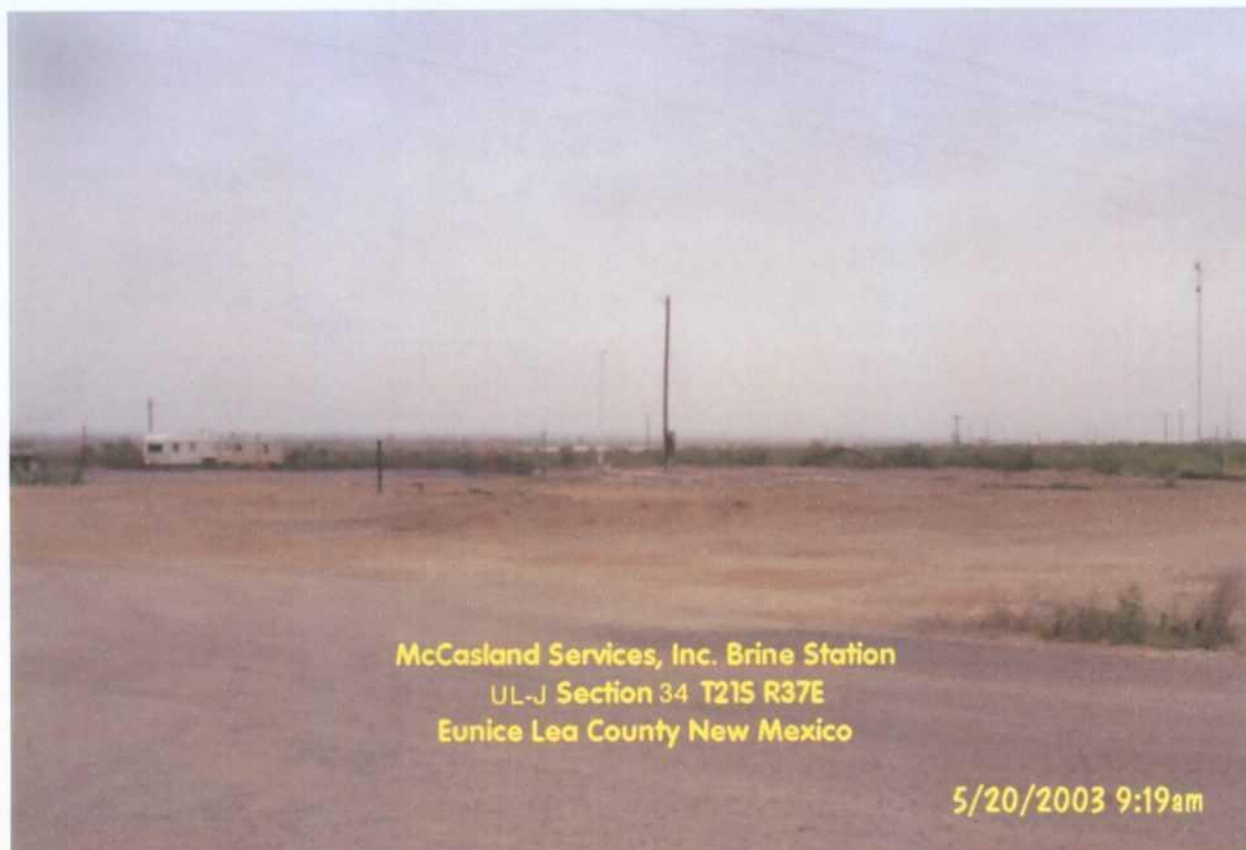
MCCASLAND BRINE STATION BH8.BSP
6/17/2003



ATTACHMENT II: PHOTOGRAPHS







ATTACHMENT III: SITE INFORMATION AND METRICS FORM

Site Metrics and Information Form

SITE: McCasland Brine Station		Assigned Site Reference #:	
Company: Calico, Inc.			
Company Street Address: 500 Zia			
Company Mailing Address: 500 Zia			
Company City, State, Zip: Hobbs, New Mexico 88240			
Company Representative: Jerry Calhoon			
Company Representative Telephone: 903.825.2739			
Company Telephone:		Fax:	
Fluid volume released (bbls) = unknown historical releases			
<div style="text-align: center;"> >25 bbls : Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas) </div>			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: McCasland Brine Station			
Source of contamination: Tanks			
Land Owner, i.e., BLM, ST, Fee, Other: Calico, Inc.			
LSP Dimensions:			
LSP Area = ft ²			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: 32 26' 02.7"N			
Longitude: 103 09' 01.6"W			
Elevation above mean sea level: ~ 3,440' amsl			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼ = UL-J NW¼ SE¼			
Location- Section = 34			
Location- Township = T21S			
Location- Range = R37E			
Surface water body within 1000' radius of site:			
Domestic water wells within 1000' radius of site:			
Agricultural water wells within 1000' radius of site:			
Public water supply wells within 1000' radius of site:			
Depth from land surface to ground water (DG):			
Depth of contamination (DC): ~50' bgs			
Depth to ground water (DG - DC = Calculated Depth to GW) ?			
1. Ground Water		2. Wellhead Protection Area	
If Depth to GW <50 feet: <i>20 points</i>		If <1000' from water source, or; <200' from private domestic water source: <i>20 points</i>	
If Depth to GW 50 to 99 feet: <i>10 points</i>			
If Depth to GW >100 feet: <i>0 points</i>		If >1000' from water source, or; >200' from private domestic water source: <i>0 points</i>	
Ground water Score = 20		Wellhead Protection Area Score = 0	
3.		Distance to Surface Water Body	
		<200 horizontal feet: <i>20 points</i>	
		200-100 horizontal feet: <i>10 points</i>	
		>1000 horizontal feet: <i>0 points</i>	
Site Rank (1+2+3) =		= 20 points	
Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
¹ 100 ppm field VOC headspace measurement may be substituted for lab analysis			

BW-16

CALICO, INC.

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1 INTRODUCTION

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1.1 Site Description

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Upon advancing to the desired sampling interval the probe will be extended through the end of the hollow stem auger and pushed into the soil matrix to collect the sample. As the 1.5" X 48" stainless steel probe with a vinyl sampling sleeve is detached from the sampling bar, it will be immediately placed on the rack and logged. A 4 oz. sample will then be decanted into the sample jar for refrigeration and preparation with the remainder (~1 Kg) placed in a 1 gallon Ziplock bag, warmed to ambient ~ 70-80 °F and VOC Headspace concentration measured and recorded. All pertinent information will be recorded on the field borelog data sheet.

2.1.3 Borehole Abandonment

The boreholes will be filled with a mixture of fresh water and Sodium Bentonite and a wooden marker denoting the borehole number driven into the center of each backfilled hole.

2.2 Sample Handling

Soil samples will be collected and prepared in accordance with accepted ASTM and EPA SW846 methods.

2.2.1 Sampling protocols

1. Decontaminate sampling equipment and area with Alconox distilled water after each sample.
2. Prepare samples and refrigerate as soon as practicable.

Duplicates or blanks may be submitted to the laboratory to establish reproducibility and identify laboratory contamination, respectively.

2.2.2 Sample Containers

Laboratory and field analyses of soil requires specific containers and are listed in the matrix below.

	TPH	BTEX	VOC Headspace	Metals	PAH	General Chemistry
Soil	4 oz. Jars with Teflon seal	4 oz. Jars with Teflon seal	1-gallon Ziplock® bags	NA	NA	NA

2.2.3 Sample Custody

All analytical request forms will be completed and signed by EPI as sampler. EPI personnel will ascension the samples to the laboratory sample-receiving personnel under chain-of-custody signature.

2.2.4 Quality Control Samples

Quality control samples will be analyzed to ensure data quality.

2.2.4.1 Field Blank

A field blank for soil is not deemed necessary.

2.2.4.2 Equipment Blank

None will be collected.

2.2.4.3 Field Duplicate or Co-located Samples

For water and soil samples, one duplicate or co-located sample will be collected for analysis every 10th sample or at least one per sampling day.

2.2.4.4 Trip Blank

A laboratory prepared trip blank will accompany each water sample batch.

2.3 Field Measurements

Each sample will be analyzed in the field for VOC headspace and chloride.

2.3.1 VOC Headspace

The VOC Headspace concentration for each soil sample will be measured. The instrument used will be the Ultra-Rae PID manufactured by Rae Systems. The calibration gas will be 100.0 ppm isobutylene standard from Scott Specialty Gases, Freemont, Colorado.

2.3.2 Chloride

Reagents used in the soil chloride field surveys will be viable and distilled water will be used as the leaching agent.

2.4 Equipment Calibration and Quality Control

The PID will be calibrated at least 3 times daily and checked with the calibration gas hourly. When a check with the calibration gas indicates the instrument reading is 10 ppm too high or low it will be calibrated. Variation in the daytime ambient temperature will cause the variation.

2.5 Equipment Maintenance and Decontamination

All sampling and survey equipment will be routinely decontaminated between samples. Nitrile gloves will be worn and changed with each sampling iteration.

2.6 Analyses

Soil and ground water will be analyzed in accordance with the following EPA Methods.

The analytical suite for soil samples will include;

- TPH (EPA method 8015M)
- BTEX (EPA method 8020 or equivalent)

The analytical suite for water samples may include:

- BTEX (EPA method 8021B)
- Total Dissolved Solids (EPA method 150.1)
- Chloride

2.7 Sample Identification

An example of the sample identification scheme is as follows

Compa ny-EPI	Site: Eunice	Date 6-3-2002	Borehole #1	Interval - 20'bgs	Qualification: Cutting/Probe Sample
E	E	60302	BH1	20'	C or P

Example: EE60302BH1-20C

2.8 Data Quality Objectives

All data will be reviewed within the context of documented and verified analytical information derived from quality control samples. If data is within the specifications it will be deemed quantitative and acceptable for use in making environmental management decisions.

- Laboratory data must have extraction recovery for TPH, BTEX and general chemistry parameters $\pm 30.0\%$. Or a "%Extraction Accuracy" between 70 and 130%.
- Laboratory data must have $<30\%$ Relative Percent Difference or a "%Instrument Accuracy" between 70 and 130%.

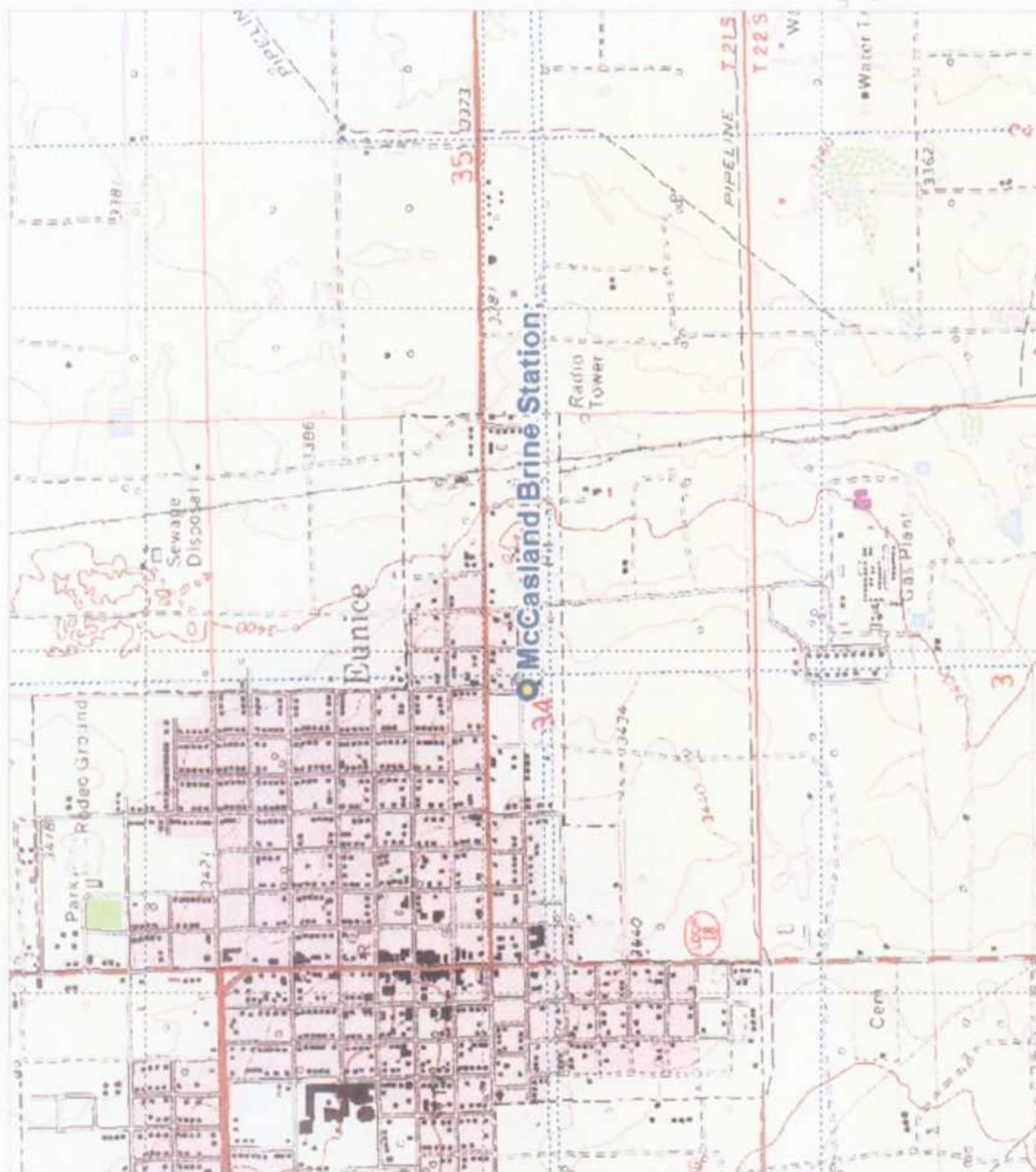
- Field headspace analyses must be supported with instrument calibration data and calibration gas certification.

3 REMEDIATION WORK PLAN

The Site Specific Remediation Work Plan, to be developed using the initial site delineation information, will provide quality analytical information and document remediation activities justifying the NMOCD require "no further action" at this site. The vertical extent of CoC contamination will be delineated by soil boring and the horizontal extent during excavation. Soil disposal will be the remediation strategy. The plan will restore the site to acceptable site specific remedial goals in accordance with the New Mexico Oil Conservation Division (NMOCD) guidelines. The Constituents of Concern (CoCs) are Total Petroleum Hydrocarbon using EPA method 8015M (TPH^{8015m}), Benzene, BTEX, i.e., the mass sum of Benzene, Toluene, Ethyl Benzene, and m, p, & o Xylene, and soil Chloride.

ATTACHMENT I: SITE MAPS

CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2S R37E



N

SCALE 1:20,000



FEET

UNIVERSAL TRANSVERSE MERCATOR
NAD 83 (83) NORTH
NAD 83 (83) UTM (83) 14C

6/16/2003



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2IS R34E



SCALE 1:15,000



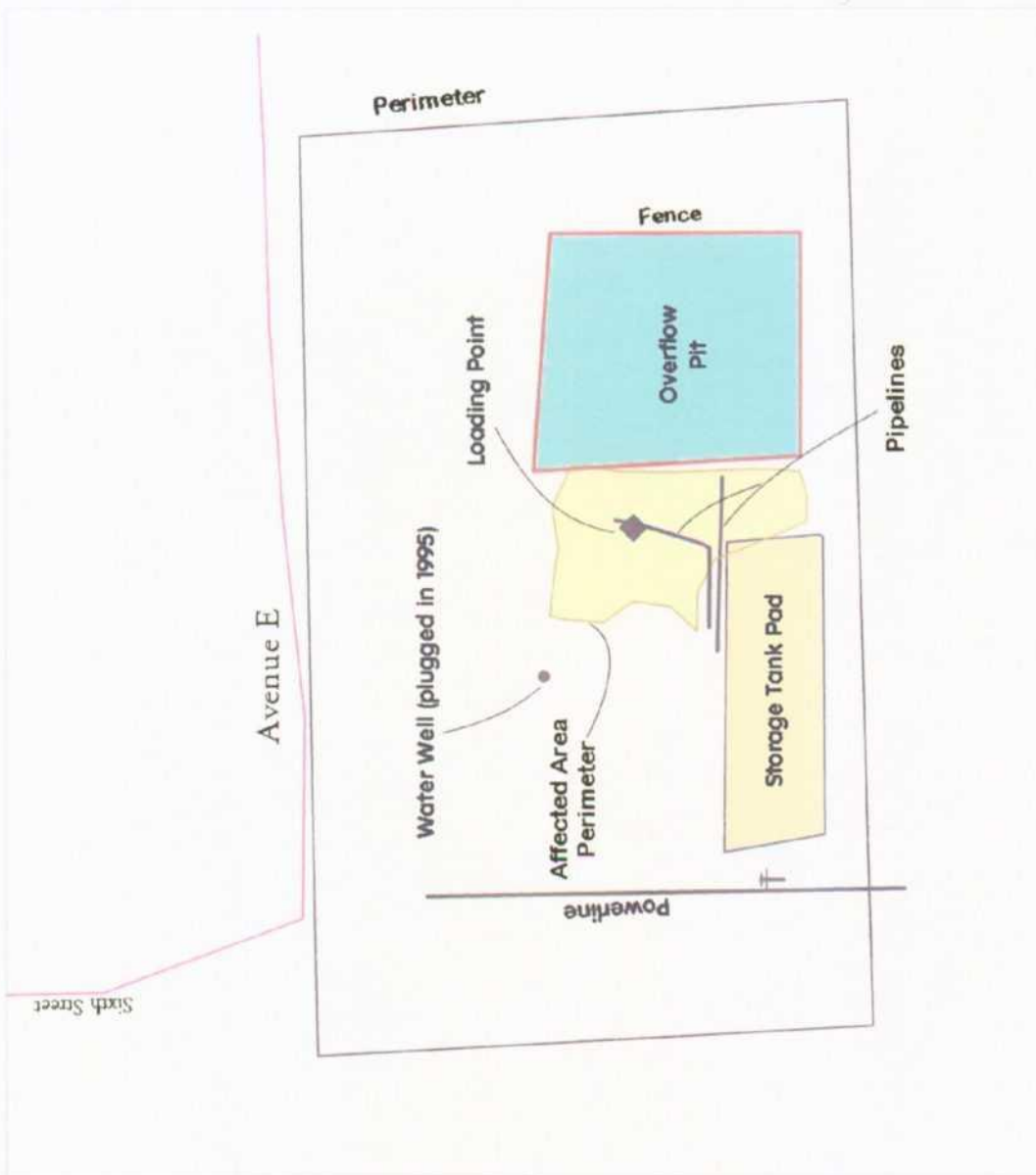
FEET

Universal Transverse Mercator
Zone 12 North
NAD 83 (SPN 83) (NAD 83)

MCCASLAND BRINE STATION, CO
6/16/2003



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2IS R34E



N

SCALE 1:700

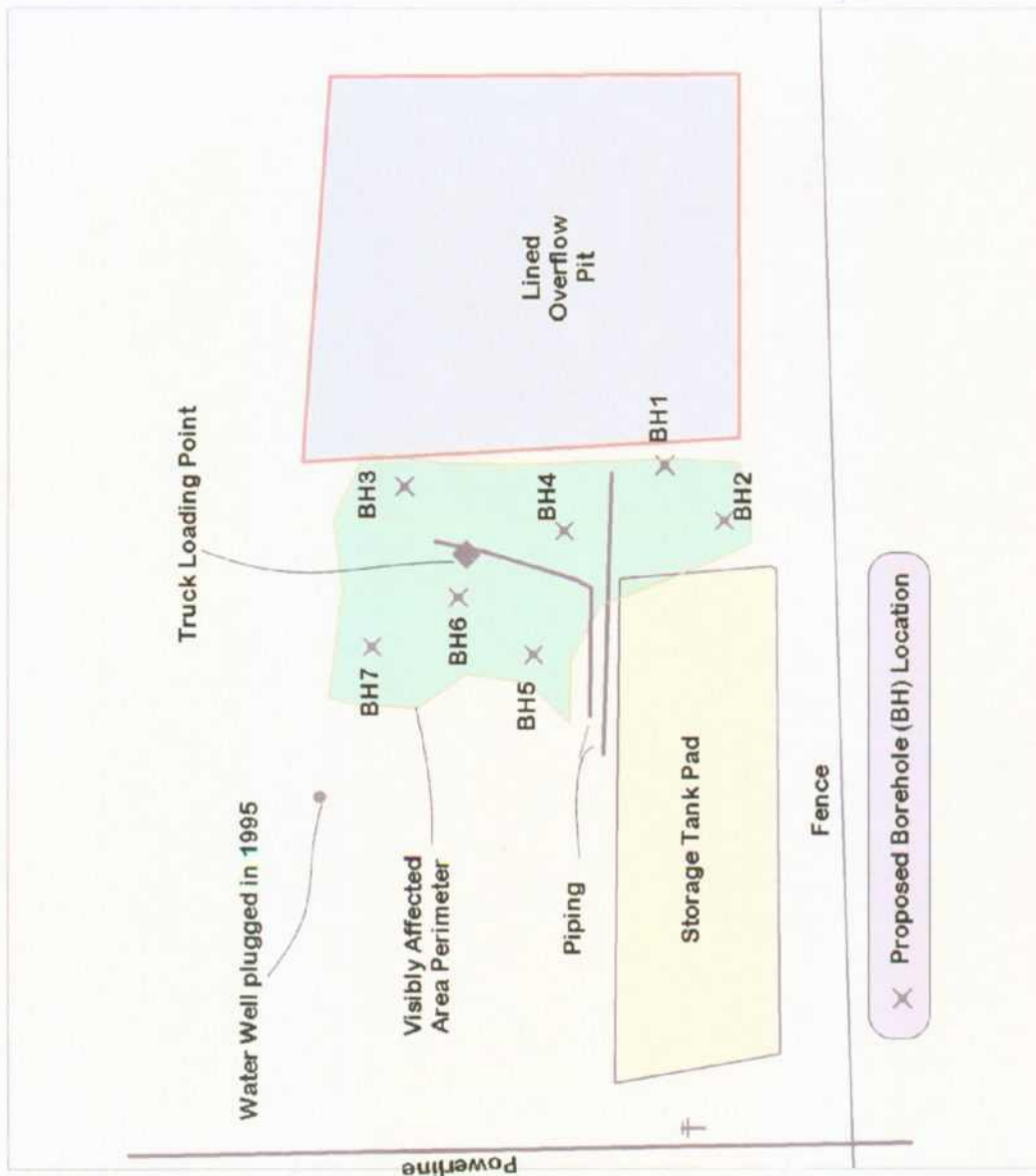


Geological, Hydrological, and
Cultural Resources
NAD 1983 (NAD 83) (New Mexico)

MCCASLAND BRINE STATION COR
6/16/2005



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T21S R37E
PROPOSED
DELINEATION
BOREHOLE
LOCATION MAP



SCALE 1:25

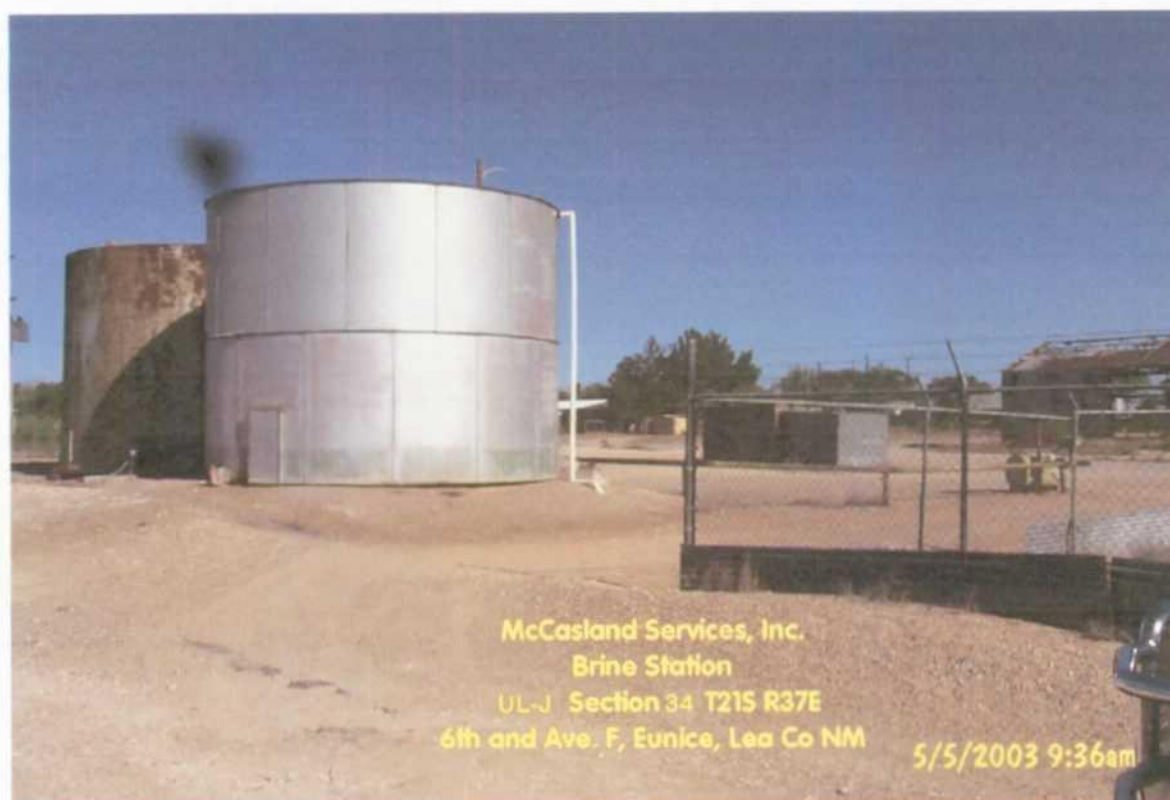
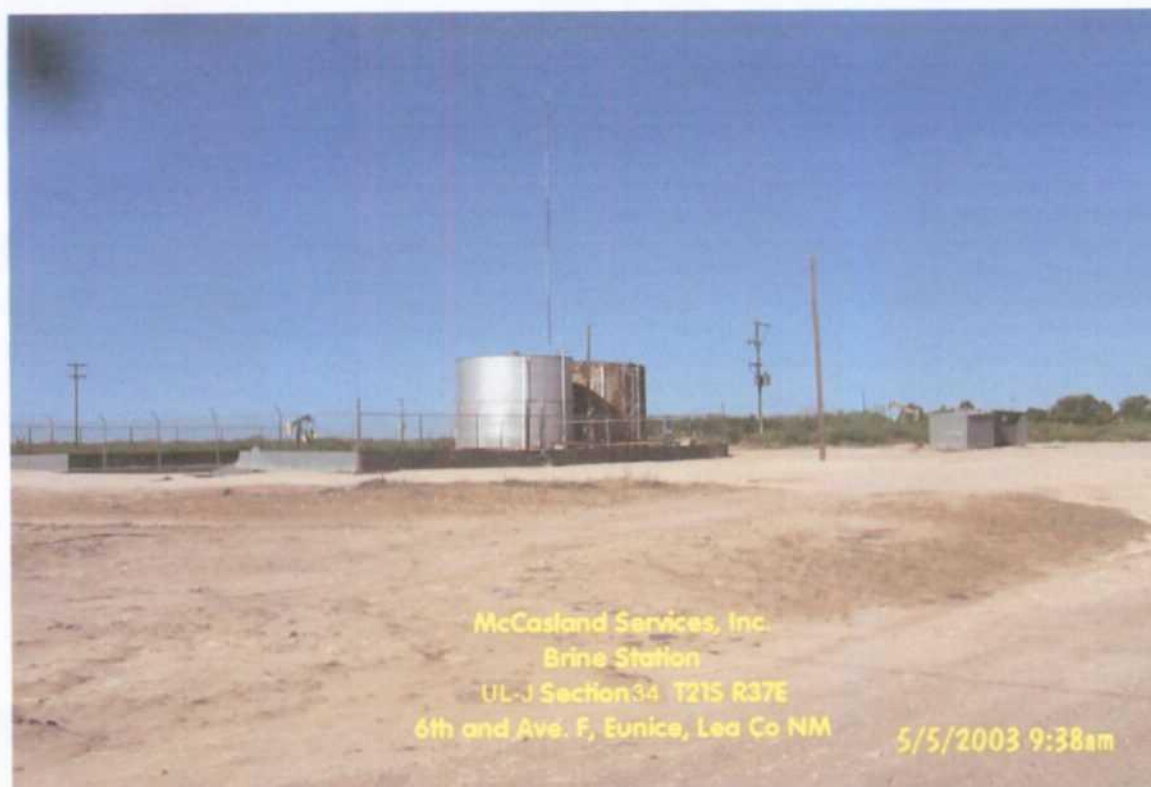


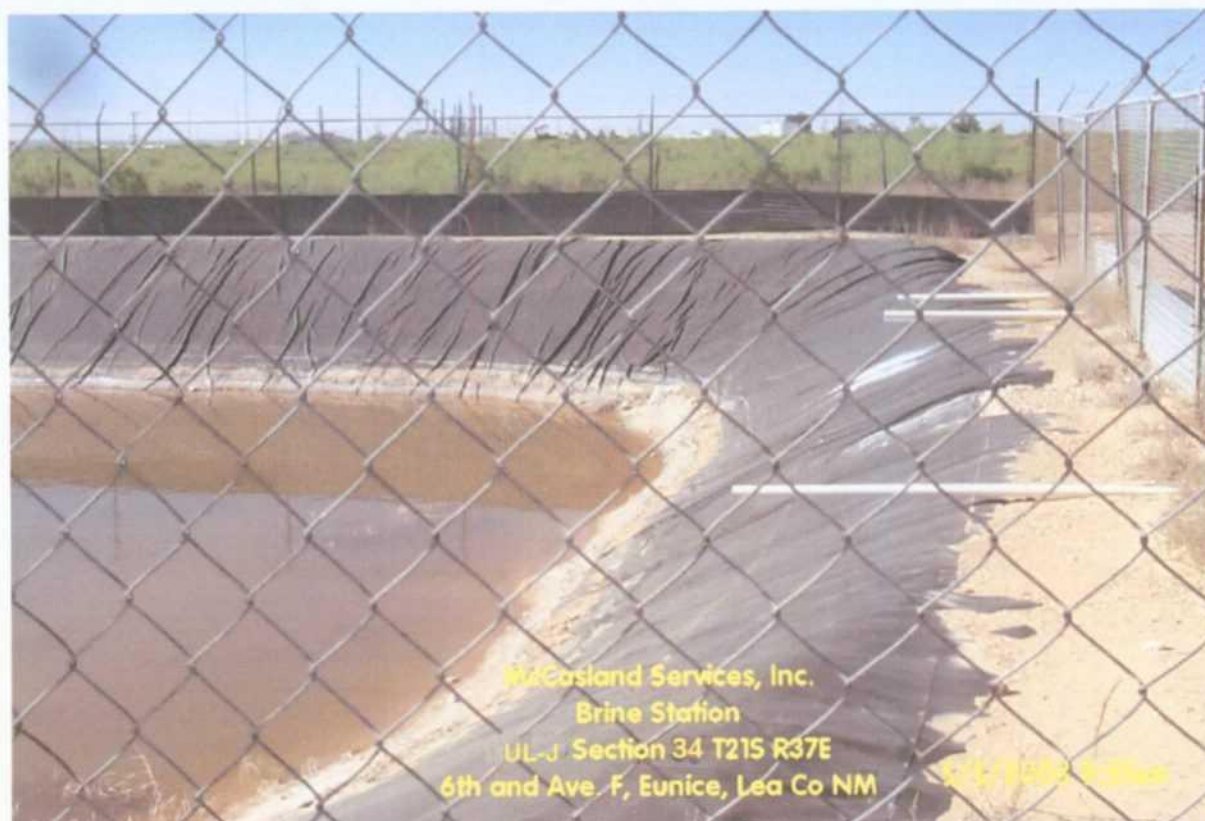
FEET

UNIVERSAL TRANSVERSE MERCATOR
NAD 1983 UTM ZONE 18N
MCCASLAND BRINE STATION, BUREAU OF LAND MANAGEMENT
6/17/2003



ATTACHMENT II: PHOTOGRAPHS







ATTACHMENT III: SITE INFORMATION AND METRICS FORM

Site Metrics and Information Form

SITE: McCasland Brine Station		Assigned Site Reference #:	
Company: Calico, Inc.			
Company Street Address: 500 Zia			
Company Mailing Address: 500 Zia			
Company City, State, Zip: Hobbs, New Mexico 88240			
Company Representative: Jerry Calhoon			
Company Representative Telephone: 903.825.2739			
Company Telephone:		Fax:	
Fluid volume released (bbls) = unknown historical releases			
>25 bbls : Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: McCasland Brine Station			
Source of contamination: Tanks			
Land Owner, i.e., BLM, ST, Fee, Other: Calico, Inc.			
LSP Dimensions:			
LSP Area = ft ²			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: 32 26' 02.7"N			
Longitude: 103 09' 01.6"W			
Elevation above mean sea level: ~ 3,440'amsl			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼ = UL-J NW¼ SE¼			
Location- Section = 34			
Location- Township = T21S			
Location- Range = R37E			
Surface water body within 1000' radius of site:			
Domestic water wells within 1000' radius of site:			
Agricultural water wells within 1000' radius of site:			
Public water supply wells within 1000' radius of site:			
Depth from land surface to ground water (DG):			
Depth of contamination (DC): ~50' bgs			
Depth to ground water (DG - DC = Calculated Depth to GW) ?			
1. Ground Water		2. Wellhead Protection Area	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or;<200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points			
If Depth to GW >100 feet: 0 points		If >1000' from water source, or; >200' from private domestic water source: 0 points	
Ground water Score =20		Wellhead Protection Area Score=0	
Site Rank (1+2+3) = = 20 points		Surface Water Score= 0	
Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
¹ 100 ppm field VOC headspace measurement may be substituted for lab analysis			



ENVIRONMENTAL PLUS, INC.

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

Micro-Blaze

Micro-Blaze Out™

RECEIVED

September 30, 2003

OCT 15 2003

Mr. Wayne Price, Geologist
Energy, Minerals, and Natural Resources Department
New Mexico Oil Conservation Division, Environmental Bureau
P.O. Box 6429
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

OIL CONSERVATION
DIVISION

Subject: Written notification of ground water impact

Re: McCasland Brine Station

UL-J; NW¼ of the SE¼ of Section 34 T21S R37E

Lea County New Mexico

Latitude: 32° 26' 02.7"N Longitude: 103° 09' 01.6"W

Dear Mr. Price,

Environmental Plus, Inc. (EPI), 2100 Avenue O, Eunice, New Mexico, on behalf of Mr. Jerry Calhoon, Calico, Inc., 101 Lakeshore, Bullard, Texas 75757, submits this written notification of ground water impact due to historical brine water spills at the above referenced site in excess of New Mexico Water Quality Control Commission (WQCC) standards found in 20 NMAC 6.2.3103A, i.e., Total Dissolved Solids (TDS) >1,000 mg/L and Chloride >250 mg/L. Ground water data provided by the USGS Ground-Water Report #6, Geology and Ground-Water Conditions in Southern Lea County, New Mexico, A. Nicholson, Jr. and A. Clebsch, Jr., 1961 indicate background concentrations in Section 34 T21S R37E for TDS to be ~543 mg/L and 68 mg/L for Chloride. Data from samples collected from an observation well installed during site delineation showed TDS=10,660 mg/L and Chloride=5,798 mg/L. This submittal follows the immediate verbal notification made on 9-30-03 and is consistent with the notification requirements of 19 NMAC 15.116. Location maps are attached.

390-7864 all

P.O. BOX 1558 ••• 2100 WEST AVE. O
TELEPHONE 505•394•3481

••• EUNICE, NEW MEXICO 88231
FAX 505•394•2601

ENVIRONMENTAL PLUS, INC.



ENVIRONMENTAL PLUS, INC.

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES



Micro-Blaze Out™

ENVIRONMENTAL PLUS, INC.

Distribution of the chloride source term at the site will be assessed in accordance with the Stage I & II Rule 19 Abatement Plans to be developed and submitted for NMOCD approval. There are no domestic, agricultural, or public supply wells within 1,000' of the site or other "at risk" facilities. All official communication should be sent to;

MAILING ADDRESS

Mr. Jerry Calhoon
Calico, Inc.
101 Lakeshore
Bullard, Texas 75757

Sincerely,

Pat McCasland
EPI Technical Services Manager

cc: Jerry Calhoon, Calico, Inc.
Ben Miller, EPI Vice President and General Manager
Sherry Miller, EPI President
File



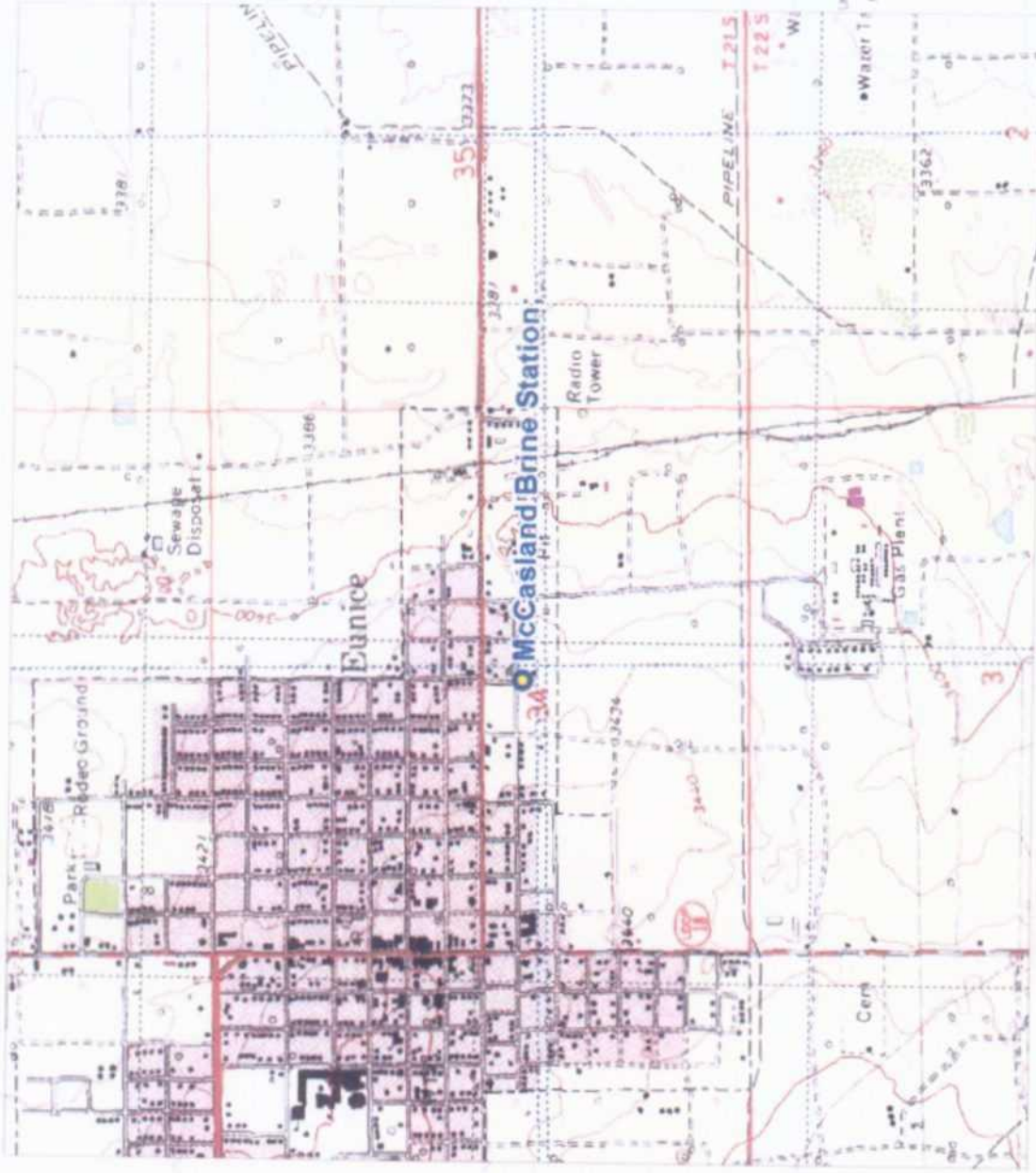
Richard M. Renn, RG, CPG
Principal

Natural Resource Management

1694 Tierra Del Rio NW
Albuquerque, New Mexico 87107

Office: 505-345-6866 FAX: 505-345-6966
Mobile: 505-401-1083 rmrenn@comcast.net

CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T21S R37E



N

SCALE 1:20,000

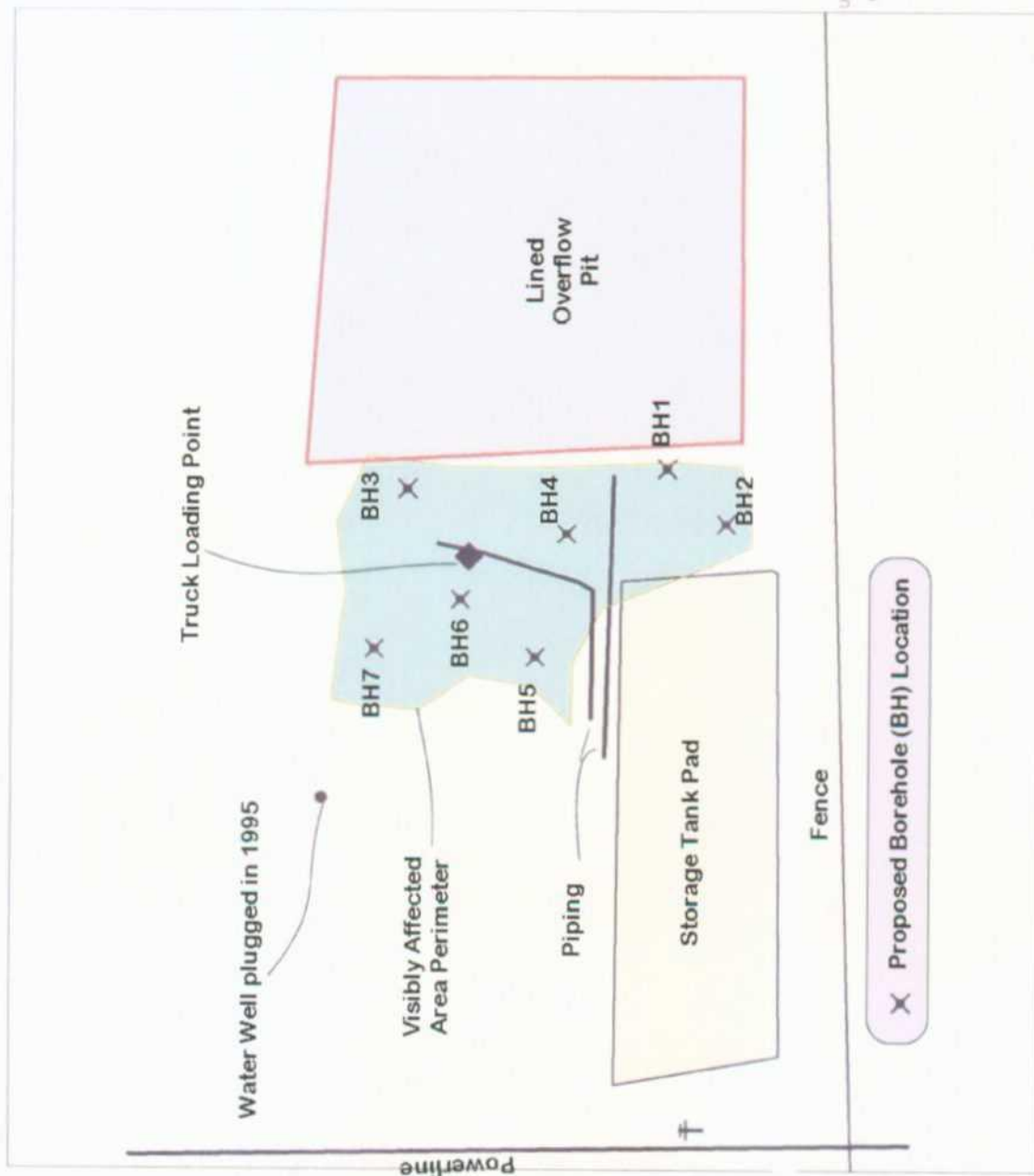


UNIVERSAL TRANSVERSE MERCATOR
15 NORTH
NAD 1983 ZONE 10N (NAD 1983)

6/16/2005



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T2S R37E
PROPOSED
DELINEATION
BOREHOLE
LOCATION MAP



CALICO
MCCASLAND
BRINE STATION
UL-J SEC 34
T21S R34E



N

SCALE 1:1,500



FEET

UNIVERSAL TRANSVERSE MERCATOR
3 NORTH
NAD 1983 HPGN (NEW MEXICO)

MCCASLAND BRINE STATION.COR
6/16/2003



McCASLAND SERVICES, INC.

2105 AVE. O

P. O. BOX 99

EUNICE, NEW MEXICO 88231

OIL CONSERVATION DIVISION
(505) 394-25810

MAY 31, 1995

'95 JUN 6 AM 8 52

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL
RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NM 87505

RECEIVED

JUN 07 1995

Environmental Bureau
Oil Conservation Division

ATTN: MR. MARK ASHLEY

30-025-35705

RE: PLUGGING OF PIONEER BRINE WELL

DEAR MR. ASHLEY,

14327

28851 → ON FEBRUARY 23, 1994, MCCASLAND SERVICES, INC. PLUGGED THE OLD PIONEER BRINE WELL, UNIT LETTER J, SEC. 34, TOWNSHIP 21S, RANGE 37E, LEA COUNTY, NEW MEXICO. THE LAND OWNER, BOB CALHOON WHO IS ALSO THE OWNER OF MCCASLAND SERVICES, INC., IS REQUESTING PERMISSION TO LEAVE THE STORAGE FACILITIES AS THEY ARE, RATHER THAN HAVING TO MOVE THEM TO ANOTHER PROPERTY. THESE STORAGE FACILITIES WILL BE RE-CONSTRUCTED SO THEY CANNOT BE FILLED WITH ANY FLUIDS. SHOULD IT BE NECESSARY TO USE THESE STORAGE TANKS FOR FRESH WATER, THE O.C.D. WILL BE NOTIFIED BY PHONE AND FOLLOWED UP IN WRITING. IN THE FUTURE, IT MAY BE FEASIBLE TO REDRILL THE WELL, AT WHICH TIME, MCCASLAND SERVICES, INC. WOULD FILE A NEW DISCHARGE PLAN AND ESTABLISH A PLUGGING BOND.

SINCE THIS WELL WAS PLUGGED UNDER THE GUISE OF THE O.C.D., HOBBS DISTRICT OFFICE, AND BY THE GUIDELINES OF THE STATE OF NEW MEXICO, MCCASLAND SERVICES WOULD LIKE TO REQUEST A RELEASE ON ITS BOND FROM THE STATE. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT ME.

THANK YOU,



BOB PATTERSON
MANAGER

BP/tb



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

CONSERVATION DIVISION
RECEIVED

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

BRUCE KING
GOVERNOR

MAR 4 AM 8 39

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

NMOCD Inter-Correspondence

To: Kathy Brown-Geologist

From: Wayne Price-Environmental Engineer District I

Date: Mar 2, 1994

Reference: Unichem Int. Eunice ST. Brine well BW-16

Comments: Please find enclosed the C-103 P&A for the above referenced brine well.

cc: Jerry Sexton-District I Supervisor



DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL API NO.

30-025-35705

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

PIONEER

28851

Brine Well

8. Well No.

1

9. Pool name or Wildcat

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

OIL
WELL ☐

GAS
WELL ☐

OTHER

Brine Well

2. Name of Operator

14327

McCasland Services, Inc.

3. Address of Operator

PO Box 99

Eunice, NM 88231

4. Well Location

Unit Letter J : Feet From The NW/4 Line and Feet From The SE/4 Line

Section 34 Township 21S Range 37E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☒

REMEDIAL WORK ☐

ALTERING CASING ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

COMMENCE DRILLING OPNS. ☐

PLUG AND ABANDONMENT ☒

PULL OR ALTER CASING ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 1) M.I.R.U. P.U., Nipple down well head, Install B.O.P. Tbg. stuck.
- 2) R.U. Rotary Wireline; R.I.H. w/ free point, Tbg. free to 1200', could not go below 1202'.
- 3) P.O.O.H.w/ 1232' Tbg. R.I.H. w/ bit, Could not get below 1200'.
- 4) R.I.H. w/ C.I.B.P. set @ 1190'. Dump 10' cement on to C.I.B.P., R.I.H. w/ retrievable pkr, test bridge plug, test casing : casing bad from 512' - 30'. Decided to plug well.
- 5) R.I.H. open ended, tag cement on top of C.I.B.P. @ 1180', pump 112 sks class C cement. P.O.Q.H. W.O.C. 5 Hr. R.I.H. Tag top of cement @ 515'. Mix 87 sks. class C cement. PO
- 6) R.I.H. Tag cement @ 45'. Mix 7 sks cement. Fill csg. to surface. Cut well head off. Install dry hole marker & cap.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

Ray D. Ramsey

TITLE

Company Rep.

DATE

2/23/94

TYPE OR PRINT NAME

Ray D. Ramsey

TELEPHONE NO.

(This space for State Use)

APPROVED BY

James L. Smith

TITLE

DISTRICT 1 SUPERVISOR

DATE

FEB 28 1994

CONDITIONS OF APPROVAL, IF ANY:



707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, Fax 505/393-6754

RECEIVED
OIL CONSERVATION DIVISION
MAR 9 1993

March 9, 1993

Mr. William J. LeMay
NM Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, NM 87504

CERTIFIED MAIL P 661 764 512

Dear Mr. LeMay:

Please be advised that Unichem International is selling its Rowland Trucking Company subsidiary to Mr. Bob Calhoon, P.O. Box 340, Hobbs, NM 88241.

Attached is a certified letter and signed receipt notifying Mr. Calhoon of the transfer of the following discharge plans.

- Unichem International Inc., Trucker's #2 Brine Station Plan BW-18
- Unichem International Inc., Carlsbad Brine Station Plan BW-19
- Unichem International Inc., Eunice Brine Station Plan BW-16
- Unichem International Inc., Truckers #1 Brine Station DP #370- Well plugged 12/90

If you have any questions please do not hesitate to call or write.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:jd

cc: B. Clements
R. Brakey
M. Hughes
Environmental File

UNICHEM INTERNATIONAL INC.



707 N. Leech, P.O. Box 1489 / Hobbs, NM 88240 / Ph. 505/393-7751, Fax 505/393-6754

March 9, 1993

Mr. Bob Calhoon
Rowland Trucking Company Inc.
P.O. Box 340
Hobbs, NM 88241

CERTIFIED MAIL P 661 764 513

Dear Mr. Calhoon:

Pursuant to the State of New Mexico Water Quality Control Commission and to the Energy and Minerals Department Oil Conservation Division Rules and Regulations, Unichem International is required by law to notify you that we are transferring the following discharge permits to your company.

- Unichem International Inc., Trucker's #2 Brine Station Plan BW-18
- Unichem International Inc., Carlsbad Brine Station Plan BW-19
- Unichem International Inc., Eunice Brine Station Plan BW-16
- Unichem International Inc., Truckers #1 Brine Station DP #370- Well plugged 12/90

For your reference please find WQCC Part 3-111 (transfer of Discharge Plan) attached.

If you have any questions please do not hesitate to call or write.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:jd

cc: B. Clements
R. Brakey
M. Hughes
Environmental File

UNICHEM INTERNATIONAL INC.

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:

Mr. Bob Calhoon
Rowland Trucking Company
P.O. Box 340
Hobbs, NM 88240

4. Article Number

p 661 764 513

Type of Service:

- ☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee

X

6. Signature — Agent

X

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

★ U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

1/24/92

Memo

From
KATHY BROWN
Geologist

To K. Brown; From Norman Denton
Randall Truckin

Eunice injection pressure 170-200 ps
shut-down pressure 230 psi.

Carlstad Station - injection
pressure 200 psi. Shut-down
pressure 235 psi.

3/18/92
KMB

Formation Fracture Pressure

$$P_f/z = (s_z/z + 2 p/z) / 3$$

↓
overburden
gradient
(1.0 psi/ft)

↓
formation
pressure
gradient
(0.46 psi/ft)

z = depth = 1260'

$$P_f/1260 = \frac{(1.0 + 2(0.46))}{3} \quad \frac{P_f}{1260} = 0.64$$

$$P_f = 806 \text{ psi}$$

Surface frac Pressure

= Formation Frac Press - hydrostatic gradient

↑ hydro-gradient of brine

$$= 806 \text{ psi} - (1260' \times 0.433 \text{ psi/ft})$$

$$= 206 \text{ psi}$$

$$\text{Surface Frac. Pressure} = 206 \text{ psi}$$

Injection Pressure @ ~~Coal~~ Eunice Brine Station



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



June 11, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Mr. Richard Brakey, Vice President
Rowland Trucking Operations
Unichem International Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

RE: Correction on Approval of Discharge Plan BW-16
Unichem Eunice Brine Station

Dear Mr. Brakey:

The approval letter for the discharge plan renewal BW-16 for the Unichem Eunice Brine Station has an error. The approval dated June 13, 1991 states that the Eunice Brine Station is located in Eddy County, New Mexico. The correct location of Unichem's Eunice Brine Station is Lea County, New Mexico. I am sorry for any inconvenience this may have caused.

Before performing remedial work, altering or pulling casing, plugging or abandonment, or any other workover, approval of the Oil Conservation Division (OCD) must be obtained. Approval should be requested on the OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103-A). Submit the original form to the appropriate district office and a copy of the form to the Santa Fe Office. If you have any questions, feel free to contact me at (505) 827-5824.

Sincerely,

A handwritten signature in cursive script that reads "Kathy M. Brown".

Kathy M. Brown
Environmental Geologist

KMB/sl



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

June 3, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-327-278-143

Mr. Richard Brakey, Vice President
Rowland Trucking Operations
Unichem International Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

RE: Approval of Discharge Plan BW-16
Unichem Eunice Brine Station

Dear Mr. Brakey:

The discharge plan renewal (BW-16) for the Unichem Eunice Brine Station located in the NW/4 SE/4 of Section 34, Township 21 South, Range 37 East, NMPM, Eddy County, New Mexico, in the 500 block of Avenue G in the town of Eunice, is hereby approved. The renewal application consists of the original discharge plan as approved December 18, 1982; the amendment and renewal of the discharge plan approved January 10, 1986; the renewal application dated January 8, 1991, and the materials dated May 24, 1991, and May 29, 1991, submitted as supplements to the application.

The discharge plan was submitted pursuant to Section 5-101.B.3 of the New Mexico Water Quality Control Commission Regulations. It is approved pursuant to Sections 5-101.A and 3-109.C. Please note Sections 3-109.E and 3-109.F which provide for possible future amendments or modifications of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface water, ground water, or the environment which may be actionable under other laws and/or regulations.

The monitoring and reporting shall be as specified in the above referenced materials. Please note that Section 3-104 of the regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3-107.C. you are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Mr. Richard Brakey

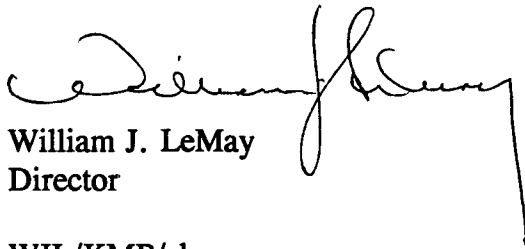
June 3, 1991

Page -2-

Pursuant to Section 3-109.G.4., this plan is for a period of five (5) years. This approval will expire January 10, 1996 and you should submit an application for renewal in ample time before this date. Note that under Section 5-101.G. of the regulations, if a discharger submits a discharge plan renewal application at least 180 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review,

Sincerely,



William J. LeMay
Director

WJL/KMB/sl

cc: OCD Hobbs Office



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, Fax 505/393/6754

OIL CONSERVATION DIVISION
RECEIVED

'91 MAY 30 AM 9 01

May 29, 1991

Ms. Kathy M. Brown
Environmental Bureau Geologist
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

Dear Ms. Brown:

Discharge Plan BW-16 (Formerly DP-369)
Eunice Brine Station
Lea County, NM

Per our telephone conversation on Wednesday, May 29, Unichem commits to performing a mechanical integrity test within two years of the permit date issuance.

We will also be sending you the fracture pressure calculations and plan along with the proper bond as soon as possible.

Thank you very much for your assistance. If you have any further questions, please don't hesitate to call.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:rm

cc: R. Brakey
N. Denton

UNICHEM INTERNATIONAL INC.



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, Fax 505/393/6754

May 24, 1991

RECEIVED

Ms. Kathy M. Brown
Environmental Bureau Geologist
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

MAY 28 1991

OIL CONSERVATION DIV.
SANTA FE

Dear Ms. Brown

Discharge Plan BW-16 (Formerly DP-369)
Eunice Brine Station
Lea County, NM

The enclosed proposal concerning the Eunice Brine Station we believe to be satisfactory for approval. If any further changes are requested, please notify us and they will immediately be addressed.

In order for convenience, the proposals are numbered to stay in sequence with your April 11, 1991 letter.

- 1) Transfer of commitment from N.M.E.I.D. to N.M.O.C.D. and major leak and spill reporting per WQCC rule 5-208.

WQCC regulations part 5-208 B. (Reporting requirements for in situ extraction wells) Item 1 reads in part "The discharger shall notify the director within 48 hours of the detection or suspected detection of a leachate excursion, and provide subsequent reports as required by the director."

We are requesting your permission, at this time, to remain with the 48 hour reporting requirement.

- 2) Closure and Plugging Bond

- a) At a minimum an approved cement plug will be placed in the cased hole. All contaminated soil will be removed and disposed of in an approved

facility. All related well equipment will be removed, if deemed necessary. Unichem/Rowland owns the property, therefore, the closure plan will address the items covered under the discharge plan.

We commit to abide by all rules and regulations imposed on us by the N.M.O.C.D. in closing the facility as an in situ brine well.

- b) In order to obtain the necessary bond of \$5,000, we are requesting a 90 day submittal date from today. We are expediting this matter and will send the bond as soon as possible.

3) Emergency Catch Basin

The water is no longer allowed in the emergency catch basin. Any liquid which enters the pit will be logged and reported to the O.C.D. within 72 hours with the cause of the use of the catch basin to be included. Also any fluid which is removed from the catch basin will be logged and the O.C.D. will be notified within 72 hours of removal.

4) Mechanical Integrity Test

We propose a pressure test of the brine well within the next 5 years, or when the next well work over is performed, utilizing a packer to isolate the casing from the formation.

We propose removing all underground brine lines within the year and replace them with above ground lines that can be monitored visually on a regular schedule.

5) Maximum Injection Pressure

In order to answer O.C.D.'s request for part #5 of letter dated 4/11/91 to Mr. Richard Brakey, Vice President from N.M.O.C.D.; (Kathy Brown), Unichem/Rowland will put together calculations detailing the fracture pressure of the salt formation. Once we have determined the fracture pressure, a proposed maximum injection pressure will be determined. We will then put together a plan for assuring that the proposed maximum injection pressure will not be exceeded. This plan, along with calculations, will be submitted 90 days from the date of this letter.

6) Collapse and subsidence

- a) Concern over the potential collapse and/or subsidence of the strata overlying the salt cavity.

In response to collapse and subsidence Unichem has had an excellent record with this brine well. Open hole MI tests have all shown no indication

of leaks of any kind. Interactive communication between other zones or wells in the same zone are non-occurring at this time.

A number of in-situ brine wells have experienced maintenance problems in the form of cave-ins around the tubing. The Eunice Brine Well has an excellent maintenance record and to date has never experienced any cave-in's.

There are no surface indications such as faults, cracks, slight depressions, etc. to indicate a forthcoming problem.

The estimated hole size was last estimated to be a hypothetical sphere with a radius of 140' at a total depth of 1900 to 1950 feet. In actuality this is probably not the physical shape of this cavity. Most brine wells are stratified caverns and intermediate strings of various shapes and sizes. The top of the salt is at 1259' last recorded and the shoe of the casing is at 1300'.

The bottom of the tubing is at 1912'. The largest cavern is expected to be at the bottom of the hole, far below the anhydrite section. The previous calculations on cavern size had a 2:1 safety factor built in them. To date, the estimated total volume of brine produced out of the hole is approximately 7.24 million barrels of brine through 1990. This would give a total accumulative cavity size of approximately 6.62 million cubic feet.

Applying a "rule of thumb" of 50 feet of overburden per million cubic feet of volume should give relative stability of the existing cavern. Also, depending upon the bulking rate and the notion that if a cavity depth is sufficiently large compared to its volume, and failure does occur, the overburden will fill the cavity and the failure will not promulgate to the surface.

If failure occurs it's most likely that subsidence would be noted before catastrophic failure. At present, we have a depth volume ratio of 197, which is considered to be in the "safe" zone. It should be pointed out that a number of brine wells and LPG storage caverns are much larger than the Eunice Brine Well, all in the same area, and have not experienced failure. Even with exact logging data, the predictability of catastrophic failure is at most a guess.

The Eunice Brine Well is not located near a major fresh water aquifer, therefore presents no major threat to usable ground water.

- b) Calculations that estimate the approximate size and shape of the present-day cavity. (SEE ATTACHED)

Calculations of Cavity Size

5.79 MM bbls of brine water produced out of hole from 1965 to 1985.

5.79 MM / 20 years = .290 M bbl/year Avg

from 1986 to 1990 5 x 2.90 MM = 1.45 MM bbls

5.79 MM bbl

1.45 MM bbl

7.24 MM bbls thru 1990

Brine containing 350,000 mg/L TDS
each barrel removed = .9157 ft³ cavity

7.24 MM bbls x .9157 = 6.62 MM ft³

using a sphere $V = \frac{4}{3} \times \pi \times r^3$

= 116 ft radius of cavity

- C. Include appropriate details on collapse/subsidence prevention and monitoring;

Unichem commits to a monitoring plan in order to prevent any collapse or subsidence. Unichem will continue to maintain all well records, pressure test, maintenance records, operating data, and to review this data on a periodic basis to determine if subsidence and or collapse might occur.

Unichem will use the most recent guidelines and modeling that are available in order to determine the probability of any failures. We will monitor other brine stations through the N.M.O.C.D. in order to determine if any trends or failures exist in other operations that might relate to our operation.

- D. Contingency Plans and Remedial Actions

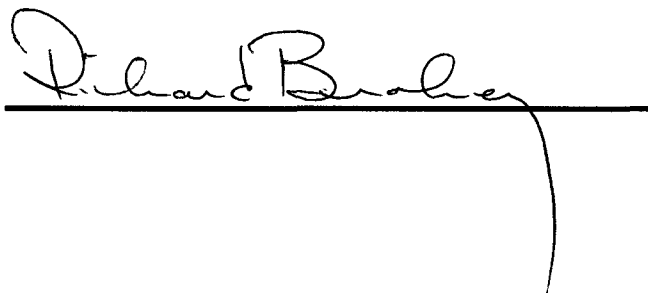
Unichem feels that contingency plans and remedial actions are pre-mature at this point and should not be contingent on our existing operations permit. If contingency and remediation plans are required, then we feel that the N.M.O.C.D. should require the same plan for all brine well operations.

If such plans are issued by the N.M.O.C.D., Unichem commits to abiding by all rules and regulations that apply.

Sign-Off Requirement W.Q.C.C. Parts 101-H

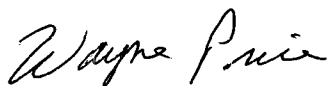
"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Richard Brakey

A handwritten signature in dark ink, appearing to read "Richard Brakey", is written over a horizontal line. A long, thin vertical line extends downwards from the right side of the signature.

Sincerely,

UNICHEM INTERNATIONAL INC.

A handwritten signature in dark ink, appearing to read "Wayne Price", is written in a cursive style.

Wayne Price
Staff Engineer

LWP:rm

INVENTORY OF SOLUTION MINING WELLS -- OIL CONSERVATION DIVISION, 1991**I. OPERATOR/LOCATION INFORMATION**

Operator: Unichem International Rowland Trucking Richard Brakey - Vice President
Wayne Price - Staff Engineer
Norman Denton - Safety Director

Address: 707 N. Leech,
P.O. Box 1499, Hobbs NM, 88240 Phone: 393-7751 (office)
393-6754 (Fax)

Facility Eunice Brine Station (Pioneer Brine)

T. 21 S R. 37 E Sec. 34 NW 1/4 of SE 1/4 # F

County: Lea

Purpose of well (brine supply, LPG storage, potash dissolution) brine supply

II. DRILLING/SITING INFORMATION

Contractor: Roy H. Smith Drilling Co

Date drilling started 1-14-65 Date drilling completed 1-17-65

Drilling method Rotary

Ground Surface Elevation _____ KB Elevation 12" Rotary to Ground

Total depth of hole 1900'

Attach schematic of well, include open hole interval, perforations, etc.

Type of drilling fluid Water

Describe all casing tests performed to date 8-22-85: 300 psi for 6 hours,
2-24-88: 350 psi for 9 hours, 2-8-91: 350 psi for 12 hours.

CASING, TUBING AND CEMENTING RECORD

From	To	Size of Hole	Size of Casing	Weight per Foot	Sacks of Cement	Estimated Top of cmt.
0'	1261' [?] 1249' (1221)	9 7/8"	7"	23	425 (4)	Surface
0'	1900'	9 7/8"	2 7/8"			Tacked @ top w/ Cement, no packer

see
attached
sketch

Is site within 1/2 mile of another well? Is so, explain. Yes; Within Section 34
have 1 abandoned, 2 oil, 3 gas, 1 brine, 1 water
- have records for all.

Type of well-head equipment ^{bond} ~~well-head equipment~~ ⁽¹⁰⁻²⁶⁻⁸¹⁾ \$50,000 blanket plugging bond on wrong
form. Working on getting new bond. ⁽⁵⁻⁹¹⁾

Comments (include problems encountered while drilling, loss of circulation, deviation of hole from vertical, centralizers, used, tools lost or stuck, fracturing techniques used, etc.)

Used 2 S-3 Centralizers & 1 float guide shoe

III. FORMATION INFORMATION

Formation Record

From	To	Thickness	Formation (name, description)
------	----	-----------	-------------------------------

0	20'	20'	Caliche & Sand
---	-----	-----	----------------

20'	1200'	1180'	Red Beds & Shale
-----	-------	-------	------------------

1200'	1259'	59'	Anhydrite (Permian Rustler?)
-------	-------	-----	------------------------------

1259'	2050'	741'	Halite + Anhydrite (Permian Salado?)
-------	-------	------	--------------------------------------

Ref. Gulf Oil #4 {	2050'	4652'	2602'	Anhydrite + Lime
-----------------------	-------	-------	-------	------------------

	4652'	6584'	1932'	Shale + Lime
--	-------	-------	-------	--------------

Logs (specify type) Driller's Log

Identify where logs are on file OCD file - Santa Fe Office

IV. AQUIFER INFORMATION

Aquifers in Immediate Area

From	To	Aquifer Description	Amount of Water entering hole	Quality of Water
------	----	---------------------	-------------------------------	------------------

Not in the Ogallalla Aquifer Zone

Water in this area is small and limited.

Quality averages 1000 ppm TDS, 350 ppm Cl

@ a depth from 20' to 60'.

EID public notice = 45' & 1400 ppm TDS.

Note: If water quality analysis are available please attach.*

Source of aquifer description Water wells in area & DP

Source of water level and quality data NM file reports

Depth water first encountered during drilling Not reported (drilled w/ water)

Direction of water gradient Southeasterly ↘

Explain ^{source of data} ~~any evidence of~~ water contamination

2 Water Wells in T21S R37E Sec. 34. CP-140 drilled 1944, TD 109', Abandoned

CP-548 TD 110', not used; up gradient well 1094 ppm TDS;

400 ppm Cl. 1 Section to east water well 1404 ppm TDS;

360 ppm Cl. 1 Section east + 1 section south

TDS = 688 ppm Cl = 160 ppm

V. PRODUCTION/BRINE STORAGE INFORMATION

Method of production (describe fully) Water from city supply, thru
(15' level maintained) (via triplex pump) (175-200 psi @ 1259')
meter, to 1000 bbl tank, to well, down annulus, thru
tubing, to 3 brine storage tanks via 3" underground
brine line, thru truckloading centrifugal pump (300 bbl/20 min),
to 4" manifold load line

* Wayne Price stated that for most of the life of the well
it had been produced out the annulus w/ fresh water
infected down the tubing.

Was well used previously for some purpose other than brine supply None

If so, explain _____

Use of brine Drilling fluid 1-29-91 CI=172,000 ppm; TDS=285,161 ppm

Source of injection water (be specific) Piped from City of Eunice
Water Supply through a flow meter

Flow meter. 2-8-77: CI=36 ppm; TDS=224 ppm

Date of first production Late Jan. 1965

Volume of brine produced to date 1965 to 1985 1/2 = 5.79 MM bbl records
1985 1/2 to 1990 = 1.45 MM bbl (avg) = 7.24 MM bbl + hru 1990

Weight of salt removed to date _____

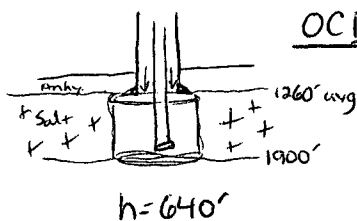
Unichem assuming ^{TDS} 350,000 ppm brine $\Rightarrow 6.62 \text{ MM-ft}^3 = .44 \text{ tons}$

OCD using brine analysis of 300,000 ppm TDS $\Rightarrow 5.68 \text{ MM-ft}^3 = .38 \text{ tons}$

Calculated size and shape of cavity to date _____

Unichem using a sphere $V = \frac{4}{3}\pi r^3$ $r = 116'$ $d = 232'$

OCD Cylinder $r = 53'$ $d = 106'$
Sphere $r = 116'$ $d = 232'$ \Rightarrow probably most likely shape
Cone $r =$ $d =$ due to production practices.



City Water is
Piped from
tobbs \rightarrow

Explain any evidence of subsidence and any subsidence monitoring _____

Brine storage facilities (describe) Brine pumped from wells to
3-1000 bbl API brine storage tanks (1985 upgrade)
manifolded together (16' high, shut-off @ 15' high).

Tanks were sand-blasted & lined & bermed.

^{1985 upgrade?} Have emergency catchment pond with single (30ml)
hypalon liner. Committed to standing fluids in
it < 10% time so no leak detection needed. Calculated

Explain how brine storage pit is being monitored for leakage ^(holding) sizeⁿ for 1000 bbl
brine plus 6" rain in 1 hour with 4 foot berm (4' x 76' x 76').

Using as storage pond 2-91. Committed to only using as
emergency catchment pond (5-91).

Explain brine loading procedures To trucks through 3(?)
loading valves ~~for~~ on a concrete pad (1985 upgrade).
Loading valves on 4" manifold load line.

Explain fresh water loading procedures No fresh water loading(?)

VI. ABANDONMENT/PLUGGING RECORDS

Date well abandoned/plugged In operation

Reason for well abandonment or plugging N/A

Method of plugging or proposed plugging (describe fully, include amounts of cement, etc. top, plug type, depth, etc.) Proposed cement plug
in the cased hole + any NMCD regulations
and rules.

List all conduits in the area of review. Include completion and plugging records.

Included in DP Second Submitted July 12, 1985

VII. CHRONOLOGY OF EVENTS

- 1-65 Well drilled & Operations Begin
- 9-20-82 UI submitted of DP to OCD
- 12-18-82 OCD approves UI GWS-11
- 11-84 EID inspects facility & sampling in response to spill (neighbor Bill Sparks).
- EID unaware Rowland = Pioneer Water Co = UI = DP from OCD
- 1-18-85 EID requests DP by 3-31-85. Still unaware of original DP
- 2-11-85 EID requests DP's info (ie. total brine produced, cavity calc, MIT).
- 3-25-85 UI "Upgrade" received by EID
- 4-17-85 EID acknowledges "Upgrade" or DP Amendment & asks for more info.
- 4-23-85 UI submits ^{electrical} piping > upgrade blueprints
- 4-26-85
- 7-12-85 UI second DP Submitted
- 8-9-85 EID response, has questions & comments (acknowledges DP approval)
- 8-13-85 EID release public notice for DP-369 renewal & modification
- 10-20-85 EID threatens to terminate DP if info requested not sent
- 12-2-85 UI third DP Submitted (includes copy of 10-9-85 letter UI → EID).
- 12-11-85 EID response requiring daily pond inspection for HCl uproot installed
- 12-31-85 UI photos of pond installation
- 1-10-86 EID approval of DP-369 (w/ 5 items required).
- 2-27-87 UI response to EID report request (w/in 45 days)
- 1-7-88 Complaint of brine migrating to gas well 600' to West (Amoco Owen 8-3)
at high injection pressure (900-1500# @ salt 1200'-2200' deep)
- 1-8-91 UI submitted of DP renewal
- 1-10-91 UI DP-369 expires
- 3-15-91 OCD public notice printed
- 4-11-91 OCD response to UI DP renewal request
- 5-24-91 UI response back to OCD.

UNICHEM INTERNATIONAL

Eunice Brine Well No. 1

T215-R37E SEC. 34

22?

Rotary Table 12+

Caliche Sand 0

0

300

400

Red Bed
Shale

600

800

1000

1200

Anhydrite 1175
1200
1259

1400

Salt +
Anhydrite

1600

1800

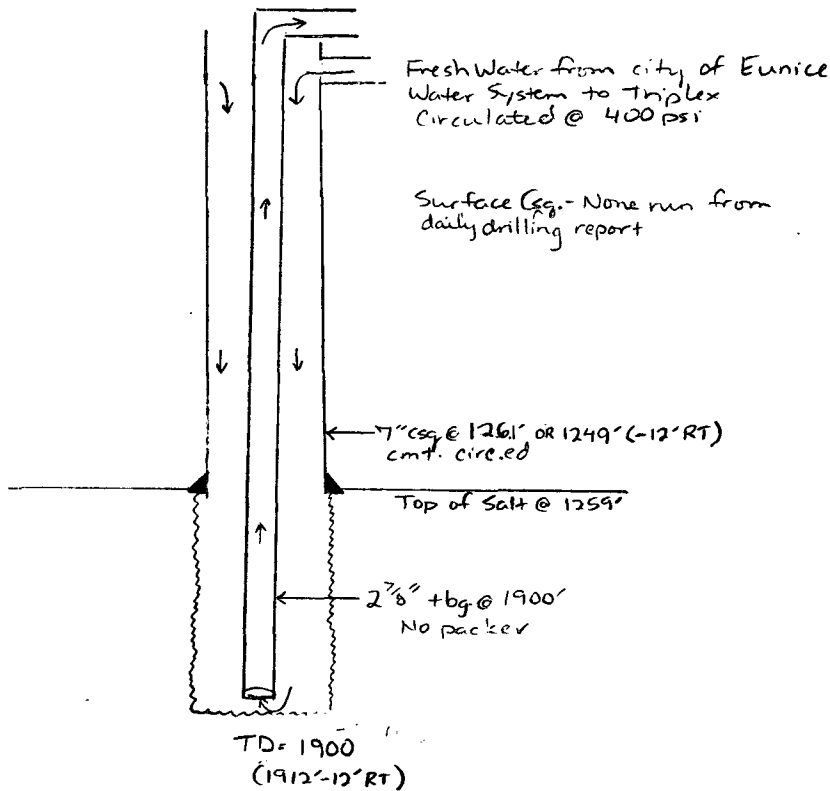
2000

TD
Salt base

Anhydrite +
lime to
4652'

Shale + Lime
to 6584

(ref. Gulf Oil No. 4)





OIL CONSERVATION DIVISION
RECEIVED

'91 MAY 15 AM 8 48

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

FACSIMILE TRANSMITTAL SHEET

=====

TO: KATHY BROWN
FROM: NORMAN DENTON
DATE: 5-13-91
SUBJECT: DISCHARGE PLANL BW-16

TOTAL PAGES THIS TRANSMISSION (Including this one): 2

ADDITIONAL COMMENTS:

ORIGINAL FORTHCOMING IN THE MAIL.

May 13, 1991

Told Wayne that he needed to get something to us within 14 days. The OGD has no authority to extend DP's that have expired. Don't have to complete the work before the DP is approved, just have to submit

IF TRANSMISSION IS NOT COMPLETE OR IF MATERIAL IS ILLEGIBLE, PLEASE NOTIFY THE ABOVE-LISTED INDIVIDUAL IMMEDIATELY AT (505) 393-7751. TO RESPOND VIA FACSIMILE, CALL (505) 393-6754.

commitments and schedules. He agreed to submit KMB materials by May 24, 1991.

UNICHEM INTERNATIONAL INC.



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

May 13, 1991

Ms. Kathy M. Brown
Environmental Bureau Geologist
State of New Mexico
Energy, Minerals & Natural Resources Dept.
P.O. Box 2088
Santa Fe, NM 87504

Dear Ms. Brown:

Telephone Conversation 05/13/91 -
Discharge Plan BW-16 (Formerly DP-369)
Eunice Brine Station, Lea County, New Mexico

We are in receipt of your letter dated April 11, 1991 requesting information within 30 days of receipt of said letter.

In order to submit the proper information we would like to request a 60-day extension. We fully intend to abide by all of your requests and requirements set forth in your letter.

We greatly appreciate your cooperation and assistance in this matter. Don't hesitate to contact us if you need our assistance.

Yours truly,

UNICHEM INTERNATIONAL INC.

Norman D. Denton
Rowland-Safety Director

jd

cc: C. Root
R. Brakey
W. Price

UNICHEM INTERNATIONAL INC.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

April 11, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-327-278-091

Mr. Richard Brakey, Vice President
Rowland Trucking Operations
Unichem International Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

RE: Discharge Plan BW-16 (formerly DP-369)
Eunice Brine Station
Lea County, New Mexico

Dear Mr. Brakey:

The Oil Conservation Division (OCD) received the above referenced discharge plan renewal application on January 9, 1991, and is in the process of reviewing it. Please note the new discharge plan number (BW-16) which will be the permanent designation used in all future correspondence. The following comments and requests for additional information are based on review of the application, dated January 8, 1991, and observations during the OCD site visit on February 6, 1991.

1. Transfer of Commitment

Administration of the brine program was transferred from the Environmental Improvement Division back to the OCD in 1989. All prior commitments to EID concerning reporting and notification remain in effect. However, please note that all unauthorized discharges (i.e. major leaks and spills), need to be reported to OCD within 24 hours of the event (WQCC Rule 5-208), not within 48 hours as stated in your correspondence dated March 21, 1985.

2. Closure Plan and Plugging Bond

The revised OCD guidelines for discharge plans at brine facilities require a general closure plan for actions to be taken when the facility is inactive. Submit a proposal for closure which includes those actions in the guidelines, Section VI.F.5.

Your commitment for plugging and abandonment is adequate; however, your \$50,000 blanket plugging bond is on the old OCD bond form which does not include brine wells. You must either have your blanket plugging bond transferred onto the new form, or obtain an additional single well plugging bond. Enclosed are the correct forms for both blanket and single well plugging bonds.

3. Emergency Catch Basin

Unichem designed and committed to using their single-lined pond as an emergency catch basin only. Fluids were observed in your catch basin by OCD representatives on February 6, 1991 and on previous occasions by EID staff. Any fluids collected in your emergency catch basin must be removed within 72 hours of collection. Remove the fluids from your pond and notify the OCD upon removal. Note that all future collection and removal of fluids must be reported to the OCD within 72 hours. If you continue to use your emergency catch basin as a brine storage and loading pond then you will be required to upgrade your pond according to the enclosed guidelines for construction of waste storage/disposal ponds.

4. Mechanical Integrity Testing

Pursuant to revised OCD guidelines for discharge plans at brine facilities, all wells must be pressure tested (open-hole) to 500 psi for 4 hours on an annual basis. A pressure test isolating the casing from the formation using either a bridge plug or packer must be conducted at least once every 5 years or during well workovers. Submit a proposal for testing and ensuring the mechanical integrity of the well. The results from your February 11, 1991 pressure test satisfy the OCD's requirement for a current pressure test prior to approving any brine facility discharge plan applications or renewals. However, this test does not guarantee the integrity of the casing. Enclosed is information on an alternate method for mechanical integrity testing that you may find of interest. Propose a plan and schedule to test and guarantee the integrity of the casing. Note that an OCD representative must be on site to witness all pressure tests. Also, submit information on any buried brine pipelines including age and material of the lines. Propose of plan to ensure the mechanical integrity of all underground brine pipelines.

5. Maximum Injection Pressure

Pursuant to WQCC Regulation Section 5-206, the maximum injection pressure at the wellhead shall not initiate new fractures or propagate existing fractures in the continuing zone. Submit a proposed maximum injection pressure, a measured and/or calculated fracture pressure for the zone being injected into, and a plan to ensure the fracture pressure value will not be exceeded.

Mr. Richard Brakey
April 11, 1991
Page -3-

6. Collapse and Subsidence

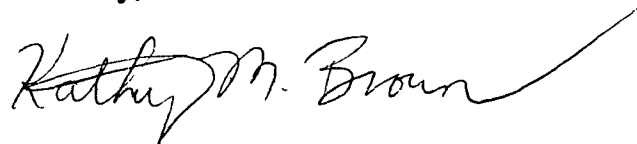
Because of the length of time (26 years) that Unichem has been solution mining at their Eunice station, the OCD is concerned over the potential for collapse and/or subsidence of the strata overlying the salt cavity that Unichem has created. Material submitted by Unichem on July 12, 1985 presented calculations of probable cavity size and shape. Submit new calculations that estimate the appropriate size and shape of the present-day cavity. Include appropriate details on collapse/subsidence prevention, monitoring, contingency plans, and remedial actions.

Submission of the above requested information will allow the review of your application to continue. Note that your discharge plan expired on January 10, 1991; however, this agency does not plan to initiate enforcement action provided a response to these requests is submitted to OCD within thirty (30) days of receipt of this letter.

Enclosed is a copy of the OCD's guidelines for preparation of ground water discharge plans at brine extraction facilities, revised February 19, 1991, and a copy of the Water Quality Control Commission Regulations.

If you have any questions, please do not hesitate to contact me at (505) 827-5824.

Sincerely,



Kathy M. Brown
Environmental Bureau Geologist

KMB/sl

Enclosures

cc: OCD Hobbs Office

Affidavit of Publication

STATE OF NEW MEXICO)

) ss.

COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Notice Of Publication

and numbered in the

Court of Lea County, New Mexico, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, once each week on the same day of the week, for one (1)

consecutive weeks, beginning with the issue of

March 8, 19 91.

and ending with the issue of

March 8, 19 91.

And that the cost of publishing said notice is the

sum of \$38.92

which sum has been (Paid) (Assessed) as Court Costs

Subscribed and sworn to before me this 20th

day of March 19 91

Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 94

LEGAL NOTICE STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-67) - Bull Dog Tool Company, Inc., Barry Antweil, Manager, 2807 West County Road, Hobbs, New Mexico 88240, has submitted a discharge plan for its Hobbs service facility located in the NE/4 SW/4, Section 20, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico. Approximately 180 gallons per day of wastewater from washing operations is collected in an above grade steel tank for storage prior to disposal in an OCD permitted offsite disposal facility. Groundwater most likely to be affected by a spill, leak or other accidental discharge to the surface is at a depth of approximately 60 feet with a total dissolved solids concentration of approximately 700 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed.

(DP-369) - Unichem International Incorporated, Richard Brakey, Vice President, P. O. Box 1499, Hobbs, New Mexico 88240, has submitted a renewal application for the previously approved discharge plan for its brine station. The brine extraction facility is located in the 500 block of Avenue G in Eunice, SE/4 NW/4, Section 34, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico. The brine station injects fresh water through an injection well into dry salt beds at an approximate depth of 1260 feet. The brine extracted has an average Total Dissolved Solids content of 283,000 mg/l and is stored at the surface in steel tanks. A lined emergency catchment pond is onsite to catch overflows and spills. Groundwater most likely to be affected by a spill, leak or other accidental discharge at this operation is at a depth of approximately 45 feet and has a total dissolved solids concentration of roughly 1000 to 1400 mg/l. The discharge plan application addresses operation of the injection well and how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest. If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 1991. To be published on or before March 15, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director

SEAL

Published in the Lovington Daily Leader March 8, 1991

CE OF PUBLICATION
ATE OF NEW MEXICO
ERGY, MINERALS AND
NATURAL RESOURCES
DEPARTMENT

OIL CONSERVATION DIVISION

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAN, Director
Journal: March 15, 1991

STATE OF NEW MEXICO

County of Bernalillo

ss

Thomas J. Smithson being duly sworn declares and says that he is National Advertising manager of the **Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, a copy of which is hereto attached, was published in said paper in the regular daily edition,

for.....1.....times, the first publication being on the.....15.....day

of.....Mon....., 1991, and the subsequent consecutive

publications on....., 1991.

Sworn and subscribed to before me, a Notary Public in

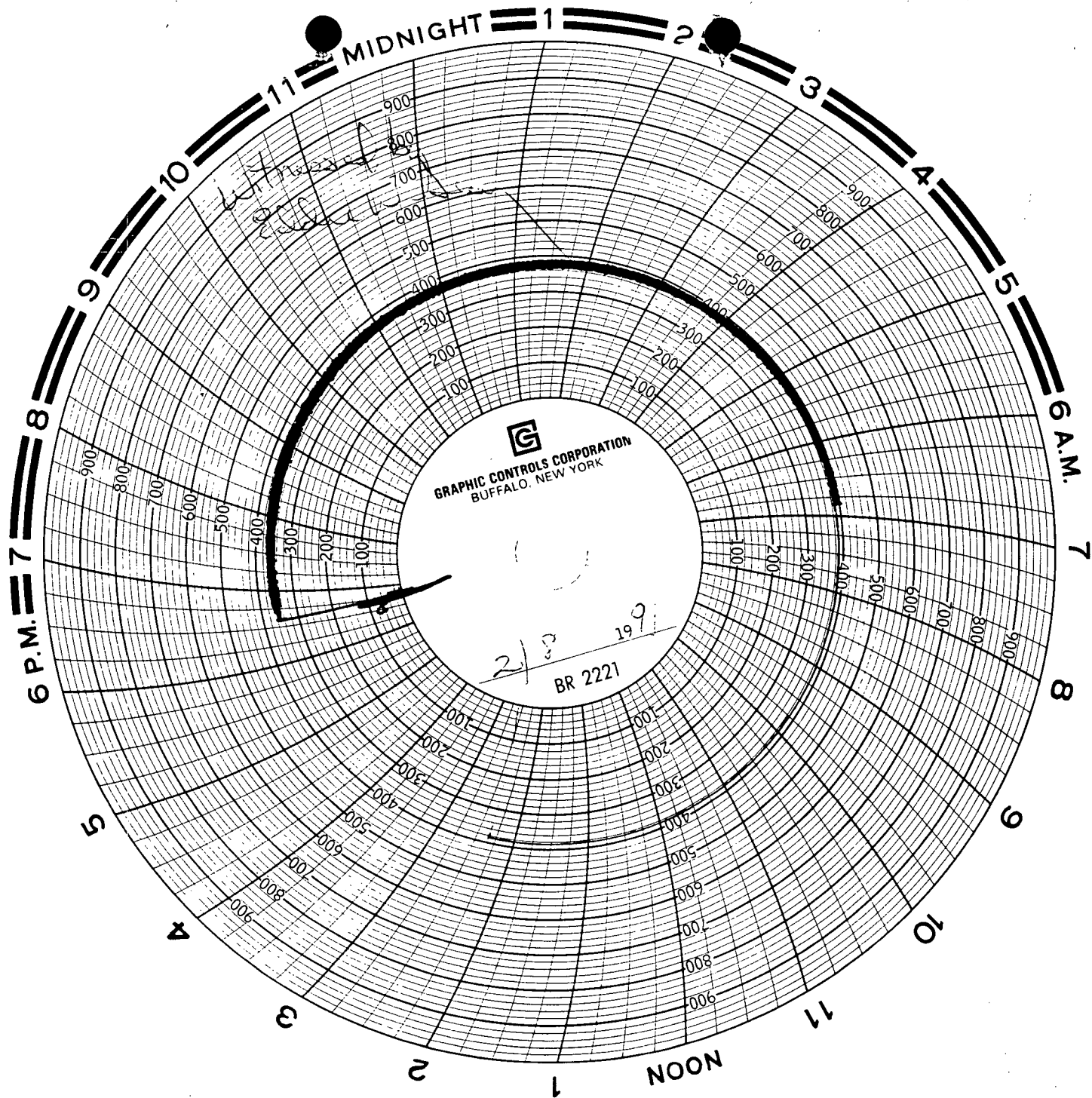
and for the County of Bernalillo and State of New Mexico, this.....15.....day of.....Mon....., 1991.

PRICE.....

Statement to come at end of month.

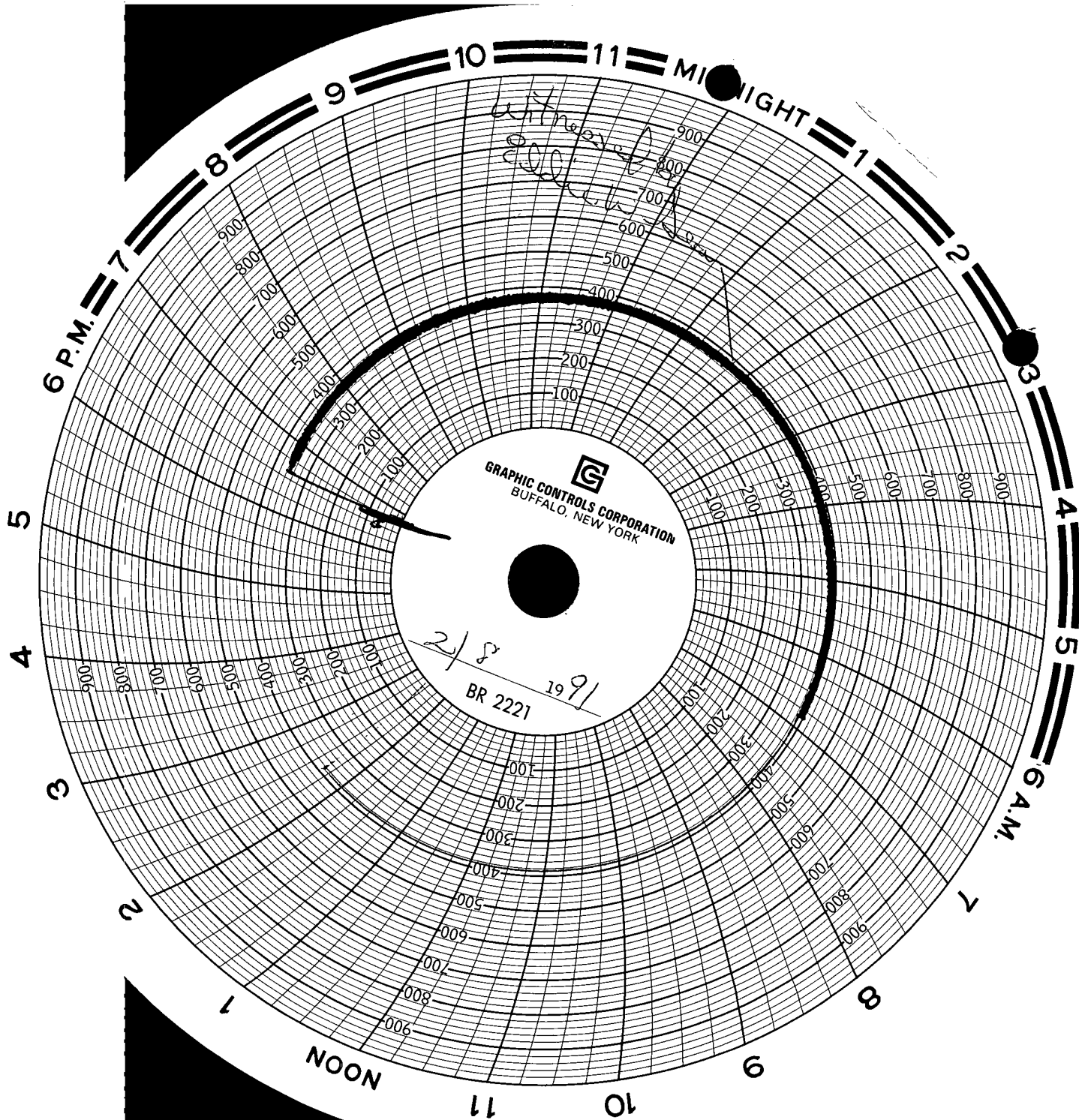
CLA-22-A (R-12/91)

ACCOUNT NUMBER.....C 80932.....



attn: Roger Anderson

Unichem - Eunice - Pioneer Pressure Test
received 2-11-91





OIL & GAS DIVISION

RECEIVED

'91 JAN 9 AM 10 34

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

January 8, 1991

David G. Boyer
310 Old Santa Fe Trail, Room 205
Land Office Building
Santa Fe, New Mexico 87501

SUBJECT: UNICHEM EUNICE BRINE STATION--500 BLOCK OF AVENUE G, EUNICE, NEW MEXICO--DISCHARGE PLAN #369

Dear Mr. Boyer,

Please accept this letter as an application for discharge plan renewal for our Eunice Brine Station, which includes an In-Situ extraction well for producing brine water for use in oil field activities in the Eunice, New Mexico area.

Please note, you have on file all previously submitted materials, which include detailed information that is required by the New Mexico Water Quality Control Commission (WQCC) regulations. Also, you have all the latest monitoring and reporting form submitted to date.

As allowed under New Mexico WQCC regulations, more specific, Part 5-101G, please accept this as our discharge plan.

We are readily available to provide New Mexico Oil Conservation Division with information that is required to complete our application for renewal.

In addition, no modifications or changes have been made within our operation, and therefore no modifications are necessary in our current discharge plan.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price

Wayne Price
Staff Engineer

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Richard Brakey
Richard Brakey

Vice President, Rowland Trucking Operations
Title

UNICHEM INTERNATIONAL INC.

To: Kevin Lambert

Re: Pressure test Unichem brine well at Eunice

From: Wm. G. Huber

Begin pressure up 9:30 AM 2-23-88.

Attain maximum pressure (350 lbs) 6:45 AM 2-24-88

Begin observations at 1:30 PM 2-24-88

Conclude observations at 3:30 2-24-88

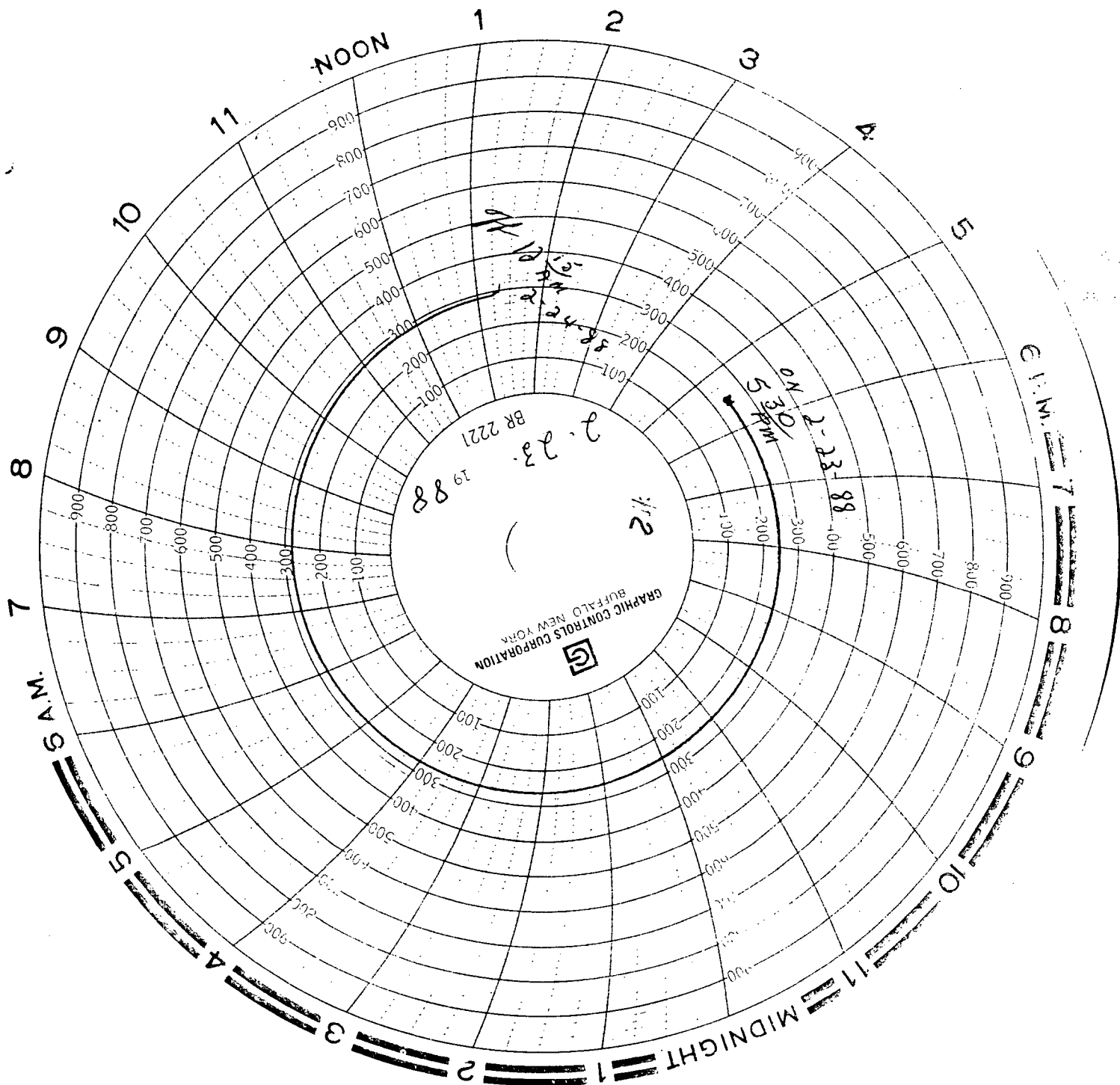
See chart graphs attached

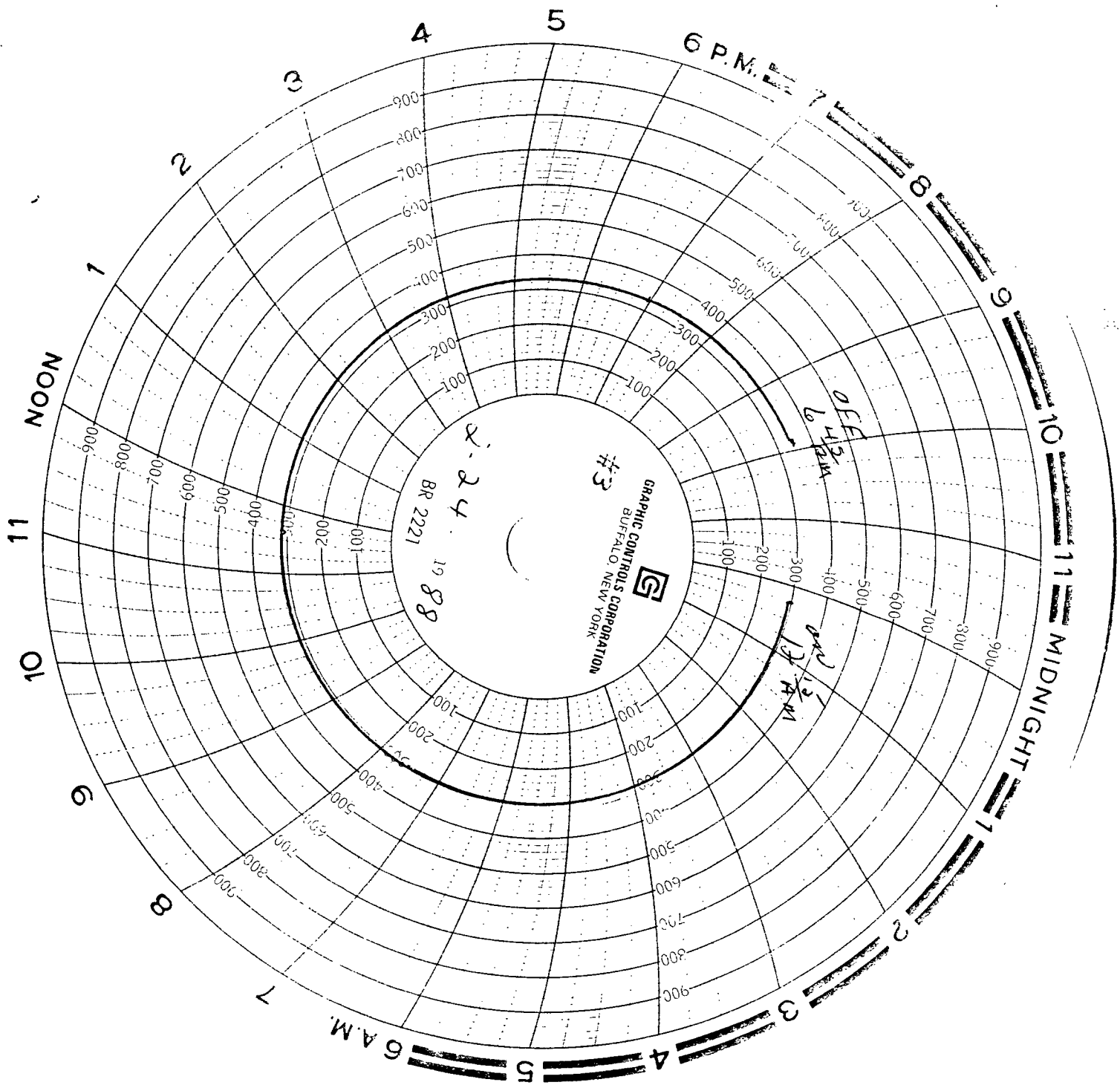
Pressure maintained throughout observation period.

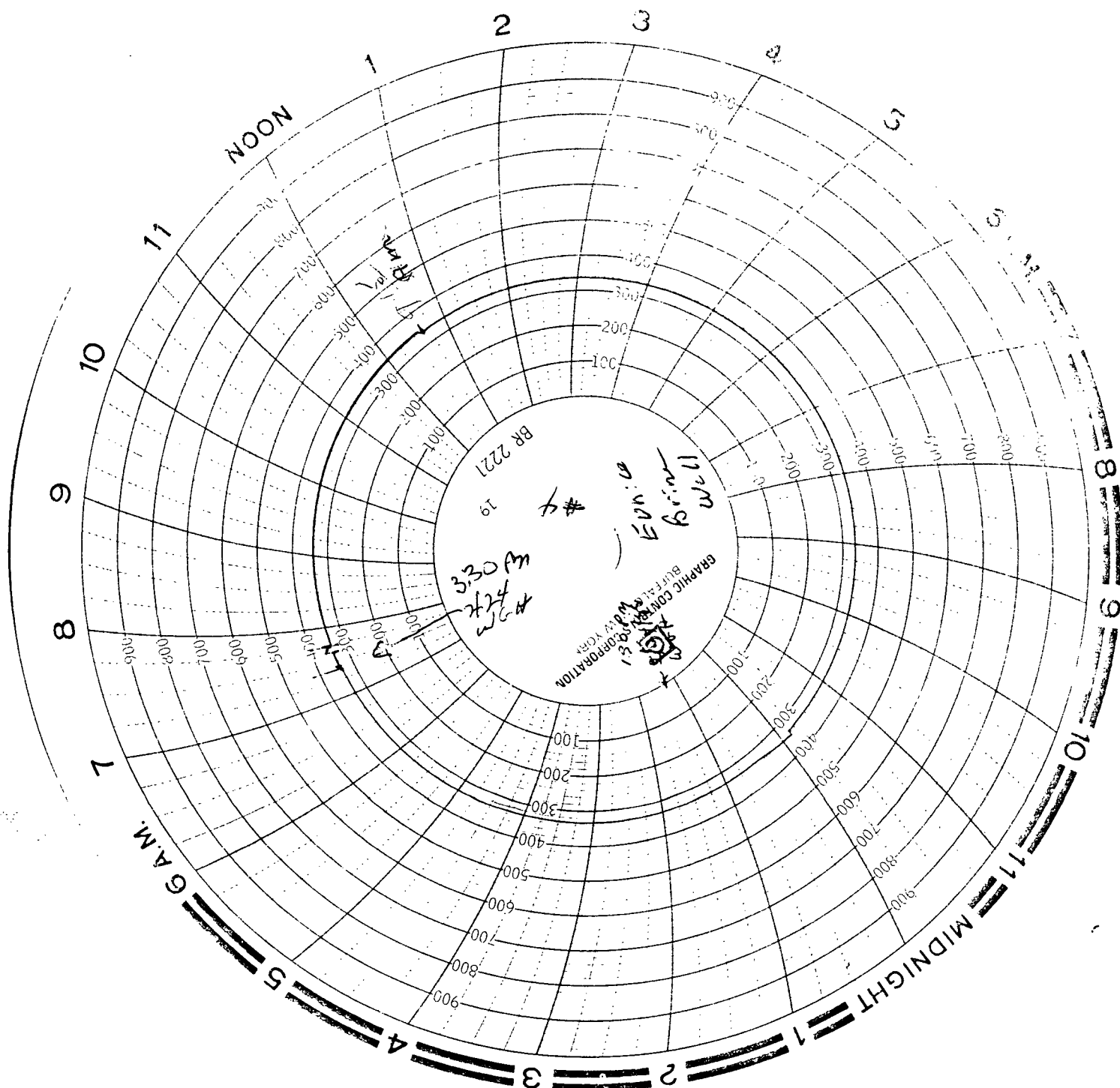
Copy to Wayne Price, Unichem

GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK

2-23-88
BR 2221
9:30 AM
1

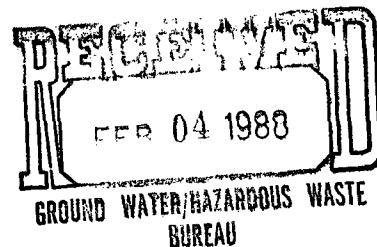








Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010



February 2, 1988

VIA CERTIFIED MAIL: P 713 502 737

Mr. Kevin A. Lambert, Hydrologist
Ground Water & Hazardous Waste Bureau
State of New Mexico
Environmental Improvement Division
P.O. Box 968, Runnels Building
Santa Fe, NM 87504-0968

SUBJECT: Amoco Well - Owen B #3 (Eunice, New Mexico)

Dear Kevin:

The enclosed plug and abandonment field report for Amoco-Owen B #3 is provided in compliance with your recent request for the information.

Please do not hesitate to contact me if you have any questions or need additional information.

Sincerely,

UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script that reads 'Wayne Price'.

Wayne Price
Staff Engineer

LWP:mms

Enclosure

cc: Richard Brakey, Vice President, Rowland Trucking
John Parker, State of New Mexico E.I.D.

UNICHEM INTERNATIONAL INC.

NEW MEXICO OIL CONSERVATION COMMISSION
DAILY FIELD TRIP REPORT
DISTRICT I

NAME Eddie W. Seay DATE 1/14/88 MILES 118
DEPARTURE 7 AM RETURN 4 PM CAR NO. 7360

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature Eddie W. Seay

H U S 2

1 Other - Eunice Area To check spill at Agua SWD boot - W F McCormack lease. Ran into old caliche pit, all water picked up and area cleaned. O.K.

R O P 4

1 Well - Eunice Area Amoco - Owen B #3 Drilling cement, drilled outside casing at 515', waiting on decision to P & A.

T O O 2

1 Well - Eunice Area Rowland Brine To put recorder and test brine well.

Mileage

UIC 18

RFA

Other 100

Per Diem

UIC 2.00

RFA

Other 4.00

Hours

UIC 2

RFA

Other 6

TYPE INSPECTION
PERFORMED

INSPECTION
CLASSIFICATION

NATURE OF SPECIFIC
OR FACILITY INSPECTION

H - Housekeeping
P - Plugging
C - Plugging Cleanup
T - Well Test
R - Repair/Workover
F - Waterflow
M - Mishap or Spill
W - Water Contamination
O - Other

U - Underground Injection Control - Any inspection of or related to injection project, facility, or well or resulting from injection into any well. (SWD, 2ndry injection and production wells, water flows or pressure tests, surface injection equipment, plugging, etc.)
R - Inspections relating to Reclamation Fund Activity
O - Other - Inspections not related to injection or The Reclamation Fund

D - Drilling
P - Production
I - Injection
C - Combined prod. operations
R - SWD
U - Underground Storage
G - General Operations
F - Facility or location
H - Hunting
O - Other

E - Indication of enforcement action taken in the field (show immediately below the letter U, R or O)

QUARTER HOURS	HOURS	FACILITY	CLASSIFICATION	DESCRIPTION
------------------	-------	----------	----------------	-------------

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Eddie W. Brown

1 Well - Eunice Area Amoco - Owens B #3 To P & A
Pull out of hole with mill and collars. - Tie on to establish pump-in rate to squeeze and leave casing full of cement. Pump 1000# Class C at 2 BPM/600#. Pump all cement, leave casing full end of job, instant shut-in pressure 300#. Will cut off head and install plate below ground as per ranchers request.

Other 8

D - Drilling
P - Production
I - Injection
C - Combined prod. & operations
N - SWD
U - Underground Storage
G - General Operations
F - Facility or local
H - Hauling
O - Other

NEW MEXICO OIL CONSERVATION COMMISSION
DAILY FIELD TRIP REPORT
DISTRICT I

NAME Eddie W. Seay DATE 1/18/88 MILES 40
DEPARTURE 7 AM RETURN 11 AM CAR NO. 7360

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature Eddie W. Seay

INSPECTION	CLASSIFICATION	FACILITY	HOURS	QUARTER HOURS	
P	O	P	4		<p>1 Well - Eunice Area Amoco - Owens B #3 To witness cut off of head, casing standing full of cement, weld plates with valve on top. O.K.</p>
<div style="display: flex; justify-content: space-between;"> <div> <p><u>Mileage</u></p> <p>UIC _____</p> <p>RFA _____</p> <p>Other <u>40</u></p> </div> <div> <p><u>Per Diem</u></p> <p>UIC _____</p> <p>RFA _____</p> <p>Other <u>--</u></p> </div> <div> <p><u>Hours</u></p> <p>UIC _____</p> <p>RFA _____</p> <p>Other <u>4</u></p> </div> </div>					

TYPE INSPECTION PERFORMED

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P - Plugging
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T - Well Test
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INSPECTION CLASSIFICATION

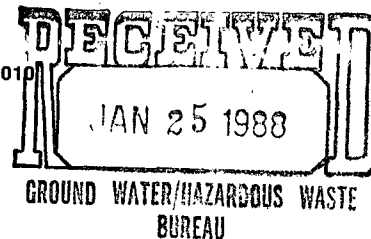
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R - Inspections relating to Reclamation Fund Activity
O - Other - Inspections not related to injection or The Reclamation Fund
E - Indication ~~some form of~~ enforcement action taken in the field (show immediately below the letter U, R or O)

NATURE OF SPECIFIC OR FACILITY INSPECTED

D - Drilling
P - Production
I - Injection
C - Combined prod. operations
B - SWD
U - Underground Stor
G - General Operatio
F - Facility or loca
M - Mining
O - Other



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010



January 20, 1988

VIA CERTIFIED MAIL: P 713 502 728

John Parker, Water Resource Specialist
Ground Water Section
State of New Mexico
Environmental Improvement Division
P.O. Box 968, Runnels Building
Santa Fe, NM 87504-0968

SUBJECT: Eunice Brine Station - Eunice, New Mexico

Dear Mr. Parker:

The enclosed mechanical integrity test dated January 12, 1988, is provided in response to your recent request.

Please do not hesitate to contact me if additional information is needed.

Sincerely,

UNICHEM INTERNATIONAL INC.

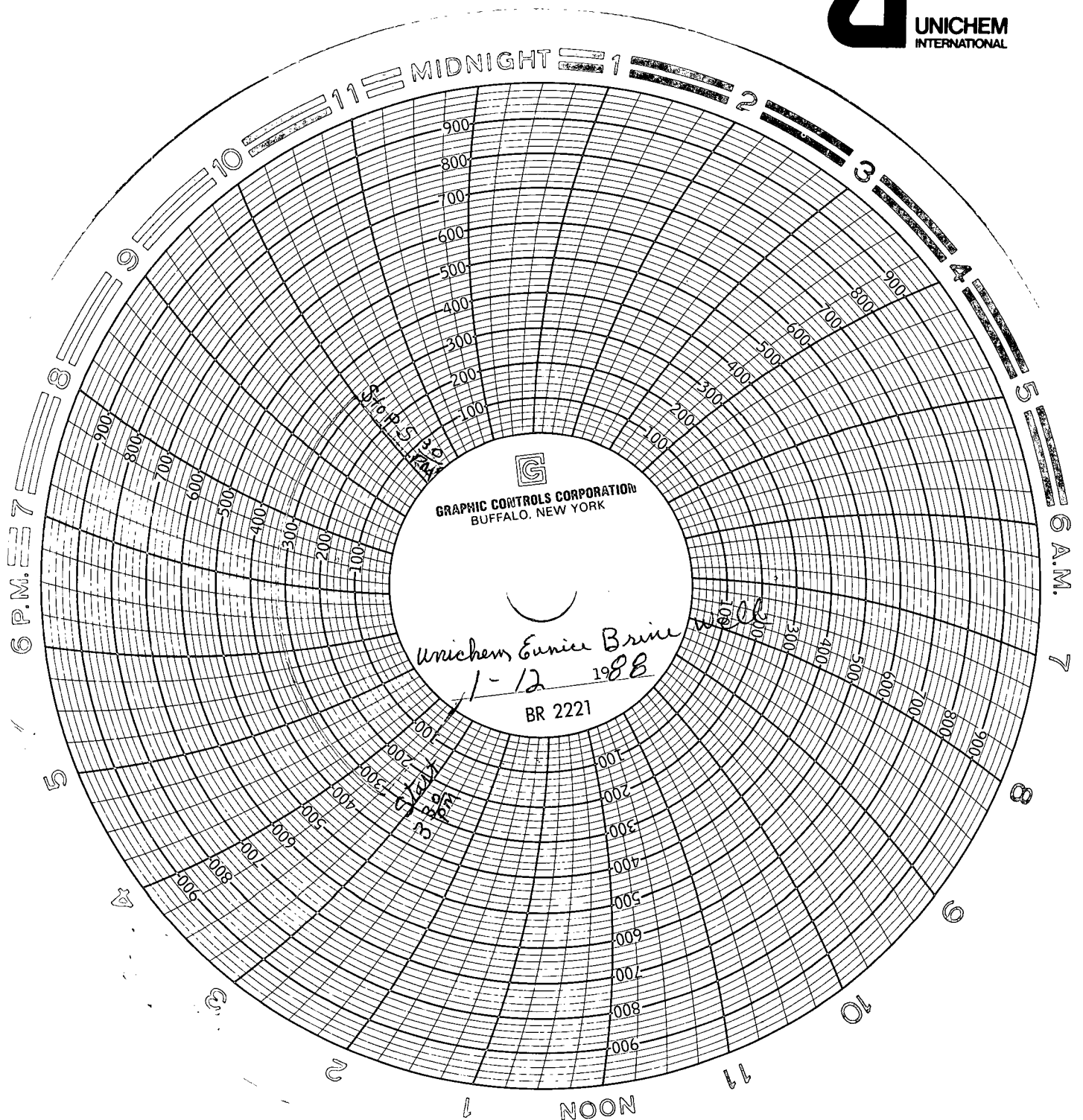
Wayne Price
Wayne Price
Staff Engineer

LWP:mms

Enclosure

cc: Richard Brakey

UNICHEM INTERNATIONAL INC.



MECHANICAL INTEGRITY TEST - JANUARY 12, 1988
EUNICE BRINE STATION
EUNICE, NEW MEXICO

MONITORING AND REPORTING FORM

ALL BLANKS MUST BE COMPLETED.

CHECK ALL APPLICABLE BOXES

DISCHARGE PLAN NUMBER: 369

ORIGINAL DP:

ORIG. DP PEND. APPROV:

RENEWAL: X

SIC NUMBER:

RENEWAL PEND:

MODIFICATION: X

MODIFICATION PENDING:

NAME OF FACILITY: Unichem Eunice Brine Station

LOCATION OF FACILITY: 500 block of Avenue G, Eunice

ALTERNATE OR PAST NAME OF FACILITY: Rowland Trucking, Pioneer Water Company

CITY OR CLOSEST TOWN: Eunice USGS QUAD: Eunice, N.M. (T-71)

COUNTY: Lea TWP: 21S RGE: 37E SEC: 34

CONTACT PERSON: Price, Wayne TITLE: Staff Engineer
LAST NAME FIRST NAME

ADDRESS OF CONTACT PERSON: P.O. Box 1499/Hobbs, New Mexico 88240

TELEPHONE: (505) 393-7751

TYPE OF FACILITY: brine manufacture and sale

MEANS OF DISCHARGE (LAGOON, LEACH FIELD, OTHER -SPECIFY):

injection well, steel tanks for storage, lined emergency pond.

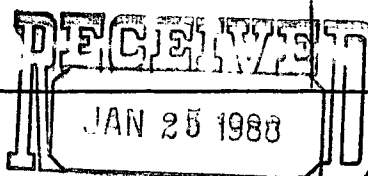
REVIEWER: (CURRENT) Morgan, Paige
LAST NAME FIRST NAME

DATE APPROVED: 1/10/86 DATE OF EXPIRATION: 1/10/91

MONITORING REQ: (COMMENT, IF NECESSARY, ON-BACK)

SAMPLING SITE OR ID	STORET CODE (SAMP. SITE)	PARAMETER(S)	DATE DUE
------------------------	-------------------------------	--------------	----------

Injection well	8,687,500 gallons 9,752,232 gallons	water injected, brine produced	12/31
Injection well		cement bond log and cement evaluation tool	condition of renewal



FIGURES FOR 1987

GROUND WATER/HAZARDOUS WASTE
- BUREAU

SAMPLING SITE
OR ID

STORE CODE
(SAMP. SITE)

PARAMETER(S)

DATE DUE

COMMENTS:

PRE - 1977 DISCHARGER YES NO
 X _____

YES NO

OTHER APPLICABLE PERMITS:

RCRA _____ X
RADIOACTIVE MAT. _____ X
NPDES _____ X
UST _____ X

FOR EID USE ONLY

STATUS OF DP:

ACTIVE: X
WITHDRAWN: _____
EXPIRED, NOT RENEWED: _____
INACTIVE: _____
NOT YET APPROVED: _____

SEND REPORTS TO:

GROUND WATER SECTION
EID: GROUND WATER/HAZARDOUS WASTE BUREAU
P.O. BOX 968
SANTA FE, NM 87504-0968

Kevin

1/8/88

Wayne Price w/ [unclear]

Ref- Enrica. Price will run
a mechanical integrity test on

on 1/10/88. It appears
that Amoco has repaired
gas well.

1/7/88

Wayne Price / Unisken

8:52 AM

RF: Eunice Brine Station

393-7751

Informed him of the complaint
of brine migrating to gas well
EID suggests get volumes injected +
produced into EID MTR Requirement
- Also do Mass Balance
ie. $IN \pm Storage = Out$
- Carry Out Pressure Test

Wayne stated he would begin
investigation immediately

And would call back later today
regarding brine leak

1/7/88

9:20 AM Paul YBarbo / Amoco Odessa TX

Travis Lester - Rowland Trucking

9:30 AM

Wayne Price

Told him Amoco talked to
Travis Lester of Rowland

1/7/88

Paul YBARBO / AMOCO Odessa Tx
RE: Problem w/ Brine Well

915
368-2222

and gas well 600 ft away
towards the West
May ^{have been} exceeding formation pressure

started 12/24/87 Our gas well is receiving brine at
200 bbls/hour in 4 days + 100 bbls/hour
end 12/28/87 then ↑ 180 lbs/hour

* Lea County T21S R37E Sec 34 Unit JOK
Unicheck Eunice

Rowland Trucking - Unicheck International

salt at 1200 ft to 2200 ft
was told 900 - 1500 lbs injection pressure

Dave Blazer 713-556-2656
Houston Tx

Complaints → have brine migrating up our
gas well between casing & hole. Brine
station operating pressure is extremely
high causing flow to our well at up
hole. We have spent > \$65,000 dollars
cementing and don't feel it will change
unless brine operator pressure reduced

BRINE STATION INSPECTION FORM

DATE 12/2 1987
 FACILITY Unishen Eunice
 FACILITY REP ON SITE None

EID INSPECTOR Lambert/Parker
 LOCATION Eunice
 COUNTY LEA

WELL OPERATION

1 well system
 WELL IS INJECTING: THROUGH ANNULUS THROUGH TUBING
 SOURCE OF FRESH WATER Eunice Water
 TRACE INJECTION/PRODUCTION LINES Buried Lines
 WELL HEAD PRESSURE _____ PSIG PUMP PRESSURE _____ PSIG
 LEAKS AROUND WELL OR PUMP No problem

STORAGE AREA

FOR PONDS: Spill Collection System
 GENERAL LINER APPEARANCE OK

AMOUNT OF FREEBOARD OK
 ANY SIGN OF OVERFLOW OR LEAKS _____
 LEAK DETECTION SYSTEM FLUIDS DRY

FOR TANKS:
 GENERAL APPEARANCE Looks Good
 LABELED PLAINLY YES NO can tell by piping
 BERMED TO PREVENT RUNOFF YES NO
 CHECK CONTENTS TO ASSURE PROPER FLUID/LABLE MATCH _____

NUMBER OF TANKS FOR BRINE 3 FRESH WATER 1 E

LOADING AREA

PROPERLY GRADED AND BERMED TO CONTAIN SPILLAGE ✓ YES — NO
 ANY EVIDENCE OF RECENT SPILLAGE ✓ YES — NO
 DOES FACILITY HAVE A SPILL COLLECTION SYSTEM ✓ YES — NO
 ANY EVIDENCE OF OIL SPILLING/DUMPING ✓ YES — NO

MONITORING WELLS

Suggest install MW for collection system
 DEPTH _____ FT STATIC WATER LEVEL _____ FT BELOW CASING
 SAMPLED THIS VISIT YES NO TEMP _____ Ec _____

COMMENTS Suggest frequent cleaning of spill collection system to prevent produced water from degrading liner system is for brine spillage
any produced water must be removed immediately
Some brine spillage/produced water may be leaving property around collection system

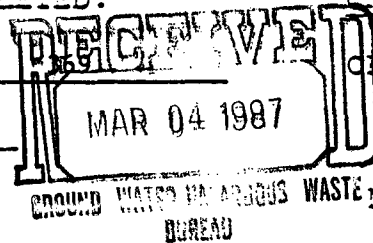
MONITORING AND REPORTING FORM

ALL BLANKS MUST BE COMPLETED.

CHECK ALL APPLICABLE BOXES

DISCHARGE PLAN NUMBER: _____

SIC NUMBER: _____



ORIGINAL DP: _____
 ORIG. DP PEND. APPROV: _____
 RENEWAL: ☒ X
 RENEWAL PEND: _____
 MODIFICATION: ☒ X
 MODIFICATION PENDING: _____

NAME OF FACILITY: Unichem Eunice Brine Station

LOCATION OF FACILITY: 500 block of Avenue G, Eunice

ALTERNATE OR PAST NAME OF FACILITY: Rowland Trucking, Pioneer Water Company

CITY OR CLOSEST TOWN: Eunice USGS QUAD: Eunice, N.M. (T-71)

COUNTY: Lea TWP: 21S RGE: 37E SEC: 34

CONTACT PERSON: Price, Wayne TITLE: Staff Engineer
 LAST NAME FIRST NAME

ADDRESS OF CONTACT PERSON: P.O. Box 1499/Hobbs, New Mexico 88240

TELEPHONE: (505) 393-7751

TYPE OF FACILITY: brine manufacture and sale

MEANS OF DISCHARGE (LAGOON, LEACH FIELD, OTHER -SPECIFY) : _____

injection well, steel tanks for storage, lined emergency pond

REVIEWER: (CURRENT) Morgan, Paige
 LAST NAME FIRST NAME

DATE APPROVED: 1/10/86 DATE OF EXPIRATION: 1/10/91

MONITORING REQ: (COMMENT, IF NECESSARY, ON BACK)

SAMPLING SITE STORET CODE PARAMETER(S) DATE DUE
 OR ID (SAMP. SITE)

Injection well	8,577,200 gallons 8,290,506 gallons	water injected, brine produced	12/31
Injection well		cement bond log and cement evaluation tool	condition of renewal

SAMPLING SITE
OR ID

STORET CODE
(SAMP. SITE)

PARAMETER(S)

DATE DUE

COMMENTS:

PRE - 1977 DISCHARGER YES NO
 X _____

YES NO

OTHER APPLICABLE PERMITS:

RCRA
RADIOACTIVE MAT.
NEDES
UST

X
X
X
X

FOR EID USE ONLY

STATUS OF DE:

ACTIVE: X
WITHDRAWN: _____
EXPIRED, NOT RENEWED: _____
INACTIVE: _____
NOT YET APPROVED: _____

SEND REPORTS TO:

GROUND WATER SECTION
EID: GROUND WATER/HAZARDOUS WASTE BUREAU
P.O. BOX 968
SANTA FE, NM 87504-0968

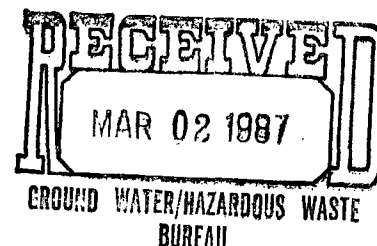


Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

February 27, 1987

VIA CERTIFIED MAIL: P169568904

Mr. Gerard Koschal, Geologist
Ground Water/Hazardous Waste Bureau
Environmental Improvement Division
P.O. Box 968 - Runnels Building
1190 St. Francis Drive
Santa Fe, NM 87504-0968



Dear Gerry,

SUBJECT: EUNICE BRINE STATION

I received your telephone message concerning the report that is due for the Eunice Brine Station. Please note that we are presently gathering this information and will have all reporting requirements in your office no later than 45 days from this date.

If you have any questions, please do not hesitate to contact me.

Sincerely,

UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script, appearing to read 'Wayne Price'.

Wayne Price
Staff Engineer

WP:mms

cc: Kevin Lambert, E.I.D.
Travis Lester, Rowland Trucking

UNICHEM INTERNATIONAL INC.

BRINE STATION INSPECTION FORM

DATE 12/10 1986 EID INSPECTOR Lambert, Koschal,
 FACILITY Unichem Eunice LOCATION Eunice
 FACILITY REP ON SITE None Available COUNTY LEA
DP-369

WELL OPERATION

→ Either Way
 WELL IS INJECTING: THROUGH ANNULUS THROUGH TUBING
 SOURCE OF FRESH WATER City of Eunice
 TRACE INJECTION/PRODUCTION LINES Buried Lines
 WELL HEAD PRESSURE _____ PSIG PUMP PRESSURE 260 PSIG
 LEAKS AROUND WELL OR PUMP None

STORAGE AREA

FOR PONDS:
 GENERAL LINER APPEARANCE Hypaline Lined Good Shape
 AMOUNT OF FREEBOARD ~ 2 ft
 ANY SIGN OF OVERFLOW OR LEAKS None
 LEAK DETECTION SYSTEM _____ FLUIDS _____ DRY

FOR TANKS:
 GENERAL APPEARANCE Good Shape
 LABELED PLAINLY _____ YES X NO CAN tell difference
 BERMED TO PREVENT RUNOFF X YES _____ NO
 CHECK CONTENTS TO ASSURE PROPER FLUID/LABLE MATCH _____

NUMBER OF TANKS FOR 4 BRINE 3 FRESH WATER 1

LOADING AREA

PROPERLY GRADED AND BERMED TO CONTAIN SPILLAGE X YES _____ NO
 ANY EVIDENCE OF RECENT SPILLAGE _____ YES X NO
 DOES FACILITY HAVE A SPILL COLLECTION SYSTEM X YES _____ NO
 ANY EVIDENCE OF OIL SPILLING/DUMPING _____ YES X NO

MONITORING WELLS

DEPTH _____ FT STATIC WATER LEVEL _____ FT BELOW CASING
 SAMPLED THIS VISIT _____ YES _____ NO TEMP _____ Ec _____

COMMENTS Overall Facility is in good shape

No. of Samples	Ion
	Na
	K
	Ca
	Mg
	Cl
	HCO3
	CO3
	SO4
	TDS
////	
	NO3+ NO2
	NH3
	kjeld N
////	
	As
	Ba
	Cd
	CN
	Cr
	F
	Pb
	Hg
	Se
	Ag
	U
	V
	Ra 226
	Ra 228
////	
	Cu
	Fe
	Mn
	Phenols
	Zn
////	
	Al
	B
	Co
	Mo
	Ni
////	
	pH
	Conduct.

FIELD TRIP REPORT
GROUND WATER SECTION

SLD USER CODES
Ground Water: 59300
NO₃, HC, & Toxics: 59600
UIC: 59500

County LEA

FACILITY VISITED
Name of Facility: EUNICE UNICHEM BRINE STATION
Location: EUNICE, NM

Discharge Plan Number: DP-
Type of Operation: BRINE WELL

ENVIRONMENTAL IMPROVEMENT DIVISION FIELD VISIT
EID Inspector(s): SARS/BAKER
Date of Inspection or Visit: 4/11/86
Discharger's Representative Present During EID Visit:
Name: NONE - SPOT CHECK
Title or Position:

- Purpose of Visit:
- a. Evaluation of Proposed Discharge Plan ☒
 - b. Compliance Inspection of Discharge with Approved Plan ☒
 - c. Other (specify) _____

Inspection Activities During Field Visit:

- a. Inspection of Facilities or Construction (specify) _____

- b. Sampling of Effluents (give sampling locations) _____

- c. Sampling of Ground Water (give names or locations of wells) _____

- d. Evaluation of geology, soils, water levels or other physical characteristics of the location (specify) _____

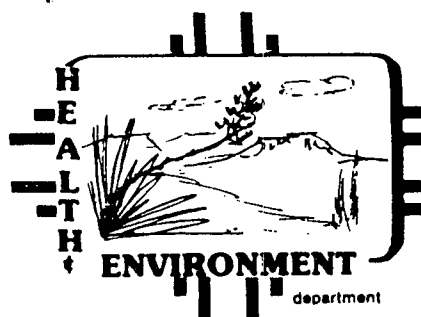
- e. Other (specify)
BAKER & I LOOKED AROUND, UNICHEM HAS INSTALLED A HYPALON LINED SPILL PIT APPROXIMATELY 16' DEEP. THE PIT HAD ~ 8' OF FREEBOARD.
Observations and Information Obtained during the Visit:
THE LOADING AREA WAS PROPERLY SLOPED AND MAINTAINED.

ACTION REQUIRED

NONE - SURFACE FACILITIES IN COMPLIANCE WITH REGS.

TONY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 10, 1986

Richard Brakey, Vice-president
Unichem International
PO Box 1499
Hobbs, NM 88240

Re: Approval of Discharge Plan DP-369 amendment and renewal.

Dear Mr. Brakey:

The amendment and renewal of discharge plan DP-369 for the Unichem Eunice brine station, located in the NW1/4 SE 1/4 of Section 34, T21S R37E, in the 500 block of Avenue G in the town of Eunice, Lea County, New Mexico, is hereby approved. The approved amendment and renewal of the discharge plan consists of the following:

1. the "Eunice Brine Station Upgrade", submitted to EID on March 25, 1985, consisting of general plans for the improvement of surface facilities at the brine station;
2. the materials dated July 12, 1985, completing the information required in a discharge plan;
3. the chart from a pressure test of the brine well conducted on August 22, 1985;
4. emergency pit liner specifications, a contingency plan and plugging plan, and sundry details of the discharge plan; and
5. Wayne Price's letter to EID of December 31, 1985, presenting documentation that the pit had been appropriately lined.

The discharge plan amendment was submitted pursuant to Section 3-102.E of the New Mexico Water Quality Control Commission regulations. It is approved pursuant to Section 3-109. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

PS Form 3800, Feb. 1982

★ U.S.G.P.O. 1983-403-517

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

1 (See Reverse)

Send to	Richard Brokey, D.P.		
Street and No.	P.O. Box 1479		
P.O., State and ZIP Code	Shaks, W. Va.		
Postage	88¢ ¹ / ₄		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to whom and Date Delivered			
Return receipt showing to whom, Date, and Address of Delivery			
TOTAL Postage and Fees	\$		
Postmark or Date			

MONITORING AND REPORTING FORM

ALL BLANKS MUST BE COMPLETED.

CHECK ALL APPLICABLE BOXES

DISCHARGE PLAN NUMBER: 369

ORIGINAL DP:

ORIG. DP PEND. APPROV:

SIC NUMBER:

RENEWAL: X

RENEWAL PEND:

MODIFICATION: X

MODIFICATION PENDING:

NAME OF FACILITY: Unichem Eunice Brine Station

LOCATION OF FACILITY: 500 block of Avenue G, Eunice

ALTERNATE OR PAST NAME OF FACILITY: Rowland Trucking, Pioneer Water Company

CITY OR CLOSEST TOWN: Eunice USGS QUAD: Eunice, N.M. (T-71)

COUNTY: Lea TWP: 21S RGE: 37E SEC: 34

CONTACT PERSON: Price, Wayne TITLE: Staff Engineer
LAST NAME FIRST NAME

ADDRESS OF CONTACT PERSON: P.O. Box 1499/Hobbs, New Mexico 88240

TELEPHONE: (505) 393-7751

TYPE OF FACILITY: brine manufacture and sale

MEANS OF DISCHARGE (LAGOON, LEACH FIELD, OTHER -SPECIFY):

injection well, steel tanks for storage, lined emergency pond.

REVIEWER: (CURRENT) Morgan, Paige
LAST NAME FIRST NAME

DATE APPROVED: 1/10/86 DATE OF EXPIRATION: 1/10/91

MONITORING REQ: (COMMENT, IF NECESSARY, ON BACK)

SAMPLING SITE OR ID	STORET CODE (SAMP. SITE)	PARAMETER(S)	DATE DUE
------------------------	-------------------------------	--------------	----------

Injection well		water injected, brine produced	12/31
Injection well		cement bond log and cement evaluation tool	condition of renewal

SAMPLING SITE
OR ID

SECRET CODE
(SAMP. SITE)

PARAMETER(S)

DATE DUE

COMMENTS:

PRE - 1977 DISCHARGER YES NO
 X

 YES NO

OTHER APPLICABLE PERMITS:

RCRA	<u> </u>	<u> X </u>
RADIOACTIVE MAT.	<u> </u>	<u> X </u>
NPDES	<u> </u>	<u> X </u>
UST	<u> </u>	<u> X </u>

FOR EID USE ONLY

STATUS OF DE:

ACTIVE: X
WITHDRAWN:
EXPIRED, NOT RENEWED:
INACTIVE:
NOT YET APPROVED:

SEND REPORTS TO:

GROUND WATER SECTION
EID: GROUND WATER/HAZARDOUS WASTE BUREAU
P.O. BOX 968
SANTA FE, NM 87504-0968

E I D B U C K S L I P

CHECK ONE:

☒ LETTER TO Richard Brakers
for Bureau Chief's signature

☐ MEMO TO _____

☐ PRESS RELEASE

☐ OTHER

SUBJECT: Amendment/renewal approval

DRAFTED BY: Larry Morgan (Date) _____

CONCURRENCES:

NAME:	INITIAL	DATE REC'D	DATE APPROVED
<u>Don Conrad</u> Sect. Mgr.	<u>RC</u>	<u>1/8/86</u>	<u>1/8/86</u>
<u>Ernie DeBuck</u> Bur. Chief	<u>ED</u>	<u>1/9/86</u>	<u>1/9/86</u>
<u>Richard Holland</u> Dep. Dir.	_____	_____	_____
<u>Denise Fort</u> Director	_____	_____	_____

FINAL DECISION NEEDED BY 1/10/85 BECAUSE date of
(date) letter

COMMENTS BY DRAFTER OR REVIEWER(S):

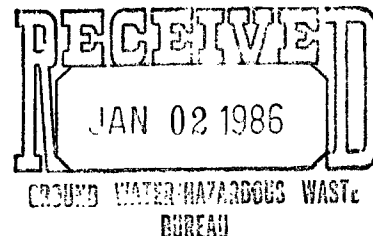
We requested this Amendment for an
AD-approved plan because it was a very
sloppy operation. They have made
substantial improvements and have
been reasonably cooperative in doing so.



VIA CERTIFIED MAIL

Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

December 31, 1985



Ms. Paige Grant Morgan
Water Resource Specialist
State of New Mexico
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

RE: Eunice Brine Well

Dear Paige:

In response to your letter of December 11, 1985, requesting documentation that the pond liner has been properly installed, I am submitting two recent photographs of the lined pond. This work was completed by Midessa Industrial Vinyl Company the week of December 23, 1985. For verification of this information, please contact Mr. Ruben Valesquez, Midessa Industrial Vinyl Company, 5203 W. 42nd St., Odessa, Texas.

Paige, as we have now complied with the pond lining requirement, we respectfully request that you approve our discharge plan for Unichem's Eunice brine facility.

Sincerely,

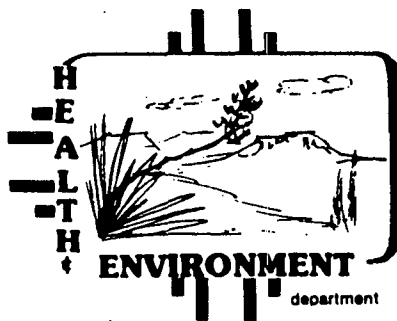
UNICHEM INTERNATIONAL INC.

Wayne Price

Wayne Price
Staff Engineer

WP/sar
Enclosures

UNICHEM INTERNATIONAL INC.



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

Wayne Price, Staff Engineer
Unichem International
PO Box 1499
Hobbs, NM 88240

December 11, 1985

Dear Mr. Price:

With reference to your letters of December 2nd:

Your response to my August 9th comments on the discharge plan amendment for Unichem's Eunice brine facility, is generally adequate. I called Richard Ward of B.F. Goodrich (614-373-6611) to ask about the applicability of the Flexseal liner to your purpose. He said that the liner is well suited to storage of brine but that floating hydrocarbons (which are often spilled along with brine when a truck is overloaded) will cause the liner to soften and become susceptible to mechanical damage when, for instance, you drop a hose in the pond to pump out the fluids it contains. Thus Unichem is required to inspect the pond daily and remove any petroleum that may be present. If petroleum or petroleum products are visible in the pond during two EID inspections, Unichem may be subject to fines for violating one of the terms of its discharge plan.

I am prepared to recommend approval of the Unichem Eunice discharge plan amendment as soon as I receive documentation that the pond liner was properly installed.

With regard to your request for an extension of the deadline by which you are required to submit a discharge plan amendment for Unichem's Carlsbad facility: I have recommended that your request be honored if you will submit plans for an investigation of the extent of soil and ground water contamination at the site by January 18, 1986, 60 days from the date of my first letter requiring a modification. The balance of the discharge plan must be submitted by March 18, 1986, 120 days from the date of that first letter. Any delay past that date will be cause to seek penalties against Unichem for violation of the Water Quality Act.

Sincerely,

Paige Grant Morgan
Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:pgm

cc: John Guinn, EID District IV Manager



VIA CERTIFIED MAIL

Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

December 2, 1985

Paige Grant Morgan
Water Resource Specialist
State of New Mexico
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

RE: Third Submittal of Amendment of Discharge Plan DP-369
For the Eunice Brine Station

Dear Paige:

Per your request, I am enclosing a list of answers and attachments in response to the questions and comments in your letter of August 9, 1985.

Please note per our telephone conversation on November 27, 1985, we should finish this amendment by installing the emergency catchment liner by December 25, 1985.

We will notify you as soon as the liner is in place.

Sincerely,

UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script that reads 'Wayne Price'.

Wayne Price
Staff Engineer

WP/sar
Enclosures

cc: Jim Britton
Richard Brakey
Charlie Root

UNICHEM INTERNATIONAL INC.



THIRD SUBMITTAL OF AMENDMENT
OF DISCHARGE PLAN DP-369
FOR EUNICE BRINE STATION

1) II.A.3.

We will be using a BF Goodrich flexseal 30HP6 polyester reinforced lining. Product bulletin attached (Exhibit 1)

2) Noted

3) Noted

4) Noted and agree

5) Noted and agree

6) Noted and agree

7) IV.A.10.b.

Monitoring of injection pressure during operation of the well would probably be the best way to detect a drop in pressure that would suggest a casing leak. If substantial contamination of ground water has occurred as a result of a leak from the brine well or from surface facilities at the Eunice station, the best approach to restoring ground water quality would probably be to install a well perforated in the contaminated zone and pump out the contaminated fluid either for treatment and reinjection or for disposal, depending upon the judgment of the State Engineer.

We agree to the above.

8. IV.B.1. Please specify the plugging procedure you will use. At a minimum, the cavity should be left full of brine and the casing plugged from bottom to top with cement.

We agree to the minimum; the cavity should be left full of brine and the casing plugged from bottom to top with cement.

Richard Ward

614-373-6611

Brine not a problem

floating HC a problem -
Cores will lose strength
& be susceptible to
mechanical damage.

1. Scope

This specification describes BFGoodrich Flexseal® 36HP6-PW, a polyester reinforced Hypalon® lining of a nominal 36 mil thickness.

2. Liner Requirements:**2.1 Material Description:**

- 2.1.1** The liner shall be a three ply construction. Two of the plies being Flexseal sheeting having Hypalon® 45 rubber in excess of 45% by weight of the total formulation and compounded to meet the requirements of this specification.

- 2.1.2** The third ply shall be a 6X6, 1000 denier polyester fabric totally encapsulated between the Flexseal sheets with 1/8" to 3/4" of the unsupported sheet extending beyond the fabric.

- 2.1.3** The liner shall be so produced so as to be free of holes, undispersed raw materials, blisters or any sign of delamination. Any such defect shall be repaired using the elastomer sheeting and the manufacturer's approved adhesive.

Flexseal® Reinforced Potable Water Grade Liner

2.2 Factory Fabrication of Blankets:

- 2.2.1** The finished roll goods shall be factory fabricated into panels up to 20,000 sq. ft. in size in order to reduce the amount of field seaming required. All seams shall be heat welded and provide a film tearing bond.

2.3 Field Seaming:

- 2.3.1** All field seaming will be performed using only the manufacturer's approved adhesives and application directions. The minimum width of field seams shall be 4 inches.
- 2.3.2** All field seams upon completion shall be visually inspected and any loose or questionable area repaired.

2.4 Physical Properties

The Flexseal liner shall conform to the requirements outlined below.

3. Warranty of Materials:

The liner purchaser shall be provided with a written limited warranty from the manufacturer, the degree and limitations of which shall be described in the warranty.

36HP6-PW

Physical Property	Test Method	Requirement	Typical Value
I. 30 Mil Unsupported Sheet			
Tensile Strength	ASTM D412	1000 psi, min.	1200 psi
Elongation	ASTM D412	300%, min.	500%
Brittleness	ASTM D746	-45°F, no failure	-45°F, no failure
Water Absorption	ASTM D471 (7 days at 70°F)	5.0%, max.	3.5%
Volatility	ASTM D1203 Method A	0.5%, max.	0.1%
Ozone Resistance	ASTM D1149 (7 days at 300 pphm at 104°F with 20% strain)	No cracks at 7 times magnification	No cracks
II. Reinforced Membrane			
Thickness	ASTM D751	0.036 ± .003 inch	0.036 inch
Grab Tensile	ASTM D751	130 lb., min.	150 lb.
Tongue Tear	ASTM D751 (8"x8" test specimens)	30 lb., min.	40 lb.
Puncture Resistance	FTMS 101B Method 2031	130 lb., min.	170 lb.
Hydrostatic Resistance	ASTM D751 Method A	160 psi, min.	175 psi
Low Temperature Bend	ASTM D2136 (1/8" Mandrel - 4 hrs.)	-40°F, no cracks	-45°F no cracks
Ply Adhesion	ASTM D413	10 lb./inch width or film tearing bond	14 lb./inch width
Dimensional Stability	ASTM D1204 (212°F - 1 hr.)	± 2%, max.	- 1.8%

*DuPont Trademark

The data are based on tests believed to be reliable. However, these are laboratory tests only and therefore may not reflect actual conditions. The data is for your information and no warranty, express or implied, is made as we cannot guarantee the results of operations not under direct BFGoodrich control. The information in this publication is not intended as permission or recommendation to practice a patented invention without permission of the patent owner.



VIA CERTIFIED MAIL

Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

December 2, 1985

Paige Grant Morgan
Water Resource Specialist
State of New Mexico
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

RE: Eunice Brine Well

Dear Paige:

In your November 20, 1985 letter, addressed to Richard Brakey, you refer to the EID witnessing the August 22 pressure test. We are presently renegotiating a contract with a pit lining company to line the emergency catch basin at the Eunice brine well. We should have a proposal by the week of December 2 and should have a liner installed before the Christmas holiday. We will respond to the remaining questions, which should allow our being permitted by January 1, 1986.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

WP/sar

cc: Jim Britton
Richard Brakey
Charlie Root

UNICHEM INTERNATIONAL INC.



VIA CERTIFIED MAIL

Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

December 2, 1985

Paige Grant Morgan
Water Resource Specialist
State of New Mexico
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

Dear Paige:

Please note that we have already responded to your inquiry of October 2,
with our letter of October 9, copy enclosed.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

WP/sar
Enclosure

cc: Jim Britton
Richard Brakey
Charlie Root

UNICHEM INTERNATIONAL INC.



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

October 9, 1985

Paige Grant Morgan
Water Resource Specialist
State of New Mexico
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

Dear Paige:

In response to your letter of October 2, we are currently accepting bids for both liner and dirt construction work on the Eunice brine facility.

On Trucker's No. 1 brine station, a level control device has been installed on the system, and all overflow pipes have been removed.

I will keep you advised of all further developments.

Sincerely,

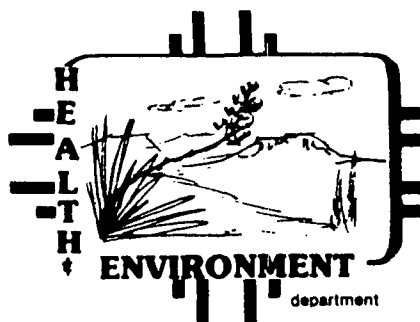
UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script that reads 'Wayne Price'.

Wayne Price
Staff Engineer

WP/sar ✓

UNICHEM INTERNATIONAL INC.



TONEY ANAY...
GOVERNOR

DENISE D. FORT
DIRECTOR

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

Richard Brakey, Vice President
Unichem International
PO Box 1499
Hobbs, NM 88240

November 20, 1985

Re: Unichem (Rowland Trucking) Eunice brine station.

Dear Mr. Brakey:

On August 22, 1985, while witnessing the pressure test conducted on the Unichem Eunice brine well, I received the impression from Wayne Price, your Staff Engineer, that the lining of the emergency pond and the balance of the discharge plan would be completed in short order. However, I revisited the station on November 11th and found that the pit was still unlined and contained fluid, which I assumed to be rainwater.

Even rainwater ponded in the pit is of concern, since it provides the head to drive existing contamination toward the water table. This situation is overdue for resolution: your firm was requested to provide a modification of the discharge plan for this facility on January 18, 1985, and as of today, I have still received no response to my August 9th letter to Wayne Price containing comments on the proposed modification.

Please reply to my August 9th letter on or before December 20, 1985. If I receive no response or an inadequate response from you as of that date, I will recommend to the Director that the approved discharge plan DP-369 under which you are operating the Eunice facility, be terminated under the terms of Section 3-109.E.2 of the Water Quality Control Commission regulations. You are reminded that it is illegal to operate without an approved discharge plan.

If you have any questions as to what will constitute an adequate response to my August 9th letter, please contact me at the above address or by phone at 827-2901.

Sincerely,

Paige Grant Morgan
Paige Grant Morgan
Water Resource Specialist

PGM:pgm

cc: Wayne Price, Staff Engineer, Unichem
John Guinn, EID District IV Manager

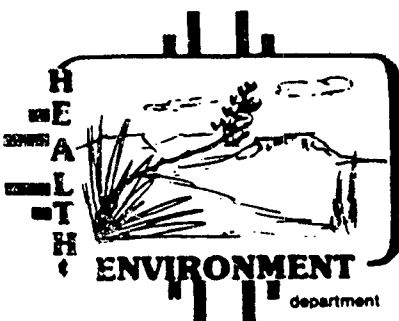
	Na
	K
	Ca
	Mg
	Cl
	HCO3
	CO3
	SO4
	TDS
//////////	//////////
	NO3+ NO2
	NH3
	kjeld N
//////////	//////////
	As
	Ba
	Cd
	CN
	Cr
	F
	Pb
	Hg
	Se
	Ag
	U
	V
	Ra 226
	Ra 228
//////////	//////////
	Cu
	Fe
	Mn
	Phenols
	Zn
//////////	//////////
	Al
	B
	Co
	Mo
	Ni
//////////	//////////
	pH
	Conduct.

County Lea

Letter on pond lining.

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR




STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

October 2, 1985

Wayne Price, Staff Engineer
Unichem International
PO Box 1499
Hobbs, NM 88240


Dear Mr. Price:

This letter is just a brief reminder that our last communication regarding the discharge plan for Unichem's Eunice brine facility was my letter to you of August 9, 1985. I would like to resolve our negotiations regarding the contents of this plan as soon as possible. Please contact me if I can help to clarify the points of my August 9th letter, so that we can finalize the terms of the Eunice station discharge plan.

Also, with regard to my August 28th letter discussing your cleanup of the Trucker's No. 1 brine station: have you installed the necessary pressure release system at the wellhead there, in order to permit you to remove the remaining overflow pipes from two of the brine storage tanks?

I hope to hear from you soon.

Sincerely,

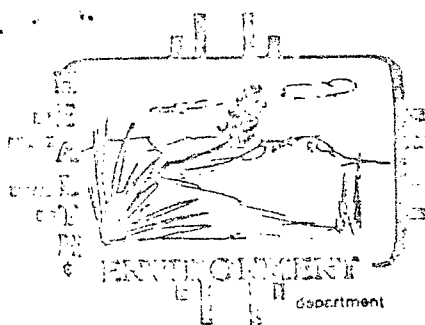

Paige Grant Morgan
Water Resource Specialist

PGM:pgm

cc: John Guinn, EID District IV Manager

VENNY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

August 23, 1985

Wayne Price, Staff Engineer
Unichem International
PO Box 1499
Hobbs, NM 88240

Dear Mr. Price:

Enclosed are three copies of the chart from the pressure test conducted on Unichem's brine well at Eunice. The chart shows that the well and salt cavity hold pressure, giving a good indication that the well is sound. Thank you for making arrangements to conduct the pressure test at a time when Steven Sares and I could be present to witness the results.

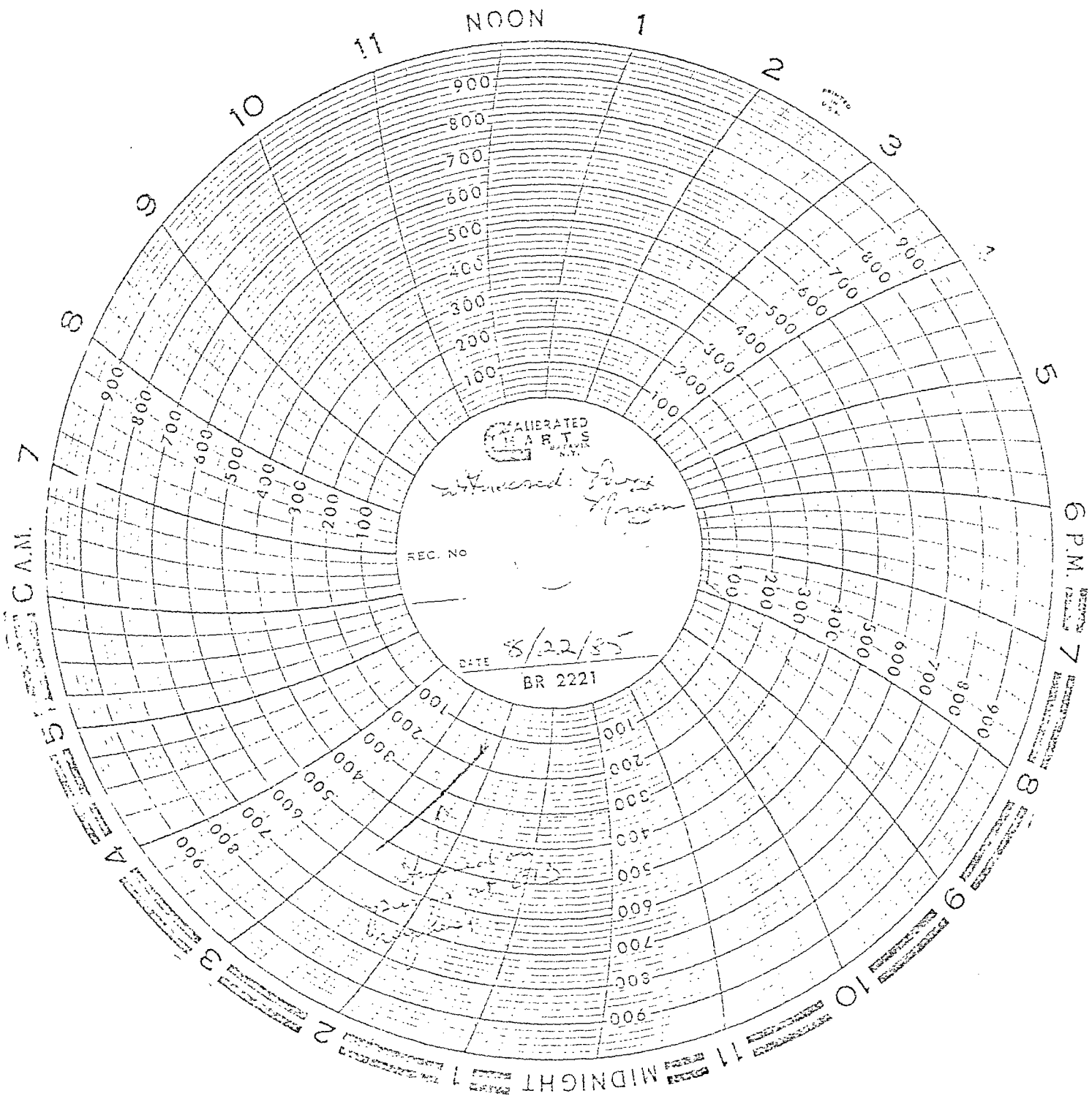
The improvements that Unichem has made at the Eunice brine station are to be commended. I look forward to completing the discharge plan process for this facility.

Sincerely,

Paige Grant Morgan
Paige Grant Morgan
Water Resource Specialist

PGM:pgm

cc: John Guinn, EID District IV Manager
Roelf Ruffner, EID Hobbs



NOON

EXALIBERATED
HARTS
PATENT
N.Y.

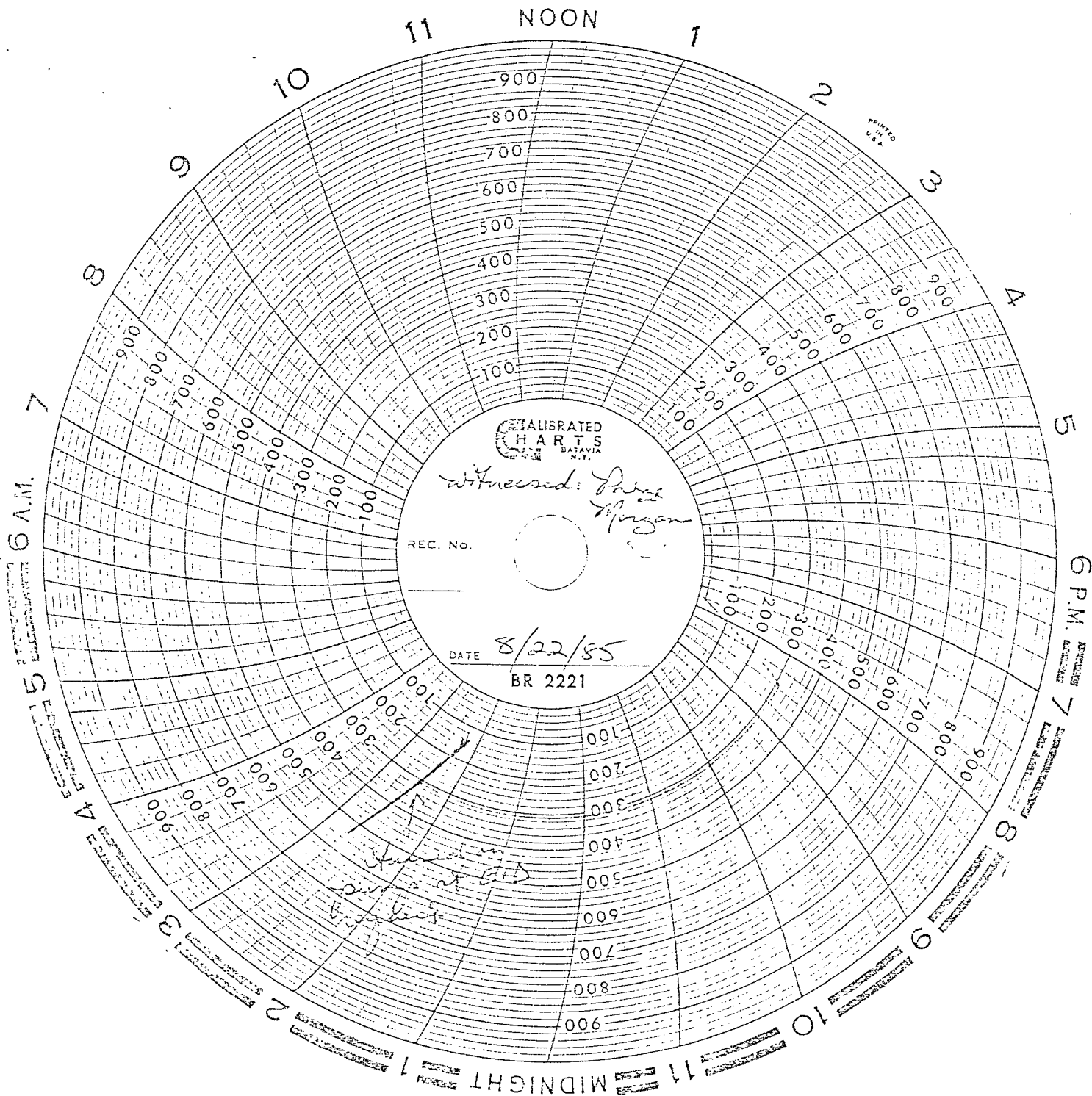
REC. No.

DATE 8/22/55
ER 2221

MIDNIGHT

6 A.M.

6 P.M.



SAMPLES	CON.
	Na
	K
	Ca
	Mg
	Cl
	HCO ₃
	CO ₃
	SO ₄
	TDS
//////////	NO ₃ + NO ₂
	NH ₃
	kjeld N
//////////	As
	Ba
	Cd
	CN
	Cr
	F
	Pb
	Hg
	Se
	Ag
	U
	V
	Ra 226
	Ra 228
//////////	Cu
	Fe
	Mn
	Phenols
	Zn
//////////	Al
	B
	Co
	Mo
	Ni
//////////	pH
	Conduct.

SLD USER CODES

Ground Water: 59300

NO₃, HC, & Toxics: 59600

UIC: 59500

FACILITY VISITED

Name of Facility: *Irishem - Eunice Bruce Station*

Location: Avenue St. Vebd. 5th and 68th E. corner

Discharge Plan Number; DP-369

Type of Operation: *brine refining & sales*

ENVIRONMENTAL IMPROVEMENT DIVISION FIELD VISIT

EID Inspector(s): Patricia Moreau Steve Sares

Date of Inspection or Visit: 8/22/85

Discharger's Representative Present During EID Visit:

Name: Wayne Price, Charley Root, Travis Lester

Title or Position: Engg, Safety Mgr, Fac. lity Mgr.

Purpose of Visit:

- a. Evaluation of Proposed Discharge Plan ✓
- b. Compliance Inspection of Discharge with Approved Plan _____
- c. Other (specify) _____

Inspection Activities During Field Visit:

- a. Inspection of Facilities or Construction (specify)

Inspected major improvements to surface facilities & witnessed satisfactory pressure test on well.

- b. Sampling of Effluents (give sampling locations)

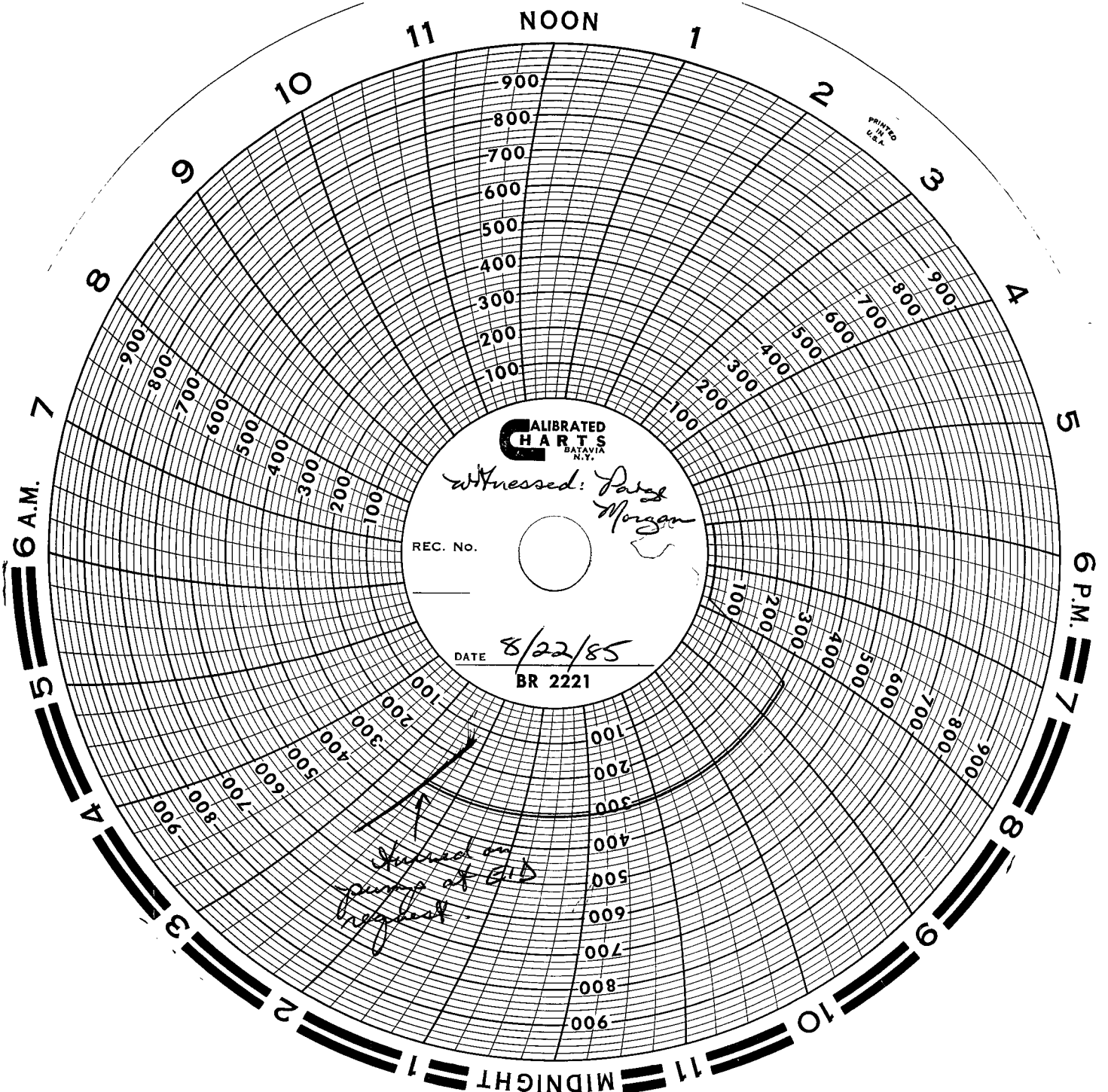
- c. Sampling of Ground Water (give names or locations of wells)

- d. Evaluation of geology, soils, water levels or other physical characteristics of the location (specify)

- e. Other (specify)

Observations and Information Obtained during the Visit:

ACTION REQUIRED





STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 13, 1985

Unichem International Incorporated
P.O. Box 1499
Hobbs, New Mexico 88240

Dear Sir:

Enclosed is a copy of the public notice pertaining to your proposed discharge which was issued by this division pursuant to New Mexico Water Quality Control Commission Regulations, Section 3-108.

If you have any questions, please do not hesitate to contact me at the above address and telephone number (ext. 279).

Sincerely,

Maxine S. Goad

Maxine S. Goad
Program Manager
Ground Water Section

MSG:jba

Enclosure

PS Form 3800, Feb. 1982		★ U.S.G.P.O. 1983-403-517	
Postmark or Date		Sent to Unichem International P.O. Box 1499 Hobbs, NM 88240	
TOTAL Postage and Fees		Postage \$	
		Certified Fee	
		Special Delivery Fee	
		Restricted Delivery Fee	
		Return Receipt Showing to whom and Date Delivered	
		Return receipt showing to whom, Date, and Address of Delivery	

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

P 612 426 533

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968

(505) 984-0020

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 13, 1985

Bob Carter, City Manager
City of Lovington
P.O. Box 1269
Lovington, New Mexico 88260

Dear Mr. Carter:

Enclosed is a copy of the public notice pertaining to your proposed discharge which was issued by this division pursuant to New Mexico Water Quality Control Commission Regulations, Section 3-108.

If you have any questions, please do not hesitate to contact me at the above address and telephone number (ext. 279).

Sincerely,

Maxine S. Goad
Program Manager
Ground Water Section

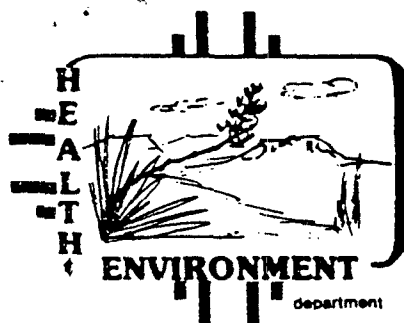
MSG:jba

Enclosure

PS Form 3800, Feb. 1982		★ U.S.G.P.O. 1983-403-517	
Postmark or Date		Sent to Bob Carter	
		Street and No. P.O. Box 1269	
		P.O., State and ZIP Code Lovington, N.M.	
		Postage	\$ 8.20
		Certified Fee	
		Special Delivery Fee	
		Restricted Delivery Fee	
		Return Receipt Showing to whom and Date Delivered	
		Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees			\$

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

P 612 426 534



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

August 13, 1985

Lovington Daily Leader
P.O. Box 1686
Lovington, New Mexico 88260

Dear Sir or Madam:

Please publish the enclosed public notice concerning discharge plan(s) in the classified legal section on or before August 20, 1985.

Send your statement and two (2) copies of the Affidavit of Publication to me at the above address.

Please print only the section(s) highlighted in yellow.

Thank you.

Sincerely,

Maxine S. Goad
Program Manager
Ground Water Section

MSG:jba

Enclosure

STATE OF NEW MEXICO
GOVERNMENT

DENISE D. FORT
DIRECTOR

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 13, 1985

County Commissioners
County of Lea
Lovington, New Mexico 88260

Board of County Commissioners:

Enclosed is a public notice which includes notice of proposed discharge plan(s) for one or more operations located in your county.

If you have any questions, please do not hesitate to contact me at the address and telephone number given above.

Sincerely,

Maxine S. Goad
MAXINE S. GOAD
Program Manager
Ground Water Section

MSG:

Enclosure

PS Form 3800, Feb. 1982

★ U.S.G.P.O. 1983-403-517

Sent to County of Lea County Commissioners Lovington, NM 88260	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

(See Reverse)

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

P 612 426 541

AUGUST 12, 1985

TO BE PUBLISHED ON OR BEFORE AUGUST 20, 1985

PUBLIC NOTICE
NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION

Notice is hereby given that, pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plans have been submitted for approval to the Director of the New Mexico Environmental Improvement Division, P.O. Box 968, Crown Building, Santa Fe, New Mexico 87504-0968; telephone (505) 984-0020.

(DP-308) ALBUQUERQUE PUBLIC SCHOOLS, P.O. Box 25704, Albuquerque, New Mexico 87125 proposes to renew approved discharge plan DP-308 and continue discharging 12,000 gallons of domestic sewage per day from Westgate Elementary School into a septic tank-leach field, located in T10N, R2E, Sec. 34 in Bernalillo County, New Mexico. Albuquerque Public Schools intends to connect the Westgate Elementary School to the city sewer system as soon as city lines are installed and will, at that time, discontinue the use of the temporary septic tank-leach field. The ground water most likely to be affected is at a depth of approximately 150 feet and has total dissolved solids concentration of approximately 300 mg/l.

(DP-21) ANACONDA MINERALS COMPANY, New Mexico Operations, P.O. Box 638, Grants, New Mexico 87020 proposes to renew its previously approved discharge plan (DP-21) allowing for the discharge of 2 million gallons per day of decant water from the solids-separation impoundment into reinforced hypalon-lined evaporation ponds located in Sections 7 and 18, T12N, R10W, and Section 12, T12N, R11W, Cibola County, New Mexico. The ground water below the site is at a depth of approximately 100 feet and has total dissolved solids concentration of approximately 1000 mg/l.

(DP-149) ANACONDA MINERALS COMPANY, New Mexico Operations, P.O. Box 638, Grants, New Mexico 87020 proposes to renew its previously approved discharge plan (DP-149) allowing for the discharge of 60,000 gallons per day of domestic sewage into clay-lined lagoons located in Section 13, T12N, R11W, Cibola County, New Mexico. After aeration in the lagoons, the effluent will either be used as process water or transported to the tailings ponds. The ground water below the site is at a depth of approximately 120 feet and has total dissolved solids content of approximately 1,850 mg/l.

(DP-398) EILEEN ACRES, Mr. James L. Wimberly, Owner, P.O. Box 130, Alto, New Mexico 88312 proposes to discharge treated sewage effluent from up to 204 mobile homes located near La Luz, in Section 33, T15S, R10E, Otero County, New Mexico. Up to 41,310 gallons of aerobically treated domestic sewage will be routed through a sprinkler system to irrigate 5.6 acres of bermuda grass. The ground water most likely to be affected is at a depth of approximately 230 feet and contains approximately 1800 parts per million of total dissolved solids.

(DP-87) CITY OF LOVINGTON, Bob Carter, City Manager, P.O. Box 1269 Lovington, New Mexico 88260 proposes to renew the approved discharge plan for the land application of treated municipal effluent to crop land located in Sections 11, 12, 13 and 14, T16S, R36E, Lea County, New Mexico. The flow has averaged 0.9 MGD and the total nitrogen content has ranged from 5 to 21 mg/l. The ground water most likely to be affected is at a depth of approximately 60 feet with a total dissolved solids content of approximately 350 to 1000 mg/l.

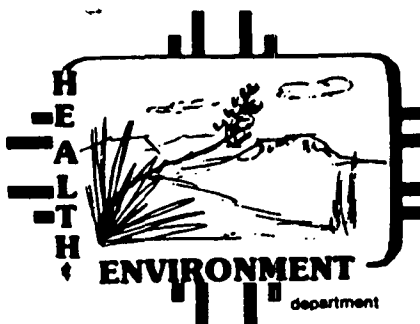
(DP-369) UNICHEM INTERNATIONAL INCORPORATED, P.O. Box 1499, Hobbs, New Mexico 88240 proposes to modify and renew the discharge plan for the brine station operated by their subsidiary, Rowland Trucking Company. The brine station is located in the 500 block of Avenue G in Eunice, Lea County, New Mexico, T21S, R37E, Section 34. Fresh water purchased from the City of Eunice is injected into dry salt beds at a depth of 1260 feet, and brine with an average total dissolved solids (TDS) content of 319,000 mg/l is brought to the surface and stored for sale on demand. Annual brine sales have ranged from 50,000 to over 615,000 barrels. The proposed modification consists mainly of replacing a set of redwood brine storage tanks with steel tanks, replacing all above-ground plumbing, paving and sloping the brine loading area to deliver any spillage to a synthetically-lined emergency catchment pond, and constructing a berm around the brine station to contain any catastrophic spill. The ground water most likely to be affected by this operation is at a depth of approximately 45 feet and has a total dissolved solids concentration of roughly 1000 to 1400 mg/l.

(DP-140) VISTA VERDE MEMORIAL PARK INCORPORATED, David Santillanes, Jr., President, P.O. Box 15158, Rio Rancho, New Mexico 87124 proposes to renew the discharge plan for Vista Verde Memorial Park, Inc. located in Rio Rancho at the corner of Sara Road and Meadowlark Lane, T11N, R3E, Section 23, Sandoval County, New Mexico. The discharge plan allows a maximum of 20,000 to 25,000 gallons per day of aerobically treated sewage effluent, derived from the Rio Rancho sewage treatment facility, to be used to irrigate a three acre blue grass cemetery. The ground water most likely to be affected is at an estimated depth of 280 feet and has a total dissolved solid concentration of less than 500 mg/l.

Any interested person may obtain further information from the Ground Water Section, Ground Water/Hazardous Waste Bureau, EID, and may submit written comments to the Director of the EID at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of EID will allow thirty (30) days after the date of publication of this Notice during which comments may be submitted to her and a public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why the hearing should be held. A hearing will be held if the Director determines that there is significant public interest.

CORRECTION: (DP-392) NASA WHITE SANDS TEST FACILITY, Rob R. Tillett, Manager, P.O. Drawer MM, Las Cruces, New Mexico 88004. In the public notice published on or before August 10, 1985, pertaining to discharge plan DP-392, the name and address were stated incorrectly as U.S. ARMY WHITE SANDS MISSILE RANGE, White Sands, New Mexico 88002.

CORRECTION: (DP-395) WESTGATE SUBDIVISION, Los Alamos County Utilities Department, 901 Trinity Drive, Los Alamos, New Mexico 87544. In the public notice published on or before August 10, 1985, pertaining to discharge plan DP-395, the location of the discharge site should be changed to Section 35, T19N, R5E, (projected).



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

**TONEY ANAYA
GOVERNOR**

**DENISE D. FORT
DIRECTOR**

August 9, 1985

Wayne Price, Staff Engineer
UNICHEM INTERNATIONAL, INC.
PO Box 1499
Hobbs, NM 88240

Re: Second submittal of amendment of Discharge Plan DP-369 for Eunice brine station.

Dear Mr. Price:

Thank you for your submittal of the above-referenced material. EID will soon publish public notice of receipt of the Discharge Plan amendment for the Eunice brine station. The amendment is being viewed simultaneously as an amendment and renewal of the discharge plan for this facility, so that once we agree on its contents and the amendment is approved, Unichem will have a five-year permit for the Eunice station. Otherwise, Unichem would be required to apply to EID for renewed approval in 1987, when the permit granted by OCD expires.

I look forward to visiting the Eunice facility on August 22nd. I hope that the inspection and pressure test conducted at that time, and your response to the following points, will constitute the final stages of negotiation of Unichem's discharge plan for the Eunice facility.

With reference to your July 12th submittal:

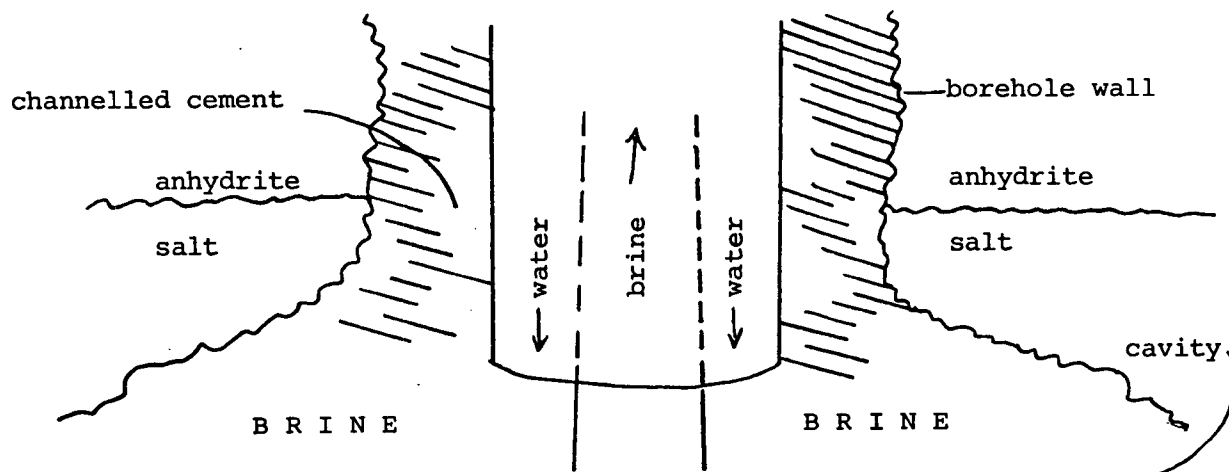
- 1) II.A.3: What will the pond be lined with?
- 2) The materials you have provided on hydrology and geology of the area are sketchy, but will be accepted.
- 3) In conversation, you have explained to me that the berm around the facility is in part to deflect runoff from uphill which otherwise would inundate the brine station. This fact is relevant to Section III.C.3. For future reference, please be aware that the discharge plan should stand on its own as a description of the facility design and hydrogeologic siting of an operation such that the operation will not affect ground water quality. The fact that you and I have discussed some

aspect of the Eunice facility does not mean that that aspect can be omitted from the discharge plan.

- 4) IV.A.3. Given the additional information on the brine well and local geology that you have submitted, your agreement to pressure-test the whole system, and your agreement to run a cement bond/cement evaluation log, the requirement to pressure-test the casing alone will be waived. As we discussed by phone, the whole-system pressure test scheduled for August 22nd should be run and recorded for approximately 8 hours. If there is a drop in pressure of as much as 10% during that time, you will need to pressure up to starting pressure, record how much water it took to do so, and see if the pressure holds or drops off a second time.

5) IV.A.3.B.

1. Neither a pressure test with packer nor a pressure test on the entire system will adequately test for channeling in the cement. It is possible for the pressuring-up process during a whole-system test to force brine into a channelled cement job at the foot of the casing, with the surrounding formation still tight enough so that the system will hold pressure:



In order to anticipate any possible corrosion and leakage problems, therefore, Unichem will be required to run a cement bond/cement evaluation log in the well at some point between approval of the present modification/renewal and five years hence. See further discussion below.

2. 300 psi is an acceptable pressure for the whole-system test.
3. Unichem has five years to carry out the cement logging. You may schedule it for a time when you need to enter the well for other purposes.
4. You presumably mean that a surface pressure of 500 to 600 psi would create downhole pressures approaching 1600 psi, which may be nearing the fracture pressure of salt. This is a moot point, since the whole-system pressure test need not be run at such pressures and the casing-only pressure test that we had discussed previously would not affect pressures in the salt cavity.

5. I spoke with Cliff Heintschel of Schlumberger regarding your concerns about the use of cement bond/cement evaluation logs in a brine extraction well. He explained that the cement bond/evaluation logs are equally valid in a high pressure or atmospheric pressure environment. However, it is often necessary to apply pressure to a casing in order to close the "microannulus" which is often present in a well, having developed as follows:

Cement is emplaced in the annulus of a well under pressure, with pressure maintained on the casing while the cement is setting. When this pressure is relaxed, a very narrow gap may develop between the cement and the deflated casing. This gap is not sufficient to permit fluid to move through it, but is enough to cause the CBL/CET tools to read the microannulus as a poor bond. Schlumberger's usual procedure in logging a well is first to make a pass without applying pressure to the well; then, if the log shows apparent channelling, they will repeat the pass with the well under pressure. Only when the CBL/CET tools show a channelled cement job even when the casing is under pressure, is it taken as fact that the cement bond is poor.

Mr. Heintschel went on to say that the cement bond log used alone gives much less information than when it is used in conjunction with the cement evaluation log (which is run together with a caliper log). The CBL reads deeper into the formation than the CET, but it has only two receivers and thus cannot accurately represent the situation at 360° around the well. The CET gives a much more thorough evaluation of the degree of cement bonding to the casing. Given the much greater information available by running both logs at a cost of 20% more than what a single log would cost, both logs will be required at the time that the CBL is run.

6. Jerry Sexton, District Manager of the New Mexico Oil Conservation Division in Hobbs, told me in response to my query that OCD has never established test procedures for brine extraction wells. The test you describe is run on wells that are completed with a packer.

- 6) You have not located an adequate down-gradient well for monitoring potential impacts to ground water from the brine station. If in the future there is a loss of *mechanical integrity in the brine well*, Unichem may be required to install a properly designed monitor well downgradient, to evaluate what damage may have been caused.
- 7) IV.A.10.b: Please refer to my letter of April 17th. Unless you wish to propose an equivalent or better method to detect and respond to a loss of mechanical integrity, please commit to what I proposed in that letter.
- 8) Similarly, in IV.B.1: I indicated in my April 17th letter what would be the minimum acceptable plan for abandonment. Please commit to this minimum or propose an acceptable alternative.

Thank you for your diligence in bringing this facility into compliance with the Water Quality Control Commission regulations.

Sincerely,



Paige Grant Morgan
Water Resource Specialist

PGM:pgm

cc: John Guinn, EID District IV Manager
Jerry Sexton, OCD District I Supervisor
Cliff Heintschel, Schlumberger Cased Hole Logging Division
PO Box 1590 / Hobbs, NM 88240

P.S. I am returning to you some of the photographs of the Eureka facility which you gave me at our June 21st meeting. Thank you for the use of them.



VIA CERTIFIED MAIL

Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

July 12, 1985

RECEIVED

JUL 15 1985

TO: State of New Mexico
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

ATTN: Paige Grant Morgan
Water Resource Specialist
Ground Water Section

GROUND WATER/HAZARDOUS WASTE
BUREAU

SUBJECT: Eunice Brine Station - Discharge Plan, Second Submittal

Per your request, I am enclosing a detailed list of answers and attachments in response to the questions and comments in your letter of April 17, 1985. Also included are comments of agreement resulting from the visit in Santa Fe on June 21, 1985 between you, our Regulatory Affairs Director, Charles Root, and myself. We found the meeting to be very helpful in understanding the proposed requirements. Thank you for your time concerning this matter.

Respectfully,

UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script that reads 'Wayne Price'.

Wayne Price
Staff Engineer

LWP/sar

cc: Jim Britton
Richard Brakey
Charles Root

UNICHEM INTERNATIONAL INC.



II.A.3. If the pond is to be kept partly full of brine or other spillage, some type of leak detection system will be required.

RESPONSE: As discussed during our June 21, 1985 meeting, a new emergency catch basin will be properly lined. However, fluids will not be allowed to stand over 10% of the time. Rowland Trucking will decant the pond on a regular basis, thereby eliminating a need for a monitoring device.

II.B.1 and 2. The existing information on materials and techniques used in construction of this well appears to be minimal. The well has been in operation for 20 years. To answer the requirements for both a well construction history and demonstration of mechanical integrity, please conduct a pressure test on the casing and run a cement bond log in the well. Also, please submit records showing total withdrawal of brine over the years of operation of this well and present a computation of the probable cavity size and geometry.

RESPONSE:

Part 1: Please accept the following exhibits for your files and reference to the construction techniques used during drilling of this well.

Exhibit I: Roy H. Smith Drilling Company
Invoice

Exhibit II: Haliburton Cementing Service
Invoice and ticket #CS-122966, #BC-107465 and #C-602562

Exhibit III: Oiltex
Casing invoice #2180

Summary of Exhibits I, II and III

The above information indicates that this well is 1912' deep with at least 1300' of 23 lb/ft., 7-inch, 10-thread casing pipe. It also indicates that the entire casing has been cemented from bottom to top with reference to the slip joint float shoe and centralizer. To further aid you in the history, please refer to the detail contractor's daily drilling report which also substantiates this. (See Exhibit V, 3.B.1.)

Comments on logging and pressure test: Please refer to IV.A.3 of this submittal.

Part 2: See attachments (Exhibit IV)

1. Summary of brine extraction
2. Dome cavity calculations
3. Figures 1, 2 and 3.



II.B.4. The letter from R.J. Brakey to Joe Ramey, September 20, 1982, indicates that the well is circulated at 400 psi.

RESPONSE: Please note that the above information is incorrect; the actual pressure that the pump exerts on the well is between 175-200 psig. This can be varified with a test gauge. We presently monitor this pressure on a daily basis.

III.B. With the exception of a sketchy driller's log on an unidentified form in the Unichem file at EID, these points of the discharge plan are entirely lacking. Pelase submit this information.

RESPONSE:

III.B.1. Please note attached Exhibit V, Daily Drilling Report (4 pages).

III.B.2. Information from the New Mexico State Engineer's Office at Roswell was obtained from Mr. Delbert Nelson, Assistant District II Surveyor, 622-6521. Information on two water wells was obtained in Section 34 Township 21S Range 37E as follows:

CP-140	SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ Dom-Ind. 921 Avenue G (Eunice); depth 109 feet, drilled 1944. Well is due west of brine station approximately three blocks. Well is abandoned. 4
CP-548	NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ Dom. 1228 12th Street (Eunice) Drilled 1975. Depth 110 feet. Well is operable but not used (water sample was taken and analyzed for up-gradient well.) (See Exhibit VIII.)

Information from the State Engineer's Office indicated that all ground water in this particular area travels in a southeasterly direction. Northwest being up-gradient and southeast down-gradient.

NOTE: Mr. Sparks does not have a water well.

II.B.3. See Exhibit V (Daily Drilling Report)

III.C.1. Lacking; please provide.

RESPONSE: Per State Engineer's Office, ground water around our well is northwest up-gradient and southeast down-gradient. Please note that the City of Eunice obtains its water from the Hobbs area via pipeline. Water resources in the Eunice area are small and limited, per Mr. Nelson. He noted that the Eunice area is not in the Ogallala Water Basin.



III.C.2. An extensive listing of wells from the records of the State Engineer's Office was submitted with Brakey's 9/20/82 letter to Ramey. Some of these wells fall within the area of review and some do not. For ease of reference, please plot those wells within a quarter-mile of the brine well, identifying as you do so one up-gradient and one down-gradient well suitable for monitoring ground water quality. (The question of hydraulic gradient needs to be addressed in III.C.1.).

✓ RESPONSE: Please note the following attachments:

Exhibit VI:

1. General section map showing water wells and gradients.
2. Detailed section map that includes brine well location and all wells within $\frac{1}{4}$ -mile radius.
3. Detailed location and designation of each well obtained from the New Mexico O.C.D. included are the formation records for the wells.

III.C.3. Please provide the information you used in your engineering of the emergency pond from the standpoint of probable maximum precipitation. This will probably suffice as an analysis of flooding potential.

RESPONSE: Please refer to Page 29 of Eunice Brine Station "Upgrade" (received by your office on March 25, 1985). Proposed elevation and drainage scheme: The emergency pit is designed to catch 1000 barrels plus runoff for a 6" rain in one hour.

See attached calculations: Exhibit VII.

III.C.4. This information can probably be obtained by sampling from the up-gradient and down-gradient wells identified in Step III.C.2.

RESPONSE: Please find attached the water analysis (Exhibit VIII) and results for the three water wells in the area of up-gradient and down-gradient from our brine well.

✓ III.C.5. An analysis of the injection water exists in your file. Since the source is a city water system, this analysis will suffice.

✓ RESPONSE: As stated, already submitted.

✓ III.C.6. An analysis of the brine produced at this station was submitted in 1982, and a second sample was collected and analyzed by EID staff in late 1984. The two analyses are corroborative, so you need not submit another.

✓ RESPONSE: As stated, already submitted.



IV.A.1. Lacking; please provide. This is of particular concern given the probable large size of the cavity created in the Salado Formation over twenty years of salt mining at this brine station. If the cavity encroaches on an unplugged well, the unplugged well may serve as a conduit to move brine into other formations.

RESPONSE: Please review Exhibit IV for estimated cavity size, particularly concern given to the maximum radius per different configurations. Please note it appears there are no unplugged wells within the area of review, and the closest well is over 500-600 feet away. These wells are presenting producing oil and gas wells, and there have been no known communication problems.

IV.A.2. Please be aware that this requirement does apply to Unichem.

RESPONSE: The proposed discharger (Rowland Trucking Division) does agree and will comply if deemed necessary.

IV.A.3. Unichem will be required to pull the tubing, set a packer and pressure up the casing to at least double the normal operating pressure, but no greater than 500 psi. Please give EID as much notice as possible when this test is scheduled, to allow an EID representative to be present to witness the test.

RESPONSE: Comments on logging and pressure test -

Per our meeting on June 21, 1985, we discussed your requirements for integrity testing of our brine well. Due to the age of the well, you allowed a pressure of 500 psi as a maximum limit. It has been noted that a cement bond log (CBL) will be required.

If deemed necessary, we will try to comply with this request. Presently, we feel it would be to our advantage from an economic and integrity standpoint to be allowed to comply with the following.

A. Mechanical Integrity Test

1. Run a standard positive pressure test of the casing-tubing annulus and cavity formation. Guidelines:
 - a. Load cavity, casing and tubing with positive pressure of 300 psig for one hour;
 - b. Have a continuous recording pressure ^tcharg during this time;
 - c. Have a tolerance of 10% for acceptance.
2. Perform a cement bond log when the tubing has to be pulled for maintenance reasons; EID will be notified for inspection.



RESPONSE TO IV.A.3. - continued

B. Mechanical Integrity Test Explanations

1. Checking the annulus and cavity at the same time ensures that we do not have any leaks from either the annulus, cavity or channeling in the cement.
2. To prevent overpressuring of the existing casing and cement bond, 300 psi at surface will give a bottom hole pressure of 1297 psi.
3. Pulling the tubing in a brine well is considered extremely hazardous in the concern of re-drilling cost, bent tubing, and possible loss of any tools.
4. Considerations were given to hydraulic fracturing and fragmentations; this salt area experienced 500-600 psi frac pressures. Therefore, any large increase of pressure could cause massive fracturing and internal damage to the existing cavity, thus losing the ability to perform any integrity test. (Frac pressure information was obtained from Titan-Dowell Co.)
5. Cement bond logs and cement evaluation logs are considered to be valid only at higher pressures normally experienced in oil and gas wells in deeper formations. The area of actual concern around 200 feet could be on the borderline. Per Schlumberger, the acoustical attenuation energy is drastically affected by pressure variations.
6. The New Mexico Oil Conservation Division recommends on this type of well that a pressure head test of 1.5 times operating pressure should be held for a period of 15 minutes with a 10% allowable tolerance.
7. The Texas Department of Water Resources requires 1.5 times normal operating pressure for two hours with an allowable tolerance of 10%. They also require that one CBL be on file with their department. The CBL can be run at the owner's convenience.

✓ IV.A.4. Is this arrangement for the measurement of brine produced or brine sold, or is it for measurement of water injected?

✓ RESPONSE: The continuous integrating flow meter is for the measurement of water injected.

✓ IV.A.5. Please commit to reporting to this office total water injected and total brine produced once each year.

✓ RESPONSE: Total water injected and total brine produced are monitored on a daily basis. It will be reported to the EID on an annual basis.

✓ IV.A.6. Discussed above.

(Response not required.)



✓ IV.A.7. Discussed above. (Response not required.)

✓ IV.A.8. This section does apply to the Unichem Eunice brine station; it has been discussed under Section III.C.2. above.

RESPONSE: Please refer to III.C.2., Exhibit VI and III.C.4., Exhibit VIII.

✓ IV.A.10.a. Although the new system appears to be well designed to prevent excursions of brine off of Unichem's property in the event of a leak or spill from the tanks or trucks, you still need to consider how a leak from the pond would be detected and corrected if it occurred.

✓ RESPONSE: See II.A.3 above: Since this particular site is monitored on a daily basis, preventative maintenance will be performed in a timely manner, depending upon the nature of the problem.

IV.A.10.b. Monitoring of injection pressure during operation of the well would probably be the best way to detect a drop in pressure that would suggest a casing leak. If substantial contamination of ground water has occurred as a result of a leak from the brine well or from surface facilities at the Eunice brine station, the best approach to restoring ground water quality would probably be to install a well perforated in the contamination zone and pump out the contaminated fluid either for treatment and reinjection or for disposal, depending on the judgment of the State Engineer.

RESPONSE: Upon loss of mechanical integrity, the production of brine will be halted until the problem area is resolved. The resolution will be negotiated and determined by all joint parties, whether private or governmental.

IV.B.1. Please specify the plugging procedure you will use. At a minimum, the cavity should be left full of brine and the casing plugged from bottom to top with cement.

RESPONSE: Cement plugs or some comparable method that has been agreed upon by the director will be used.

V. Please refer to Section 5-101.H.1 of the Water Quality Control Commission regulations for designation of the individual who must sign the statement.

RESPONSE: "Noted."



Page 7

V. (Continued) SIGN-OFF REQUIREMENT

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment (5-101.H.2).

("Must be signed by Vice President or above")

UNICHEM INTERNATIONAL INC.

A handwritten signature in black ink, appearing to read 'Richard Brakey', written over a horizontal line.

Richard Brakey
Vice President
Manager, Rowland Trucking Division

LWP:RB/sar



Contacts Used:

Jerry Sexton, New Mexico Oil Conservation Division

Guy Cleveland, Texas Department of Water Resources

Harold Headburg, Schlumberger

Jerry Wolf, Titan-Dresser

Jerry Mullican, Texas Railroad Commission

Bill Honkler, Environmental Protection Agency, Dallas, Texas

EXHIBIT I

DRILLING AND REMEDIAL WORK

INVOICE
Roy H. Smith Drilling Co.

728 FIRST-WICHITA NAT'L BLDG.

WICHITA FALLS, TEXAS

INSURED THROUGH

TEXAS EMPLOYERS INSURANCE ASSN.

P. L. & P. D. EXPIRES

8-6-65

FEDERAL NO. 75-0770305

TO: Mr. Roy McLean
P. O. Box 1104
Eunice, New Mexico

DATE	1/22/65	LEASE	Roy McLean Saltwater Well, Lea Co.	WELL NO.	1	INV. NO.	905
------	---------	-------	------------------------------------	----------	---	----------	-----

To charge you for footage in drilling the above well:

Total depth	1912'
Less rotary to ground	<u>12</u>
	1900'

1900' @ contract price of \$3.00 per foot

\$5700.00

1-26-65
#2889
Cost of Drilling
Brine Well -

EXHIBIT II



FORM 489-R7

SEND ALL REMITTANCE TO
P. O. DRAWER 1431
DUNCAN, OKLAHOMA

CEMENTING SERVICE
INVOICE & TICKET

No. CS-122966

In Remitting or Corresponding
Please Refer to Above Invoice Number

DATE 1-16-65	CUSTOMER'S ORDER NO.	CUSTOMER'S REG. NO.	SEC.	TWP.	RNG.	TRUCK CALLED OUT 1-15 7:00	ON LOCATION 1-15 8:00	JOB STARTED 1-15 12:00	JOB COMPLETED 1-16 1:00
WELL NO. AND FARM 1 McLean Higgins-McLean		PLACE OR DESTINATION Eunice, New Mexico				COUNTY Log		STATE New Mexico	
TYPE OF WELL 1 <input type="checkbox"/> Workover 2 <input type="checkbox"/> Exploratory 3 <input type="checkbox"/> Development 4 <input type="checkbox"/> Other		OWNER Roy McLean				CONTRACTOR Roy H. Smith			
Duncan Use Only R. L. McLEAN		3				Cus. Inv. Req. Orig. & <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other		CHARGE TO Roy McLean	
EUNICE, NEW MEXICO		565305				CITY AND STATE Eunice New Mexico		MAILING ADDRESS	
						No. Copies			

Owner, Operator or His Agent States the Well is in Condition for the Service Job to Be Performed and Submits the Following Data:									
TYPE OF JOB (✓) One	CASING	HOLE DATA	TUBING OR DRILL PIPE	CEMENTING PACKER	MAKE FLOAT EQUIPMENT				
SURFACE	NEW	BORE SIZE 9 7/8	SIZE	SIZE	FLOAT COLLAR				
INTERMEDIATE	USED ✓	TOTAL DEPTH 1261	TYPE	TYPE	GUIDE SHOE				
PRODUCTION	SIZE 7	ROTARY ✓	WEIGHT	WEIGHT	FLOAT SHOE HOLCO				
SQUEEZE	WEIGHT 23				OTHER EQUIPMENT				
PUMPING	DEPTH 1280				2 Holco Control 130				
PLUG BACK	TYPE 10V	CABLE TOOL	TOTAL DEPTH	DEPTH SET					
GROUTING									
Other (write in)									

SQUEEZE OR PLUG BACK DATA				CEMENT DATA			
PURPOSE	Depth From	To Approx.	IN SIZE CASING HOLE	BULK? ✓ SACKS	SACKED? TYPE	BRAND	Mixed Wt. Per Gal. 13-014-1 % Gel. Other Admix
WATER				275	Class C	Lonaster	4 2 C.C.
GAS				150	" "	" "	2 C.C.
ABANDON							

OTHER DATA ON SERVICE OPERATION		PRESSURE	
PLUGS AND HEADS		CIRCULATING	100
BOTTOM PLUG ✓	TYPE 7R	MINIMUM	
TOP PLUG ✓	TYPE 7R	MAXIMUM	
TYPE HEAD	7 PCH		
CEMENT LEFT IN CASING		FT.	
BY REQUEST NECESSITY MEASURED WITH LINE?		DISP	
TRUCK NO. & TYPE	TRUCK LOCATION	TITLE	NAME
7281	Louington	Cementer	M Hardosty
	New Mexico	Driver	E BACKUS
		Cementer	
		Driver	
		Cementer	
		Driver	
		Cementer	
		Driver	

The following information is urgently requested in order that we may be fully advised, and to enable us to keep our standard of service up to the highest point.

Was Operation of the Cement- Was the Work of the Crew Per-
ing Equipment Satisfactory? formed in a Satisfactory Manner?

Was Cementing Job Satisfactorily Completed? Suggestions:

OWNER, OPERATOR OR HIS AGENT

INVOICE SECTION

DEPTH OF JOB	PRICE REF.	SERVICE AND RENTAL CHARGES	AMOUNT
1261	3	BASE CHARGE 300 FT.	165.00
	3	961 FT. 15¢ Per Ft. FT. per 100' or Fraction	144.15
EXTRA TRUCK			
STAND BY TRUCK			
MILEAGE @			
TERMS—NET, PAYABLE BY 20th OF FOLLOWING MONTH. INTEREST CHARGED AFTER 60 DAYS FROM DATE OF INVOICE.			SUB-TOTAL 309.15
This is to certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to the services furnished covered by this invoice.			N/A TAX 9.27
PRINTED IN U.S.A.			TOTAL 318.42



SEND ALL REMITTANCES TO
P. O. DRAWER 1431
DUNCAN, OKLAHOMA

INVOICE & TICKET

No. BC 107465

In Remitting or Corresponding
Please Refer to Above Invoice Number.

984 B7

DATE 1-15-65	CUSTOMER'S ORDER & REQ. NO.	SERVICE TICKET NO.	SEC.	TWP.	RANGE	TRUCK CALLED OUT 11:00	DATE A.M. P.M.	ON LOCATION 11:00	DATE A.M. P.M.	JOB STARTED 12:00	DATE A.M. P.M.	JOB COMPLETED 1:00	DATE A.M. P.M.
-----------------	-----------------------------	--------------------	------	------	-------	---------------------------	----------------------	----------------------	----------------------	----------------------	----------------------	-----------------------	----------------------

WELL NO. AND FARM 1 McLean - Higgins	PLACE OR DESTINATION Eunice	COUNTY Lea	STATE New, Mexico
TYPE OF WELL 1 <input type="checkbox"/> WORKOVER 3 <input type="checkbox"/> DEVELOPMENT	2 <input type="checkbox"/> EXPLORATORY 4 <input type="checkbox"/> OTHER	OWNER Roy McLean	CONTRACTOR

DUNCAN USE ONLY	R. L. McLEAN	3	CUST. INV. REQ. ORIG. & <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other	DELIVERED TO Location
	EUNICE, NEW MEXICO	565305	NO. COPIES	PREPARED BY Hines
				RECEIVED BY X O.E. Hines
				DELIVERED FROM Eunice, New, Mexico

CHARGE TO Roy Mc Lean	TERMS: DUE BY THE 20TH OF FOLLOWING MONTH, INTEREST CHARGED AFTER 60 DAYS FROM DATE OF INVOICE \$21.25 Cash discount allowed if paid within this period. \$ - 64 Tax adjustment may be deducted if discounted.
MAILING ADDRESS Box 1104	
CITY & STATE Eunice New Mexico	

WT. TICKET NO.	TRUCK NO.	CONVOY NO.	QUANTITY *	BRAND AND TYPE	UNIT PRICE	AMOUNT
40	6906		425	Lone Star Class(C) Cement F/ Maryneal, Texas	136	578 00
41	8070		10	Howcogel Mixed 4% With 275 Sks.	13	35 75
			8	Ahydrous Chol. Cholride Mixed .016% With 425 Sks.	675	54 00

* SACKS UNLESS OTHERWISE INDICATED	SERVICE CHARGE ON MATERIALS RETURNED	UNITS	441	UNITS	35	154 35			
We certify that the Fair Labor Standards Act of 1938 as amended, has been complied with in the production of goods and/or with respect to services furnished covered by this invoice.	SERVICE CHARGE	MILEAGE CHARGE	41 622 41,622	1	LOADED MILES FROM PLANT TO WELL	min	TON MILES	14	10 00
PRINTED IN U.S.A.	CONDITIONS AND LIMITATIONS COVERING THIS CONTRACT				SUB TOTAL			832 10	
It is expressly understood and agreed that Halliburton Company is selling and delivering the material described on this ticket only as a retail dealer and distributor and that Halliburton Company makes no representation or warranties, expressed or implied, except those made by the manufacturer.				TAX			24 96		
It is specifically understood and agreed that Halliburton Company shall not be liable for any unsatisfactory results from the use of such material.				TAX					
It is understood and agreed that Halliburton Company will not be bound by any changes or modifications in the above terms and conditions unless authorized by one of the executive officers in writing.				TOTAL			857 06		



Halliburton
COMPANY

SEND ALL REMITTANCES TO
P. O. DRAWER 1431
DUNCAN, OKLAHOMA

INVOICE & TICKET

No. S 602562

In Remitting or Corresponding
Please Refer to Above Invoice Number.

985 RS

DATE 1-16-65	CUSTOMER'S ORDER NO.	CUSTOMER'S REQ. NO.	SEC.	TWP.	RNG.	SHIPPED VIA	AMT. OF CHARGES	PPD. BY HALLIBURTON <input type="checkbox"/>	SHIPPED COLLECT <input type="checkbox"/>
------------------------	----------------------	---------------------	------	------	------	-------------	-----------------	--	--

WELL NO. AND FARM

PLACE OR DESTINATION

COUNTY

STATE

1 Brine Well

Eunice

Lea

N.Mex.

TYPE
OF
WELL

1. ☐ Workover
2. ☐ Exploratory
3. ☐ Development
4. ☐ Other

OWNER

R.L. McLean

CONTRACTOR

Roy H. Smith

Duncan Use Only

R. L. McLEAN

3

EUNICE, NEW MEXICO

565305

Cus. Inv.
Req. Orig. &
<input type="checkbox"/> 1
<input type="checkbox"/> 2
<input type="checkbox"/> 3
<input type="checkbox"/> 4
<input type="checkbox"/> Other
No. Copies

DELIVERED TO

Location

RECEIVED BY

We certify that the Fair Labor Standards Act of 1938 as amended, has been complied with in the production of goods and/or with respect to services furnished covered by this invoice.

CHARGE TO
R.L. McLean

MAILING ADDRESS
Box 1104

CITY & STATE
Eunice, New Mexico

TERMS:

Due by the 20th of following
month from date of invoice.

\$ **2 70**

Cash discount allowed if paid within this period.
Interest charged after 60 days from date of invoice.
Tax adjustment may be deducted if discounted.

DUNCAN USE ONLY

Price Ref. No. & Part No.	Size	Thds.	DESCRIPTION	Quan. Issued	Unit of Issue	UNIT PRICE	AMOUNT
REF NO. 12-D							
846.612	7"		Slip Joint Float Shoe	1	ea.		91 70
REF NO. 650							
807.712	7"		S-3 Centralizers	2	ea.	19 80	39 60
REF NO.							
REF NO.							
REF NO.							
REF NO.							
REF NO.							
REF NO.							
REF NO.							
REF NO.							
REF NO.							

SALESMAN

SALESMAN'S EMPLOYEE NO

Bill Cleveland

14552

DELIVERED FROM

Eunice, New Mexico

CODE

WHSE CODE

Domest Sales

4-65320

SUB TOTAL

131 30

TAX

3 94

TOTAL

135 24

EXHIBIT III



EQUIPMENT COMPANY

OILTEX

4726 JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS

STORES:

WICHITA FALLS, TEXAS
ABILENE, TEXAS
HOBBS, NEW MEXICOTO *Ennice Rental Tool*
Box 1104
Ennice, New Mexico
SALES CONTRACT

Nº 2180

TERMS: NET - NO DISCOUNT ALLOWED

LEASE

WELL NO.

STATE

Roy H. Smith
Rig Buena Vista

OILTEX EQUIPMENT COMPANY, a Texas Corporation, with offices in Wichita County, Texas hereby sells and the undersigned purchasers jointly and severally, hereby purchase, subject to the terms and conditions hereinafter set forth, the following property, delivery and acceptance of which in good order are hereby acknowledged by purchaser, to-wit:

QUAN.	DESCRIPTION	UNIT PRICE	PRICE
<i>1321.02</i>	<i>4 2 joints) 23" 7" 10 thread</i> <i>1321.02 ft long 701.35 per ft</i>		<i>1788.38</i>
	<i>23 Top</i>		<i>53.50</i>
			<i>1836.88</i>

The purchaser understands and agrees that the provisions on the reverse side hereof, hereby incorporated by reference, constitute a part of this contract.

Executed this *15* day of *Jan*19*65*

I, the undersigned do hereby certify that I have full authority to purchase the above listed equipment and to have same charged as above. I certify also that I have examined the equipment and found it in satisfactory condition and accept same under the terms of this contract.

Richard Long
Ennice Rental Tool Co Truck
PURCHASER

OILTEX EQUIPMENT COMPANY

By

O R Harris

SELLER

EXHIBIT IV

SUMMARY OF BRINE EXTRACTION

<u>Date</u>	<u>Eunice Brine Station (Pion��r)</u>
1965	166,414 BBLS
1966	172,056 BBLS
1967	50,002 BBLS
1968	323,571 BBLS
1969	122,127 BBLS
1970	54,344 BBLS
1971	55,116 BBLS
1972	122,609 BBLS
1973	153,402 BBLS
1974	464,209 BBLS
1975	420,767 BBLS
1976	371,198 BBLS
1977	449,342 BBLS
1978	352,671 BBLS
1979	431,313 BBLS
1980	615,786 BBLS
1981	504,418 BBLS
1982	255,045 BBLS
1983	160,915 BBLS
1984	423,303 BBLS
1985 (Jan.-May)	117,469 BBLS
TOTAL	5,786,071 BBLS

DOME CAVITY CALCULATIONS

5.79 MM BBL'S OF EXTRACTION OF 10 # BRINE

5.79 MM BBL'S X 42 GAL/BBL'S = 243.18 MM GALLONS OF BRINE

10 # BRINE/GAL = 2.48 #'S OF SALT @ NaCL

ONE CUBIC FOOT OF SALT WILL VARY BETWEEN 50 AND 70 #'S/FT³
DEPENDING UPON THE SOIL CONDITIONS

WILL USE 50 # AS WORST CASE (LOOSE PACK)

OVER 20 YEARS 243.18 MM GALLONS OF BRINE X 2.48 #'S = 603MM #'S

$$\frac{603 \text{ MM #'S OF SALT}}{50 \text{ #'S/CUBIC FT}} = 12.06 \text{ MM FT}^3$$

VOLUME OF CAVITY IS 12.06 MM FT³

THREE DIFFERENT CONFIGURATIONS WERE LOOKED AT:

1. SPHERE
2. CYLINDER
3. TWO RIGHT CIRCULAR CONE

THE FOLLOWING EQUATIONS WERE USED TO DETERMINE THE RADIUS
OF THE PARTICULAR CONFIGURATIONS:

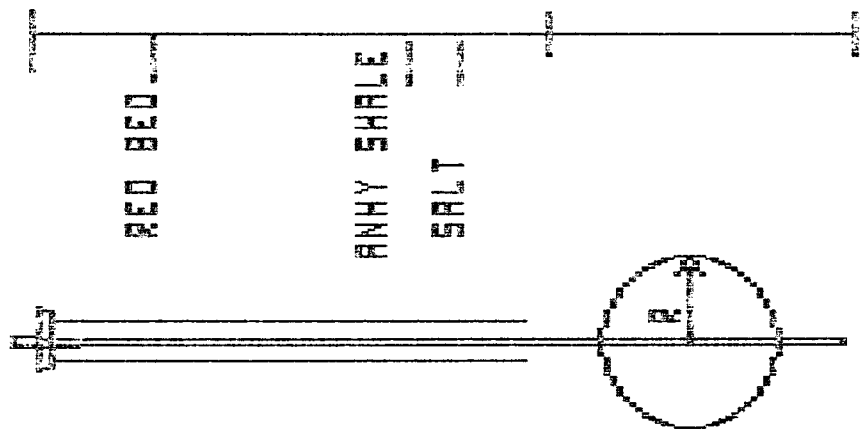
1. SPHERE VOLUME= $\frac{4}{3}(\pi)r^3$

2. CYLINDER VOLUME= $(\pi)Hr^2$

3. TWO RIGHT CIRCULAR CONE VOLUME= $2 \times \frac{1}{3}r^2H$

SEE ATTACHED FIGS. 1,2,& 3 FOR RADIUS NUMBERS./

FIG. 1 SPHERE



NOTE: Location of the sphere is for illustration purposes only. The sphere will probably be located near the casing outlet and teardropped to the tubing outlet. The reverse would be true if flow conditions were reversed.

SURFACE

RED BED

ANY SHALE

SALT

RADIUS
IS 79 FT

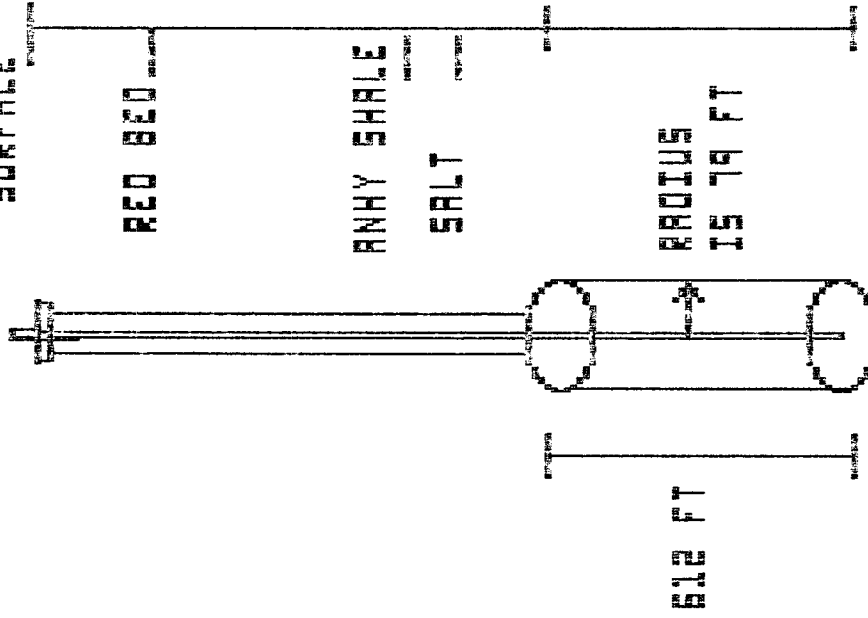
612 FT

FIG. 2 CYLINDER

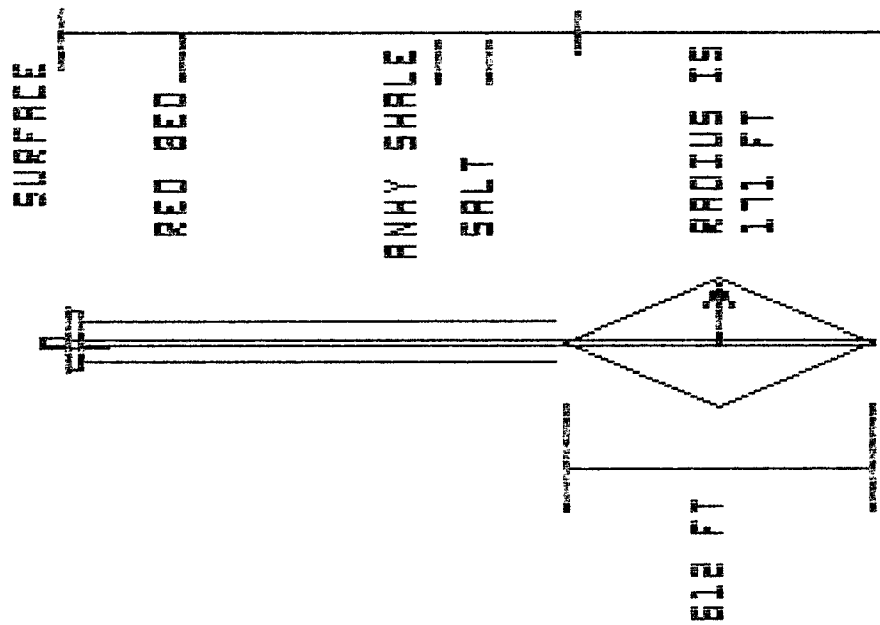
1300 FT OF CASING

TOP OF SALT 1259 FT

612 FT OF OPEN HOLE



**FIG. 3 RIGHT
CIRCULAR CONES**



1300 FT OF CASING

TOP OF SALT 1259 FT

612 FT OF OPEN HOLE

EXHIBIT V

CONTRACTOR

Ray H. Seward Drilling Co.

DAILY DRILLERS' REPORT

No.

FOR *Ray McLean*

LEASE *Ray McLean*

TYPE RID *NAT STD*

WELL NO. *11-5461 WATER*

RIG NO. *2*

CO. *KEA*

STATE *Ill*

DEPTHS MEASURED FROM OF ☐ RT ☐ RB ☐
HEIGHT OF MEASURING POINT
FROM Ground

LAST CASING DEPTH SIZE WT GRADE DATE *1-14-65*
CO SUPERVISOR

MIDNIGHT TO 8:00 A.M.

8:00 A.M. TO 4:00 P.M.

4:00 P.M. TO MIDNIGHT

HOURS DRILLED CORED REAMED CO. TIME

HOURS DRILLED CORED REAMED CO. TIME

HOURS DRILLED 4 CORED REAMED CO. TIME

REMARKS:

REMARKS: *2 1/2" - 11-5461 Rtg*

REMARKS *4:00-8:00 Rigging up*
8:00-12:00 Drilling

TYPE OF MUD W/GAL. VIS. 30 MIN. WATER LOSS ADDITIONS TO MUD

TYPE OF MUD W/GAL. VIS. 30 MIN. WATER LOSS ADDITIONS TO MUD

TYPE OF MUD *Water* W/GAL. VIS. 30 MIN. WATER LOSS ADDITIONS TO MUD

SERIAL NO. BIT OR CORE BBL. NO. SIZE HOURS RUN FROM TO FOOTAGE

SERIAL NO. BIT OR CORE BBL. NO. SIZE HOURS RUN FROM TO FOOTAGE

SERIAL NO. BIT OR CORE BBL. *1* NO. *2 1/2"* SIZE *4* HOURS RUN *0* FROM *257* TO *237*

STATUS AT END OF TOUR STANDS SINGLE KELLY FEET

STATUS AT END OF TOUR STANDS SINGLE KELLY FEET

STATUS AT END OF TOUR STANDS *2* SINGLE *1* KELLY DOWN *40* FEET *237*

PUMP PRESSURE R.P.M. TABLE SPEED

PUMP PRESSURE R.P.M. TABLE SPEED

PUMP PRESSURE *1000* R.P.M. *100* TABLE SPEED *100*

DR. PIPE SIZE AND WEIGHT GAL. SLOPE TEST DEPTH

DR. PIPE SIZE AND WEIGHT GAL. SLOPE TEST DEPTH

FUEL ON GAL. SLOPE TEST *1 1/2* DEPTH *100*

DR. COLLAR SIZE FROM TO LENGTH FORMATION AND REMARKS

DR. COLLAR SIZE FROM TO LENGTH FORMATION AND REMARKS

DR. COLLAR SIZE *6 1/2"* FROM *237* TO *Red Bed* LENGTH *197* REMARKS

TOTAL FOOTAGE DRILLED CORED REAMED

TOTAL FOOTAGE DRILLED CORED REAMED

TOTAL FOOTAGE DRILLED *237* CORED

DR.

R.M.

DR. *W.A. Ellison* R.M. *E.L. Corbett*

DR. *W.A. Ellison* R.M. *B.D.*

D.M.

R.M.

D.M. *W.A. Ellison* R.M.

D.M. *W.A. Ellison* R.M. *T.B.*

R.M.

R.M.

R.M. *W.A. Ellison*

R.M. *W.A. Ellison*

Ray M. Smith DRL6 coo

DAILY DRILLERS' REPORT No.

[illegible]

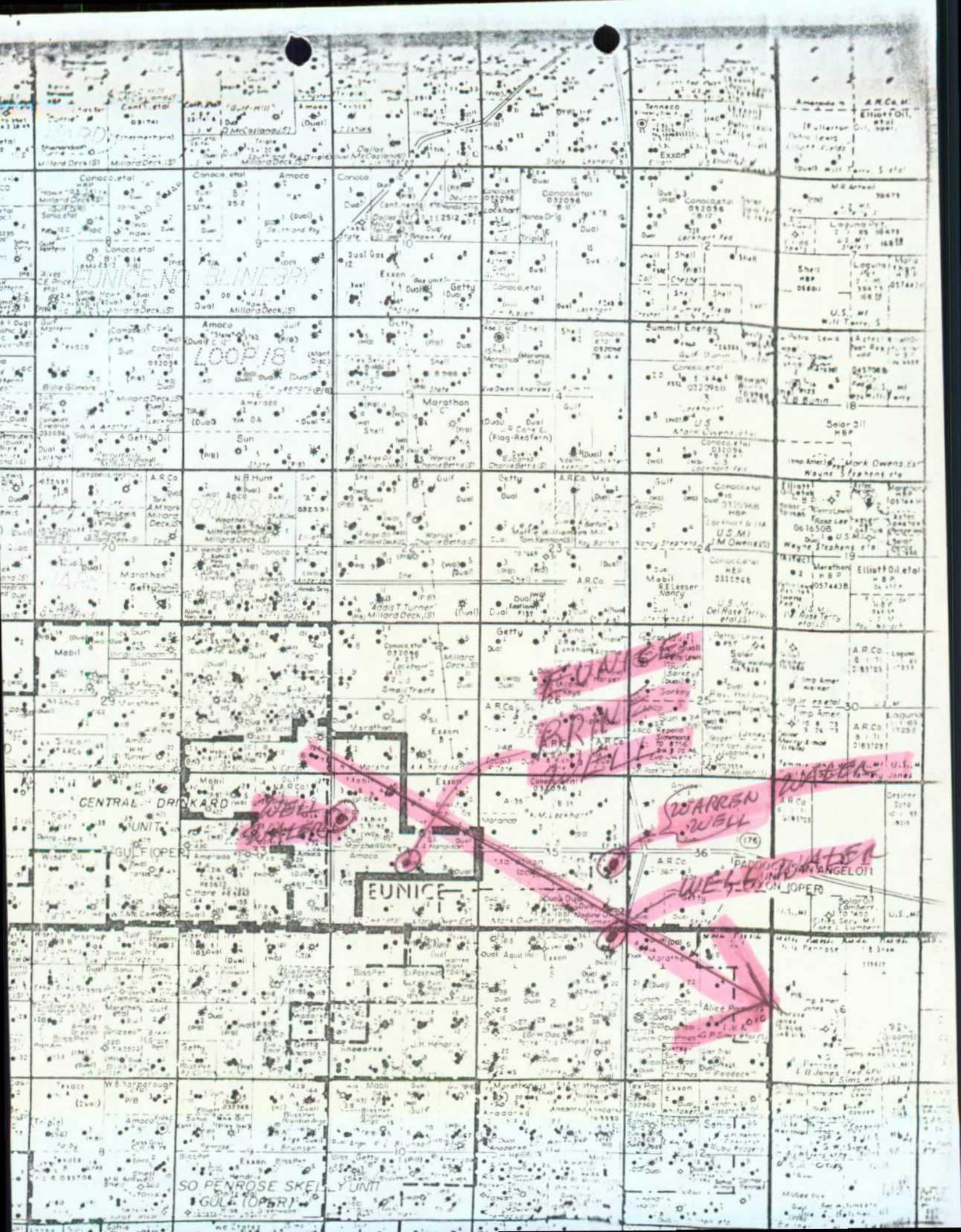
No

FOR		LEASE		DEPTHS MEASURED FROM		LAST		DATE	
TYPE RIG		WELL NO.		HEIGHT OF MEASURING POINT		CASING		1-16-65	
RIG NO.		CO.		STATE		DEPTH		WT	
MIDNIGHT TO 8:00 A.M.		8:00 A.M. TO 4:00 P.M.		4:00 P.M. TO MIDNIGHT		SIZE		GRADE	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
12:30-1:45 - C.R.R. - CEMENTING STATE		12:30-1:45 - C.R.R. - CEMENTING STATE		12:30-1:45 - C.R.R. - CEMENTING STATE		12:30-1:45 - C.R.R. - CEMENTING STATE		12:30-1:45 - C.R.R. - CEMENTING STATE	
1:45-8:00 - C.R.R. - CEMENTING STATE		1:45-8:00 - C.R.R. - CEMENTING STATE		1:45-8:00 - C.R.R. - CEMENTING STATE		1:45-8:00 - C.R.R. - CEMENTING STATE		1:45-8:00 - C.R.R. - CEMENTING STATE	
TYPE OF MUD		TYPE OF MUD		TYPE OF MUD		TYPE OF MUD		TYPE OF MUD	
S/GAL.		S/GAL.		S/GAL.		S/GAL.		S/GAL.	
VIS.		VIS.		VIS.		VIS.		VIS.	
30 MIN. WATER LOSS		30 MIN. WATER LOSS		30 MIN. WATER LOSS		30 MIN. WATER LOSS		30 MIN. WATER LOSS	
ADDITIONS TO MUD		ADDITIONS TO MUD		ADDITIONS TO MUD		ADDITIONS TO MUD		ADDITIONS TO MUD	
SERIAL NO. BIT OR CORE B.L.		SERIAL NO. BIT OR CORE B.L.		SERIAL NO. BIT OR CORE B.L.		SERIAL NO. BIT OR CORE B.L.		SERIAL NO. BIT OR CORE B.L.	
NO.		NO.		NO.		NO.		NO.	
SIZE		SIZE		SIZE		SIZE		SIZE	
HOURS RUN		HOURS RUN		HOURS RUN		HOURS RUN		HOURS RUN	
FROM		FROM		FROM		FROM		FROM	
TO		TO		TO		TO		TO	
FOOTAGE		FOOTAGE		FOOTAGE		FOOTAGE		FOOTAGE	
STATUS AT END OF TOUR		STATUS AT END OF TOUR		STATUS AT END OF TOUR		STATUS AT END OF TOUR		STATUS AT END OF TOUR	
STANDS		STANDS		STANDS		STANDS		STANDS	
SINGLE		SINGLE		SINGLE		SINGLE		SINGLE	
RELLY DOWN		RELLY DOWN		RELLY DOWN		RELLY DOWN		RELLY DOWN	
FEET		FEET		FEET		FEET		FEET	
PUMP PRESSURE		PUMP PRESSURE		PUMP PRESSURE		PUMP PRESSURE		PUMP PRESSURE	
R.P.M.		R.P.M.		R.P.M.		R.P.M.		R.P.M.	
TABLE SPEED		TABLE SPEED		TABLE SPEED		TABLE SPEED		TABLE SPEED	
DRL. PIPE SIZE AND WEIGHT		DRL. PIPE SIZE AND WEIGHT		DRL. PIPE SIZE AND WEIGHT		DRL. PIPE SIZE AND WEIGHT		DRL. PIPE SIZE AND WEIGHT	
ON BIT		ON BIT		ON BIT		ON BIT		ON BIT	
FUEL ON HAND		FUEL ON HAND		FUEL ON HAND		FUEL ON HAND		FUEL ON HAND	
GAL.		GAL.		GAL.		GAL.		GAL.	
SLOPE TEST		SLOPE TEST		SLOPE TEST		SLOPE TEST		SLOPE TEST	
DEPTH		DEPTH		DEPTH		DEPTH		DEPTH	
DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE	
FROM		FROM		FROM		FROM		FROM	
TO		TO		TO		TO		TO	
LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED	
CORED		CORED		CORED		CORED		CORED	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE	
FROM		FROM		FROM		FROM		FROM	
TO		TO		TO		TO		TO	
LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED	
CORED		CORED		CORED		CORED		CORED	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE	
FROM		FROM		FROM		FROM		FROM	
TO		TO		TO		TO		TO	
LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED		TOTAL FOOTAGE DRILLED	
CORED		CORED		CORED		CORED		CORED	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	
DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE		DR. COLLAR SIZE	
FROM		FROM		FROM		FROM		FROM	
TO		TO		TO		TO		TO	
LENGTH		LENGTH		LENGTH		LENGTH		LENGTH	
FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS		FORMATION AND REMARKS	
REMARKS		REMARKS		REMARKS		REMARKS		REMARKS	

29

[illegible]

EXHIBIT VI



SECTION 34 TOWNSHIP 21 S RANGE 37 E

B - BRINE

W - WATER WELL

G - GAS

O - OIL

A - ABANDONED 1320

N

← 2640

2640 →

1320

← 0

{(660/N)
(660/W)}

{(660/N)
(1980/W)}

{(660/N)
(1980/E)}

{(660/N)
(660/E)}

D
NW NW

C
NE NW

B
NW NE

A
NE NE

{(1980/N)
(660/W)}

{(1980/N)
(1980/W)}

{(1980/N)
(1980/E)}

{(1980/N)
(660/E)}

E
SW NW

F 20
SE NW

G 3
SW NE

H
SE NE

{(1980/S)
(660/W)}

{(1980/S)
(1980/W)}

{(1980/S)
(1980/E)}

{(1980/S)
(660/E)}

L
NW SW

K 36
NE-SW

J 4
NW SE

I
NE SE

{(660/S)
(660/W)}

{(660/S)
(1980/W)}

{(660/S)
(1980/E)}

{(660/S)
(660/E)}

M
SW SW

N
SE SW

O 45
SW SE

P
SE SE

13

14

15

16

S

* Gulf Oil Corp., Tubing Gas pool, No. 4 / Pioneer Shelly Oil pool No. 1

Δ Mobil, Padlock Oil Pool No. 2

x Exxon, Brinkard Oil Pool No. 3 - Gas

▽ Amoco, Brinkard Oil Pool No. 3 - Gas

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. OF COPIES RECEIVED	
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SANTA FE	
FILE	
U.S.O.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

a. TYPE OF WELL
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Brine Well

b. TYPE OF COMPLETION
NEW WELL ☐ WDRR OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name <u>PTS BRINE Sales</u>
8. Farm or Lease Name <u>EUNICE</u>

c. Name of Operator
PTS BRINE Sales

d. Address of Operator
Box 1075 Eunice, N.M. 88231

9. Well No. <u>#1</u>
10. Field and Pool, or Wildcat

e. Location of Well
UNIT LETTER 0 LOCATED 630' FEET FROM THE South LINE AND 2427' FEET FROM EAST
LINE OF SEC. 34 TWP. 21 RGE. 37 NMPM

12. County

15. Date Spudded 7/1/80 16. Date T.D. Reached 7/7/80 17. Date Compl. (Ready to Prod.) 7/17/80 18. Elevations (DF, RKB, RT, GR, etc.) 3426.5 19. Elev. Casinghead 2'6"

20. Total Depth 1816' 21. Plug Back T.D.

22. If Multiple Compl., How Many	23. Intervals Drilled By Rotary Tools <u>X</u> Cable Tools
----------------------------------	---

24. Producing Interval(s), of this completion - Top, Bottom, Name
SALT section

25. Was Directional Survey Made <u>yes</u>

26. Type Electric and Other Logs Run
NONE

27. Was Well Cored <u>no</u>

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<u>7"</u>	<u>23#</u>	<u>1200'</u>	<u>8 3/4"</u>	<u>Halliburton</u>	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

31. Perforation Record (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

33. PRODUCTION							
Date First Production <u>7/21/80</u>		Production Method (Flowing, gas lift, pumping - Size and type pump) <u>pumping BRINE WATER</u>				Well Status (Prod. or Shut-in) <u>Prod</u>	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By
--	-------------------

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Lane Mathew TITLE Partner DATE 12/2/80

* = please attach pertinent documents

III. FORMATION INFORMATION

Formation Record			
From	To	Thickness	Formation (name, description)
0'	1816'		Red bed, white, sand

Logs (specify type) None

Identify where logs are on file _____

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LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-105
Effective 1-1-65

Operator		GULF OIL CORPORATION	
Address			
P. O. Box 670, Hobbs, NM 88240			
Reason(s) for filing (Check proper box)		Other (Please explain)	
New Well <input type="checkbox"/>	Change In Transporter of:	Reclassification to Gas well	
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>		
Change In Ownership <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>		

If change of ownership give name and address of previous owner

Lease Name		Well No.	Pool Name, including Formation	Kind of Lease	Lease No.
Mark Owen		4	Tubb (Gas)	State, Federal or Fee	Fee
Location					
Unit Letter	J	2068	Feet From The	South	Line and
					2068
					Feet From The
					East
Line of Section	34	Township	21-S	Range	37-E
					NMPM, Lea
					County

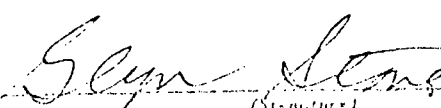
Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/>						Address (Give address to which approved copy of this form is to be sent)	
Shell Pipeline Corporation						P. O. Box 1910, Midland, TX 79701	
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>						Address (Give address to which approved copy of this form is to be sent)	
Northern Natural Gas Company						P. O. Box 308, Omaha, NB 68101	
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Pge.	Is gas actually connected?	When	
	I	34	21S	37E	No		

If this production is commingled with that from any other lease or pool, give commingling order number:

Designate Type of Completion - (X)		Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.				
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth				
Perforations		Depth Casing Shoe							
TUBING, CASING, AND CEMENTING RECORD									
HOLE SIZE		CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)			
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL			
Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE		OIL CONSERVATION COMMISSION	
I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.		APPROVED <u>APR 5 1979</u> , 19	
		BY <u>Glyn Stone</u>	
Area Engineer		Geologist	
(Title)			
January 15, 1979		This form is to be filed in compliance with RULE 1104.	
(Date)		If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviated tests taken on the well in accordance with RULE 111.	
		All sections of this form must be filled out completely for allowable on new and recompleted wells.	
		Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.	
		Separate Forms C-104 must be filed for each pool in multi-	

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	308		Red bed
	680		Red shale
1170	1820		Shale and anhydrite
2100	2420		Anhydrite and shale
2535	2655		Anhydrite
2790	2900		Anhydrite and salt
3365	3497		Anhydrite and lime
4652	4760		Anhydrite
6584			Lime
			Shale and lime
			Lime (TOTAL DEPTH)

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

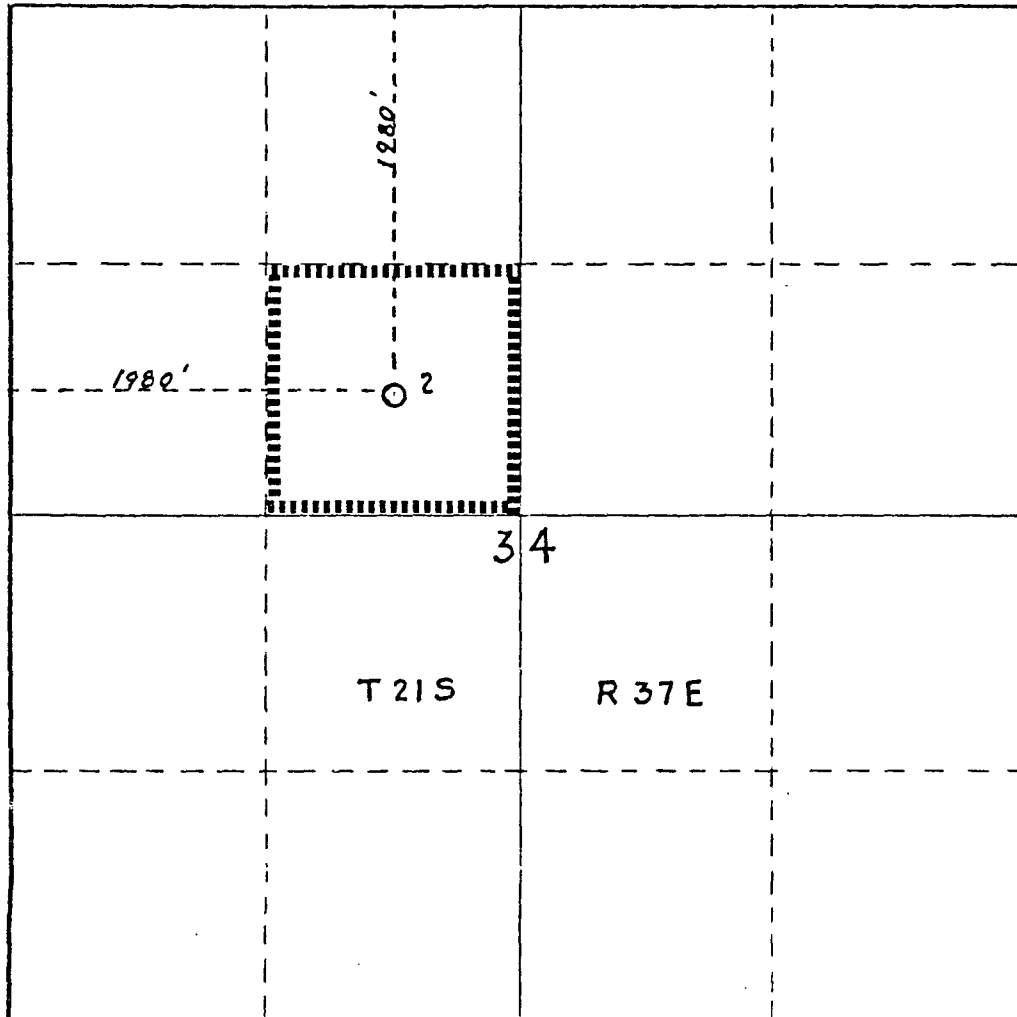
Operator Mobil Producing TX. & N.M. Inc.			Lease Marshall COM		Well No. 2
Unit Letter F	Section 34	Township 21S	Range 37E	County Lea	
Actual Footage Location of Well: 1980 feet from the North line and 1980 feet from the West line					
Ground Level Elev. 3443'	Producing Formation Paddock		Pool Paddock		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

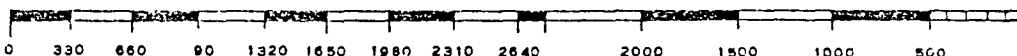
A. D. Bond

Name
A. D. Bond
Position **Regulatory Engineering Coordinator II**
Company
Mobil Producing TX & N.M.
Date
September 15, 1981

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____
Registered Professional Engineer and/or Land Surveyor _____

Certificate No. _____



NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110

Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

HOBBBS OFFICE CCC

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

1953 JAN 21 AM 7:25

Company or Operator Gulf Oil Corporation Lease Mark Owen

Well No. 1 Unit Letter J S 34 T 21 R 37 Pool Penrose Skelly

County Lea Kind of Lease (State, Fed. or Patented) Patented

If well produces oil or condensate, give location of tanks: Unit J S 34 T 21 R 37

Authorized Transporter of Oil or Condensate Shell Pipe Line Corporation

Address Box 1598 - Hobbs, New Mexico

(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas Warren Petroleum Corporation

Address Deming, New Mexico

(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Reasons for Filing: (Please check proper box) New Well ()

Change in Transporter of (Check One): Oil () Dry Gas () C'head () Condensate ()

Change in Ownership () Other (x)

Remarks: (Give explanation below)

Change in transporter from Gulf Oil Corporation to Warren Petroleum Corporation effective 1-1-58.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 7 day of January 1953

By [Signature]

Approved _____ 19____

Title Area Supt. of Production

OIL CONSERVATION COMMISSION

Company Gulf Oil Corporation

By [Signature] Address Box 2167 - Hobbs, New Mexico

Title _____

[illegible]

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	GAS	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-1
Effective 1-1-65

Operator Exxon Corporation	
Address Box 1600, Midland, TX 79701	
Reason(s) for filing (Check proper box)	Other (Please explain)
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Recompletion <input type="checkbox"/>	Casinghead Gas <input checked="" type="checkbox"/> Condensate <input type="checkbox"/>
Change in Ownership <input type="checkbox"/>	Workover - New Perforations

If change of ownership give name
and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name F. F. Hardison "B"	Well No. 3	Pool Name, including Formation Drinkard	Kind of Lease State, Federal or Fee Fee	Lease No.
Location Unit Letter G ; 1980 Feet From The East Line and 2015 Feet From The North Line of Section 34 Township 21-S Range 37-E , NMPIA, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> Texas New Mexico Pipeline Co.	Address (Give address to which approved copy of this form is to be sent) Box 1510, Midland, Texas 79701	
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> EI Paso Natural Gas	Address (Give address to which approved copy of this form is to be sent) Box 1384, Jal, N.M. 88252	
If well produces oil or liquids, give location of tanks.	Unit B	Sec. 34
	Twp. 21-S	Rge. 37-E
	Is gas actually connected? No When 4-1-76	

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
				X				
Date Spudded 12-31-75	Date Compl. Ready to Prod. 1-16-76		Total Depth 6607		P.B.T.D. 6435			
Elevations (DF, RKB, RT, GR, etc.) 3429 DF	Name of Producing Formation Drinkard		Top Oil/Gas Pay 6303		Tubing Depth 6226			
Perforations 6303-6394 (25 shots) (New)					Depth Casing Shoe 6607			
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
13-3/4	10-3/4		368		350			
8-5/8	7-5/8		2822		1650			
6-3/4	5-1/2		6607		400			
	2-3/8		6226					

V. TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed tap allow-
OIL WELL able for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

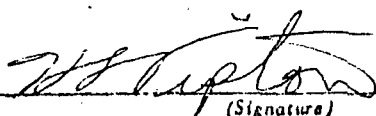
GAS WELL

Actual Prod. Test-MCF/D 144	Length of Test 24 hrs.	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (shut-in) 170#	Casing Pressure (Shut-in) Pkr	Choke Size 16/64

VI. CERTIFICATE OF COMPLIANCE

THIS IS A GAS WELL IN THE DRINKARD OIL Pool,

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.


(Signature)

Unit Head
(Title)

3-5-76
(Date)

OIL CONSERVATION COMMISSION

APPROVED **APR 16 1976**, 19

BY

TITLE

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviate tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of well name or number, or transporter, or other such change of condition.

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TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-105
Effective 1-1-65

I. Operator
AMOCO PRODUCTION COMPANY

Address
BOX 367, ANDREWS, TEXAS 79714

Reason(s) for filing (Check proper box)

New Well ☐

Recompletion ☐

Change in Ownership ☐

Change in Transporter of:

Oil ☐

Casinghead Gas ☐

Dry Gas ☒

Condensate ☐

Other (Please explain)

Well recompleted & classified as
a gas well. obtained H P has
sales outlet.

If change of ownership give name
and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name OWEN B	Well No. 3	Pool Name, Including Formation DEINKARD	Kind of Lease State, Federal or Fee FEE	Lease No.
Location Unit Letter K 3040 Feet From The NORTH Line and 3120 Feet From The EAST Line of Section 34 Township 21-S Range 37-E				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> SHELL PIPE LINE Co.	Address (Give address to which approved copy of this form is to be sent) MIDLAND TX
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> (1) SKELLY OIL Co. (Casinghead Gas) (2) NORTHERN NATURAL GAS	Address (Give address to which approved copy of this form is to be sent) Box 1650, TULSA OK Box 2300, MIDLAND TX
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. L 34 21 37
Is gas actually connected?	When YES 12-24-74

If this production is commingled with that from any other lease or pool, give commingling order number:

PC-476

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'tv.	Diff. Res'tv.
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET			SACKS CEMENT		

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

ADMINISTRATIVE ASSISTANT

JAN 22 1975

OIL CONSERVATION COMMISSION

APPROVED JAN 22 1975

BY

TITLE

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepen well, this form must be accompanied by a tabulation of the deviate tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for all wells on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of own well name or number, or transporter, or other such change of conditions.

FORMATION RECORD

FROM	TO (NO. OF)	THICKNESS (IN FEET)	FORMATION
0	47	47	Cellulose
47	110	63	Sand
110	230	120	Shale
230	240	10	Water Sand
240	1183	915	Shale
1183	1245	112	Anhydrite
1245	2375	1123	Salt, Shale, Anhydrite & Potash
2375	2620	145	Anhydrite
2620	2540	10	Gas sand
2540	2890	340	Anhydrite
2890	2900	10	Br. Limestone
2900	3065	165	Anhydrite & Limestone
3065	3077	12	Br. Limestone
3077	3382	305	Anhydrite & Limestone
3382	3525	143	Limestone (sedimentation 3570 to 3750)
3525	3750	225	

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

RECEIVED
DEC 2 1948
HOBBS OFFICE

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL	X		

November 15, 1948

Date

Odessa, Texas

Place

OIL CONSERVATION COMMISSION,
SANTA FE, NEW MEXICO.
Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

E. G. Rodman

Hardison

Well No. 1 in the

Company or Operator

Lease

SW/4 - NE/4 of Sec. 34, T. 21-S, R. 37-E, N. M. P. M.,

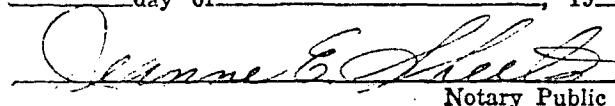
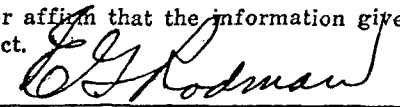
Penrose-Skelly Field, Lea County.

The dates of this work were as follows: November 12, 1948

Notice of intention to do the work was (was not) submitted on Form C-102 on September 14, 1948
and approval of the proposed plan was (was not) obtained. (Cross out incorrect words.)

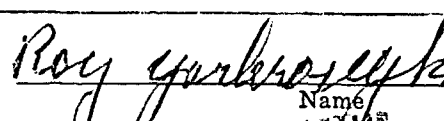
DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Bottom of hole was cemented with fifty sacks of cement, then filled with mud to 1200' where 15 sacks of cement was dumped. Seven inch casing was knocked off at 480'--hole was filled with mud to 10' of top. 4" Pipe was cemented in top of hole - 9 5/8" surface casing was left in hole.

Witnessed by	E. G. Rodman	Owner
	Name	Title
Subscribed and sworn before me this	the	I hereby swear or affirm that the information given above is true and correct.
15th	day of November	19 48
 Notary Public		Name  Position Owner Representing E. G. Rodman Company or Operator
My commission expires	June 1, 1949	Address Box 591, Odessa, Texas

Remarks:

APPROVED
DEC 2 1948
Date


Name
Title

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	60		Caliche
60	193		Red Bed, lime, and shells
193	1120		Red bed and shells
1120	1208		Red rock and anhydrite.
1208	1295		Anhydrite
1295	1464		Salt and red rock.
1464	2116		Salt and anhydrite.
2116	2416		Salt, anhydrite, and shells.
2416	2496		Anhydrite and gyp.
2496	2505		Anhydrite.
2505	2951		Anhydrite and gyp.
2951	3050		Anhydrite.
3050	3282		Anhydrite and lime.
3282	3400		Anhydrite.
3400	3461		Anhydrite and lime.
3461	3538		Anhydrite and shale.
3538	3598		Anhydrite, lime, and shells.
3598	3630		Lime and anhydrite.
3630	5265		Lime
5265	5312		Lime and shale.
5312	6090		Lime
6090	6113		Lime and shale.
6113	6607		Lime
6607			Total Depth.

EXHIBIT VII

EMERGENCY PIT

$$1000 \text{ bbl.} \times 42 = 42,000 \text{ gal.} \times .1337 \frac{\text{ft}^3}{\text{gal.}} = 5615.4 \text{ ft}^3$$

$$6'' \text{ rain in one hour} = \text{over } 35,980 \text{ ft}^3 \times .5 = 17,990 \text{ ft}^3$$

$$\begin{array}{rcl} \text{Totals 1000 gal. tank volume} & = & 5615.4 \\ + 6'' \text{ rain} & = & \underline{17,990.0} \\ & & 23,605 \text{ ft}^3 \end{array}$$

$$\text{with 4' high bearm} = \frac{23,605 \text{ ft}^3}{.4} = 5901 \text{ ft}^2$$

4' x 76' x 76' = approximate size of emergency pit for above conditions.

EXHIBIT VIII



From the Desk of . . .

JIMMY POINDEXTER

Water sample from 1228 12th St
Eunice location contained some
~~sed~~ solids which are primarily
sand and silt, however there is
a small amount of iron oxide
as noted by the total iron count.
Other samples are clear with
little or no sediment.



P. O. Box 1499, Hobbs, New Mexico 88240 / Phone 505/393-7751 / (Home Office)
2300 Hwy. 365, Atrium Bldg., Box 129, Suite 440 / Nederland, Texas 77627 / Phone 409/724-6535 (Area II Office)

W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: STATE OF NEW MEXICO
FACILITY: E.I.D.
LOCATION: SANTA FE, NEW MEXICO

DATE: 07/01/85
SAMPLE DATE: 06/28/85
DATE ANALYZED: 06/28/85

SAMPLE IDENTIFICATION :	WARREN WELL	1228 12TH ST.	1/2 MILE
	#25 SEC35	EUNICE, NM	SOUTH OF
	T215 R37E	SEC34 T215	WARREN WELL

pH		7.69	7.80	7.79
PHENO ALKALINITY	(CaCO3)	NIL	NIL	NIL
TOTAL ALKALINITY	(CaCO3)	200	56	176
BICARBONATE	(HCO3)	244.0	68.3	214.7
CARBONATE	(CO3)	NIL	NIL	NIL
HYDROXIDE	(OH)	NIL	NIL	NIL
TOTAL HARDNESS	(CaCO3)	680	376	272
CALCIUM	(Ca)	248.0	78.4	92.8
CALCIUM	(CaCO3)	620	196	232
MAGNESIUM	(Mg)	14.4	43.2	9.6
MAGNESIUM	(CaCO3)	60	180	40
CHLORIDE	(Cl)	360	400	160
CHROMATE	(CrO4)	***	***	***
SULFATE	(SO4)	320	262	83
TOTAL PHOSPHATE	(PO4)	1.0	0.2	1.0
ORTHO PHOSPHATE	(PO4)	***	***	***
POLY PHOSPHATE	(PO4)	1.0	0.2	1.0
SILICA	(SiO2)	50.0	4.0	27.0
SILICA	(CaCO3)	83.5	6.7	45.1
SPECIFIC CONDUCTANCE	(mmhos)	1200	1180	765
IRON	(Fe)	4.00	7.00	5.00
COPPER	(Cu)	0.11	0.02	0.14

CALCULATED :			
TOTAL DISSOLVED SOLIDS		1404	1094
SODIUM	(Na)	166	238
			688
			100

ANALYZED BY: Jimmy Panchik
(HOBBS LAB)

APPROVED BY: _____

*** INDICATES THAT THIS TEST WAS NOT RUN

UNICHEM INTERNATIONAL, INC.



P. O. Box 1499, Hobbs, New Mexico 88240 / Phone 505/393-7751 / (Home Office)
2300 Hwy. 365, Atrium Bldg., Box 129, Suite 440 / Nederland, Texas 77627 / Phone 409/724-6535 (Area II Office)

WATER ANALYSIS

CLIENT NAME: STATE OF NEW MEXICO
FACILITY: E.I.D.
LOCATION: SANTA FE, NEW MEXICO

DATE: 07/01/85
SAMPLE DATE: 06/28/85
DATE ANALYZED: 06/28/85

SAMPLE IDENTIFICATION - 1228 12TH STREET EUNICE, NEW MEXICO

TOTAL IRON 50 PPM AS Fe

ANALYZED BY: _____
(HOBBS LAB)

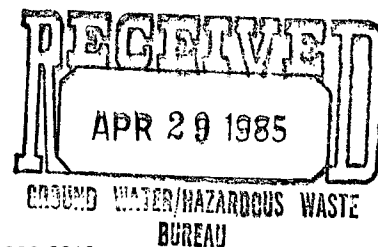
APPROVED BY: _____

*** INDICATES THAT THIS TEST WAS NOT RUN

UNICHEM INTERNATIONAL, INC.



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010



April 26, 1985

Ms. Paige Grant Morgan
State of New Mexico
Environmental Improvement Division
Ground Water Section
P.O. Box 978
Santa Fe, New Mexico 87504-0968

Dear Ms. Morgan:

Enclosed is the "Electrical Schematic" blueprint, which was designated as IV. F. in the EUNICE BRINE STATION "UPGRADE" presented by Unichem International Inc. to your Section in March. This blueprint has just recently been completed.

If you have any questions, please feel free to contact me at the above telephone number.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

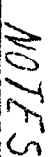
WP/sar
Enclosure

UNICHEM INTERNATIONAL INC.

CONTROL PANEL (EXISTING)



- ## SCOPE OF WORK



- EUNICE BRINE STATION, "UP-GRADE"
"ELECTRICAL PLAN"

UNICHEM INTL HOEBS, NM

RECEIVED
APR 20 1985
GROUND WATER/HAZARDOUS
WASTE

APR 29 1985

**GROUND WATER/HAZARDOUS WASTE
BUREAU**

DRAWING NUMBER
PR0185-03



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

April 23, 1985

RECEIVED

APR 26 1985

Ms. Paige Grant Morgan
State of New Mexico
Environmental Improvement Division
Ground Water Section
P.O. Box 978
Santa Fe, New Mexico 87504-0968

GROUND WATER/HAZARDOUS WASTE
BUREAU

Dear Ms. Morgan:

Enclosed is the "Piping Schematic" blueprint, which was designated as IV. E. in the EUNICE BRINE STATION "UPGRADE" presented by Unichem International Inc. to your Section in March. This has just recently been completed.

If you have any questions, please feel free to contact me at the above telephone number.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price

Wayne Price
Staff Engineer

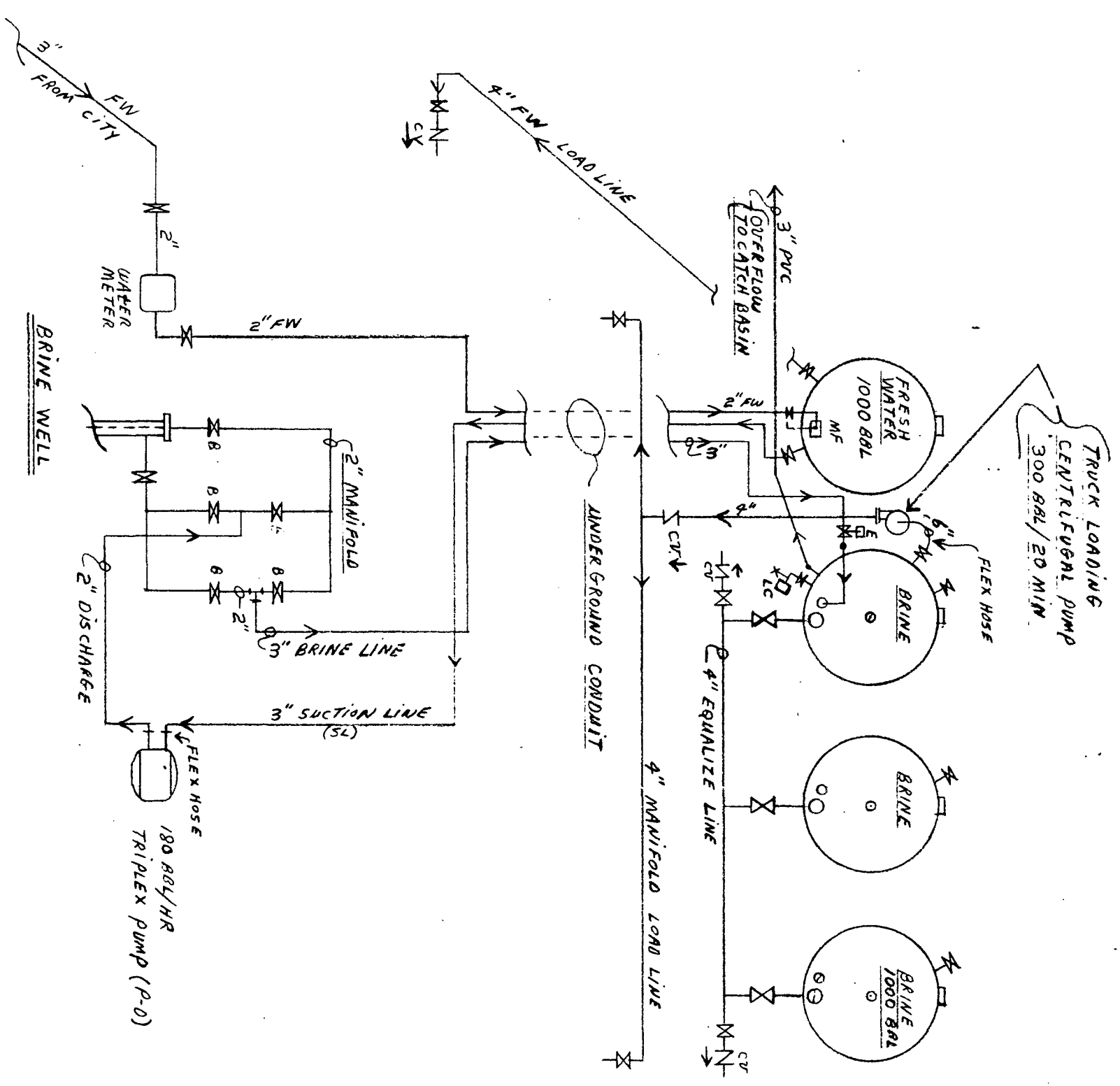
WP/sar
Enclosure

UNICHEM INTERNATIONAL INC.

GROUND WATER/HAZARDOUS WASTE
BUREAU

APR 26 1985

RECEIVED



SPEC'S & NOTES

- MF - MECHANICAL FLOAT - SET TO MAINTAIN 15' LEVEL IN FRESH WATER TANK
- E - ELECTRICAL OPERATED VALVE
- LC - LEVEL CONTROLLER
- START BRINE PUMP AT 4' STOP BRINE PUMP AT 14' SHUT(E) VALVE AT 15'
- ✕ BUTTERFLY VALVES (WATER TYPE) FOR MIN 150 # ANSI FLANGES
- ⊗ BALL VALVES 1500 # WOG
- PIPING TO BE A-106 CS SCH 40 UNLESS MARKED OTHERWISE
- FLEX HOSE RATED 1500 PSI
- ↗ CHECK VALVE 150 # RATED

TANKS 1000 BBL API RATED
21'6" x 16' HIGH 1/4" (BOT) x 3/16" (SIDE) x 3/8" (TOP)

EUNICE BRINE STATION "UPGRADE"
"PIPING SCHEMATIC"

SCALE: NONE
DATE: 4-15-85
APPROVED BY: *[Signature]*
DRAWN BY: LW PRICE
REVISED

UNICHEM INTL HOBBS, NM

DRAWING NUMBER
PRO185-02

P 612 425 099

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1983-403-517

PS Form 3800, Feb. 1982

Sent to <i>Wayne Price</i>	
Street and No. <i>P.O. Box 1499</i>	
P.O., State, and Zip Code <i>Holts, NM 88240</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	



TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 17, 1985

Wayne Price, Staff Engineer
UNICHEM INTERNATIONAL, INC.
P.O. Box 1499
Hobbs, NM 88240

RE: Amendment of Discharge Plan DP-369 for Eunice brine station.

Dear Mr. Price:

Thank you for your submittal to be considered as an amendment to the discharge plan for Unichem's Eunice brine station. Your plans for upgrading the facility appear to address very thoroughly EID's immediate concerns regarding operations at the Eunice station expressed in my January 18, 1985 letter to Mr. Travis Lester, Area Manager of the Eunice facility for Unichem--that is, the spillage of oily brine from the emergency pit, steady leakage of brine from the redwood tanks and a leaking valve on a loading line. However, your submittal does not provide the geologic and hydrologic information required in a discharge plan for a facility of this type. The materials you have submitted therefore do not constitute a complete discharge plan amendment. To complete your submittal of a discharge plan amendment, please respond to the questions/comments below. The alphanumeric designation of each remark is taken from the "Suggested Outline for Discharge Plan Submittal" provided to you with my letter of February 11, 1985.

II.A.3. If the pond is to be kept partly full of brine or other spillage, some type of leak detection system will be required.

II.B. 1 and 2. The existing information on materials and techniques used in construction of this well appears to be minimal. The well has been in operation for 20 years. To answer the requirements for both a well construction history and demonstration of mechanical integrity, please conduct a pressure test on the casing and run a cement bond log in the well. Also, please submit records showing total withdrawal of brine over the years of operation of this well and present a computation of the probable cavity size and geometry.

II.B.4. The letter from R.J. Brakey to Joe Ramey, September 20, 1982, indicates that the well is circulated at 400 psi.

Wayne Price
April 17, 1985
Page 2

III.B. With the exception of a sketchy driller's log on an unidentified form in the Unichem file at EID, these points of the discharge plan are entirely lacking. Please submit this information.

III.C.1. Lacking. Please provide.

III.C.2. An extensive listing of wells from the records of the State Engineer's Office was submitted with Brakey's 9/20/82 letter to Ramey. Some of these wells fall within the area of review and some do not. For ease of reference, please plot those wells within a quarter-mile of the brine well, identifying as you do so one up-gradient and one down-gradient well suitable for monitoring ground water quality. (The question of hydraulic gradient needs to be addressed in III.C.1.).

III.C.3. Please provide the information you used in your engineering of the emergency pond from the standpoint of probable maximum precipitation. This will probably suffice as an analysis of flooding potential.

4. This information can probably be obtained by sampling from the upgradient and downgradient wells identified in step III.C.2.

5. An analysis of the injection water exists in your file. Since the source is a city water system, this analysis will suffice.

6. An analysis of the brine produced at this station was submitted in 1982, and a second sample was collected and analyzed by EID staff in late 1984. The two analyses are corroborative, so you need not submit another.

IV.A.1. Lacking; please provide. This is of particular concern given the probable large size of the cavity created in the Salado Formation over twenty years of salt mining at this brine station. If the cavity encroaches on an unplugged well, the unplugged well may serve as a conduit to move brine into other formations.

IV.A.2. Please be aware that this requirement does apply to Unichem.

IV.A.3. Unichem will be required to pull the tubing, set a packer and pressure up the casing to at least double the normal operating pressure, but no greater than 1000 psi. Please give EID as much notice as possible when this test is scheduled, to allow an EID representative to be present to witness the test.

IV.A.4. Is this arrangement for the measurement of brine produced or brine sold, or is it for measurement of water injected?

IV.A.5. Please commit to reporting to this office total water injected and total brine produced once each year.

Wayne Price
April 17, 1985
Page 3

IV.A.6. Discussed above.

I.V.A.7. Discussed above.

IV.A.8. This section does apply to the Unichem Eunice brine station; it has been discussed under Section III.C.2. above.

✓ IV.A.10.a. Although the new system appears to be well designed to prevent excursions of brine off of Unichem's property in the event of a leak or spill from the tanks or trucks, you still need to consider how a leak from the pond would be detected and corrected if it occurred.

b. Monitoring of injection pressure during operation of the well would probably be the best way to detect a drop in pressure that would suggest a casing leak. If substantial contamination of ground water has occurred as a result of a leak from the brine well or from surface facilities at the Eunice station, the best approach to restoring ground water quality would probably be to install a well perforated in the contaminated zone and pump out the contaminated fluid either for treatment and reinjection or for disposal, depending on the judgment of the State Engineer.

IV.B. ~~A~~. Please specify the plugging procedure you will use. At a minimum, the cavity should be left full of brine and the casing plugged from bottom to top with cement.

✓ V. Please refer to Section 5-101.H.1 of the Water Quality Control Commission regulations for designation of the individual who must sign this statement.

Thank you for your efforts in preparing a response to EID's request for a discharge plan modification in such a timely manner. Please be in touch if I can help to clarify the remaining requirements of the plan modification.

Sincerely,



Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:jba

cc: John Guinn, EID District IV, Roswell

msl



MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 9:15 a.m.

Date 02-25-85

Originating Party

Wayne Price, Incheam
393-7751 ext 224

Other Parties

Subject

Response to letter regarding modification of
D for Incheam's Eureka facility.

Discussion

Mr. Price described the actions taken to redesign the Eureka facility: he has surveyed the site, prepared a preliminary plot plan, drainage scheme and mechanical/electrical study. Pex will be decommissioned; steel tanks on order. Whole area around facility will be bermed to catch a catastrophic spill. I discussed need to plan for frequent, smaller spills also. He agreed. We will have engineering specs by 3/31/85 deadline; hydrological information may take longer.

Conclusions or Agreements

Distribution

Signed

Pader Morgan

P 612 423 804

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982
* U.S.G.P.O. 1983-403-517

Sent to Wayne Payne	
Street and No. P.O. Box 1499	
P.O., State and ZIP Code Hobbs, NM 88240	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

TONEY ANAYA
GOVERNOR

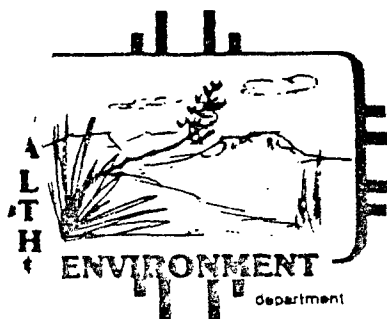
DENISE D. FORT
DIRECTOR

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968

(505) 984-0020



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 11, 1985

Wayne Price
Staff Engineer
UNICHEM
P.O. Box 1499
Hobbs, NM 88240

Dear Mr. Price:

In response to your February 7th telephone discussion of the discharge plan for the modification of Unichem's Eunice brine extraction facility, I am sending you a copy of the New Mexico Water Quality Control Commission (WQCC) regulations. The regulations should be used as a reference in preparing a discharge plan along the lines of the outline you received with my January 18th letter to Mr. Travis Lester, Area Manager of the Eunice facility.

I mentioned that a particular concern regarding the Eunice facility will be the size of the salt cavity which has developed over the twenty years of operation of that plant. Please ascertain the volume of brine produced over the lifetime of the well, and on that basis calculate the approximate dimensions of the cavity. (In this and other calculations, please identify the source of the variables used and the reasoning behind any assumption.) You may also be required to run a sonar or other log to actually measure the cavity to ensure that it neither poses a threat of surface subsidence nor is encroaching upon any borehole or other conduit which would permit brine to move into other formations.

The integrity of the casing is also an item of concern. A pressure test of the casing witnessed by an EID representative will be required for the Eunice well.

I appreciate Unichem's compliance with New Mexico's ground water water quality protection regulations. Please let me know if I can further help to clarify the discharge plan requirements.

Sincerely,

Steven Davis
FOR Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:jba

cc: John Guinn, EID District IV, Roswell

ms22

REPORT TO:

Morgan/Sares

Ground Water & Hazardous Waste Bureau
Environmental Improvement Division
Health & Environment Department
P.O. Box 968 - Crown Building
Santa Fe, NM 87504-0968

LAB NUMBER

WC 5653

DATE RECEIVED

1/30/84

DATE REPORTED

1/29/85

Initials

SLD USER CODE NUMBER 59500Well Location Address Unichem Rowland Trucking, Eunice NMPoint of Collection Brine tankWell Owner/User Unichem Rowland Trucking CoNumber of People Drinking Water from Well 0Collected 11/28/84

Date

1450

Time

By

Morgan/Sares

Name

EIO

Agency

Well Depth —

pH

6.5Water Level —Conductivity
(Uncorrected)

umho/cm

Taste? Odor? Color? Collectors Remarks

Temperature

°C

Brine SampleConductivity at
25°C

umho/cm

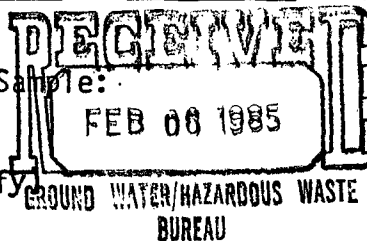
PROJECT:

Ca 37.0From —, A-H₂SO₄ Sample:From F, NA Sample:Date
Analyzed☐ Nitrate-N⁺ — mg/l

Nitrite-N

☐ Ammonia-N — mg/l☐ Chemical — mg/l

oxygen demand

☐ —☒ Calcium 739 mg/l 1/16☒ Potassium 2613 mg/l 12/17☒ Magnesium 1972 mg/l 1/21☒ Sodium 123280 mg/l 12/17☒ Bicarbonate 191.5 mg/l 1/28☒ Chloride 229458 mg/l 1/17☒ Sulfate 8713 mg/l 1/4☒ Total Solids 322,234 mg/l 1/2From —, A-HNO₃ Sample:☐ ICAP Scan☐ Metals by AA (Specify)This form accompanies 1 sample(s) marked as follows to indicate field treatment:

NF: Whole sample (no filtration).

F: Filtered in field with 0.45u membrane filter

A-H₂SO₄: Acidified with 2 ml conc H₂SO₄/lA-HNO₃: Acidified with 5ml conc HNO₃/l

NA: No acid added

8411281450

**FIELD TRIP REPORT
GROUND WATER SECTION**

County LEA

SLD USER CODES

Ground Water: 59300
NO₃, HC, & Toxics: 59600
UIC: 59500

FACILITY VISITED

Name of Facility: Rowland Trucking
Location: EUNICE, NM

Discharge Plan Number: DP-369
Type of Operation: BRINE STATION

ENVIRONMENTAL IMPROVEMENT DIVISION FIELD VISIT

EID Inspector(s): SARES/BAKER

Date of Inspection or Visit: 1/31/85

Discharger's Representative Present During EID Visit:

Name: RICHARD BRAKEY, TRAVIS LESTER.

Title or Position: Division Manager, Facility Manager

Purpose of Visit:

- a. Evaluation of Proposed Discharge Plan _____
- b. Compliance Inspection of Discharge with Approved Plan _____
- c. Other (specify) Follow up on Earlier Complaint.

Inspection Activities During Field Visit:

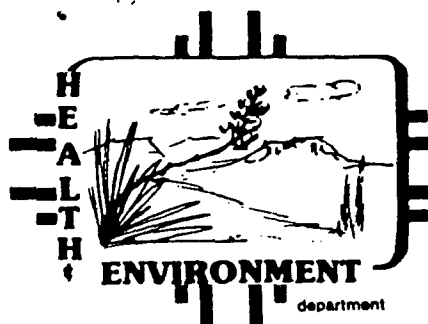
- a. Inspection of Facilities or Construction (specify)
Inspected Brine station, Area generally a mess, puddles of Brine, oil
all over
- b. Sampling of Effluents (give sampling locations)
- c. Sampling of Ground Water (give names or locations of wells)
- d. Evaluation of geology, soils, water levels or other physical
characteristics of the location (specify)
- e. Other (specify)

Observations and Information Obtained during the Visit: plans for new
facility are progressing. See notes in file.

ACTION REQUIRED

TONEY ANAYA
GOVERNOR

DENISE D. FORT
DIRECTOR



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968

(505) 984-0020

January 18, 1985

Travis Lester, Area Manager
Rowland Trucking Company (Unichem)
1901 Main Street
Eunice, NM 88231

Dear Mr. Lester:

During my visit to the Rowland Trucking Company (Unichem) brine station in Eunice on November 28, 1984, in response to a complaint about a brine spill from your emergency pond, I provided you with a copy of the Water Quality Control Commission (WQCC) regulations. At that time we discussed the discharge plan requirement, and you and Mr. Brakey said that the company was planning to make extensive improvements at your Eunice facility which would bring about compliance with the WQCC regulations.

When I called you on January 15, 1985, to ask about the progress of your plans, you informed me that planning has progressed no further over the past six weeks. Let me call your attention to Section 3-109.E. of the regulations, which states that when the EID Director (through her staff) has information which indicates that the regulations are being or may be violated - for instance by spillage of oily brine from your emergency pit, steady leakage of brine from your redwood tanks and a leaking valve on a loading line - then "the director may require a discharger to modify a discharge plan within the shortest reasonable time so as to achieve compliance with these regulations . . .". Further, "the director may terminate an approved discharge plan when a discharger fails to modify the plan . . .". It is illegal, under Section 5-101.B.3, to operate a brine facility without an approved discharge plan, except by special permission from the Water Quality Control Commission.

Therefore, please submit a discharge plan for the proposed modification of your Eunice brine facility on or before March 31, 1985. This request constitutes an attempt to obtain your voluntary compliance with the WQCC regulations.

I enclose an outline for a discharge plan for an in situ extraction well (such as a brine well) and associated surface facilities. I have attached a list of the information which has already been submitted for this facility's

Travis Lester
January 18, 1985
Page 2

discharge plan, so that you need not repeat effort. -I plan to be in the Eunice area during the week of February 4-8, and would be glad to drop by to discuss this material with you at that time.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Paige Grant Morgan".

Paige Grant Morgan
Water Resource Specialist
Ground Water Section

PGM:jba

cc: John Guinn, EID District IV, Roswell

name on hats,
Trucks
Travis Lester, Rowland Trucking (dba
Pioneer Water; Eunice Rental Tool - name
on shop; Unichem) - 394-2512.

1/11/85 - left message to call.
1/15/85 - I called again. Mr. Lester
said plans had progressed no
further than when we had visited
in November - still weren't sure
whether funds had been budgeted
for reconstruction of the facility,
still "kicking around" whether
they wanted to go with a
lined pit or tanks. Said
the bad weather had held
things up. I said bad weather
shouldn't have any affect on their
planning or budgeting process,
and we needed to see their
plans before they began con-
struction. I asked whether I
might help the process along
by calling someone else in the
company to point out EID's concern
about their present operation con-
tinuing unchanged. He said he
wasn't sure. I said we'd probably

be in the area the first week
of February and might stop by
then. He said "fine".

Larry Morgan

1/15/84 - Called Bill Sparks to
see if he'd noticed any further
problem with the pond over-
flopping. Spoke with Sparks'
daughter - she said she didn't
think there'd been any problem
but she'd have Sparks call me
if he had anything to report.

Rowland Trucking Co

— Eunice 1901 Main ^{Eunice}
394 2512

Bill Sparks (property -
pail water spilled onto
his property -

from well? or
~~bone~~ pit.

394-2627

409 Avenue G.

Eunice.

ACTION REQUIRED



☒ Telephone ☐ Personal Time 5:30 Date 11/21/84

Originating Party

Paige Morgan

Other Parties

Bill Sparks

Subject

Response to his complaint that a brine
spill at Rowland Trucking ^{brine spill} contaminated
the soil of his property

Discussion

I told him that we had scheduled a
meeting with Lester of Rowland Trucking and ^(Sparks, Sares) we
agreed to meet immediately afterward. I told him
that we would address his non-compliance with
Ground Water regs but couldn't necessarily get clean-
up of adjacent property (this was on the basis of
advice from Duff Westbrook, ELD Legal Staff). Sparks
said he doubted he could get anywhere suing Row-
land because he was pretty sure Rowland
was owned by Unichem. If this is so (and
there is indeed a Unichem brine well in Euvree

Conclusions or Agreements

under an OGD discharge plan approval), we are
on different ground - discharge plan violated
rather than no d.p.

Distribution

Signed

Paige Grant Morgan

I checked the brine well and D.P. files for either Rowland Trucking Co or Pioneer Water Co. I couldn't find any record of a D.P. He's probably a pre-1977 discharger that was never aware of DP requirement.

Steve S. 11-21

☒ Telephone☐ Personal

Time

3⁵⁰ pm

Date

11/21/84

Originating Party

Other Parties

Steve Sares

Travis Lester Rowland Trucking Co/

Pioneer Water Co 1901 Main St, Eunice
394 2512

Subject

Complaint of Brine spill

Discussion

I told him I was calling in response to a complaint about a brine spill. He said he was aware of it but the complainer would not talk to him until we did. I asked about his facilities. He has a production well, storage tanks and a lined overflow pond. The well is run under the name Pioneer Water Co. I informed him that in-situ mining facilities, such as his brine well, need a dp. I explained that a dp was a permit that insured gw protection. He said the Co. had been operating for 20 yrs under that name (PWC) and had all the permits it needed. We set up a meeting for Wed. 11/28 at 2³⁰ pm at his office in Eunice. The sign on the door says Eunice rental tool.

Conclusions or Agreements

Distribution

Signed

Steve Sares



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

December 18, 1982

Unichem International
P.O. Box 1499
Hobbs, New Mexico 88240

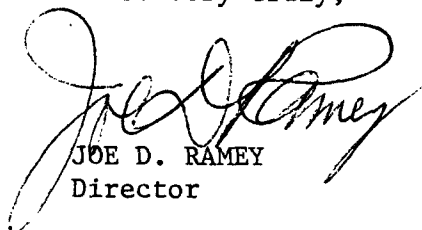
RE: GWB-11
Discharge Plan

Gentlemen:

The discharge plan submitted for the brine production facility and in situ extraction well located in Section 34, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby approved.

The discharge plan was submitted pursuant to Section 3-106 of the Water Quality Control Commission regulations. It is approved pursuant to Section 109. Please note subsections 3-109.E and 3-109 F which provide for possible future amendment of the plan. Please also be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

Yours very truly,


JOE D. RAMEY
Director

JDR/OS/dp

cc: Hobbs District Office

*What is the meaning of
2 cc of same letter w/
2 diff sets of attachments?
one letter says Sec. 3, the
other Sec. 34 (correct); appro-
val letter says right section, wrong
townships.*



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

September 20, 1982

Mr. Joe Ramey
Energy and Minerals Department
Oil Conservation Division

OIL CONSERVATION DIVISION

DEC 9 1982

RECEIVED

RE: Brine Well Discharge Plan
Eunice Brine Well

534 ~~22~~ T228-R37E

Dear Sir:

Attached hereto, please find a schematic of the brine facility at Eunice, New Mexico.

The records have apparently been misplaced through the years, but we located an old drillers log in our files that was fairly complete from which we compiled all our data. The well was drilled as a brine well by our company, then owned by R. L. McLean, in January, 1965. Roy Smith Drilling Company, Wichita Falls, Texas was the contractor. Halliburton invoices confirmed the casing and cementing program.

The facility has been in use since 1965, and during the years 1980-81, produced approximately 1,120,000 barrels of brine.

The brine is monitored daily for quantity and quality and pressures are observed for downhole malfunctions.

We trust this meets your requirements for a suitable discharge plan and meets with your approval.

Very truly yours,

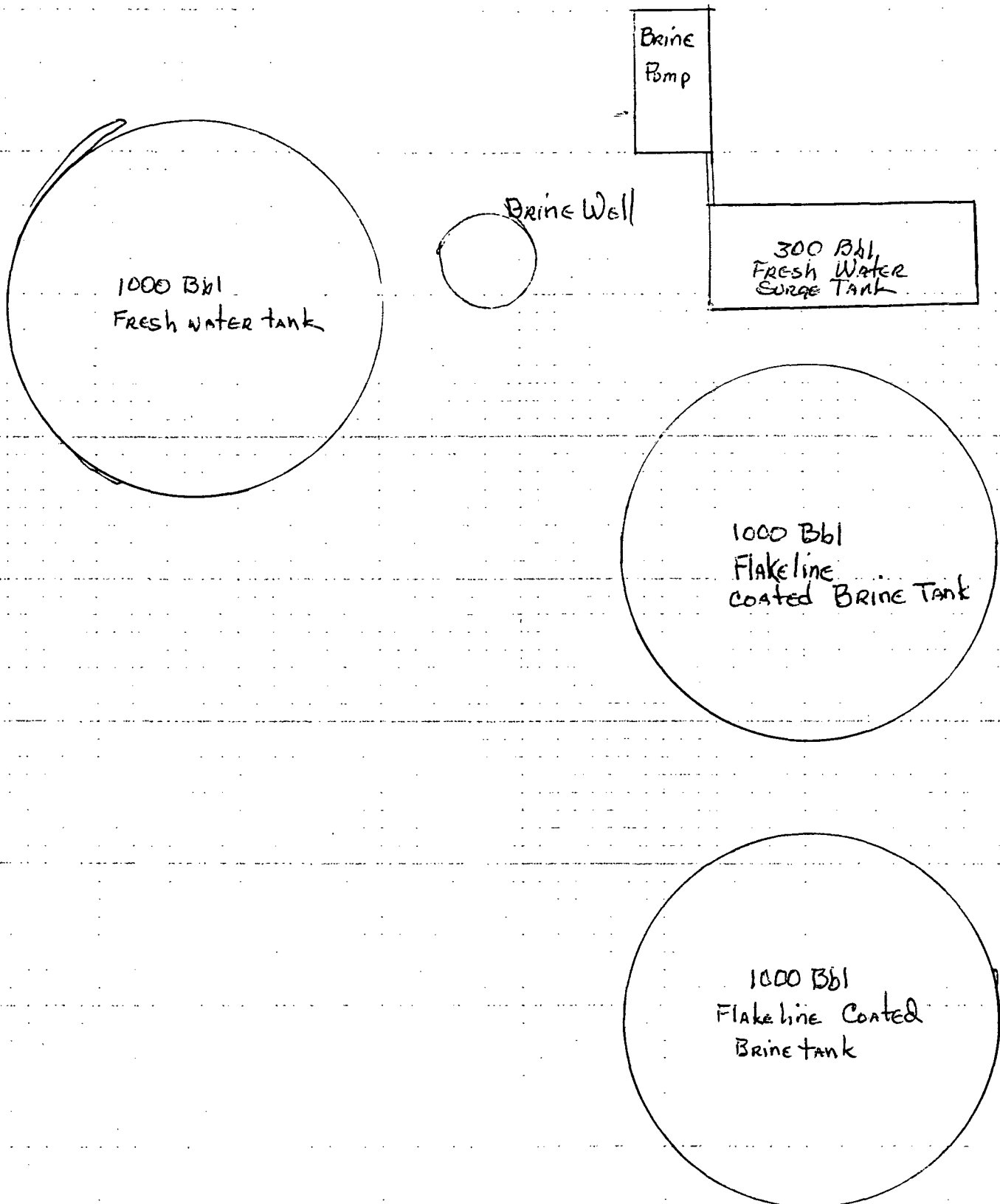
UNICHEM INTERNATIONAL INC.

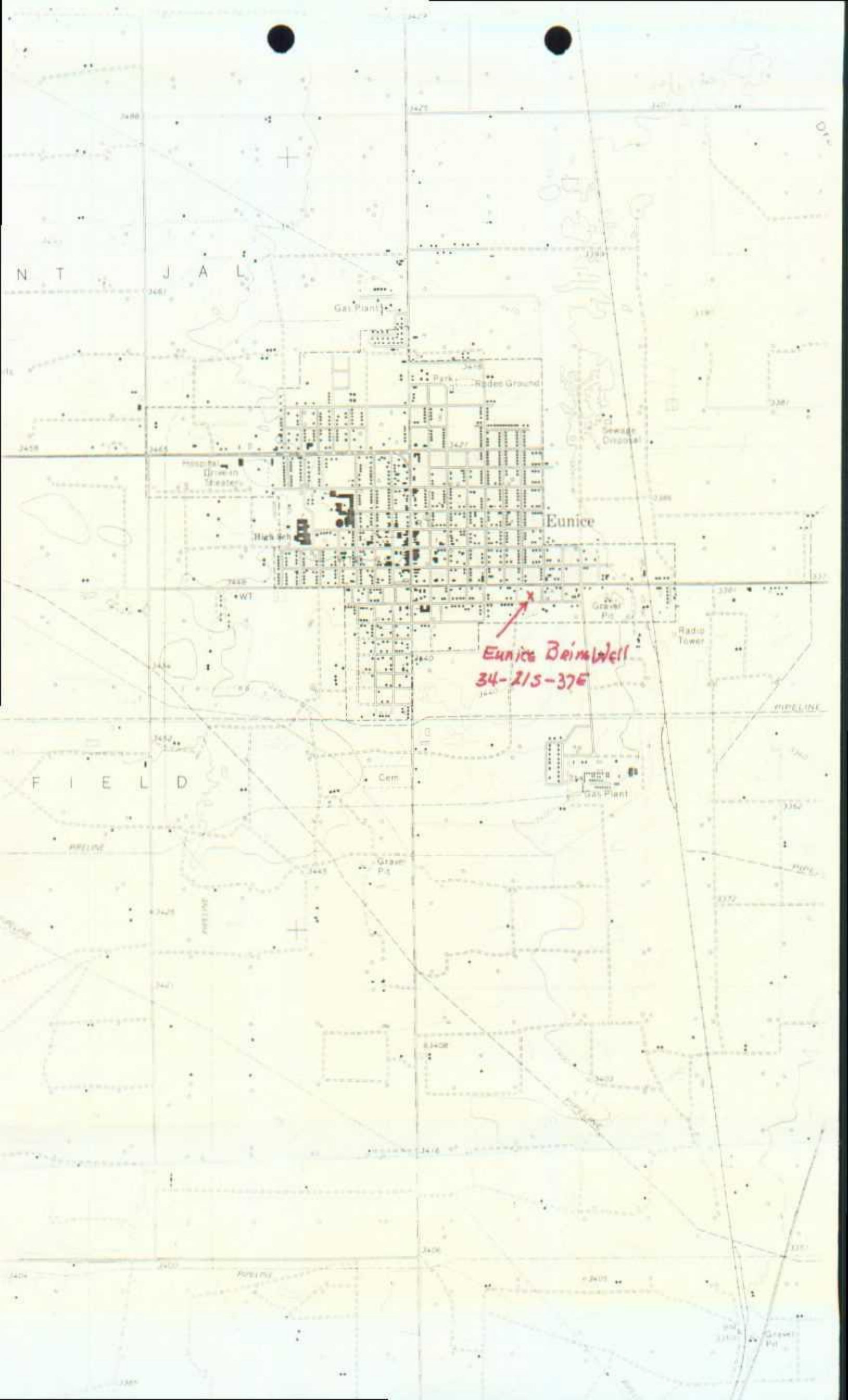

R. J. Brakey
Vice President

RJB/js

UNICHEM INTERNATIONAL INC.

Eunice Brine Station.





Eunice Beina Well
34-213-375

INJECTION WELL DATA SHEET

Uni Chem International

Eunice Brine Well

OPERATOR

LEASE

WELL NO. 1

FOOTAGE LOCATION

SECTION 34

TOWNSHIP 21S

RANGE 37E

Schematic

Tabular Data

Surface Casing

Size Unknown " Cemented with NA sx.TOC Unknown feet determined by _____Hole size Unknown

Intermediate Casing

Size 7" 24# " Cemented with 425 sx.TOC CIRC feet determined by _____Hole size NA

Long string

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Total depth _____

Injection interval

_____ feet to _____ feet
(perforated or open-hole, indicate which)

Drillers Log

0-20' Caliche + Sand

20'-1200' Red bed.

1200-1259 Anhydrite

1259-1912 Salt + Anhydrite.

2 7/8 TBG
1900

TD 1912

Tubing size 2 7/8 lined with Unlined set in a
(material)
(brand and model) packer at None feet.

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Salt

2. Name of Field or Pool (if applicable) _____

3. Is this a new well drilled for injection? ☒ Yes ☐ No

If no, for what purpose was the well originally drilled? _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Nocompleted in open hole.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. _____

UNICHEM INTERNATIONAL

601 NORTH LEECH

P.O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : ROWLAND TRUCKING
DATE : 7-9-82
FIELD, LEASE & WELL : EUNICE BRINE STATION
SAMPLING POINT:
DATE SAMPLED : 7-8-82

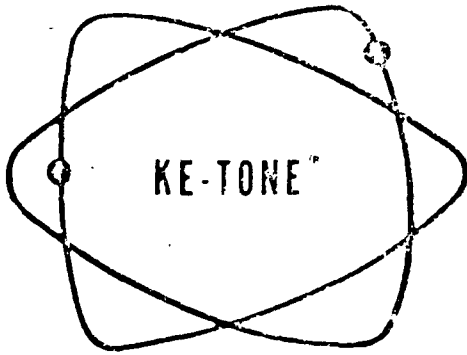
SPECIFIC GRAVITY = 1.214
TOTAL DISSOLVED SOLIDS = 317061
PH = 6.86

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	37.3	748.
MAGNESIUM	(MG)+2	140.	1709.
SODIUM	(NA), CALC.	5227.	120189.
ANIONS			
BICARBONATE	(HCO3)-1	2	122.
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	215.	10333.
CHLORIDES	(CL)-1	5188.	183958.
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON(TOTAL)	(FE)	NOT RUN	
BARIUM	(BA)+2	NOT RUN	
MANGANESE	(MN)	NOT RUN	

SCALING INDEX	TEMP
	30C
	86F
CARBONATE INDEX	-2.2
CALCIUM CARBONATE SCALING	UNLIKELY
SULFATE INDEX	-.01
CALCIUM SULFATE SCALING	UNLIKELY

WATER ANALYSIS — IONIC

TELEPHONE: HOBBS 393-7751
AREA CODE - 505



UNITED CHEMICAL CORPORATION OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

-February 8, 1977

Company Rowland Trucking Co., Hobbs, NM

Field

Lease Pioneer Fresh H₂O

Sampling Date

Type of Sample

WATER ANALYSIS

IONIC FORM

	me/l *	mg/l *
Calcium (Ca++)	3.40	68
Magnesium (Mg++)	1.08	13
Sodium (Na+)	2.54	58
Iron (Total)		0.42

(CALCULATED)

Bicarbonate (HCO ₃ ⁻)	4.40	268
Carbonate (CO ₃ ²⁻)	Not	Found
Hydroxide (OH ⁻)	Not	Found
Sulphate (SO ₄ ²⁻)	1.60	77
Chloride (Cl ⁻)	1.02	36

Total Dissolved Solids 520

7.2 pH @ 68 °F		
Dissolved Solids on Evap. at 103°-105 °C		
Hardness as CaCO ₃	4.48	224
Carbonate Hardness as CaCO ₃ (temporary)	4.40	220
Non-Carbonate Hardness as CaCO ₃ (permanent)	0.08	4
Alkalinity as CaCO ₃	4.40	220
Specific Gravity @ 68 °F 1.000		

* mg/l = milligrams per liter

* me/l = milliequivalent per liter

CaCO₃ Scaling Index Slightly positive @ 86°F (0.11)

CaSO₄ Scaling Index Negative (0.30)

Make Water Work

STATE OF NEW MEXICO

Revised 6-17-77

\$50,000.00 BLANKET PLUGGING BOND

BOND NO. 4446488
(For Use of Surety Company)

(Note: File with Oil Conservation Commission, P. O. Box 2038, Santa Fe 87501)

KNOW ALL MEN BY THESE PRESENTS:

That Unichem International, Inc., et al. (~~xxxxxxx~~) (a partnership) (a corporation organized in the State of New Mexico, with its principal office in the city of Hobbs, State of New Mexico, and authorized to do business in the State of New Mexico), as PRINCIPAL, and HARTFORD ACCIDENT & INDEMNITY, a corporation organized and existing under the laws of the State of Connecticut, and authorized to do business in the State of New Mexico, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Oil Conservation Commission of New Mexico pursuant to Section 65-3-11, New Mexico Statutes Annotated, 1953 Compilation, as amended, in the sum of Fifty Thousand Dollars (\$50,000.00) lawful money of the United States, for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon dioxide (CO₂) gas leases, or helium gas leases with the State of New Mexico; and

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon dioxide (CO₂) gas leases, or helium gas leases on lands patented by the United States of America to private individuals, and on lands otherwise owned by private individuals; and

WHEREAS, The above principal, individually, or in association with one or more other parties, has commenced or may commence the drilling of wells to prospect for and produce oil or gas, or carbon dioxide (CO₂) gas or helium gas, or does own or may acquire, own or operate such wells, or such wells started by others on land embraced in said State oil and gas leases, or carbon dioxide (CO₂) gas leases, or helium gas leases, and on lands patented by the United States of America to private individuals, and on lands otherwise owned by private individuals, the identification and location of said wells being expressly waived by both principal and surety hereto.

NOW, THEREFORE, If the above bounden principal and surety or either of them or their successors or assigns, or any of them, shall plug all of said wells when dry or when abandoned in accordance with the rules, regulations, and orders of the Oil Conservation Commission of New Mexico in such way as to confine the oil, gas, and water in the strata in which they are found, and to prevent them from escaping into other strata;

THEN, THEREFORE, This obligation shall be null and void; otherwise and in default of complete compliance with any and all of said obligations, the same shall remain in full force and effect.

PROVIDED, HOWEVER, That thirty (30) days after receipt by the Oil Conservation Commission of New Mexico of written notice of cancellation from the surety, the obligation of the surety hereunder shall terminate as to property or wells acquired, drilled, or started after said thirty (30) day period but shall continue in effect, notwithstanding said notice, as to property or wells theretofore acquired, drilled, or started.

Sec. _____ T. _____ R. _____

21-37

~~21-38~~

20	21	22	23			
29	28	27	26			
32	33	34	35			

24

25

Eunice Ben

Weib 36

BRINE

22-37

~~22-38~~

5	4	3	2			
8	9	10	11			

1

12

Section 20 Township 21 South Range 37 East

CP-130	NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	Ind-Irr-Stk.
CP-173	SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Ind-Irr-Stk.

Section 21 Township 21 South Range 37 East

CP-164	NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$	Ind-Com-Irr-Stk.
CP-170	SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$	Ind-Irr-Stk.
CP-171	SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$	Ind-Irr-Stk.

76

Section 22 Township 21 South Range 37 East

CP-16	SE $\frac{1}{4}$	Ind.
CP-166	NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Ind-Irr-Stk.
CP-168	SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$	Ind-Irr-Stk.
CP-169	NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	Ind-Irr-Stk.
CP-251	NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	Ind.
CP-252	SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Ind.

Section 25 Township 21 South Range 37 East CP-220 NW 1/4 NW 1/4 SW 1/4 Dom. & Stk.

Section 24 Township 21 South Range 37 East CP-134 NW 1/4 NW 1/4 NW 1/4 Stk.

Section 23 Township 21 South Range 37 East CP-20 (C) CP-21 (C) CP-12 NE 1/4 NW 1/4 CP-13 NW 1/4 NE 1/4 CP-14 SW 1/4 NE 1/4 CP-15 SW 1/4 NE 1/4 CP-213 NE 1/4 NE 1/4 SW 1/4 CP-224 SE 1/4 SW 1/4 SW 1/4 CP-235 NE 1/4 NE 1/4 NW 1/4 CP-236 SW 1/4 NW 1/4 NE 1/4 CP-237 NW 1/4 SW 1/4 NE 1/4 CP-238 SW 1/4 SW 1/4 NE 1/4 CP-239 NW 1/4 NW 1/4 NE 1/4 CP-240 SE 1/4 NE 1/4 NW 1/4 CP-241 SE 1/4 NE 1/4 NW 1/4 CP-235 thru CP-241-Comb-S NW 1/4 NE 1/4 NW 1/4 Ind. CP-235 thru CP-241-Comb-S-2 NE 1/4 NW 1/4 NW 1/4 Ind. CP-235-S-3 NW 1/4 SW 1/4 NW 1/4 Ind. CP-235-S-4 NW 1/4 SE 1/4 NW 1/4 Ind. CP-235-S-5 NE 1/4 NW 1/4 NW 1/4 Ind. CP-235-S-6 SW 1/4 NW 1/4 NW 1/4 Ind. CP-235-S-7 SW 1/4 NW 1/4 NE 1/4 Ind. CP-235-S-8 SW 1/4 SE 1/4 NW 1/4 Ind. CP-562 NW 1/4 NW 1/4 NE 1/4 NW 1/4 NE 1/4 STK

Section 26

Township 21 South

Range 37 East

CP-98	NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$	Decl.
CP-99	NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$	Decl.
CP-226	NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Ind.
CP-227	NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	Ind.
CP-228	SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	Ind.
CP-230	SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$	Ind.

Section 27

Township 21 South

Range 37 East

CP-17	NW $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-18	SW $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-19	SW $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-100	SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Decl.
CP-101	SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Decl.
CP-249	NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-250	NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-253	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-285	SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-293	NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$	Dom. —
CP-294	NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$	Irr.
CP-346	NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$	Dom. —

Section 28

Township 21 South

Range 37 East

CP-63	SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Dom.
CP-83	NE $\frac{1}{4}$ SE $\frac{1}{4}$	WF
CP-242	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Ind.
CP-318	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Dom.
CP-322	SW $\frac{1}{4}$	Dom.

Section 29

Township 21 South

Range 37 East

CP-161	SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$	OWD-Irr-Comm.
CP-161-X	NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Comm-Irr.
CP-161-X-2	NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Stk-OWD-Comm.
CP-161-X-3	SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	OWD-Stk-Comm-Irr.
CP-161-X-4	SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$	Dom.
CP-161-X-5	NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Dom-Irr.
CP-464	W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Domestic

Section 32

Township 21 South

Range 37 East

CP-205	NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Irr-Dom-Comm
CP-205-X	NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Irr-Dom-Comm
CP-205-X-2	NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Irr-Dom-Comm
CP-206	NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	Irr-Dom-Comm
CP-206-X	NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	Irr-Dom-Comm
CP-206-X-2	NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	Irr-Dom-Comm

Section 33

Township 21 South

Range 37 East

CP-22	SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-23	NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$	Mun.
CP-24	NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$	Mun.
CP-34	NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	Mun.
CP-417	NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$	Com.
CP-415	NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$	Comm.

Section 34

Township 21 South

Range 37 East

CP-140 ✓
CP-548SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$
NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ Dom-Ind.
Dom.

←

Section 35

Township 21 South

Range 37 East

CP-133

NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

Dom.

CP-138

SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

Stk.

CP-214

NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$

Dom. & Stk.

CP-221 ✓

NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$

Dom.

CP-222 ✓

NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$

Ind.

CP-223

SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

Ind.

CP-225

NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

Ind.

CP-229

SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$

Ind.

CP-287

SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$

Ind.

CP-405

NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

Stock

←

Section 36

Township 21 South

Range 37 East

CP-111 ✓

NE cor. SW $\frac{1}{4}$

Dom.

CP-117 ✓

Nr. ctr. SE $\frac{1}{4}$ SW $\frac{1}{4}$

Decl.

CP-118 ✓

NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$

Decl.

CP-119 ✓

SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$

Decl.

CP-356 ✓

SW $\frac{1}{4}$ SW $\frac{1}{4}$

Dom & Stk.

X

Section 1	Township 22 South	Range 37 East
CP-188	SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Dom. & Stk.

X

Section 2	Township 22 South	Range 37 East
CP-152 ✓	NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Comm.
CP-153 ✓	NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Comm.
CP-316 ✓	SE $\frac{1}{2}$ SW $\frac{1}{2}$	SR0
CP-427 ✓	SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$	WF
CP-427-X	SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	WF
CP-427-X-2	NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$	WF
CP-427-X-3	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$	WF
CP-427-X-4	NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$	WF
CP-427-X-5	NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	WF

Withdrew

←

What about Sec 3?

Section 4	Township 22 South	Range 37 East
CP-25	NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-26 27	SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-28	NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-29	NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-30	SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-31	NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-32	SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-33	NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$	Mun.
CP-254 ✓	NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$	Ind.
CP-255 ✓	NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$	Ind.
CP-422 ✓	SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	dom.
CP-451	SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$	cathodic protection hole
CP-468	SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	Dom & Stk
CP-254	NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$	Ind.

←

Section 5

Township 22 South

Range 37 East

CP-82

SW $\frac{1}{4}$ NE $\frac{1}{4}$

WF

CP-264

NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$

Irr.

CP-439

NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$

Dom

CP-481

SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

Dom.

X

Section 8

Township 22 South

Range 37 East

CP-479

SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$

OWD

Section 9

Township 22 South

Range 37 East

CP-154

SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$

Comm.

CP-457

NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

Dom & Stk

CP-560

NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$

Cathodic Prot.

CP-560-Amended

NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$

"

CP-617 *Denied*SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$

COM.

X

Sec. 11

Twp. 22-S.

Rge. 37-E.

CP-270

SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$

Com, Irr, Stk

CP-414

SE $\frac{1}{4}$

Irr.

X

Section 12

Township 22 South

Range 37 East

CP-195 X

SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$

Dom.

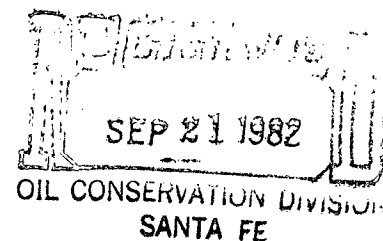
X



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

September 20, 1982

Mr. Joe Ramey
Energy and Minerals Department
Oil Conservation Division



RE: Brine Well Discharge Plan
Eunice Brine Well
S3-T22S-R37E

Dear Sir:

Attached hereto, please find a schematic of the brine facility at Eunice, New Mexico.

The records have apparently been misplaced through the years, but we located an old drillers log in our files that was fairly complete from which we compiled all our data. The well was drilled as a brine well by our company, then owned by R. L. McLean, in January, 1965. Roy Smith Drilling Company, Wichita Falls, Texas was the contractor. Halliburton invoices confirmed the casing and cementing program.


The facility has been in use since 1965, and during the years 1980-81, produced approximately 1,120,000 barrels of brine.

The brine is monitored daily for quantity and quality and pressures are observed for downhole malfunctions.

We trust this meets your requirements for a suitable discharge plan and meets with your approval.

Very truly yours,

UNICHEM INTERNATIONAL INC.

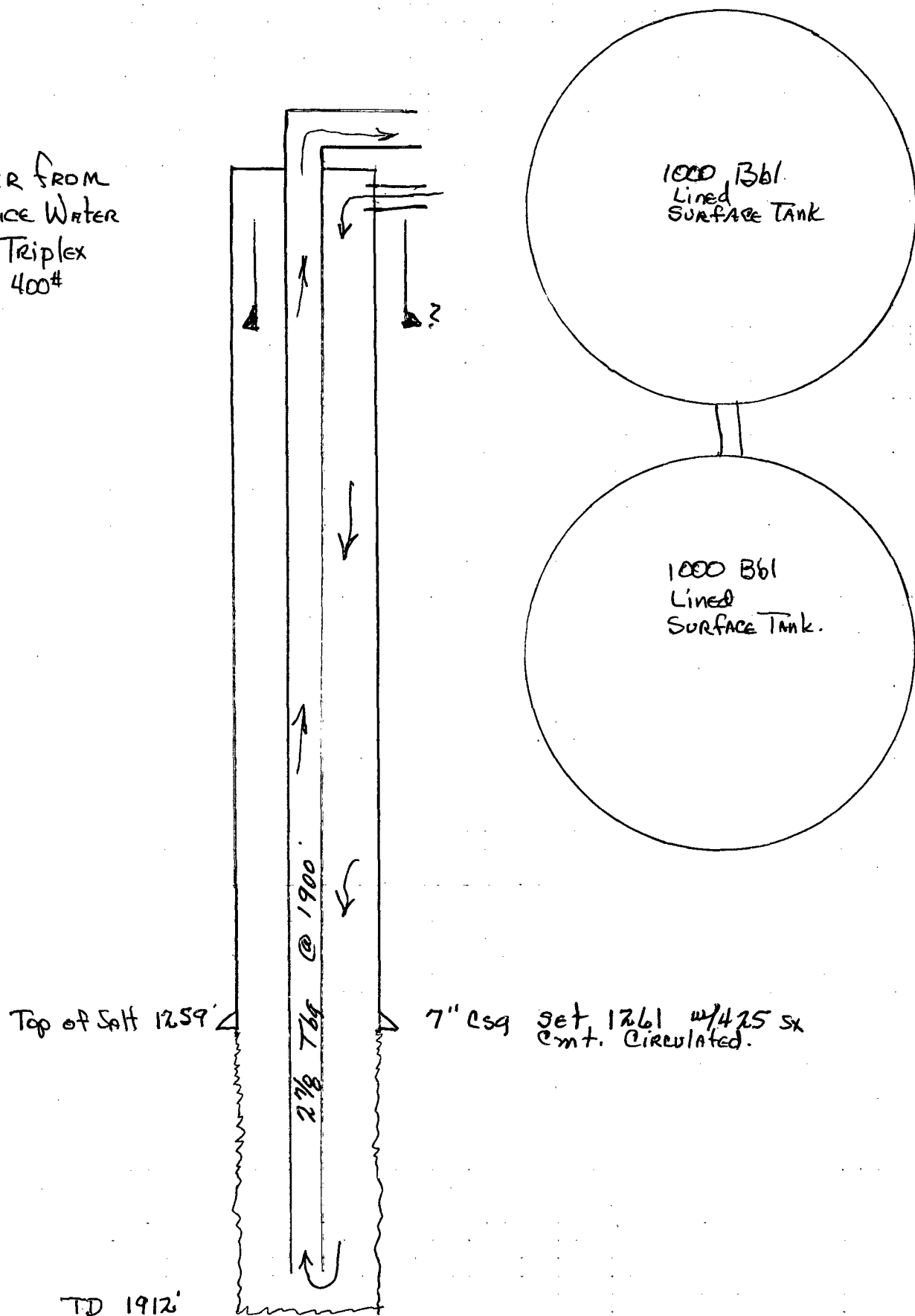

R. J. Brakey
Vice President

Eunice
RJB/js

UNICHEM INTERNATIONAL INC.

Unohem International
Eunice Brine Well
S 3-T 22 S - R 37 E

FRESH WATER FROM
CITY OF EUNICE WATER
SYSTEM TO TRIPLEX
CIRCULATED AT 400#



photographs provided
by Wayne Duda and
Charlie Root of Unichem
on their visit to EID

6/21/85, to illustrate what
has been done at the
Eunice facility since
EID's November '84 visit.

Larry Morgan



Submitted w/ letter of 12/31/85



Submitted w/ letter of 12/31/85













**DANGER
HIGH VOLTAGE**

GARY ELECTRIC INC.

1000 E. 10th St. - 2001-2004-2005



Trichen Ender:

Took chart off pressure
recorder. ^{Left} Good test, facility
in good shape except for
pond - they plan to clean
that up shortly.



















Vegetation killed by spill. Spots crude
oil also spilled.

Photo 2 11/7/84
Bill Sparks



Looking east. 3 brown trawlers are on
Sparks property. The west side of formerly
completely bermed-in pond was knocked
down when pond no longer used
for storage. Pond thus turned into
emergency catchment. Gentle slope of
area with tanks in that direction.

Spill ran down ditch south of
pond and was diverted with
crude berm onto adjacent pasture
to south.

Photo Bill Sparks
x 11/7/84



Archiever Lumber Brum facility, looking
east. Note leaking hose in foreground,
surface spill from leaking hose,
trailers in rear affected by spill
from emergency pond. Photo taken
~~approx~~ 11/28/84 by Dave Morgan.

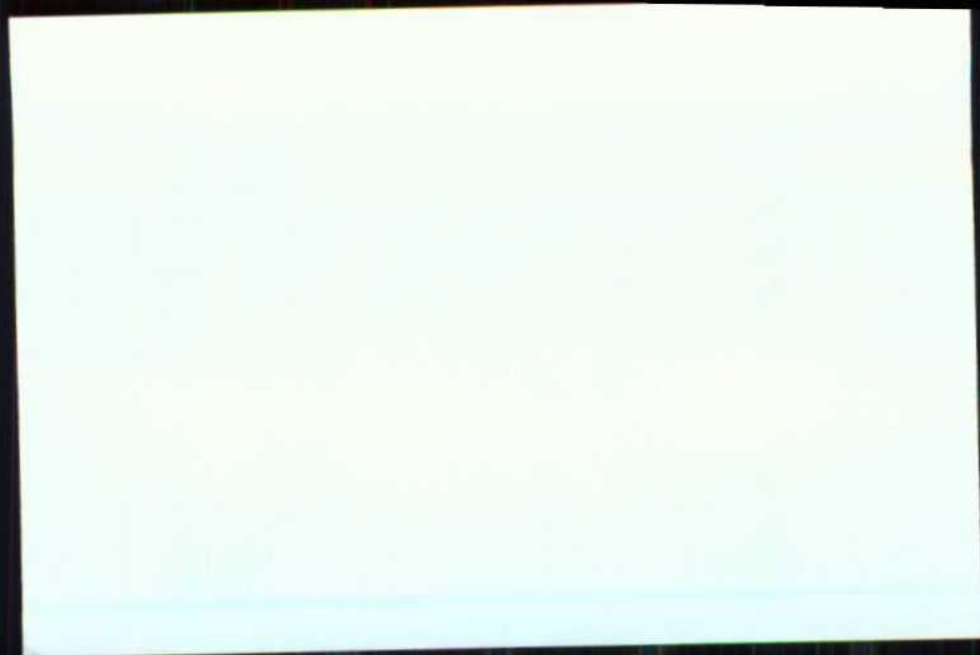


Unbroken Eucalyptus line facing looking
east across emergency pond. No
franklin affected by spill from pond.
Photo Dodge Morgan 11/28/84.



Thickens. Entire brine facility looking
south across west end of emergency
pond. Note west end of pond knocked
down to permit spillage from
tank area to flow into pond.
Photo 11/22/81 Paty Morgan.







Old redwood tanks used in part for
storage, Rowland Trucking Co
(Eureka Rental Tool)
Eureka - Sea County



Looking north. Fence delineates western
edge of "emergency pit". Pumps in top
shed w/ rusted base.

~ 11/7/84 Photo Bill Sparks
Springer to east of
Rowland Trucking
(Eunice Rental Pool)

This paper manufactured
by Kodak
new 35



R

FEB 15 1990

GROUND WATER BUREAU

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING CO.
FACILITY: UNICHEM OFFICE
LOCATION: HOBBS, NEW MEXICO

DATE: 1/12/90
SAMPLE DATE: 1/11/90
DATE ANALYZED: 1/12/90

SAMPLE IDENTIFICATION :

TRUCKERS
BRINE STATION
CARLSBAD, NM

pH		6.77
PHEND ALKALINITY	(CaCO3)	NIL
TOTAL ALKALINITY	(CaCO3)	88
BICARBONATE	(HCO3)	107.4
CARBONATE	(CO3)	NIL
HYDROXIDE	(OH)	NIL
TOTAL HARDNESS	(CaCO3)	3800
CALCIUM	(Ca)	880.0
CALCIUM	(CaCO3)	2200
MAGNESIUM	(Mg)	384.0
MAGNESIUM	(CaCO3)	1600
CHLORIDE	(Cl)	196000
SULFATE	(SO4)	6670
TOTAL PHOSPHATE	(PO4)	***
ORTHO PHOSPHATE	(PO4)	***
POLY PHOSPHATE	(PO4)	***
SILICA	(SiO2)	24.0
SPECIFIC CONDUCTANCE	(mmhos)	600000
IRON	(Fe)	1.40
COPPER	(Cu)	0.40

CALCULATED :

TOTAL DISSOLVED SOLIDS		332540
SODIUM	(Na)	128474

ANALYZED BY:

(HOBBS LAB)

APPROVED BY:

*** INDICATES THAT THIS TEST WAS NOT RUN

CARLSBAD BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON FOR 1989
FOURTH QUARTER

Page 1

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES
OCTOBER	587000	13976	8735
NOVEMBER	368000	8762	2315
DECEMBER	73000	1738	8090

=====

1028000

=====

24476

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19140



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING CO.
FACILITY: UNICHEM OFFICE
LOCATION: HOBBS, NEW MEXICO

DATE: 1/12/90
SAMPLE DATE: 1/11/90
DATE ANALYZED: 1/12/90

SAMPLE IDENTIFICATION :

PIONEER
BRINE STATION
EUNICE, N.M.

pH		6.74
PHEND ALKALINITY	(CaCO3)	NIL
TOTAL ALKALINITY	(CaCO3)	44
BICARBONATE	(HCO3)	53.7
CARBONATE	(CO3)	NIL
HYDROXIDE	(OH)	NIL
TOTAL HARDNESS	(CaCO3)	4200
CALCIUM	(Ca)	1040.0
CALCIUM	(CaCO3)	2600
MAGNESIUM	(Mg)	384.0
MAGNESIUM	(CaCO3)	1600
CHLORIDE	(Cl)	176800
SULFATE	(SO4)	6490
TOTAL PHOSPHATE	(PO4)	***
ORTHO PHOSPHATE	(PO4)	***
POLY PHOSPHATE	(PO4)	***
SILICA	(SiO2)	21.6
SPECIFIC CONDUCTANCE	(mmhos)	550000
IRON	(Fe)	1.30
COPPER	(Cu)	0.40

CALCULATED :

TOTAL DISSOLVED SOLIDS		300534
SODIUM	(Na)	115745

ANALYZED BY:

Kathy Kipstein
(HOBBS LAB)

APPROVED BY:

Dyle Branning

*** INDICATES THAT THIS TEST WAS NOT RUN

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
FOURTH QUARTER, 1989

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
OCTOBER	1179800	28090	57990
NOVEMBER	1810000	43095	16120
DECEMBER	970900	23117	28559

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3960700

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94302

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102669



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING CO.
FACILITY: UNICHEM OFFICE
LOCATION: HOBBS, NEW MEXICO

DATE: 1/12/90
SAMPLE DATE: 1/11/90
DATE ANALYZED: 1/12/90

SAMPLE IDENTIFICATION : TRUCKERS II
HOBBS, N.M.

pH		7.16
PHENO ALKALINITY	(CaCO ₃)	NIL
TOTAL ALKALINITY	(CaCO ₃)	88
BICARBONATE	(HCO ₃)	107.4
CARBONATE	(CO ₃)	NIL
HYDROXIDE	(OH)	NIL
TOTAL HARDNESS	(CaCO ₃)	3800
CALCIUM	(Ca)	800.0
CALCIUM	(CaCO ₃)	2000
MAGNESIUM	(Mg)	432.0
MAGNESIUM	(CaCO ₃)	1800
CHLORIDE	(Cl)	180000
SULFATE	(SO ₄)	6850
TOTAL PHOSPHATE	(PO ₄)	***
ORTHO PHOSPHATE	(PO ₄)	***
POLY PHOSPHATE	(PO ₄)	***
SILICA	(SiO ₂)	35.0
SPECIFIC CONDUCTANCE	(mmhos)	550000
IRON	(Fe)	1.30
COPPER	(Cu)	0.30

CALCULATED :
TOTAL DISSOLVED SOLIDS 306419
SODIUM (Na) 118194

ANALYZED BY:

Kathy Klipstein
(HOBBS LAB)

APPROVED BY:

[Signature]

*** INDICATES THAT THIS TEST WAS NOT RUN

TRUCKERS II BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
FOURTH QUARTER, 1989

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS	FRESH WATER SALI BARRELS
OCTOBER	1373500	32702	10046	3866
NOVEMBER	524800	12495	11869	6008
DECEMBER	902300	21483	12929	6517

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2800600

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66681

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34844

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16391

New Mexico Health and Environment Department

OIL CONSERVATION DIVISION
RECEIVED

'90 JAN 8 AM 9 53

January 4, 1990

David Boyer
Environmental Bureau
Oil Conservation Division
Energy, Minerals and Natural Resources Department
P.O. Box 2088
Santa Fe, NM 87504-2088

Re: Unichem International Inc. Brine Wells
Truckers #1 and #2 Financial Assurances

Dear Mr. Boyer:

Pursuant to our earlier conversation and Robert Stovall's request dated December 2, 1989, enclosed please find the original financial assurance documents executed and submitted by Unichem pertaining to the above-captioned facilities. I retain copies of these documents, as well as originals of the related correspondence and internal memoranda, notes of telephone conversations, etc. Should you at any time need access to these other materials, please let me or the Office of General Counsel know.

Sincerely,



GINI NELSON
Assistant General Counsel

Enclosure(s)

cc: John Parker, EID Ground Water Bureau (w/o enclosures)
Ernest Rebuck, EID Ground Water Bureau (w/o enclosures)

ocdltr.gn2



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 6, 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Wayne Price
UNICHEM INTERNATIONAL
P. O. Box 1499
Hobbs, New Mexico 88240

RE: Delegation of Responsibilities Brine Manufacturing Operations

Dear Mr. Price:

On June 13, 1989, the Water Quality Control Commission (WQCC) transferred the responsibility for the administration and enforcement of Commission regulations at brine manufacturing operations, including all brine production wells, holding ponds and tanks, from the Environmental Improvement Division (EID) to the Oil Conservation Division (OCD). The OCD has jurisdiction over all manufactured brine once it is transported, used or disposed of off brine plant premises for use in or directly related to oil and gas operations regulated by OCD. OCD regulates brine injection through its Class II Underground Injection Control (UIC) Program if the brine is used in the drilling for or production of oil and gas. EID shall regulate brine injection through its UIC Program if the brine is used for other purposes.

Brine production facilities that were transferred to OCD's jurisdiction must operate pursuant to an approved and current discharge plan. The discharge plan renewal process will be continued by OCD Environmental Bureau Staff. Approximately eight (8) months before the expiration date of an approved discharge plan, the discharger will be notified of the pending expiration of the plan. The discharge plan review process can, depending on circumstances, take several months. If the holder of an approved discharge plan submits a renewal application at least 180 days before discharge plan expiration, and the discharger is in compliance with his approved plan on the date of expiration, then the existing plan will not expire until the renewal application has been approved or disapproved.

Mr. Wayne Price
December 6, 1989
Page -2-

Guidelines to aid you in determining what will be required for the renewal of your discharge plan are being prepared. When the guidelines are finalized, they will be supplied to each operator of a brine production facility.

The OCD requires that any person, firm corporation or association that is in ownership of an oil, gas, or service well in the State of New Mexico shall furnish the Division with a surety bond in an amount prescribed in the OCD regulations. The current bond for well less than 5000 feet deep in Chaves, Eddy, Lea and Roosevelt Counties is \$5000. I am enclosing the OCD bond forms for your use. All surety bonds previously submitted to the OCD did not include brine wells. Those surety bonds submitted to the EID must be changed to the OCD. Once the proper bond form are received and approved, all other sureties and bonds can be cancelled.

If you have any questions, please do not hesitate to contact me at (505) 827-5884.

Sincerely,



Roger C. Anderson
Environmental Engineer

RCA/sl

Enclosures

CC: Artesia District Office
Hobbs District Office



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 2, 1989

Geni Nelson
Environmental Improvement Division
Legal Bureau
1190 South St. Francis
Santa Fe, New Mexico 87503

Re: Brine Wells

Dear Ms. Nelson:

In order to make the transition of responsibility over brine wells from EID to OCD as smooth as possible, it would be very helpful for us to obtain all of the information contained in your files regarding the currently existing brine wells in the State.

I therefore would ask that you provide to David Boyer of our Environmental Bureau copies of all documents in your files regarding brine wells and originals of any bonds, letters of credit, permits and similar types of documents. I would appreciate your doing this at your earliest convenience, because we are trying to integrate the brine wells into our records.

Thank you for your cooperation.

Sincerely,

ROBERT G. STOVALL,
General Counsel

RGS/dr

Submit 4 Copies
to Appropriate
District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

AUG 24 1989

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-134
Aug. 1, 1989

Permit No. H-7
(For Division Use Only)

**APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)**

Operator Name: Unichem International Inc.

Operator Address: 707 North Leech - Hobbs, NM 88240

Lease or Facility Name Pioneer Water Station Location 34 21S 37E
Ut. Ltr. Sec. Twp. Rge

Size of pit or tank: 65' X 75'

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

X The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.
This is a brine storage pit only.

1) If any oil or hydrocarbons should reach this facility give method and time required for removal:

Skim hydrocarbons off with vacuum trucks continuously until clean.

2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

Operator proposes the following alternate protective measures: _____

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Richard Brakey Title Vice President Date August 15, 1989

Printed Name Richard Brakey Telephone No. (505) 393-7751

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected 8/17/89

Inspected by Eddie W. [Signature]

Approved by ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

Date AUG 23 1989

RECEIVED
AUG 15 1989

HOBBY

RECEIVED

AUG 15 1989

HOBBY

7/14/89

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
SECOND QUARTER, 1989

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
APRIL	1480800	35257	21820
MAY	61210	1457	25895
JUNE	76640	1825	20166

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1618650

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38539

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67881



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

WATER ANALYSIS

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: Unichem International, Inc.
FACILITY: Pioneer Brine Station
LOCATION: Eunice, New Mexico

DATE: 07/13/89
SAMPLE DATE: 06/29/89
DATE ANALYZED: 07/11/89

SAMPLE IDENTIFICATION : PIONEER
BRINE

pH		7.10
PHEND ALKALINITY	(CaCO ₃)	NIL
TOTAL ALKALINITY	(CaCO ₃)	60
BICARBONATE	(HCO ₃)	73.2
CARBONATE	(CO ₃)	NIL
HYDROXIDE	(OH)	NIL
TOTAL HARDNESS	(CaCO ₃)	5700
CALCIUM	(Ca)	1380.0
CALCIUM	(CaCO ₃)	3450
MAGNESIUM	(Mg)	540.0
MAGNESIUM	(CaCO ₃)	2250
CHLORIDE	(Cl)	187000
SULFATE	(SO ₄)	3625
TOTAL PHOSPHATE	(PO ₄)	***
ORTHO PHOSPHATE	(PO ₄)	***
POLY PHOSPHATE	(PO ₄)	***
SILICA	(SiO ₂)	***
SPECIFIC CONDUCTANCE	(mmhos)	51400
IRON	(Fe)	4.50
COPPER	(Cu)	0.30

CALCULATED :
TOTAL DISSOLVED SOLIDS 312916
SODIUM (Na) 120298

ANALYZED BY: Mitchell Jarvis
(HOBBS LAB)


APPROVED BY: Rylee Branning

*** INDICATES THAT THIS TEST WAS NOT RUN

RECEIVED
JUN 15 1989


GROUND WATER BUREAU

MEMORANDUM

TO: JOHN PARKER
FROM: GINI NELSON 
DATE: JUNE 14, 1989
RE: UNDERGROUND INJECTION CONTROL PROGRAM CLOSE-OUT

As the Underground Injection Control Program is to be returned to the Oil Conservation Division (OCD) for administration, I expect that you will be transferring files to OCD. I have the original financial assurance for the Unichem facility in my files. Please advise me whether EID will be keeping the original or whether OCD wants to hold the original financial assurance.

cc: Ernest Rebuck

9 AM Friday




Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

RECEIVED

APR 26 1989

GROUND WATER BUREAU

WATER ANALYSIS

CLIENT NAME: ROWLAND TRUCKING
FACILITY:
LOCATION:

DATE: 04/20/89
SAMPLE DATE: 04/17/89
DATE ANALYZED: 04/17/89

SAMPLE IDENTIFICATION - HOBBS TRUCKERS II

pH	7.52		
SPECIFIC CONDUCTANCE	86200	mmhos	
CHLORIDE	189200	mg/L	AS C1

ANALYZED BY: Mitch Irvin
(HOBBS LAB)

APPROVED BY: Dyle Branning

*** INDICATES THAT THIS TEST WAS NOT RUN

4/24/89

BUCKERS II BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
FIRST QUARTER, 1989

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS	FRESH WATER SALES BARRELS
JANUARY	1433500	34131	8127	1899
FEBRUARY	471100	11217	9208	2745
MARCH	610500	14536	9813	995

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2515100

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59883

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27148

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5639



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

WATER ANALYSIS

CLIENT NAME: ROWLAND TRUCKING
FACILITY:
LOCATION:

DATE: 04/20/89
SAMPLE DATE: 04/17/89
DATE ANALYZED: 04/17/89

SAMPLE IDENTIFICATION - EUNICE PIONEER

pH	7.05		
SPECIFIC CONDUCTANCE	87000	mmhos	
CHLORIDE	196400	mg/L	AS CI

ANALYZED BY: Mitch Ivins
(HOBBS LAB)

APPROVED BY: [Signature]

*** INDICATES THAT THIS TEST WAS NOT RUN

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 2:30	Date 12/27/88
Originating Party Wayne Price - Unichem Int.		Other Parties John Parker - EID WRS	

Subject

Rowland Trucking spill of ~100 BBL of drilling mud.

Discussion

Wayne called to tell me that there had been a spill of ~100 BBL (4,500 gal) of drilling fluid on Dec. 24 at the intersection of Hwy 62-180 and main entrance to WIPP facility. The ^{spill} accident occurred when the truck rolled over. Wayne stated that the spill had been localized in a 30x5 yd trench. The drilling mud contained oil emulsion (diesel-oil-water) and is considered non-hazardous under RCRA. He further stated that the spill would be removed and taken to an OCP approved disposal facility.

Conclusions or Agreements

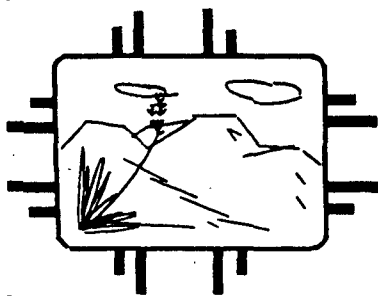
I thanked Wayne for reporting the spill to us and informed him that it was my belief that due to the location the incident was exempt from the WQCC regulations. (No water < 10,000 mg/l TDS) - but to send us a report anyway.

Distribution

Kevin Lambert & File

Signed

John Parker



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

ENVIRONMENTAL IMPROVEMENT DIVISION
Harold Runnels Bldg.-1190 St. Francis Drive
Santa Fe, New Mexico 87503

Richard Mitzelfelt
Director

GARREY CARRUTHERS
Governor
CARLA L. MUTH
Secretary
MICHAEL J. BURKHART
Deputy Secretary

December 22, 1988

Mr. Wayne Price
Unichem Carlsbad
Carlsbad, New Mexico 88220

Dear Mr. Price:

The Underground Injection Control staff of the New Mexico Environmental Improvement Division Ground Water Section would like to thank you for your cooperation during our recent inspection of the four Unichem brine facilities; Unichem Carlsbad, Unichem Eunice, Trucker's #1 and Trucker's #2 brine facility. A copy of the inspection forms is attached for your reference.

Deficiencies noted during the inspection are as follows:

A. Unichem Carlsbad

- Evidence of brine spill around tankage and injection well. Leakage collection system should be constructed to prevent infiltration of spilled brine/produced waters.

B. Unichem Eunice

- No violations noted.

C. Trucker's #2

- Spillage around loading area of brine/produced water. Area should be cleaned.
- Windblown debris in storage pond. Storage pond should be free of litter and weeds.


Mr. Wayne Price
Page 2
December 22, 1988

D. Truckers #1

- Well temporarily abandoned.
- Need to regrade prior to re-opening.

Thank you for your continued cooperation. Should you have any questions feel free to contact me (827-2902) or John Parker (827-0027).

Sincerely,



Kevin Lambert
Hydrologist
Ground Water Section - UIC Program

KL/JP/mw

cc: Tom Bank, Carlsbad EID Field Office

Enclosure

BRINE STATION INSPECTION FORM

DATE 12/5 1988 1520 EID INSPECTOR Lambert
 FACILITY Unichem Carlsbad LOCATION Carlsbad
 FACILITY REP ON SITE - COUNTY Eddy

WELL OPERATION

2-way
Valving to control flow appears tubing
valve closed well
 WELL IS INJECTING: - THROUGH ANNULUS - THROUGH TUBING Not
 SOURCE OF FRESH WATER City H₂O producing
 TRACE INJECTION/PRODUCTION LINES - at this time

WELL HEAD PRESSURE - PSIG PUMP PRESSURE - PSIG
 LEAKS AROUND WELL OR PUMP Evidence of brine leak/spill
Soil has recently been graded & fresh dirt placed
OVER SALT CRUST ON
 STORAGE AREA surface Took photos

FOR PONDS: out-of-service
 GENERAL LINER APPEARANCE old ammunition bunkers

AMOUNT OF FREEBOARD Empty w/ salt buildup on
 ANY SIGN OF OVERFLOW OR LEAKS bottom
 LEAK DETECTION SYSTEM - FLUIDS - DRY

FOR TANKS: Look
 GENERAL APPEARANCE Good
 LABELED PLAINLY - YES X NO CAN see lines from well
 BERMED TO PREVENT RUNOFF X YES - NO
 CHECK CONTENTS TO ASSURE PROPER FLUID/LABLE MATCH -

NUMBER OF TANKS FOR 4 BRINE fractanks FRESH WATER 3 => Appeared
in use to be out-of
service

LOADING AREA Facility Recently Graded ~~may~~ leak may have been
 PROPERLY GRADED AND BERMED TO CONTAIN SPILLAGE ✓ YES - NO Sizeable
 ANY EVIDENCE OF RECENT SPILLAGE ✓ YES - NO ?
 DOES FACILITY HAVE A SPILL COLLECTION SYSTEM ✓ YES - NO unknown
 ANY EVIDENCE OF OIL SPILLING/DUMPING - YES - NO

Evidence of Brine Spill around tankst injection well
 MONITORING WELLS SALT crust present, dirt placed over spill

DEPTH - FT STATIC WATER LEVEL - FT BELOW CASING
 SAMPLED THIS VISIT - YES - NO TEMP - Ec -

COMMENTS Check w/ discharger about brine
leak/spill from wellhead & tanks
? Recommend removal of salt encrusted
soil

BRINE STATION INSPECTION FORM

DATE 12/7 1988 Funniceid INSPECTOR Lambert
 FACILITY Unicklem LOCATION Funnice
 FACILITY REP ON SITE Row TRAVIS LESTER COUNTY Lea

WELL OPERATION valved for reversal to control salt build up
 WELL IS INJECTING: ☒ THROUGH ANNULUS ☐ THROUGH TUBING
 SOURCE OF FRESH WATER City Water
 TRACE INJECTION/PRODUCTION LINES underground
 WELL HEAD PRESSURE _____ PSIG PUMP PRESSURE _____ PSIG
 LEAKS AROUND WELL OR PUMP None Looks Good

STORAGE AREA

FOR PONDS: 1 pond/spill collection system
 GENERAL LINER APPEARANCE lypalon lined, fenced

AMOUNT OF FREEBOARD ~ 2 foot
 ANY SIGN OF OVERFLOW OR LEAKS None
 LEAK DETECTION SYSTEM ☐ FLUIDS ☐ DRY

FOR TANKS: 4 tanks 1 fresh East 3 brine West
 GENERAL APPEARANCE Good Shape Don't & Sell Water
 LABELED PLAINLY ☒ YES ☐ NO it is make-up for brine
 BERMED TO PREVENT RUNOFF ☒ YES ☐ NO
 CHECK CONTENTS TO ASSURE PROPER FLUID/LABLE MATCH _____

NUMBER OF TANKS FOR BRINE 3 FRESH WATER 1 makeup water

LOADING AREA

PROPERLY GRADED AND BERMED TO CONTAIN SPILLAGE ☒ YES ☐ NO
 ANY EVIDENCE OF RECENT SPILLAGE ☐ YES ☒ NO
 DOES FACILITY HAVE A SPILL COLLECTION SYSTEM ☒ YES ☐ NO
 ANY EVIDENCE OF OIL SPILLING/DUMPING ☐ YES ☐ NO

→ also used for additional brine storage when needed
not continuous

MONITORING WELLS

DEPTH _____ FT STATIC WATER LEVEL _____ FT BELOW CASING
 SAMPLED THIS VISIT ☐ YES ☐ NO TEMP _____ Ec _____

COMMENTS Looks Good See no problems
Typical Brine Spillage - minor

BRINE STATION INSPECTION FORM

DATE 12/6 1988 ¹³⁴⁴ EID INSPECTOR Lambert
FACILITY Unichem Truckers #1 LOCATION Hwy 529 @ junction w/ St 8
FACILITY REP ON SITE — COUNTY LEA

WELL OPERATION

Valved for reversal

WELL IS INJECTING: — THROUGH ANNULUS — THROUGH TUBING
SOURCE OF FRESH WATER —

TRACE INJECTION/PRODUCTION LINES Surface look OK

WELL HEAD PRESSURE — PSIG PUMP PRESSURE — PSIG
LEAKS AROUND WELL OR PUMP None

STORAGE AREA

Appears well is shut in, lines from wellhead to pump disconnected

FOR PONDS:

GENERAL LINER APPEARANCE —

AMOUNT OF FREEBOARD

ANY SIGN OF OVERFLOW OR LEAKS —

LEAK DETECTION SYSTEM — FLUIDS — DRY

FOR TANKS: 5 tanks

GENERAL APPEARANCE Look Good

LABELLED PLAINLY ✓ YES — NO

BERMED TO PREVENT RUNOFF ✓ YES — NO

CHECK CONTENTS TO ASSURE PROPER FLUID/LABLE MATCH —

NUMBER OF TANKS FOR BRINE 2 FRESH WATER 3 East

Some brine spillage on North Side of Tanks - Minor
West
LOADING AREA

PROPERLY GRADED AND BERMED TO CONTAIN SPILLAGE ✓ YES — NO

ANY EVIDENCE OF RECENT SPILLAGE ✓ YES — NO

DOES FACILITY HAVE A SPILL COLLECTION SYSTEM ✓ YES — NO

ANY EVIDENCE OF OIL SPILLING/DUMPING — YES ✓ NO

Minor brine spillage drains to collection system (i.e. pit)

MONITORING WELLS Eastside of property OK

DEPTH — FT STATIC WATER LEVEL — FT BELOW CASING
SAMPLED THIS VISIT — YES — NO TEMP — Ec —

COMMENTS Cleanup Minor ~~Brine~~ Brine Spill - ~~Regrade~~ Regrade

CHECK STATUS OF OPERATION

Station appears to be out-of-service

Well SHUT IN Pumps Disconnected

BRINE STATION INSPECTION FORM

DATE 12/6 1988 EID INSPECTOR Lambert
FACILITY Unickon Truckers LOCATION Hobbs
FACILITY REP ON SITE #2 COUNTY IEA

WELL OPERATION

WELL IS INJECTING: THROUGH ANNULUS THROUGH TUBING
SOURCE OF FRESH WATER city water
TRACE INJECTION/PRODUCTION LINES underground

WELL HEAD PRESSURE _____ PSIG PUMP PRESSURE _____ PSIG
LEAKS AROUND WELL OR PUMP yes appears brine spilled / fluids ?
Nothing major ? well workover

STORAGE AREA

FOR PONDS: 1 brine storage
GENERAL LINER APPEARANCE hypalon lined looks ok

AMOUNT OF FREEBOARD ~ 1 foot plus
ANY SIGN OF OVERFLOW OR LEAKS No
LEAK DETECTION SYSTEM FLUIDS DRY
windblown debris in pond needs to be clean out

FOR TANKS:

GENERAL APPEARANCE _____

LABELLED PLAINLY	_____	YES	_____	NO
BERMED TO PREVENT RUNOFF	_____	YES	_____	NO
CHECK CONTENTS TO ASSURE PROPER FLUID/LABLE MATCH				

NUMBER OF TANKS FOR	BRINE	FRESH WATER
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
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11	11	11
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98	98	98
99	99	99
100	100	100

LOADING AREA

PROPERLY GRADED AND BERMED TO CONTAIN SPILLAGE	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
ANY EVIDENCE OF RECENT SPILLAGE	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
DOES FACILITY HAVE A SPILL COLLECTION SYSTEM	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/>	NO
ANY EVIDENCE OF OIL SPILLING/DUMPING	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/>	NO

Minor brine spillage not major
MONITORING WELLS typical loading area

DEPTH _____ FT STATIC WATER LEVEL _____ FT BELOW CASING
 SAMPLED THIS VISIT YES NO TEMP _____ Ec

COMMENTS Overall Looks Good
Need general cleanup around wellhead
And remove windblown debris from pond

No. of
Samples Ion

1	Na
1	K
1	Ca
1	Mg
1	Cl
1	HCO ₃
1	CO ₃
1	SO ₄
1	TDS
1	NO ₃ + NO ₂
1	NH ₃
1	kjeld N
1	As
1	Ba
1	Cd
1	CN
1	Cr
1	F
1	Pb
1	Hg
1	Se
1	Ag
1	U
1	V
1	Ra 226
1	Ra 228
1	Cu
1	Fe
1	Mn
1	Phenols
1	Zn
1	Al
1	B
1	Co
1	Mo
1	Ni
1	pH
1	Conduct.

FIELD TRIP REPORT
GROUND WATER SECTION

SLD USER CODES

Ground Water: 59300

NO₃, HC, & Toxics: 59600

UIC: 59500

County Eddy/LEA

FACILITY VISITED

Name of Facility: 20 Brine Facilities & Climax Chemical

Location: Carlsbad/Hobbs in Southeast NM

Discharge Plan Number: DP- See Below

Type of Operation: Brine Production / Chemical Manufacturing

ENVIRONMENTAL IMPROVEMENT DIVISION FIELD VISIT

EID Inspector(s): Lambert

Date of Inspection or Visit: 12/5-8/88

Discharger's Representative Present During EID Visit:

Name:

Title or Position:

Purpose of Visit:

- a. Evaluation of Proposed Discharge Plan
- b. Compliance Inspection of Discharge with Approved Plan
- c. Other (specify)

Inspection Activities During Field Visit:

a. Inspection of Facilities or Construction (specify)

b. Sampling of Effluents (give sampling locations)

c. Sampling of Ground Water (give names or locations of wells)

Sampled M.W. at Marathon

d. Evaluation of geology, soils, water levels or other physical characteristics of the location (specify)

e. Other (specify)

Observations and Information Obtained during the Visit:

The 20 Brine Facilities & Climax are listed below by DP#. See Individual File for specifics

ACTION REQUIRED

#	#	#	#	#
318	323	354	370	298
319	324	355	371	426
320	325	360	372	
321	326	361	394	
322	351	369	401	



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

RECEIVED

AUG 23 1988

GROUND WATER BUREAU

August 19, 1988

VIA CERTIFIED MAIL: P 713 502 771

John Parker, Water Resource Specialist
Ground Water Section
State of New Mexico
Environmental Improvement Division
P.O. Box 968, Runnels Building
Santa Fe, NM 87504-0968

SUBJECT: Blanket Plugging Bond

Dear Mr. Parker:

As indicated by the enclosed letters from the State of New Mexico Energy, Minerals and Natural Resources Department, the blanket plugging bond issued through Hartford Accident & Indemnity Company has been cancelled. The two wells outstanding refer to the Eunice and Carlsbad Brine Stations.

At this time, I just wanted you to be aware of the cancellation. I will keep you informed as events progress and action is taken to comply with the EID requirements for liability.

Please do not hesitate to contact me if you have any questions.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:mms

Enclosures

cc: Richard Brakey, Vice President, Rowland Trucking Division
Kevin Lambert, State of New Mexico EID
Bill Walton, Vice President-Finance, Unichem International Inc.

UNICHEM INTERNATIONAL INC.



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

August 10, 1988

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Unichem International, Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

Re: \$50,000 Blanket Plugging Bond
Unichem International, Inc.,
Principal; Hartford Accident &
Indemnity Co., Surety
Bond No. 4446488

Gentlemen:

Enclosed please find a copy of our letter cancelling the above-referenced blanket plugging bond as to future liability. Our records show two wells still outstanding on this bond and we would appreciate your advising us as to whether you will be obtaining a replacement bond or leaving the status of your present bond cancelled as to future liability.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Diane Richardson".

DIANE RICHARDSON
Administrator
Bonding Department

enclosure



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

August 10, 1988

POST OFFICE BOX 2068
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

The Hartford Insurance Group
Western Bond Underwriting
P. O. Box 3615
San Francisco, Ca. 94119

Re: \$50,000 Blanket Plugging Bond
Unichem International, Inc.,
Principal; Hartford Accident &
Indemnity Co., Surety
Bond No. 4446488

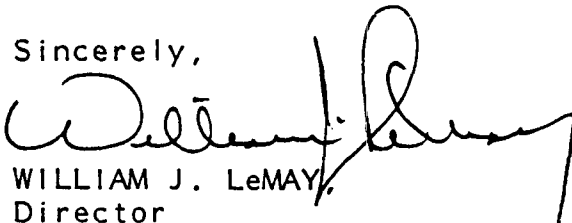
Gentlemen:

Receipt of your request for cancellation of the above-captioned bond is hereby acknowledged.

The bond executed by your company is cancelled September 5 1988 as to any property or wells acquired, started, or drilled after that date.

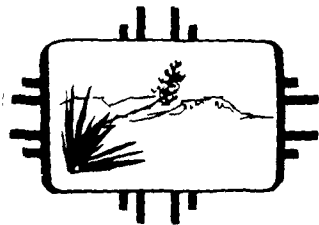
It should be noted, however, that the subject bond will remain in effect as to any property or wells acquired, started, or drilled prior to September 5, 1988.

Sincerely,


WILLIAM J. LeMAY,
Director

cc: Oil Conservation Division
Hobbs, Artesia, Aztec

Unichem International
P. O. Box 1499
Hobbs, New Mexico 88240



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

ENVIRONMENTAL IMPROVEMENT DIVISION

Michael J. Burkhart
Director

GARREY CARRUTHERS
Governor

CARLA L. MUTH
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 19, 1988

James H. Brutton, President
Unichem International, Inc.
P.O. Box 1499
Hobbs, NM 88240

RE: Approval of DP-370 and DP-371

Dear Mr. Brutton:

Pursuant to the Settlement Agreement entered into by Unichem International, Inc. (Unichem) and the Environmental Improvement Division (EID) on February 24, 1988, as amended May 5, 1988, EID has reviewed all financial assurance materials submitted by Unichem, and hereby certifies that it has found these financial assurances to be adequate. This terminates Unichem's obligations under the Settlement Agreement.

The applications for renewal of discharge plans DP-370 and 371 for Trucker's #1 and Trucker's #2 respectively in Lea County, New Mexico are hereby approved. The approved discharge plan renewals consist of the materials dated September 17, and 22, 1987; December 22, 1987; March 17, 1988; May 5, 1988, May 17, 1988; June 6, 1988; June 29, 1988; June 30, 1988; and July 7, 1988, plus the information and materials submitted as part of the original discharge plan approved December 18, 1982.

The discharge plan renewal applications were submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. It is approved pursuant to Section 3-109. Please note Subsections 3-109.E. and 3-109.F., which provide for possible future amendment of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

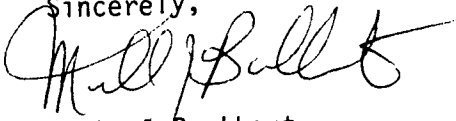
Monitoring and reporting shall be as specified in the discharge plan and supplements thereto. These requirements are summarized on the attached sheets. Any inadvertent omissions from this summary of a discharge plan monitoring or reporting requirement shall not relieve you of responsibility for compliance with that requirement.

JAMES H. BRUTTON
July 19, 1988
Page 2.

Pursuant to Subsection 3-109.G.4., these plan renewals are for a period of five years. This approval will expire July 18, 1993, and you should submit an application for a new approval in ample time before that date.

On behalf of the staff of the Ground Water Section I wish to thank you for your cooperation during these discharge plan reviews.

Sincerely,



Michael Burkhardt
Director

MB:JP:mc

cc: Garrison McCaslin, EID District IV Manager, Roswell
Wayne Price, Unichem Staff Engineer
Gini Nelson, HED Office

PS Form 3800, June 1985

U.S.G.P.O. 153-503

Sender <i>James H. Brutton</i>	
Street and No. <i>Laurelwood Christian</i>	
P.O. State and ZIP Code <i>Chickadee, Pa.</i>	
Postage <i>Post 1499</i>	
Certified Fee <i>10000</i>	<i>11/11 88240</i>
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ <i>10000</i>
Postmark or Date	<i>7/21/88</i>

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

P-484 099 846

E I D B U C K S L I P

CHECK ONE:

☒ LETTER TO James Brutton
for Michael Burkhardt signature

☐ MEMO TO _____

☐ PRESS RELEASE

☐ OTHER

SUBJECT: DP-Approvals, Settlement Agreement Termination

DRAFTED BY: John Parker 7/15/88
(Date)

CONCURRENCES:

NAME:

INITIAL

DATE
REC'DDATE
APPROVED

Ernest C. Rebeck Sect. Mgr.

ER

7/10

7/19

w/correction

Bur. Chief


Richard Mitzelfelt Dep. Dir.

Rm

7/19

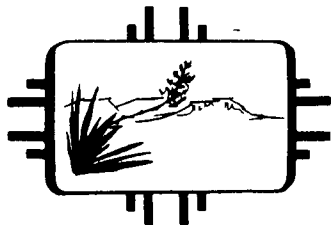
7/19

Michael Burkhardt Director

Provide this for signature to 

FINAL DECISION NEEDED BY SOON BECAUSE _____
(date)

COMMENTS BY DRAFTER OR REVIEWER(S):



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

(505) 827-2990

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

M E M O R A N D U M

TO: John Parker, EID, UIC
FROM: Gini Nelson, OGC *Gini Nelson*
DATE: July 13, 1988
RE: Unichem International, Inc. Financial Assurances

I have reviewed Unichem's submittals and conclude that Unichem has submitted satisfactory financial assurances for Truckers #1 and Truckers #2 as required by EID. Under the Settlement Agreement, the EID Director must approve or disapprove the discharge plan application on or before July 20, 1988. Additionally, EID must certify to Unichem in writing that EID has reviewed and approved the financial assurances submitted, in order to terminate Unichem's obligations under the Settlement Agreement. This can be done in the letter announcing the Director's decision on the discharge plan applications.

For now, I will hold the financial assurances in my Unichem file. The UIC program will need to decide where the originals should be kept.

Please call if you have any questions.

GN

:vmj



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

June 29, 1988

Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P. O. Box 968
Santa Fe, NM 87504-0968

Re: Truckers #1 - Financial Assurance/Letter of Credit

Dear Ms. Nelson:

Per your request, the following information is to tie the Letter of Credit issued to you from Barclays Bank in New York to the Truckers #1 Brine Station.

Irrevocable Standby Letter of Credit #810057

Issued By: Barclays Bank
75 Wall Street
New York, NY 10265

Dated: Effective June 1, 1988

Discharge Plan #370 (EID # DP-370)

Location of Well: Sec 1, T19S, R35E, approximately 10 miles
west of Hobbs, New Mexico

Amounts Assured: \$7,500 (U.S. \$)
[Seven Thousand Five Hundred Dollars & No/100---]

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Wayne Price
Staff Engineer

LWP:mms

UNICHEM INTERNATIONAL INC.



Barclays Bank
75 Wall Street
New York, N.Y. 10265

June 6, 1988

ENVIRONMENTAL IMPROVEMENT DIVISION OF THE
NEW MEXICO HEALTH AND ENVIRONMENT DEPARTMENT
P.O. Box 968
Santa Fe, New Mexico 87504-0968

IRREVOCABLE STANDBY LETTER OF CREDIT NO. 810057

Gentlemen:

In accordance with instructions received from accreditor, we hereby issue in your favor an Irrevocable Standby Letter of Credit No. 810057 in your favor, at the request and for the account of Unichem International, Inc., 707 North Leech P.O. Box 1499, Hobbs, New Mexico 88240, up to an aggregate amount of US\$7,500.00 (United States Dollars Seven Thousand Five Hundred), available upon presentation by you of:

1. Your sight draft, bearing reference to this Letter of Credit, No. 810057; and.
2. Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978.

This Letter of Credit will be drawn on to cover plugging and abandonment cost arising from the injection well(s) identified below in the amount of (United States Dollars Seven Thousand Five Hundred) \$7,500.00 annual aggregate:

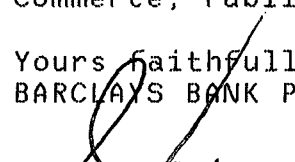
(List for each well: the New Mexico discharge plan number, and the name and address of each well. If coverage is different wells, the type of coverage applicable to each well must be indicated.)

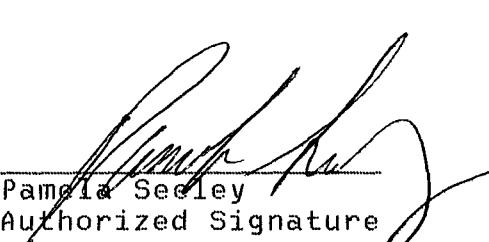
This Letter of Credit is effective as of June 1, 1988 and shall expire on June 1, 1989, but such expiration date shall be automatically extended for a period of one year on June 1, 1989 on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and Unichem International, Inc. by certified mail that we have decided not to extend this Letter of Credit beyond the current expiration date. In the event that you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Unichem International, Inc., as shown on the signed return receipts.

Whenever this Letter of Credit is drawn on under and in compliance with the ~~terms of this credit~~, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of Unichem International, Inc., in accordance with your instructions.

This credit is subject to the Uniform Customs and Practice for Documentary Credits (1983 Revision), International Chamber of Commerce, Publication No. 400.

Yours faithfully,
BARCLAYS BANK PLC


Nelson Bernardo
Authorized Signature


Pamela Seeley
Authorized Signature

BARCLAYS

BARCLAYS BANK PLC
75 Wall Street
New York, NY 10265

RECEIVED

JUL 05 1988

June 30, 1988

LEGAL

Beneficiary:
STATE OF NEW MEXICO
c/o DIRECTOR, ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968
Santa Fe, New Mexico 87504-0968

Accreditor:
UNICHEM INTERNATIONAL, INC.
707 North Leech
P.O. Box 1499
Hobbs, New Mexico 88240

AMENDMENT TO IRREVOCABLE STANDBY LETTER OF CREDIT NO. 810057 DATED June 6, 1988

Gentlemen:

We advise that the above mentioned credit has been amended as follows:

Beneficiarys name to now read	State of New Mexico c/o Director, Environmental Improvemnet Divison P.O. Box 968 Santa Fe, New Mexico 87504-0968
-------------------------------	--


Replace paragraph	(List for each well.....indicated.)
-------------------	--

to now read	Truckers #1 Brine Station (Sec 1, T19S, R35E, approximately 10 Miles west of Hobbs. DP-370)
-------------	---

All other terms and conditions remain unchanged. This letter forms an integral part of the Letter of Credit and is to be attached to the original advice.

Yours faithfully,

BARCLAYS BANK PLC



Authorized Signature



Authorized Signature

STANDBY TRUST AGREEMENT

Trust Agreement, the "Agreement", entered into as of June 29, 1988, by and between Unichem International Inc., a New Mexico Corporation, the "Grantor", and United Bank of Lea County, a national bank, the "Trustee".

Whereas, the New Mexico Water Quality Control Commission, "WQCC," has established certain regulations applicable to the Grantor, requiring that an owner or operator of an injection well shall provide assurance that funds will be available when needed for plugging and abandonment of the injection well,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facility(ies) identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this agreement and any successors or assigns of the Grantor;

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee;

(c) the terms "facility" or "activity" mean any underground injection well or any other facility or activity that is subject to regulation under the Underground Injection Control Program of the New Mexico Environmental Improvement Division, "EID", an agency of the State of New Mexico.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on Attachment A [on Attachment A, for each facility list the name, address, and the current plugging and abandonment cost estimate, or portions thereof, for which financial assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EID. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Attachment B. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The

Trustee shall not be responsible nor shall it undertake any responsibilities for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EID.

Section 4. Payment for Plugging and Abandonment. The Trustee shall make payments from the Fund as the EID Director shall direct, in writing, to provide for the payment of the costs of plugging and abandonment of the injection wells covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EID Director from the Fund for such expenditures in such amounts as the EID Director shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EID Director specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be

assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the EID Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EID Director shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advise of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected to the extent permitted by law, in acting upon the advise of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EID Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in Attachment A or such other designees as the Grantor may designate by amendment to Attachment A. The Trustee shall be fully protected in acting without inquiry in

accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EID Director to the Trustee shall be in writing, signed by the EID Director, or his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instruction. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EID hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EID, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the EID Director, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the EID Director, or by the Trustee and the EID Director if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee and the EID Director, or by the Trustee and the EID Director, if the Grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EID Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of New Mexico.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written.

W D Walton

Signature of Grantor

By: W.D. Walton, V.P.-Finance

Attest: Wayne Price

[Title] Wayne Price, Staff Engineer

[Seal]

Michael A. Warren

Signature of Trustee

By: Michael A. Warren, President and CEO

Attest: [Signature]


[Title] [Signature]

[Seal]

State of

County of

On this 29th day of June, 19 88, before me personally came William D. Walton to me known, who, being by me duly sworn, did depose and say that he/she resides at 101 W. Baja, Hobbs, New Mexico, that he/she is Vice President-Finance of Unichem International Inc., the corporation described in and which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he/she signed his/her name thereto by like order.

 _____, Mae M. Small
Notary Public in and for the
State of New Mexico

My Commission Expires July 30, 1988



BARCLAYS BANK PLC
Office:

"ATTACHMENT A"

L.C. # (For Bank Use Only)

APPLICATION AND AGREEMENT FOR STANDBY LETTER OF CREDIT

May 31, 1988

Please issue for our account an irrevocable standby letter of credit under the terms and conditions set forth below.

Letter of credit to be notified to beneficiary by:

☒ Airmail ☐ Telex or other teletransmission

Beneficiary (full name and address): Environmental Improvement Division of the New Mexico Health and Environment Department P.O. Box 968 Santa Fe, New Mexico 87504-0968	Applicant (full name and address): Unichem International Inc.* (*See additional 707 North Leech reference below) P.O. Box 1499 Hobbs, New Mexico 88240
To be advised through: Ms. Gini Nelson, Assistant General Counsel Office of General Counsel Health and Environment Department P.O. Box 968 Santa Fe, New Mexico 87504-0968	Amount in words and figures (specify currency): \$ 7,500.00 (U.S. \$) Seven Thousand Five Hundred Dollars & No/100----
Partial Drawings: <input checked="" type="checkbox"/> Permitted <input type="checkbox"/> Prohibited	Date and Place of Expiry: June 1, 1989

Available by drafts drawn on you or your correspondents at sight accompanied by the following documents:

☒ Beneficiary's signed statement as follows (specify exact wording):

" I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978. "

*Additional Reference Note with respect to Applicant: Truckers #1 Brine Station
(Sec 1, T19S, R35E, approximately
10 miles west of Hobbs. DP-370)

☐ Other (specify exact wording):

Special Instructions:

☒ Letter of Credit to be in form attached (subject to your approval)

☐ Other:

In consideration of your issuing your irrevocable standby letter of credit (hereinafter called the "Credit") substantially in accordance with the foregoing application, we, the undersigned (jointly and severally if more than one), hereby (a) agree to the provisions set forth on the following pages hereof and (b) agree to pay the following fees and commissions for the establishment of the Credit: plus any customary commission for any increase, extension, renewal, amendment or transfer of the Credit:

Issuance fee: \$ _____ : Commission of \$ _____ or at _____ % per annum on the undrawn portion of the Credit; Other: _____

Simon U.S. Holdings Inc.

Name of Applicant

By: [Signature], Sanders Davies

Title: VICE PRESIDENT

Unichem International Inc.

Name of Applicant

By: [Signature], William D. Walton

Title: Vice President-Finance



BARCLAYS

Barclays Bank N.C.
75 Wall Street
New York, N.Y. 10265

"ATTACHMENT B"

June 6, 1988

ENVIRONMENTAL IMPROVEMENT DIVISION OF THE
NEW MEXICO HEALTH AND ENVIRONMENT DEPARTMENT
P.O. Box 968
Santa Fe, New Mexico 87504-0968

IRREVOCABLE STANDBY LETTER OF CREDIT NO. 810057

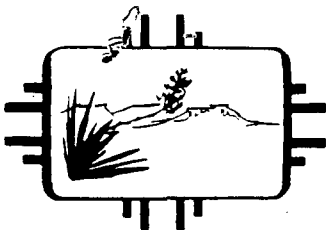
Gentlemen:

In accordance with instructions received from accreditor, we hereby issue in your favor an Irrevocable Standby Letter of Credit No. 810057 in your favor, at the request and for the account of Unichem International, Inc., 707 North Leech P.O. Box 1499, Hobbs, New Mexico 88240, up to an aggregate amount of US\$7,500.00 (United States Dollars Seven Thousand Five Hundred), available upon presentation by you of:

1. Your sight draft, bearing reference to this Letter of Credit, No. 810057; and.
2. Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978."

This Letter of Credit will be drawn on to cover plugging and abandonment cost arising from the injection well(s) identified below in the amount of (United States Dollars Seven Thousand Five Hundred) \$7,500.00 annual aggregate:

(List for each well: the New Mexico discharge plan number, and the name and address of each well. If coverage is different wells, the type of coverage applicable to each well must be



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

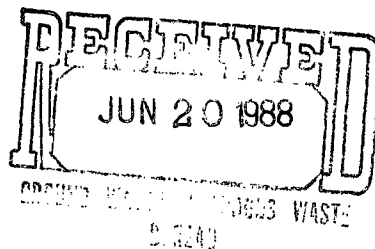
(505) 827-2990

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

June 17, 1988



VIA CERTIFIED MAIL,
RETURN RECEIPT REQUESTED

Wayne Price, Staff Engineer
Unichem International, Inc.
Post Office Box 1499
Hobbs, New Mexico 88240

Re: Settlement Agreement Notification of Financial Assurances
Inadequacies, Truckers #1 and Truckers #2

Dear Mr. Price:

The Environmental Improvement Division (EID) of the New Mexico Health and Environment Department has reviewed the Letters of Credit submitted to this office for Unichem by Barclays. As I informed Mae Small of your office on June 15, 1988, Unichem will need to (1) establish a standby trust fund for each Letter of Credit; and (2) submit a letter specifically referring to each Letter of Credit and each well covered. Both these requirements are explained in more detail in my letter to you dated April 28, 1988.

Please note that, pursuant to WQCC Regulation §5-210.B-17, the standby trust funds must be established with New Mexico banks, and be in the name of the State of New Mexico, c/o Director, Environmental Improvement Division.


Additionally, each Letter of Credit should be amended to (1) specifically refer to the New Mexico discharge plan number, and name and address of well covered; and (2) be in the name of the State of New Mexico, c/o Director, Environmental Improvement Division.

Under the amended Settlement Agreement, the EID Director must approve or disapprove the discharge plan applications on or before July 20, 1988. Please advise me of Unichem's intention

Wayne Price, Staff Engineer
June 17, 1988
Page 2

regarding the financial assurances inadequacies, at your earliest convenience.

Sincerely,


GINI NELSON
Assistant General Counsel

GN:vmj

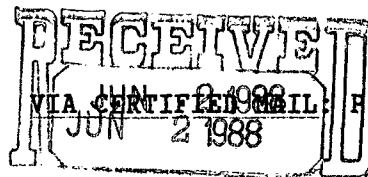
cc: John Parker, EID, UIC
Garrison McCaslin, EID District IV Manager
Scotty Holloman, Esq.

ltprice.uni



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

June 1, 1988



Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P.O. Box 968
Santa Fe, NM 87504-0968

SUBJECT: TRUCKERS #1 AND TRUCKERS #2

Dear Ms. Nelson:

Regarding the Amendment to the Settlement Agreement between the Environmental Improvement Division and Unichem International Inc., signed by the parties on April 27, 1988, and May 5, 1988, respectively, the enclosed copies of correspondence are provided for your information.

The purpose of providing this information is to show that Unichem has every intention of complying with the requirement set forth in Paragraph 1 of the amended Agreement to provide "completed, adequate financial assurances" by June 6, 1988. As indicated herein, Unichem has made application for the required financial assurances; as soon as the respective letters of credit are issued, they will be forwarded to your attention.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:mms

Enclosures

cc: Richard Brakey, Rowland Trucking
John Parker, New Mexico E.I.D.

UNICHEM INTERNATIONAL INC.



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

May 31, 1988

VIA EXPRESS MAIL

Mr. Sanders Davies
Davies and Davies
50 East 42nd Street, 16th Floor
New York, NY 10017

SUBJECT: Applications for Standby Letters of Credit -
UI Reference: Truckers #1 and Truckers #2 Brine Stations

Dear Sandy:

The enclosed applications for standby letters of credit through Barclays Bank require your signature on the second page of each copy. Once you have signed the applications, please pass them on to Maria Montenegro at Barclays for immediate processing. We are required to provide the letters of credit to the New Mexico Environmental Improvement Division by June 6, 1988; therefore, promptness in expediting the applications is very much appreciated. Also, would you please forward a signed copy of each application to my attention for our file reference.

Thank you for your assistance in this matter. Please do not hesitate to call if you have any questions or if further information is required.

Very truly yours,

UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script that reads 'Bill'.

William D. Walton
Vice President-Finance

WDW:mms

Enclosures

UNICHEM INTERNATIONAL INC.

**BARCLAYS**BARCLAYS BANK PLC
Office:

L/C # (For Bank Use Only)

**APPLICATION AND AGREEMENT
FOR STANDBY LETTER OF CREDIT**

May 31, 19 88

Please issue for our account an irrevocable standby letter of credit under the terms and conditions set forth below.

Letter of credit to be notified to beneficiary by:

☒ Airmail ☐ Telex or other teletransmission

Beneficiary (full name and address): Environmental Improvement Division of the New Mexico Health and Environment Department P.O. Box 968 Santa Fe, New Mexico 87504-0968	Applicant (full name and address): Unichem International Inc.* (*See additional 707 North Leech reference below) P.O. Box 1499 Hobbs, New Mexico 88240
To be advised through: Ms. Gini Nelson, Assistant General Counsel Office of General Counsel Health and Environment Department P.O. Box 968 Santa Fe, New Mexico 87504-0968	Amount in words and figures (specify currency): \$ 7,500.00 (U.S. \$) Seven Thousand Five Hundred Dollars & No/100----
Partial Drawings: <input checked="" type="checkbox"/> Permitted <input type="checkbox"/> Prohibited	Date and Place of Expiry: June 1, 1989

Available by drafts drawn on you or your correspondents at sight accompanied by the following documents:

☒ Beneficiary's signed statement as follows (specify exact wording):

" I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978. "

***Additional Reference Note with respect to Applicant:** Truckers #1 Brine Station
(Sec 1, T19S, R35E, approximately
10 miles west of Hobbs. DP-370)

☐ Other (specify exact wording):

Special Instructions:

☒ Letter of Credit to be in form attached (subject to your approval)

☐ Other:

In consideration of your issuing your irrevocable standby letter of credit (hereinafter called the "Credit") substantially in accordance with the foregoing application, we, the undersigned (jointly and severally if more than one), hereby (a) agree to the provisions set forth on the following pages hereof and (b) agree to pay the following fees and commissions for the establishment of the Credit: plus any customary commission for any increase, extension, renewal, amendment or transfer of the Credit:

Issuance fee: \$ _____ : Commission of \$ _____ or at _____ % per annum on the undrawn portion of the Credit; Other: _____

Simon U.S. Holdings Inc.

Name of Applicant

By _____, Sanders Davies

Title: _____

Unichem International Inc.

Name of Applicant

By William D. Walton, William D. Walton

Title: Vice President-Finance

**BARCLAYS**BARCLAYS BANK PLC
Office:

L/C # (For Bank Use Only)

**APPLICATION AND AGREEMENT
FOR STANDBY LETTER OF CREDIT**

May 31, 19 88

Please issue for our account an irrevocable standby letter of credit under the terms and conditions set forth below.

Letter of credit to be notified to beneficiary by:

☒ Airmail ☐ Telex or other teletransmission**Beneficiary (full name and address):**Environmental Improvement Division of the
New Mexico Health and Environment Department
P.O. Box 968
Santa Fe, New Mexico 87504-0968**Applicant (full name and address):**Unichem International Inc. ** (**See additional
707 North Leech reference below)
P.O. Box 1499
Hobbs, New Mexico 88240**To be advised through:**Ms. Gini Nelson, Assistant General Counsel
Office of General Counsel
Health and Environment Department
P.O. Box 968
Santa Fe, New Mexico 87504-0968**Amount in words and figures (specify currency):**

\$ 11,000.00 (U.S. \$)

Eleven Thousand Dollars & No/100----

Partial Drawings:☒ Permitted ☐ Prohibited**Date and Place of Expiry:**

June 1, 1989

Available by drafts drawn on you or your correspondents at sight accompanied by the following documents:

☒ Beneficiary's signed statement as follows (specify exact wording):" I certify that the amount of the draft is payable pursuant to regulations issued under authority of the
New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978. "****Additional Reference Note with respect to Applicant:**Truckers #2 Brine Station
(Sec. 33, T18S, R38E, Broadway Place,
Hobbs. DP-371)☐ Other (specify exact wording):

Special Instructions:

☒ Letter of Credit to be in form attached (subject to your approval)

☐ Other:

In consideration of your issuing your irrevocable standby letter of credit hereinafter called the "Credit" substantially in accordance with the foregoing application, we, the undersigned (jointly and severally if more than one), hereby (a) agree to the provisions set forth on the following pages hereof and (b) agree to pay the following fees and commissions for the establishment of the Credit plus any customary commission for any increase, extension, renewal, amendment or transfer of the Credit:

Issuance fee: \$ _____ : Commission of \$ _____ or at _____ % per annum on the undrawn portion of the Credit; Other: _____

Simon U.S. Holdings Inc.

Name of Applicant

Unichem International Inc.

Name of Applicant

By _____, Sanders Davies

Title: _____

By W. D. Walton, William D. Walton

Title: Vice President-Finance

IRREVOCABLE STANDBY LETTER OF CREDIT

[Name and address of issuing institution]

Director
Environmental Improvement
Division of the New Mexico
Health and Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Dear Sir or Madam:

We hereby establish our irrevocable Standby Letter of Credit No. _____ in your favor, at the request and for the account of Unichem International, Inc., P. O. Box 1499, Hobbs, New Mexico 88240, up to the aggregate amount of [in words] U.S. dollars (\$ [insert dollar amount]), available upon presentation by you of:

1. Your sight draft, bearing reference to this letter of credit, No. _____; and

2. Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978.

This letter of credit may be drawn on to cover plugging and abandonment costs arising from the injection well(s) identified below in the amount of [in words] \$ [insert dollar amount] annual aggregate:

[List for each well: the New Mexico discharge plan number, and the name and address of each well. If coverage is different for different wells, the type of coverage applicable to each well must be indicated.]

This letter of credit is effective as of [date] and shall expire on [expiration date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and Unichem International, Inc. by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that you are so notified, any

unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Unichem International, Inc., as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of Unichem International, Inc., in accordance with your instructions.

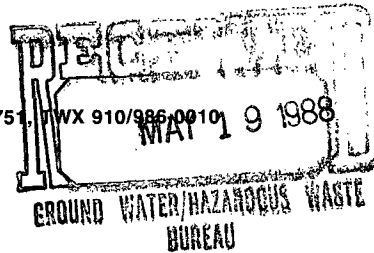
[Signatures(s) and title(s) of official(s) of
issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, FAX 910/986-0010



May 17, 1988

VIA CERTIFIED MAIL: P 713 502 748

Mr. John Parker
Water Resource Specialist
Ground Water Section
New Mexico Health and
Environment Department
P.O. Box 968
Santa Fe, NM 87504-0968

SUBJECT: TRUCKERS #2 BRINE STATION

Dear Mr. Parker:

In response to your letter of May 13, 1988, enclosed is a copy of the actual bid submitted by Standard Welding Works. The quoted price of \$3,500, which includes tax, is for filling the storage pit with caliche (fill dirt) and compacting the fill material to ground level.

The original figure of \$3,500 is correct; however, the breakdown prices shown for the fill dirt and load cost were listed incorrectly.

If you have any further questions after reviewing the enclosed information, please do not hesitate to contact me.

Sincerely,

UNICHEM INTERNATIONAL INC.

A handwritten signature in cursive script that reads 'Wayne Price'.

Wayne Price
Staff Engineer

LWP:mms

Enclosure

cc: Ms. Gini Nelson, Assistant General Counsel, State of New Mexico
Mr. Richard Brakey, Vice President - Rowland Trucking

UNICHEM INTERNATIONAL INC.

STANDARD WELDING WORKS, INC.

P.O. BOX 275 PHONE 394-2121
EUNICE, NEW MEXICO 88231

Lic. No. 18655

May 16, 1988

Unichem International, Inc.

RE: Brine Storage Pit (Truckers #2)

Mr. Wayne Price:

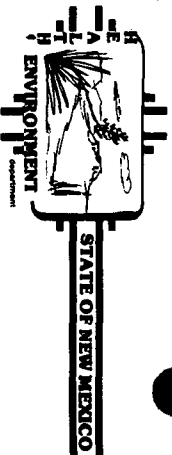
Please use and consider this as Standard Welding Works, Inc. bid for turn key job to fill existing Brine Storage Pit located at West Broadway Place, Hobbs, New Mexico, with caliche and compact to existing ground level.

Bid Price:	\$3,337.31
NM Sales Tax:	<u>162.69</u>
	\$3,500.00

Thank You,



Wes Johnston, President



MEMORANDUM

DATE: 5/12/88

TO: John Parker, etc

FROM: Gini Nelson, DEC

SUBJECT: Unichem Revised Estimates

PLEASE CALL ME (3854) TO DISCUSS. ELD had agreed to review revised estimates within 5 working days. Receipt of office received my copy on 5/6 (Friday); when we probably arrived at same time. Because I was out sick & you were in the field, an extension would probably be acceptable to Unichem, if you cannot in fact finish your review by end of day, Friday, 5/13.

REVISED COST ESTIMATE FOR TRUCKERS #1

(REFERENCE: Permit Submittal #3, Dated 12/11/87)

The following information represents a detailed breakdown on the cost that would be incurred by Unichem International if the brine well required plugging and removal of all associated equipment.

E S T I M A T E
= = = = =

Oilfield service unit (pulling unit): \$ 750.00*
--pull tubing; re-enter hole and set
bridge plug; cement pump truck (stand-by
time required - 1/2 day)

Oilfield service unit (pulling unit): \$ 750.00*
--dismantle well head; set P&A marker
(1/2 day time required)

*The above prices were quoted by X-Pert Well Service Company located in Hobbs, New Mexico.

One 7-5/8" bridge plug at \$1,500 \$ 1,500.00**

**Price quoted by Packer Sales & Rental located in Hobbs, New Mexico.

Set one cement plug above bridge 265 SX \$ 4,500.00***
plug using Class C neat cement (includes
cement cost [bottom-to-top], time and
labor for pump truck and driver

***Price quoted by Halliburton located in Hobbs, New Mexico.

Remove and relocate the following a total distance of 20 miles: - N/C - ****

- two 1,000 bbl tanks and three 400 bbl tanks
- 300' miscellaneous pipes and valves
- one pump and house
- miscellaneous electrical conduit and wire
- three-phase power service (power company)
- two concrete unloading pads

****Local salvage company will remove all equipment at no cost for possession of equipment.

TOTAL ESTIMATED COST: \$ 7,500.00

REVISED COST ESTIMATE FOR TRUCKERS #2

(Reference: Permit Submittal #3, Dated 12/15/87)

The following information represents a detailed breakdown on the cost that would be incurred by Unichem International if the brine well required plugging and removal of all associated equipment.

E S T I M A T E
= = = = =

Oilfield service unit (pulling unit): \$ 750.00*
--pull tubing; re-enter hole and set bridge plug;
cement pump truck (stand-by time required - 1/2 day)

Oilfield service unit (pulling unit): \$ 750.00*
--dismantle well head; set P&A marker
(1/2 day time required)

*The above prices were quoted by X-Pert Well Service Company located in Hobbs, New Mexico.

One 7-5/8" bridge plugs at \$1,500 \$ 1,500.00**

**Price quoted by Packer Sales & Rental located in Hobbs, New Mexico.

Set one cement plug above bridge plug using \$ 4,500.00***
Class C neat cement (includes cement cost 400 SK
[bottom-to-top], time and labor for pump
truck and driver

*Price quoted by Halliburton located in Hobbs, New Mexico.

Removal of miscellaneous equipment: - N/C - ****

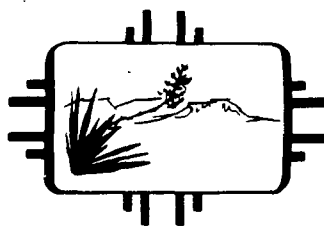
400' underground piping
Miscellaneous above-ground pipe
Miscellaneous electrical conduit and wire
Three-phase power service (power company)
1-30' X 100' concrete unloading pad
1-10' X 20' X 10' sump
1-10,000 bbl storage pit and liner

****Local salvage company will remove all equipment at no charge for possession of equipment.

Fill and compact: \$ 3,500.00 #
--2,000 yards fill dirt @ \$3/yard = \$ 6,000.00
--166 loads @ \$38/load = \$ 6,308.00

The above price was quoted by Standard Welding & Construction Company located in Eunice, New Mexico.

TOTAL ESTIMATED COST: \$ 11,000.00



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

ENVIRONMENTAL IMPROVEMENT DIVISION

Michael J. Burkhart
Director

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

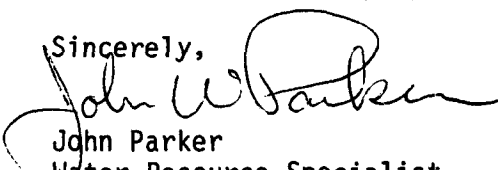
May 13, 1988

Mr. Wayne Price
Unichem International
P.O. Box 1499
Hobbs, NM 88240

Dear Mr. Price:

The New Mexico Environmental Improvement Division Ground Water Section is in receipt of your response dated May 5, 1988 to Ms. Gini Nelson. Preliminary review of your revised costs estimate for plugging and abandonment indicates that the lower sums based upon use of different plugging procedures are acceptable. However, staff will need more time to verify the figures submitted, and Unichem will need to clarify the surface decommissioning costs for Truckers #2. The figure of \$3,500.00 in the right column is contradictory to the quantities and unit costs appearing on the left. Further, it is not clear to what end the fill and compaction are being proposed. Please submit any clarification you can by Friday, May 20, 1988. EID will at that time be able to finish its review of Unichem's proposal.

Sincerely,


John Parker
Water Resource Specialist
Ground Water Section

JP:mc

cc: Gini Nelson, Assistant General Counsel
Scotty Holloman, Maddox Renfrow & Sauders
Garrison McCaslin, Dist. IV Manager



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

RECEIVED

MAY 6 1988

LEGAL

May 5, 1988

Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P.O. Box 968
Santa Fe, NM 87504-0968

SUBJECT: TRUCKERS #1 AND TRUCKERS #2

Dear Ms. Nelson:

In response to your letter of April 28, 1988, both copies of the Amendment to Settlement Agreement have been signed, and one copy is enclosed herewith for your records. Please note that a correction has been made on the Agreement to show the correct spelling of Mr. Britton's last name, i.e., Britton, rather than Brutton.

Also enclosed for the EID's review are revised cost estimates for the plugging and abandonment plans for Truckers #1 and Truckers #2. Please be aware that the estimates have been revised to reflect more realistic values; as such, the cost figures now represent true cost and weighted averages based on discussion with other brine well operators in the area. As indicated in the estimates, the prices quoted have been obtained from local companies.

Thank you for your assistance in this matter. Please contact me if you have any questions about the enclosed documents.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Wayne Price
Staff Engineer

LWP:mms

Enclosures

cc: Richard Brakey, Rowland Trucking
John Parker, New Mexico E.I.D.

UNICHEM INTERNATIONAL INC.

*note: revised
cost estimates
given to John
Parker. Copy is
in "Consig." section
of file. Huhm*

AMENDMENT TO SETTLEMENT AGREEMENT BETWEEN THE ENVIRONMENTAL
IMPROVEMENT DIVISION AND UNICHEM INTERNATIONAL, INC., SIGNED
BY THE PARTIES ON FEBRUARY 24, 1988 AND FEBRUARY 17, 1988,
RESPECTIVELY

By mutual agreement, the parties to the above-captioned
Settlement Agreement enter into the following agreement
amending the above-captioned Settlement Agreement:

1. Paragraph 1.c. of the Schedule of Compliance is
amended to read as follows:

Unichem International, Inc. shall submit to EID
completed, adequate financial assurances pursuant
to Section 5.210.B.17 of the Commission Regulations
(other than the most recent annual financial
statement submitted to EID) at the earliest date
that they are completed, but no later than June 6,
1988.

2. Paragraph 1.d. of the Schedule of Compliance is
amended to read as follows:

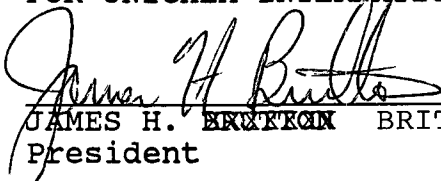
EID shall review the materials submitted under
paragraph 1.c. and shall either approve the
materials or will notify Unichem International,
Inc. of the materials' inadequacies on or before
June 20, 1988.

3. Paragraph 1.f. of the Schedule of Compliance is
amended to read as follows:

The EID Director shall approve or disapprove the
discharge plan application on or before July 20,
1988.

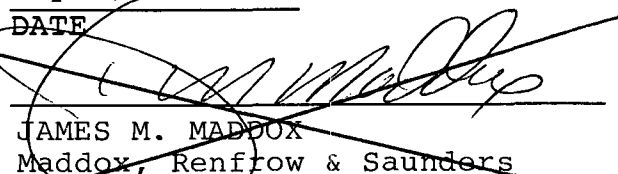
This Amendment to the Settlement Agreement is effective when
signed by all parties to this Settlement Agreement.

FOR UNICHEM INTERNATIONAL, INC.


JAMES H. ~~BRITTON~~ BRITTON
President

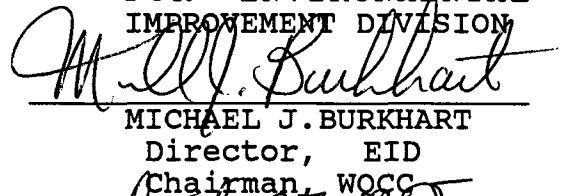
May 5, 1988

DATE

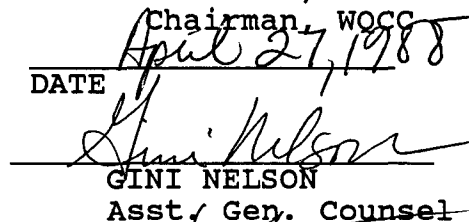

JAMES M. MADDOX
Maddox, Renfrow & Saunders

DATE May 5, 1988

FOR ENVIRONMENTAL
IMPROVEMENT DIVISION


MICHAEL J. BURKHART
Director, EID
Chairman, WOCC

DATE


GINI NELSON
Asst. Gen. Counsel

DATE

Attorney's signature not required
for Settlement Agreement.



Post Office Box 968
Santa Fe, New Mexico 87504-0968

GARREY CARRUTHERS
Governor

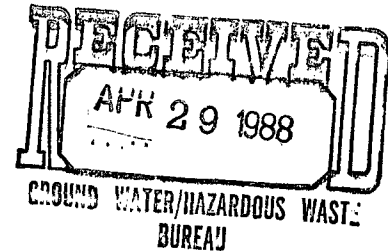
LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

VIA FEDERAL EXPRESS

April 28, 1988

Wayne Price, Staff Engineer
Unichem International, Inc.
P.O. Box 1499
Hobbs, NM 88240



Dear Mr. Price:

The Environmental Improvement Division (EID) is in receipt of Unichem's request dated April 15, 1988 for an extension of 90 days in which to (1) submit sufficient financial assurances, and (2) re-submit cost estimates for the plugging and abandonment plans for Truckers #1 and Truckers #2; and inquiring into the sufficiency of a letter of credit in satisfying the plugging and abandonment financial assurances.

EID has considered Unichem's request for an extension, and is willing to amend the Settlement Agreement to provide Unichem an extension, as indicated in the enclosed proposed Amendment to the Settlement Agreement. Please have the Amendment signed, and return a copy to EID, by May 9, 1988, if Unichem agrees to the proposal.

With regard to Unichem's other requests, Unichem may submit additional cost estimates for the plugging and abandonment plans for Truckers #1 and Truckers #2 for EID's review, if Unichem does so by May 9, 1988. EID will review any such submittal, and will notify Unichem of EID's acceptance or rejection of the cost estimates, within 5 working days of EID's receipt.

Additionally, Unichem may submit its financial assurances for plugging and abandonment by means of a letter of credit if:

- (1) the letter of credit is in a form substantially similar to that provided herein;
- (2) the issuing entity has the authority to issue letters of credit, and the letter of credit operations are regulated and examined by a Federal or State agency;
- (3) Unichem also establishes a standby trust fund for the letter of credit, in a form substantially similar to that provided Unichem by copy of the letter I sent Larry

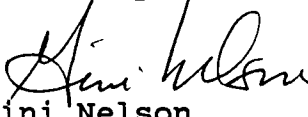
Letter to Wayne Price
April 28, 1988
Page 2

McConnell on March 21, 1988; and
(4) Unichem's submittal is accompanied by a letter from Unichem that refers to the letter of credit by number, issuing institution, and date, and indicates the discharge plan numbers, locations of wells and the amounts assured by the letter of credit.

Please note that Unichem may not provide its financial assurances for the plugging and abandonment of Truckers #1 and Truckers #2 by means of coverage by Unichem's financial statement. The amounts of the financial assurances required will be those amounts currently stated in Unichem's discharge plan applications for Truckers #1 and Truckers #2, or the amounts accepted by EID pursuant to Unichem's submittal referred to above.

If you have any questions, please call me at 827-2854. Thank you for your cooperation in this matter.

Sincerely,


Gini Nelson
Assistant General Counsel

Enclosures

cc: John Parker
Scotty Holloman
Garrison McCaslin, District IV Manager

AMENDMENT TO SETTLEMENT AGREEMENT BETWEEN THE ENVIRONMENTAL
IMPROVEMENT DIVISION AND UNICHEM INTERNATIONAL, INC., SIGNED
BY THE PARTIES ON FEBRUARY 24, 1988 AND FEBRUARY 17, 1988,
RESPECTIVELY

By mutual agreement, the parties to the above-captioned
Settlement Agreement enter into the following agreement
amending the above-captioned Settlement Agreement:

1. Paragraph 1.c. of the Schedule of Compliance is
amended to read as follows:

Unichem International, Inc. shall submit to EID
completed, adequate financial assurances pursuant
to Section 5.210.B.17 of the Commission Regulations
(other than the most recent annual financial
statement submitted to EID) at the earliest date
that they are completed, but no later than June 6,
1988.

2. Paragraph 1.d. of the Schedule of Compliance is
amended to read as follows:

EID shall review the materials submitted under
paragraph 1.c. and shall either approve the
materials or will notify Unichem International,
Inc. of the materials' inadequacies on or before
June 20, 1988.

3. Paragraph 1.f. of the Schedule of Compliance is
amended to read as follows:

The EID Director shall approve or disapprove the
discharge plan application on or before July 20,
1988.

This Amendment to the Settlement Agreement is effective when
signed by all parties to this Settlement Agreement.


FOR UNICHEM INTERNATIONAL, INC.

JAMES H. BRUTTON
President

DATE


DATE

FOR ENVIRONMENTAL
IMPROVEMENT DIVISION



MICHAEL J. BURKHART
Director, EID
Chairman, WCCG

DATE



GINI NELSON
Asst. Gen. Counsel

DATE

IRREVOCABLE STANDBY LETTER OF CREDIT

[Name and address of issuing institution]

Director
Environmental Improvement
Division of the New Mexico
Health and Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Dear Sir or Madam:

We hereby establish our irrevocable Standby Letter of Credit No. _____ in your favor, at the request and for the account of Unichem International, Inc., P. O. Box 1499, Hobbs, New Mexico 88240, up to the aggregate amount of [in words] U.S. dollars (\$ [insert dollar amount]), available upon presentation by you of:

1. Your sight draft, bearing reference to this letter of credit, No. _____; and

2. Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978.

This letter of credit may be drawn on to cover plugging and abandonment costs arising from the injection well(s) identified below in the amount of [in words] \$ [insert dollar amount] annual aggregate:

[List for each well: the New Mexico discharge plan number, and the name and address of each well. If coverage is different for different wells, the type of coverage applicable to each well must be indicated.]

This letter of credit is effective as of [date] and shall expire on [expiration date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and Unichem International, Inc. by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that you are so notified, any

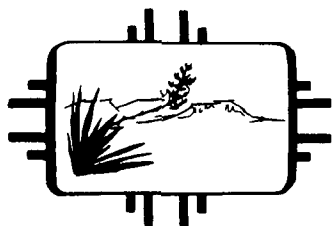
unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Unichem International, Inc., as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of Unichem International, Inc., in accordance with your instructions.

[Signatures(s) and title(s) of official(s) of
issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

MEMORANDUM

TO: JOHN PARKER, UIC
FROM: GINI NELSON, OGC *Shulson*
RE: UNICHEM
DATE: APRIL 21, 1988

I delivered to you Friday, April 18th, a copy of Unichem's telefax to EID regarding the financial assurances. The original arrived on Monday, and Wayne Price telephoned me yesterday to confirm that it had arrived. I confirmed that it had, and that EID was considering Unichem's request for an extension to re-submit Unichem's original projected plugging and abandonment costs.

Under the Settlement Agreement, EID committed to responding to Unichem's submittal by April 18th. Because Unichem requested (1) an extension to obtain an adequate financial assurance instrument, coupling the request with a status report on Unichem's efforts to procure same, and (2) an extension in order to re-submit the projected plugging and abandonment costs, which you have indicated may be significantly higher than the figures Unichem could legitimately have submitted, I believe EID can take additional time to respond to Unichem, as I told you on Friday, although EID is not obligated to take additional time. Wayne Price indicated that Unichem had no objection to EID's taking additional time to consider its requests, so long as Unichem will have the full twenty days in which to respond to EID, once EID responds, as provided for in the Settlement Agreement. I said Unichem would, as the decision whether to take additional time was EID's.

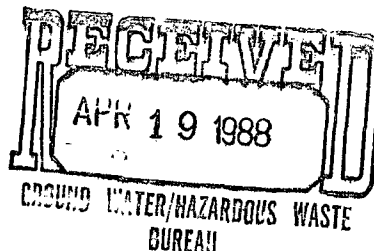
Thus, the UIC program has two requests for extensions from Unichem, to which the program will want to respond quickly. If some delay in providing financial assurances is acceptable, EID may want to give Unichem an extension on that count. If the program will consider a resubmittal of the projected plugging and abandonment costs, it will need to determine in what time frame to do it: you earlier indicated that you could evaluate a resubmittal so long as final discharge plan approval under the Settlement Agreement was not delayed. Unichem has requested a total extension period of 90 days, but it is unclear whether the longer period is required for the financial assurances or for the resubmittal.

Please call for us to discuss this.



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

April 15, 1988



VIA FACSIMILE

Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P.O. Box 968
Santa Fe, NM 87504-0968

SUBJECT: TRUCKERS #1 AND TRUCKERS #2

Dear Ms. Nelson:

In response to Point 3 of your letter dated April 6, the following represents an update on Unichem's efforts to obtain surety bonds for the above-referenced brine wells:

- Letter to Dick Caldwell of Federal Insurance Company on March 23 regarding REVISED Financial Bond Form and Trust Agreement. For your reference, a copy of the letter accompanies this transmittal.
- Follow-up telephone conversation with Mr. Caldwell on March 31, at which time he indicated that long-term surety bonds are not favored with his company. He suggested that we contact our parent company, Simon Engineering plc, to discuss a possible letter of credit in lieu of the surety bond. Discussion with Simon personnel indicated strong preference for pursuing letter of credit as possible solution to situation.

Based on the results of our efforts without having reached a satisfactory conclusion to date, we are requesting an extension in order to obtain either the letter of credit or surety bond. Also, please notify me as to whether or not a letter of credit will be sufficient.

After my telephone conversation with you this date, I would like to request a second extension in order to re-submit our original technical plan. The purpose for re-submitting the plan is to amend the bond amounts required for Truckers #1 and #2. The total extension time we are requesting is 90 days.

UNICHEM INTERNATIONAL INC.

Ms. Gini Nelson
Page Two
April 15, 1988

I appreciate your time and efforts in resolving this matter. After you have had an opportunity to consider our request, please notify me regarding the outcome.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price

Wayne Price
Staff Engineer

LWP:mms

✓cc: Mr. John Parker, New Mexico E.I.D.



COPY.

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

March 23, 1988

Federal Insurance Company
ATTN: Dick Caldwell, Surety Dept.
Box 1615
15 Mountain View Road
Warren, New Jersey 07061-1615

Dear Mr. Caldwell:

Enclosed please find the REVISED Financial Bond Form and Trust Agreement for your review, to replace the previous Form which was sent to you via FEDERAL EXPRESS, March 17, 1988. As stated previously, this Form is in reference to Truckers #1 & #2 Brine Stations.

Thank you for your patience in this matter.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:jmb

Enclosures

UNICHEM INTERNATIONAL INC.

John #1

4/14/88 TL w/ Scotty Holloman ← HE WAS NOT ~~Home~~
(4 pm.) (393-0505) IN, NOR WOULD
BE FOR REST
OF DAY.

4/14/88 TL w/ Wayne Price, (393-7751).

1. Will "fax" re: bond status tomorrow.
2. Are considering HOC, b/c may be cheaper.

4/15/88 TL w/ Wayne Price, (393-7751).

2pm

1. getting ready to fax for extension S.
2. Federated Insur. Co.
3. Re: \$50K blanket: covers 2 others, not up to for renewal. doesn't cover #1 + #2.
4. Re: pra estimates PROPOSED REVISIONS: program probs. will consider so long as time frame is met.
Extensions? CAN'T ST/GUARANTEE... but w/ good faith of Unichem, it might be possible.

4/15/88 TL w/ John Barker (0027)

Gave status of 4/14 + 4/15
telephone calls w/ Wayne Price



THE REPRODUCTION OF

THE

FOLLOWING

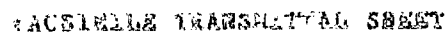
DOCUMENT (S)

CANNOT BE IMPROVED

DUE TO

THE CONDITION OF

THE ORIGINAL



If transfer is to be made, or if no transfer is to be made, please notify us immediately at (505) 353-7751.



Home Office 707 N. Loech, P.O. Box 1482 / Hobbs, NM 88240 / Ph 505/393-7751, TWX 910/968-6610

April 15, 1988

VIA FACSIMILE
=====

Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P.O. Box 968
Santa Fe, NM 87504-0968

SUBJECT: TRUCKERS #1 AND TRUCKERS #2

Dear Ms. Nelson:

In response to Point 4 of your letter dated April 14, 1988, the following represents an update on Unichem's efforts to develop a letter of credit for the above-referenced brine wells:

--Letter to Dick Caldwell, President of the company on March 23 regarding the SER Financial Bond and Trust Agreement. For your reference, a copy of the letter attached is this transmittal.

--Follow-up telephone conversation with Mr. Caldwell on March 31, at which time he indicated that long-term surety bonds are not beyond his company. He suggested that we contact our parent company, Simon Engineering plc, to discuss a possible letter of credit or bond option. Discussion with Simon personnel indicated a new procedure for providing letter of credit as possible solution to situation.

Based on the results of our efforts to date, we are reaching an impasse. We are unable to reach either the letter of credit or surety bond. We are unsure at this time whether or not a letter of credit will be sufficient.

After my telephone conversation with you this date, I would like to request a second extension in order to re-submit our original financial plan. The purpose for re-submitting the plan is to amend the bond amount required for Truckers #1 and #2. The total extension time we are requesting is 90 days.

Ms. Gini Nelson

Page Two

April 15, 1988

I appreciate your time and efforts in resolving this matter. After you have had an opportunity to consider our request, please notify me regarding the outcome.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price

Wayne Price
Staff Engineer

LWP:mms

cc: Mr. John Parker, New Mexico E.O.D.

COPY



Home Office 707 N. Laguna Blvd. Box 1455, Hobbs, NM 88240 / PO. 505/503-7731, FAX 505/503-0010

March 23, 1988

Federal Insurance Company
ATTN: Dick Caldwell, Staff Eng.
Box 1615
15 Mountain View Road
Vernon, New Jersey 07061-1615

Dear Mr. Caldwell:

Enclosed please find a copy of the Unichem International Agreement
for your review. The enclosed is a copy of the agreement to you
by AIR MAIL EXPRESS. We hope you will find it acceptable. We have
reference to Project #1 & #2 for the Station.

Thank you for your attention to this matter.

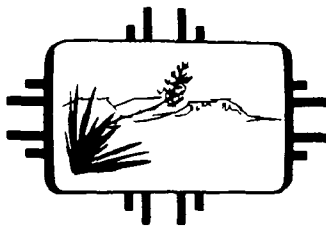
Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Staff Engineer

LWP:jmb

Enclosures



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

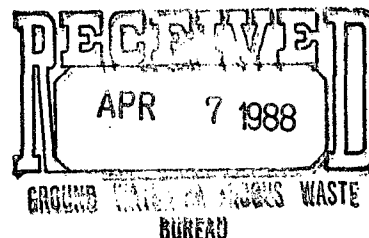
GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

April 6, 1988

Wayne Price, Staff Engineer
Unichem International, Inc.
P.O. Box 1499
Hobbs, NM 88240



Dear Mr. Price:

EID received your submittal dated March 17, 1988, and is completing its consideration of Unichem's requests regarding financial assurances. EID will respond formally on April 15 on the adequacy of the materials submitted; this letter is intended to provide you with what I anticipate will be EID's response, in order to allow Unichem to provide additional information to EID regarding Point 3 below, before April 15:

- (1) The letter from Unichem's financial officer completes the required financial assurances for the hydrogeologic investigations at Truckers #1 and #2;
- (2) EID will continue to require that Unichem provide financial assurances for the plugging and abandonment of Truckers #1 and #2 by means of, e.g., a surety bond in the form EID provided Unichem, rather than allow any portion of the projected plugging and abandonment costs to be covered by Unichem's financial statement (i.e., financial self-guarantee); and
- (3) EID will need an update on Unichem's efforts to get a surety bond(s), with an anticipated acquisition date, before it can consider granting an extension of time to Unichem in which to provide EID with an adequate surety bond(s).

Please feel free to call with any questions you may have.

Sincerely,

Gini Nelson
Assistant General Counsel

cc: John Parker
Scotty Holloman



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

March 17, 1988

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P.O. Box 968
Santa Fe, NM 87504-0968

RECEIVED
MAR 18 1988
LEGAL

RE: Settlement Agreement between Unichem International, Inc. and Environmental Improvement Division of the New Mexico Health & Environment Department dated February 24, 1988 covering Truckers #1 and Truckers #2 brine wells ("Settlement Agreement")

Dear Ms. Nelson:

As you requested, we are submitting the following documents:

1. Letter from Maddox, Renfrow & Saunders, setting forth our position concerning the requirements set forth in the Settlement Agreement
2. Letter from William D. Walton, Vice President-Finance of Unichem International, Inc., concerning the financial assurances for the hydrogeologic investigation

After your review of this material, please contact me or Scotty Holloman at Maddox, Renfrow & Saunders to discuss the position of the Environmental Improvement Division.

Yours very truly,


Wayne Price
Staff Engineer

xc: John Parker
Maddox, Renfrow & Saunders

UNICHEM INTERNATIONAL INC.

MADDOX, RENFROW & SAUNDERS

PROFESSIONAL CORPORATION
ATTORNEYS AND COUNSELORS AT LAW

POST OFFICE BOX 5370
HOBBS, NEW MEXICO 88241

THIRD FLOOR
BROADMOOR BUILDING
(505) 393-0505

DON MADDOX
JAMES M. MADDOX
JOHN M. RENFROW
JAMES P. SAUNDERS, JR.

SCOTTY HOLLOMAN
JOHN PAUL WEBER
GARY L. CLINGMAN

March 17, 1988

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P.O. Box 968
Santa Fe, NM 87504-0968

VIA: FEDERAL EXPRESS

RE: Settlement Agreement between Unichem International, Inc. and Environmental Improvement Division of the New Mexico Health & Environment Department dated February 24, 1988 covering Truckers #1 and Truckers #2 brine wells ("Settlement Agreement")

Dear Ms. Nelson:

This letter is in response to a conversation held Wednesday, March 16, 1988 between you, Wayne Price of Unichem International, Inc., and myself. During that conversation, we indicated to you that Unichem has taken steps to satisfy the requirements of the Environmental Improvement Division of the New Mexico Health & Environment Department ("EID") for the submission of adequate financial assurances as required by Section 5-210.B.17 of the Commission Regulations pursuant to the Settlement Agreement.

Under the Settlement Agreement, Unichem has until March 18, 1988 to provide the EID with the financial assurances requested which relate to the possibility of hydrogeologic testing and plugging and abandonment of Truckers #1 and #2 brine wells, and the EID has until April 15, 1988 to approve or disapprove of the financial assurances submitted.

Enclosed is the executed letter from the Chief Financial Officer of Unichem International, Inc. as requested by your letter dated March 4, 1988. The submission of this document satisfies the financial assurances for hydrogeologic investigation at the rate of \$35,000 per brine well for the two wells in partial satisfaction of the Settlement Agreement.

Environmental Improvement Division
March 17, 1988
Page 2

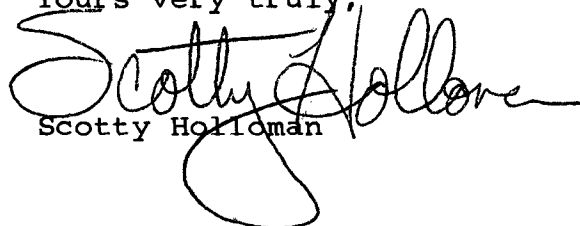
The only item left to be addressed is the submission of adequate financial assurances for the plugging and abandonment of Truckers #1 and #2 in the amounts of \$16,000 and \$28,000, respectively. During our conversation of March 16, 1988, you indicated that Unichem meets the net tangible worth test for using financial statements to fulfill financial assurances, but the EID has a policy of not accepting the financial statement for financial assurances in excess of \$100,000. The total financial assurances for Truckers #1 and #2 as set out in your letter of March 4, 1988 totals \$114,000. Unichem requests that the financial statements be reconsidered as complete adequate financial assurances for all financial assurances, hydrogeologic testing, and plugging and abandonment requested. In the event this approach is unacceptable, Unichem requests that the financial statements be accepted in at least partial satisfaction of the financial assurances requirement for plugging and abandonment in an amount of at least \$30,000 (\$100,000 financial statement policy limit of EID less \$70,000 financial assurance for the hydrogeologic testing). The \$30,000 amount could completely satisfy the financial assurance requirement for the plugging and abandonment amount for Truckers #2 in the amount of \$28,000, or the \$30,000 amount could be divided between the two wells.

In the event the financial statements are not satisfactory for the complete financial assurances under the terms of the Settlement Agreement, Unichem does not anticipate having the necessary plugging and abandonment bonds in place before March 18, 1988. Unichem would request an extension of time under the Settlement Agreement in which to submit final adequate financial assurances for the plugging and abandonment costs.

Unichem has previously submitted all previously requested materials and information as soon as it was available and Unichem is continuing to attempt to do so and to secure bonds for the plugging and abandonment costs. Applications for these bonds have been made through Daniels Insurance in Hobbs, New Mexico and through Marsh & McLennan in Albuquerque, New Mexico. In the event you desire to verify the efforts made to obtain these bonds, please contact Larry McConnell at 243-6616 with Marsh & McLennan.

Unichem continues to do everything possible to comply with the terms of the Settlement Agreement and is willing to provide further information if necessary.

Yours very truly,


Scotty Holloman

SH:rm
Enc: As stated

[LETTER FROM CHIEF FINANCIAL OFFICER]

I am the chief financial officer of Unichem International, Inc., P.O. Box 1499, Hobbs, New Mexico 88240. This letter is in support of the use of the financial test of self-insurance to demonstrate financial responsibility for undertaking a hydrogeologic investigation for ground water contamination caused by sudden and/or nonsudden accidental releases in the amount of at least \$70,000.00 arising from operating the brine wells indicated below.

The following brine wells at the following facilities are covered by this financial test by Unichem International, Inc.:

Truckers #1: located in Section 1, Township 19 South, Range 35 East, Lea County, New Mexico;

Truckers #2: located in Section 33, Township 18 South, Range 38 East, Lea County, New Mexico.

Unichem International, Inc. has not received an adverse opinion or a disclaimer of opinion from an independent auditor on its financial statements for the latest completed fiscal year.

[Fill in the following information. Tangible net worth is to be derived from the year-end financial statements of Unichem International, Inc. for the latest completed fiscal year.]

1. Amount of plugging and abandonment costs and hydrogeologic investigation costs covered by the financial test \$70,000
2. Tangible net worth \$11,943,146 ⊕
3. Is line 2 at least 10 times line 3? yes

William D. Walton
[Signature]

William D. Walton
[Name]

Vice President - Finance
[Title]

3/16/88
[Date]



Stockholder's Equity
12/31/87 \$19,889,631

Less: Goodwill (7,946,485)

TANGIBLE NET WORTH 11,943,146

MADDOX, RENFROW & SAUNDERS

PROFESSIONAL CORPORATION

ATTORNEYS AND COUNSELORS AT LAW

POST OFFICE BOX 5370

HOBBS, NEW MEXICO 88241

DON MADDOX
JAMES M. MADDOX
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THIRD FLOOR
BROADMOOR BUILDING
(505) 393-0505

SCOTTY HOLLOMAN
JOHN PAUL WEBER
GARY L. CLINGMAN

March 17, 1988

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P.O. Box 968
Santa Fe, NM 87504-0968

VIA: FEDERAL EXPRESS

RE: Settlement Agreement between Unichem International, Inc. and Environmental Improvement Division of the New Mexico Health & Environment Department dated February 24, 1988 covering Truckers #1 and Truckers #2 brine wells ("Settlement Agreement")

Dear Ms. Nelson:

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Environmental Improvement Division
March 17, 1988
Page 2

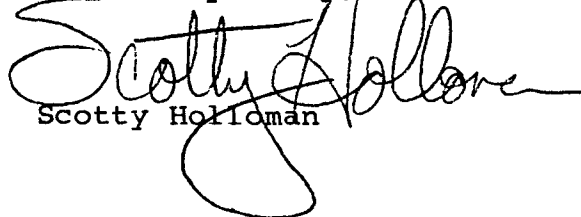
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Unichem continues to do everything possible to comply with the terms of the Settlement Agreement and is willing to provide further information if necessary.

Yours very truly,


Scotty Holloman

SH:rm
Enc: As stated

[LETTER FROM CHIEF FINANCIAL OFFICER]

I am the chief financial officer of Unichem International, Inc., P.O. Box 1499, Hobbs, New Mexico 88240. This letter is in support of the use of the financial test of self-insurance to demonstrate financial responsibility for undertaking a hydrogeologic investigation for ground water contamination caused by sudden and/or nonsudden accidental releases in the amount of at least \$70,000.00 arising from operating the brine wells indicated below.

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Truckers #2: located in Section 33, Township 18 South, Range 38 East, Lea County, New Mexico.

Unichem International, Inc. has not received an adverse opinion or a disclaimer of opinion from an independent auditor on its financial statements for the latest completed fiscal year.

[Fill in the following information. Tangible net worth is to be derived from the year-end financial statements of Unichem International, Inc. for the latest completed fiscal year.]

1. Amount of plugging and abandonment costs and hydrogeologic investigation costs covered by the financial test \$70,000
2. Tangible net worth \$11,943,146
3. Is line 2 at least 10 times line 3? Yes

William D. Walton
[Signature]

William D. Walton
[Name]

VICE PRESIDENT - Finance
[Title]

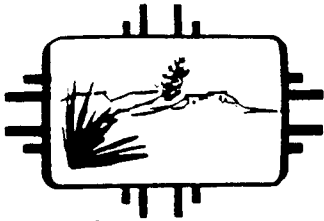
3/16/87
[Date]



STOCKHOLDER'S EQUITY
12/31/87 \$19,889,631

Less: Goodwill (7,946,485)

TANGIBLE NET WORTH 11,943,146



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

OFFICE OF GENERAL COUNSEL
Post Office Box 968
Santa Fe, New Mexico 87504-0968
(505) 827-2990

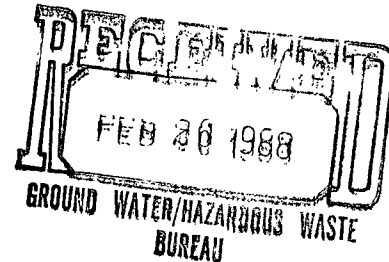
GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

February 24, 1988

Mr. James H. Britton
President
Unichem International, Inc.
P.O. Box 1499
Hobbs, NM 88240



Re: Settlement Agreement for Truckers #1 and #2 Brine Stations

Dear Mr. Britton:

Enclosed please find your company's copy of the Settlement Agreement between Unichem International, Inc. (Unichem) and Michael Burkhardt, Director, Environmental Improvement Division (EID), and Chairman, Water Quality Control Commission (WQCC), signed by Mr. Burkhardt this date.

Unichem's prompt and cooperative response in this matter is appreciated, and EID expects to continue working closely with Unichem in dealing with the submission of adequate financial assurances pursuant to Section 5 210.B.17 of the WQCC Regulations. EID is in the process of reviewing Unichem's financial statement submitted in partial satisfaction of the Settlement Agreement, and shall notify Unichem in writing by March 4, 1988 of EID's approval or disapproval of the submission as satisfaction of the Section 5 210.B.17 requirement.

As I indicated to Mr. Price and Mr. Holloman, however, the standards for a corporate self guarantee (applicable under other programs) are rather rigorous, and Unichem must pursue application for other forms of financial assurances, such as a surety bond, concurrently with that review. Daniels Insurance Inc. informs me that Unichem has made application to it for bonds for Truckers #1 and Truckers #2 Brine Stations, per the bond forms submitted to EID for review on February 11, and for \$16,000.00 and \$28,000.00, respectively. I understand Unichem's need for prompt application at that time, and do not fault it for that; the form of the bond, and the amounts of the bonds, may not be adequate for fully satisfying the Section 5 210.B.17 requirement, however. EID is in the process of determining what the proper amounts of the bonds, and adequate bond forms, are, as I also indicated to Mr. Price and Mr. Holloman. I shall contact Unichem within a short time with additional comments regarding

Mr. James H. Britton
February 24, 1988
Page Two

I note that the Settlement Agreement is not signed by an Unichem attorney, which the form of the Settlement Agreement contemplated (the second signature line under yours, and opposite mine, as attorney to Mr. Burkhart). This is not required, and I simply note that Mr. Holloman, an attorney, was involved in discussions with me regarding the Agreement.

Thank you again for your company's cooperation in this matter. I look forward to that continued assistance.

Sincerely,



Gini Nelson
Assistant General Counsel

Enclosure

cc: Mr. Wayne Price
Unichem International, Inc.
P.O. Box 1499
Hobbs, NM 88240

Mr. Scotty Holloman, Esq.
Maddox, Renfrow and Saunders
1401 North Turner
Broadmoor Building
Hobbs, NM 88240

John Parker, EID UIC Program

March 16, 1988

To: Gini Nelson

From: George Parascandola

Subject: Unichem International - Additional Analysis
Updates Memo dated February 24, 1988

The most recent report for Unichem International Inc. (UII) includes audited consolidated financial statements for the years ended December 31, 1987 and 1986. There are no differences between the audited 1986 statements and the previously reviewed unaudited 1986 statements.

Overall conclusion remains that there are adequate liquid assets and cash generating capacity to either meet a \$100,000 plus expenditure or to post some cash or purchase a bond.

However, I still recommend that we require escrowing some funds or obtaining a bond.

The strong cash flow includes large cash transactions with the parent company. Those transactions are clearly shown in the audited financial statements of changes in financial position and decrease in working capital (page 5).

It is apparent that the parent company can and is willing to take substantial cash from UII. There is no evidence or indication that the parent intends to hurt UII or to strip assets. But, given what might be reduced brine production and related profits when wells are shut down, it would be good to have some protection. Accordingly, the above recommendation is offered.

EPA includes in its standards for self insurance under rules concerning underground storage tanks that a firm must have tangible net worth equal to at least 10 times a potential financial responsibility. UII's tangible net worth at the close of 1987 and 1986:

	<u>1987</u>	<u>1986</u>
Shareholder's Equity	\$19,889,631	\$18,502,994
Less: Intangible Asset - Premium on Acquisition of Subsidiaries	<u>7,946,485</u>	<u>6,561,781</u>
Tangible Net Worth	<u>\$11,943,146</u>	<u>\$11,941,213</u>

Please let me know if you have any questions or require additional information.

npfile:giniuii2

2/24/88 Cw George Parascandola

1. see attached - (+ his notes w/ finan. stmt w/ bond settlement agent)
2. Generally:
 - Company probably could afford \$¹⁰5-10K/yr. into ~ snow; old bank \$50K.
 - * These sums are relatively small.
 - If ~~fund~~ ^{fund} ~ \$100K, better to get a bond.
 - Company probably can get a \$50K bond.

February 24, 1988

To: Gini Nelson

From: George Parascandola

Subject: Unichem International

I did some analysis of the unaudited financial statements submitted by UI Inc. for the period ended December 31, 1986 with comparison to prior year. The purpose of the analysis was to assess the liquidity of the company in relationship to its proposal to self underwrite \$50,000+(-) as part of a settlement agreement.

The reviewed statements are for 1986. Since then 1987 has past. It is assumed that nothing extraordinary occurred that adversely changed the company's fiscal condition.

I conclude from the quick analysis that there are plenty of liquid assets and cash generating capacity. There should be no problem meeting the additional expenditure.

I'd suggest that you request them to escrow all or some major portion of the amount upon signing the agreement. Initial expenditures for the required action could come from the company with subsequent "reimbursement" by releasing amounts from escrow.

Let's discuss if you have any questions.

I'd really like to pursue the project of evaluating procurement of a computer assisted formal system for evaluating financial statements.

opfile:giniuci

2/24
Gini
here's my
technical report
George

3/16

Gini

the analysis under
this tag is a hodge
podge that should be
superseded by the
statements on page 5
of the Audited report

Unichem International Inc
Analysis for ETO Settlement -
Determining Liquidity for 50,000±

Alleg 3/14/88

	December 31		
	1986	1985	1987
Total Current Assets	6784136	8883229	6375468
Total Current Liabilities	1044396	2649005	1819875
Add: Payable to related companies*	2611287	5072941	1106619
	3655683	7721946	2926494
Net Working Capital (Add*)	3128453	1161283	3448974

* reclassified to "current" for this analysis because \$2,461,654 reduction from 1985 to 1986 indicates it might be payable on a current basis.

Equity

Spendable

CASH

Accounts Receivable Net of Current Liabilities

550701	924767	501615
2020328	1643115	1248245
2571029	2567882	1749860

Not Spendable

Net All Other Assets & Liabilities

15931965	14326829	18139771
----------	----------	----------

Stockholder's Equity

18502944	16844711	19889631
----------	----------	----------

Simple Audited (Estimated) Cash Generated by Operations

Net Income + 1748067 1151243

Plus: Depreciation

Allocation Federal TAXES

+ 1972992 NA + 1817848 + 525601

Less: GAIN on Sale of Equipment

- 592802 - 45706

Reduction of Accounts Payable

- 761226 ~~INCREASE~~ + 84301

Payment to related companies

- 663294 ~~INCREASE~~ + 580439

Other reductions of liabilities

- 180084 ~~INCREASE~~ + 150739

Plus: Reduction in Accounts Receivable + 1227396 ~~INCREASE~~ - 3396

Less: Reduction in long-term debt

- 2545738 - 1597557

Increase in Fixed Assets

- 130818 - 948933

74482

Less: Premium on Acquisition (Subsidiary)

- 393026 Dividend 1902496

Partial - CASH spent

(318544) - 1032000

Actual Cash Addition (225066)

(129504)

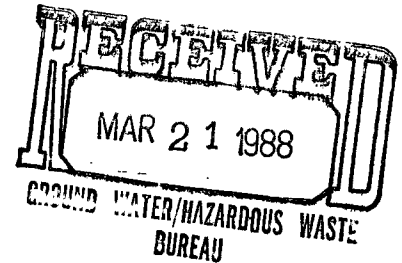
1987 Audited report includes Audited Statements of Unichem in Financial Position of - must have used them this



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

March 17, 1988

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P.O. Box 968
Santa Fe, NM 87504-0968



RE: Settlement Agreement between Unichem International, Inc. and Environmental Improvement Division of the New Mexico Health & Environment Department dated February 24, 1988 covering Truckers #1 and Truckers #2 brine wells ("Settlement Agreement")

Dear Ms. Nelson:

As you requested, we are submitting the following documents:

1. Letter from Maddox, Renfrow & Saunders, setting forth our position concerning the requirements set forth in the Settlement Agreement
2. Letter from William D. Walton, Vice President-Finance of Unichem International, Inc., concerning the financial assurances for the hydrogeologic investigation

After your review of this material, please contact me or Scotty Holloman at Maddox, Renfrow & Saunders to discuss the position of the Environmental Improvement Division.

Yours very truly,

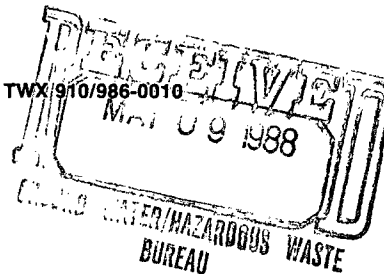
Wayne Price
Wayne Price
Staff Engineer

xc: John Parker
Maddox, Renfrow & Saunders

UNICHEM INTERNATIONAL INC.



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010



May 5, 1988

Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P.O. Box 968
Santa Fe, NM 87504-0968

SUBJECT: TRUCKERS #1 AND TRUCKERS #2

Dear Ms. Nelson:

In response to your letter of April 28, 1988, both copies of the Amendment to Settlement Agreement have been signed, and one copy is enclosed herewith for your records. Please note that a correction has been made on the Agreement to show the correct spelling of Mr. Britton's last name, i.e., Britton, rather than Brutton.

Also enclosed for the EID's review are revised cost estimates for the plugging and abandonment plans for Truckers #1 and Truckers #2. Please be aware that the estimates have been revised to reflect more realistic values; as such, the cost figures now represent true cost and weighted averages based on discussion with other brine well operators in the area. As indicated in the estimates, the prices quoted have been obtained from local companies.

Thank you for your assistance in this matter. Please contact me if you have any questions about the enclosed documents.

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Wayne Price
Staff Engineer

LWP:mms

Enclosures

cc: Richard Brakey, Rowland Trucking
John Parker, New Mexico E.I.D.

UNICHEM INTERNATIONAL INC.

AMENDMENT TO SETTLEMENT AGREEMENT BETWEEN THE ENVIRONMENTAL
IMPROVEMENT DIVISION AND UNICHEM INTERNATIONAL, INC., SIGNED
BY THE PARTIES ON FEBRUARY 24, 1988 AND FEBRUARY 17, 1988,
RESPECTIVELY

By mutual agreement, the parties to the above-captioned
Settlement Agreement enter into the following agreement
amending the above-captioned Settlement Agreement:

1. Paragraph 1.c. of the Schedule of Compliance is
amended to read as follows:

Unichem International, Inc. shall submit to EID
completed, adequate financial assurances pursuant
to Section 5.210.B.17 of the Commission Regulations
(other than the most recent annual financial
statement submitted to EID) at the earliest date
that they are completed, but no later than June 6,
1988.

2. Paragraph 1.d. of the Schedule of Compliance is
amended to read as follows:

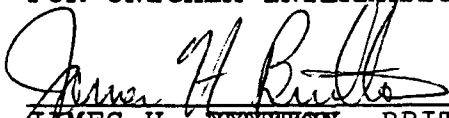
EID shall review the materials submitted under
paragraph 1.c. and shall either approve the
materials or will notify Unichem International,
Inc. of the materials' inadequacies on or before
June 20, 1988.

3. Paragraph 1.f. of the Schedule of Compliance is
amended to read as follows:

The EID Director shall approve or disapprove the
discharge plan application on or before July 20,
1988.

This Amendment to the Settlement Agreement is effective when
signed by all parties to this Settlement Agreement.

FOR UNICHEM INTERNATIONAL, INC.


JAMES H. ~~BRITTON~~ BRITTON
President

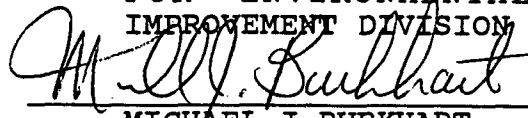
May 5, 1988

DATE



JAMES M. MADDOX
Maddox, Renfrow & Saunders

DATE May 5, 1988

FOR ENVIRONMENTAL
IMPROVEMENT DIVISION


MICHAEL J. BURKHART
Director, EID
Chairman, WOCC

DATE


GINI NELSON
Asst. Gen. Counsel

DATE

Attorney's signature not required
for Settlement Agreement.

REVISED COST ESTIMATE FOR TRUCKERS #1

(REFERENCE: Permit Submittal #3, Dated 12/11/87)

The following information represents a detailed breakdown on the cost that would be incurred by Unichem International if the brine well required plugging and removal of all associated equipment.

E S T I M A T E
= = = = =

Oilfield service unit (pulling unit): \$ 750.00*
--pull tubing; re-enter hole and set
bridge plug; cement pump truck (stand-by
time required - 1/2 day)

Oilfield service unit (pulling unit): \$ 750.00*
--dismantle well head; set P&A marker
(1/2 day time required)

*The above prices were quoted by X-Pert Well Service Company located in Hobbs, New Mexico.

One 7-5/8" bridge plug at \$1,500 \$ 1,500.00**

**Price quoted by Packer Sales & Rental located in Hobbs, New Mexico.

Set one cement plug above bridge \$ 4,500.00***
plug using Class C neat cement (includes
cement cost [bottom-to-top], time and
labor for pump truck and driver

***Price quoted by Halliburton located in Hobbs, New Mexico.

Remove and relocate the following a total distance of 20 miles: - N/C - ****

- two 1,000 bbl tanks and three 400 bbl tanks
- 300' miscellaneous pipes and valves
- one pump and house
- miscellaneous electrical conduit and wire
- three-phase power service (power company)
- two concrete unloading pads

****Local salvage company will remove all equipment at no cost for possession of equipment.

TOTAL ESTIMATED COST: \$ 7,500.00

REVISED COST ESTIMATE FOR TRUCKERS #2

(Reference: Permit Submittal #3, Dated 12/15/87)

The following information represents a detailed breakdown on the cost that would be incurred by Unichem International if the brine well required plugging and removal of all associated equipment.

E S T I M A T E
= = = = =

Oilfield service unit (pulling unit): \$ 750.00*
--pull tubing; re-enter hole and set bridge plug;
cement pump truck (stand-by time required - 1/2 day)

Oilfield service unit (pulling unit): \$ 750.00*
--dismantle well head; set P&A marker
(1/2 day time required)

*The above prices were quoted by X-Pert Well Service Company located in Hobbs, New Mexico.

One 7-5/8" bridge plugs at \$1,500 \$ 1,500.00**

**Price quoted by Packer Sales & Rental located in Hobbs, New Mexico.

Set one cement plug above bridge plug using \$ 4,500.00***
Class C neat cement (includes cement cost
[bottom-to-top], time and labor for pump
truck and driver

*Price quoted by Halliburton located in Hobbs, New Mexico.

Removal of miscellaneous equipment: - N/C - ****

400' underground piping
Miscellaneous above-ground pipe
Miscellaneous electrical conduit and wire
Three-phase power service (power company)
1-30' X 100' concrete unloading pad
1-10' X 20' X 10' sump
1-10,000 bbl storage pit and liner

****Local salvage company will remove all equipment at no charge for possession of equipment.

Fill and compact: \$ 3,500.00 ‡
--2,000 yards fill dirt @ \$3/yard
--166 loads @ \$38/load

‡ The above price was quoted by Standard Welding & Construction Company located in Eunice, New Mexico.

TOTAL ESTIMATED COST: \$ 11,000.00



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

June 29, 1988

Ms. Gini Nelson
Assistant General Counsel
New Mexico Health and
Environment Department
P. O. Box 968
Santa Fe, NM 87504-0968

Re: Truckers #2 - Financial Assurance/Letter of Credit

Dear Ms. Nelson:

Per your request, the following information is to tie the Letter of Credit issued to you from Barclays Bank in New York to the Truckers #2 Brine Station.

Irrevocable Standby Letter of Credit #810049

Issued By: Barclays Bank
75 Wall Street
New York, NY 10265

Dated: Effective June 1, 1988

Discharge Plan #371 (EID # DP-371)

Location of Well: Sec 33, T18S, R38E, Broadway Place,
Hobbs, New Mexico

Amounts Assured: \$11,000 (U.S. \$)
[Eleven Thousand Dollars & No/100---]

Sincerely,

UNICHEM INTERNATIONAL INC.

Wayne Price
Wayne Price
Staff Engineer

LWP:mms

UNICHEM INTERNATIONAL INC.



Barclays Bank PLC
75 Wall Street
New York, N.Y. 10265

June 6, 1988

ENVIRONMENTAL IMPROVEMENT DIVISION OF THE
NEW MEXICO HEALTH AND ENVIRONMENT DEPARTMENT
P.O. Box 968
Santa Fe, New Mexico 87504-0968

IRREVOCABLE STANDBY LETTER OF CREDIT NO. 810049

Gentlemen:

In accordance with instructions received from accreditor, we hereby issue in your favor an Irrevocable Standby Letter of Credit No. 810049 in your favor, at the request and for the account of Unichem International, Inc., P.O. Box 1499, Hobbs, New Mexico 88240, up to an aggregate amount of US\$11,000.00 (United States Dollars Eleven Thousand), available upon presentation by you of:

1. Your sight draft, bearing reference to this Letter of Credit, No. 810049; and.
2. Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978.

This Letter of Credit will be drawn on to cover plugging and abandonment cost arising from the injection well(s) identified below in the amount of (United States Dollars Eleven Thousand) \$11,000.00 annual aggregate:


(List for each well: the New Mexico discharge plan number, and the name and address of each well. If coverage is different wells, the type of coverage applicable to each well must be indicated.)

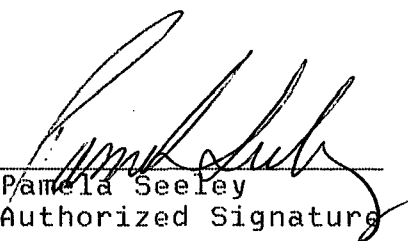
This Letter of Credit is effective as of June 1, 1988 and shall expire on June 1, 1989, but such expiration date shall be automatically extended for a period of one year on June 1, 1989 on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and Unichem International, Inc. by certified mail that we have decided not to extend this Letter of Credit beyond the current expiration date. In the event that you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Unichem International, Inc., as shown on the signed return receipts.

Whenever this Letter of Credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of Unichem International, Inc., in accordance with your instructions.

This credit is subject to the Uniform Customs and Practice for Documentary Credits (1983 Revision), International Chamber of Commerce, Publication No. 400.

Yours faithfully,
BARCLAYS BANK PLC


Nelson Bernardo
Authorized Signature


Pamela Seeley
Authorized Signature



BARCLAYS BANK PLC
75 Wall Street
New York, NY 10265

June 30, 1988

Beneficiary:
STATE OF NEW MEXICO
c/o DIRECTOR, ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968
Santa Fe, New Mexico 87504-0968

Accreditor:
UNICHEM INTERNATIONAL, INC.
707 North Leech
P.O. Box 1499
Hobbs, New Mexico 88240

AMENDMENT TO IRREVOCABLE STANDBY LETTER OF CREDIT NO. 810049 DATED June 6, 1988

Gentlemen:

We advise that the above mentioned credit has been amended as follows:

Beneficiarys name to now read	State of New Mexico c/o Director, Environmental Improvemnet Divison P.O. Box 968 Santa Fe, New Mexico 87504-0968
-------------------------------	--


Replace paragraph	(List for each well.....indicated.)
-------------------	--

to now read	Truckers #2 Brine Station (Sec 33, T18S, R38E, Broadway Place, Hobbs. DP-371)
-------------	---

All other terms and conditions remain unchanged. This letter forms an integral part of the Letter of Credit and is to be attached to the original advice.

Yours faithfully,

BARCLAYS BANK PLC


Authorized Signature


Authorized Signature

STANDBY TRUST AGREEMENT

Trust Agreement, the "Agreement", entered into as of June 29, 1988, by and between Unichem International Inc., a New Mexico Corporation, the "Grantor", and United Bank of Lea County, a national bank, the "Trustee".

Whereas, the New Mexico Water Quality Control Commission, "WQCC," has established certain regulations applicable to the Grantor, requiring that an owner or operator of an injection well shall provide assurance that funds will be available when needed for plugging and abandonment of the injection well,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facility(ies) identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term "Grantor" means the owner or operator who enters into this agreement and any successors or assigns of the Grantor;
- (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee;
- (c) the terms "facility" or "activity" mean any underground injection well or any other facility or activity that is subject to regulation under the Underground Injection Control Program of the New Mexico Environmental Improvement Division, "EID", an agency of the State of New Mexico.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on Attachment A [on Attachment A, for each facility list the name, address, and the current plugging and abandonment cost estimate, or portions thereof, for which financial assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EID. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Attachment B. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The

Trustee shall not be responsible nor shall it undertake any responsibilities for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EID.

Section 4. Payment for Plugging and Abandonment. The Trustee shall make payments from the Fund as the EID Director shall direct, in writing, to provide for the payment of the costs of plugging and abandonment of the injection wells covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EID Director from the Fund for such expenditures in such amounts as the EID Director shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EID Director specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be

assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the EID Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EID Director shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advise of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected to the extent permitted by law, in acting upon the advise of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EID Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in Attachment A or such other designees as the Grantor may designate by amendment to Attachment A. The Trustee shall be fully protected in acting without inquiry in

accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EID Director to the Trustee shall be in writing, signed by the EID Director, or his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instruction. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EID hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EID, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the EID Director, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the EID Director, or by the Trustee and the EID Director if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee and the EID Director, or by the Trustee and the EID Director, if the Grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EID Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of New Mexico.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written.

W. D. Walton

Signature of Grantor

By: W.D. Walton, V.P.-Finance

Attest: Wayne Price

[Title] Wayne Price, Staff Engineer

[Seal]

Michael A. Warren

Signature of Trustee

By: Michael A. Warren, President and CEO

Attest: [Signature]

[Title] [Signature]

[Seal]

CERTIFICATE OF ACKNOWLEDGMENT

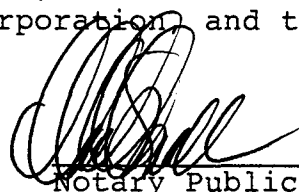
State of

New Mexico

County of

Lea

On this 29th day of June, 19 88, before me personally came William D. Walton to me known, who, being by me duly sworn, did depose and say that he/she resides at 101 W. Baja, Hobbs, New Mexico, that he/she is Vice President-Finance of Unichem International Inc., the corporation described in and which executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that he/she signed his/her name thereto by like order.



Mae M. Small
Notary Public in and for the
State of New Mexico

My Commission Expires July 30, 1988

**BARCLAYS**

BARCLAYS BANK PLC

Office:

"ATTACHMENT A"

L.C. # (For Bank Use Only)

**APPLICATION AND AGREEMENT
FOR STANDBY LETTER OF CREDIT**

May 31, 1988

Please issue for our account an irrevocable standby letter of credit under the terms and conditions set forth below.

Letter of credit to be notified to beneficiary by:

☒ Airmail ☐ Telex or other teletransmission

Beneficiary (full name and address): Environmental Improvement Division of the New Mexico Health and Environment Department P.O. Box 968 Santa Fe, New Mexico 87504-0968	Applicant (full name and address): Unichem International Inc. ** (**See additional 707 North Leech reference below) P.O. Box 1499 Hobbs, New Mexico 88240
To be advised through: Ms. Gini Nelson, Assistant General Counsel Office of General Counsel Health and Environment Department P.O. Box 968 Santa Fe, New Mexico 87504-0968	Amount in words and figures (specify currency): \$ 11,000.00 (U.S. \$) Eleven Thousand Dollars & No/100----
Partial Drawings: <input checked="" type="checkbox"/> Permitted <input type="checkbox"/> Prohibited	Date and Place of Expiry: June 1, 1989

Available by drafts drawn on you or your correspondents at sight accompanied by the following documents:

☒ Beneficiary's signed statement as follows (specify exact wording):

" I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978. "

****Additional Reference Note with respect to Applicant:**Truckers #2 Brine Station
(Sec 33, T18S, R38E, Broadway Place,
Hobbs. DP-371)☐ Other (specify exact wording):

Special Instructions:

☒ Letter of Credit to be in form attached (subject to your approval)

☐ Other:

In consideration of your issuing your irrevocable standby letter of credit (hereinafter called the "Credit") substantially in accordance with the foregoing application, we, the undersigned (jointly and severally if more than one), hereby (a) agree to the provisions set forth on the following pages hereof and (b) agree to pay the following fees and commissions for the establishment of the Credit: plus any customary commission for any increase, extension, renewal, amendment or transfer of the Credit:

Issuance fee: \$ _____ : Commission of \$ _____ or at _____ " per annum on the undrawn portion of the Credit; Other: _____

Simon U.S. Holdings Inc.

Name of Applicant

By: [Signature] Sanders Davies

Title: VICE PRESIDENT

Unichem International Inc.

Name of Applicant

By: [Signature], William D. Walton

Title: Vice President-Finance



BARCLAYS

Barclays Bank PLC
75 Wall Street
New York, N.Y. 10265

"ATTACHMENT B"

June 6, 1988

ENVIRONMENTAL IMPROVEMENT DIVISION OF THE
NEW MEXICO HEALTH AND ENVIRONMENT DEPARTMENT
P.O. Box 968
Santa Fe, New Mexico 87504-0968

IRREVOCABLE STANDBY LETTER OF CREDIT NO. 810049

Gentlemen:

In accordance with instructions received from accreditor, we hereby issue in your favor an Irrevocable Standby Letter of Credit No. 810049 in your favor, at the request and for the account of Unichem International, Inc., P.O. Box 1499, Hobbs, New Mexico 88240, up to an aggregate amount of US\$11,000.00 (United States Dollars Eleven Thousand), available upon presentation by you of:

1. Your sight draft, bearing reference to this Letter of Credit, No. 810049; and.
2. Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the New Mexico Water Quality Act, §74-6-1 et seq. NMSA 1978."

This Letter of Credit will be drawn on to cover plugging and abandonment cost arising from the injection well(s) identified below in the amount of (United States Dollars Eleven Thousand) \$11,000.00 annual aggregate:

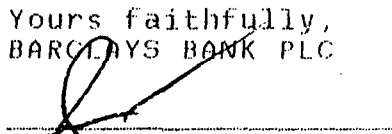
(List for each well: the New Mexico discharge plan number, and the name and address of each well. If coverage is different wells, the type of coverage applicable to each well must be indicated.)

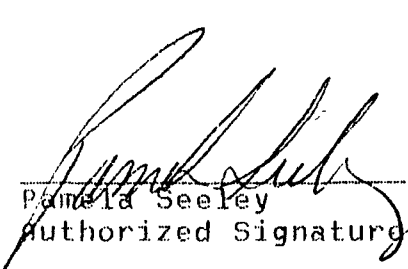
This Letter of Credit is effective as of June 1, 1988 and shall expire on June 1, 1989, but such expiration date shall be automatically extended for a period of one year on June 1, 1989 on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and Unichem International, Inc. by certified mail that we have decided not to extend this Letter of Credit beyond the current expiration date. In the event that you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Unichem International, Inc., as shown on the signed return receipts.

Whenever this Letter of Credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of Unichem International, Inc., in accordance with your instructions.

This credit is subject to the Uniform Customs and Practice for Documentary Credits (1983 Revision), International Chamber of Commerce, Publication No. 400.

Yours faithfully,
BARCLAYS BANK PLC


Nelson Bernardo
Authorized Signature


Pamela Seeley
Authorized Signature

Post Office Box 968
Santa Fe, New Mexico 87504-0968

GARREY CARRUTHERS
Governor

ENVIRONMENTAL IMPROVEMENT DIVISION

Michael J. Burkhardt
Director

CARLA L. MUTH
Secretary

NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 19, 1988

RECEIVED

JUL 22 1988

LEGAL

James H. Brutton, President
Unichem International, Inc.
P.O. Box 1499
Hobbs, NM 88240

RE: Approval of DP-370 and DP-371

Dear Mr. Brutton:

Pursuant to the Settlement Agreement entered into by Unichem International, Inc. (Unichem) and the Environmental Improvement Division (EID) on February 24, 1988, as amended May 5, 1988, EID has reviewed all financial assurance materials submitted by Unichem, and hereby certifies that it has found these financial assurances to be adequate. This terminates Unichem's obligations under the Settlement Agreement.

The applications for renewal of discharge plans DP-370 and 371 for Trucker's #1 and Trucker's #2 respectively in Lea County, New Mexico are hereby approved. The approved discharge plan renewals consist of the materials dated September 17, and 22, 1987; December 22, 1987; March 17, 1988; May 5, 1988, May 17, 1988; June 6, 1988; June 29, 1988; June 30, 1988; and July 7, 1988, plus the information and materials submitted as part of the original discharge plan approved December 18, 1982.

The discharge plan renewal applications were submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. It is approved pursuant to Section 3-109. Please note Subsections 3-109.E. and 3-109.F., which provide for possible future amendment of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

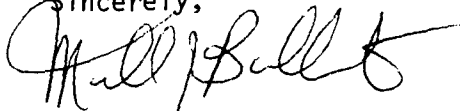
Monitoring and reporting shall be as specified in the discharge plan and supplements thereto. These requirements are summarized on the attached sheets. Any inadvertent omissions from this summary of a discharge plan monitoring or reporting requirement shall not relieve you of responsibility for compliance with that requirement.

JAMES H. BRUTTON
July 19, 1988
Page 2.

Pursuant to Subsection 3-109.G.4., these plan renewals are for a period of five years. This approval will expire July 18, 1993, and you should submit an application for a new approval in ample time before that date.

On behalf of the staff of the Ground Water Section I wish to thank you for your cooperation during these discharge plan reviews.

Sincerely,

A handwritten signature in dark ink, appearing to read "Michael Burkhardt", with a stylized flourish at the end.

Michael Burkhardt
Director

MB:JP:mc

cc: Garrison McCaslin, EID District IV Manager, Roswell
Wayne Price, Unichem Staff Engineer
Gini Nelson, HED Office

UNICHEM INTERNATIONAL INC.

CONSOLIDATED FINANCIAL STATEMENTS
with
ACCOUNTANTS' REPORT

YEARS ENDED DECEMBER 31, 1987 AND 1986

CONTENTS

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Consolidated financial statements:	
Consolidated balance sheet	2
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Statements of changes in stockholders' equity	4
Consolidated statements of changes in financial position	5
Summary of significant accounting policies	6
Notes to consolidated financial statements	8

1

Johnson,
Miller

Co.

certified public accountants

A PROFESSIONAL CORPORATION

ACCOUNTANTS' REPORT

The Board of Directors
Unichem International Inc.
Hobbs, New Mexico

We have examined the consolidated balance sheet of Unichem International, Inc. and subsidiaries as of December 31, 1987, and the related consolidated statements of income and changes in stockholders' equity and financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As disclosed in the Summary of Significant Accounting Policies, the Company records as a "Premium on acquisition of subsidiary companies" the purchase costs in excess of the net tangible assets as carried by the subsidiary companies. This premium is not allocated to assets based on fair value at time of acquisition and is not depreciated or amortized as is required by United States generally accepted accounting principles.

As disclosed in Note 7, the Company's investment and equity in earnings of a Mexican corporation are restated to record the effect of currency fluctuations using a method to conform with Unichem International, Inc.'s parent company but not United States generally accepted accounting principles. The effect of the currency exchange rate fluctuation during the year was used in revaluation of the Company's 40% equity in the net assets of its subsidiary.

In our opinion, except for the effect of the items described in the preceding paragraphs, the accompanying balance sheet and statement of income present fairly the consolidated financial position of Unichem International, Inc. at December 31, 1987 and the results of its operations and changes in financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with the preceding year.

The 1986 financial statements were reviewed by us and our report thereon, dated February 19, 1987, stated that we were not aware of any material modifications that should be made to those statements for them to be in conformity with generally accepted accounting principles with the exception of the matters described in the preceding paragraphs. However, a review is substantially less in scope than an audit and does not provide a basis for the expression of an opinion on the financial statements taken as a whole.

Hobbs, New Mexico
February 5, 1988

Johnson, Miller & Co.

CONSOLIDATED FINANCIAL STATEMENTS

UNICHEM INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEETS

6,375,468
1,819,875
4,555,593
Capital
see schedule 5

ASSETS

	December 31,	
	1987	1986
Current assets:		
Cash	\$ 501,615	\$ 550,701
Accounts receivable:		
Trade accounts, net of allowance for doubtful accounts of \$192,426 in 1987 and \$175,905 in 1986	3,068,120	3,064,724
Receivable from related companies (Note 2)	50,000	-
Inventories (Note 1)	2,245,784	2,390,953
Prepaid expenses	316,256	589,174
Notes receivable (Note 3)	178,750	188,584
Accrued interest receivable	14,943	-
Total current assets	6,375,468	6,784,136
Investments and other assets:		
Premium on acquisition of subsidiary companies (Note 6) +1,384,704 (Note 4) see Schedule 5	7,946,485	6,561,781
Equity in securities of related companies (Note 2)	1,318,948	1,366,973
Non-current portion of notes receivable (Note 3)	240,993	296,902
	9,506,426	8,225,656
Property and equipment, at cost:		
Land	463,739	463,739
Buildings	2,648,628	2,646,497
Automotive equipment	9,018,991	8,588,054
Processing, laboratory, treating and other equipment	7,125,488	6,965,684
Office equipment	546,022	531,306
Leasehold improvements	47,157	79,621
Construction-in-progress	591,448	217,639
	20,441,473	19,492,540
Less accumulated depreciation and amortization	12,901,401	11,644,925
	7,540,072	7,847,615
	\$23,421,966	\$22,857,407

The accompanying accountants' report, notes and summary of accounting policies are integral parts of the financial statements.

Tangible Net Worth
 Tangible Net Worth 19,889,631
 Less Intangibles 7,946,485
Tangible Net Worth 11,943,146

LIABILITIES AND STOCKHOLDER'S EQUITY

	December 31,	
	1987	1986
Current liabilities:		
Trade accounts payable	\$ 723,447	\$ 639,146
Employee compensation payable	75,260	151,742
Contribution payable to employee profit-sharing plan <i>see Note 4</i>	540,439	-
Current portion of long-term debt (Note 5)	92,889	84,084
State income taxes payable	18,546	35,220
Taxes other than income taxes	155,516	128,839
Provision for retrospective insurance premiums and claims	201,957	-
Other payables	11,821	5,365
Total current liabilities	1,819,875	1,044,396
Long-term debt (Note 5)	605,841	698,730
Payable to related companies (Note 2)	1,106,619	2,611,287
Stockholder's equity (Note 9):		
Common stock		
Authorized		
Issued	100,000	7,074,659
Capital in excess of par value	7,958,289	-
Retained earnings	11,831,342	12,049,613
	19,889,631	19,124,272
Less treasury stock, at cost	-	621,278
	19,889,631	18,502,994
	\$23,421,966	\$22,857,407

Handwritten notes:
 Note: reduction of 1,504,665 in 1987
 also 2,461,654 was reduced in 1986
 1,386,637
 1,933
 1,386,637
 see Note 9
 P. 11
 & Asset: formation and integration of subsidiary companies

*Equity has been written up on basis of previous
 Recession - however, no net impact on tangible
 net worth.*

UNICHEM INTERNATIONAL INC.
CONSOLIDATED STATEMENTS OF INCOME

	Year ended December 31,	
	1987	1986
Sales	\$22,580,605	\$23,087,384 ^{100%}
Cost of sales	6,485,414	7,381,776
Gross margin on sales	16,095,191	15,705,608
Operating expenses:		
Selling, general and administrative expenses	12,381,254	12,293,784
Depreciation and amortization	1,817,848	1,972,992
Operating leases and rentals	309,016	323,658
	14,508,118	14,590,434
Income from operations	1,587,073	1,115,174
Other income (expense):		
Interest income	61,993	63,900
Gain on sale of equipment	45,706	592,808
Miscellaneous income	35,101	42,532
Interest expense	(43,983)	(88,070)
	98,817	611,170
Income before equity in income of related company	1,685,890	1,726,344
Equity in net income of related company before income taxes (Note 7)	133,464	172,652
Income before income taxes	1,819,354 ^{8.17%}	1,898,996 ^{8.2%}
Equity in income taxes of related company	(64,179)	(83,794)
Federal income taxes	→ (525,601) ^{2.3%}	(-)
State income taxes	(78,331)	(67,135)
Net income	\$ 1,151,243 ^{5.1%}	\$ 1,748,067 ^{7.6%}

The accompanying accountants' reports, notes and summary of accounting policies are integral parts of these financial statements.

difference primarily attributable to Federal income taxes @ 2.3% of sales - if added back, comparable rate is net income @ 7.4% of sales in 1987 vs 7.62% of sales in 1986. Income before taxes was substantially the same at 8.17% of sales in 1987 vs 8.27% of sales in 1986.

UNICHEM INTERNATIONAL INC.

STATEMENTS OF CHANGES IN STOCKHOLDER'S EQUITY

	<u>Capital stock</u>	<u>Capital in excess of par value</u>	<u>Retained earnings</u>	<u>Treasury stock</u>
Balances at January 1, 1986	\$7,074,659	\$ -	\$10,441,330	\$621,278
Foreign currency rate fluctuation	-	-	(139,784)	-
Net income	-	-	1,748,067	-
Balances at December 31, 1986	7,074,659	-	12,049,613	621,278
Foreign currency rate fluctuation <i>Note 7</i>	-	-	(117,310)	-
Dividend paid	-	-	(1,032,000)	-
Net income	-	-	1,151,243	-
	7,074,659	-	12,051,546	621,278
Recapitalization (Note 9)	(6,974,659)	7,958,289	(220,204)	(621,278)
Balances at December 31, 1987	<u>\$ 100,000</u>	<u>\$7,958,289</u>	<u>\$11,831,342</u>	<u>\$ -</u>

The accompanying accountants' reports, notes and summary of accounting policies are integral parts of these financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

UNICHEM INTERNATIONAL INC.

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

	Year ended December 31,	
	1987	1986
Sources of working capital from operations:		
Net income	\$1,151,243	\$1,748,067
Charges to earnings not using working capital:		
Depreciation	1,817,848	1,971,311
Expiration of non-compete agreement	-	1,681
Working capital provided from operations	2,969,091	3,721,059
Proceeds from sale of property, plant and equipment	105,135	107,408
Proceeds from Agua-Treat, S.A. investment	48,025	50,928
Decrease in notes receivable	55,909	38,598
Proceeds from related company advances	1,557,601	28,346
	4,735,761	3,946,339
Applications of working capital:		
Additions to property, plant and equipment	1,615,440	998,428
Reduction of long-term debt	92,889	84,084
Changes in foreign currency exchange rates	117,310	139,784
Reduction of related company payables	3,062,269	2,490,000
Dividend paid	1,032,000	-
Issuance of notes receivable	-	335,500
Final acquisition price of Petro Treat, Inc.	-	393,027
	5,919,908	4,440,823
Decrease in working capital	(1,184,147)	(494,484)
Working capital at beginning of year	5,739,740	6,234,224
Working capital at end of year	\$4,555,593	\$5,739,740

The accompanying accountants' report, notes and summary of accounting policies are integral parts of these financial statements.

* balance payable to related company @ 2/31/87 is \$1,106,619.
 based on observed performance, this could likely be paid in 1988.
 accordingly, consider the amount as a current liability for analysis.
 result is: Working Capital (per this audit report) 4,555,593
 less: due to related company 1,106,619
 Adjusted Working Capital 3,448,974

3/16 Comment: Still very substantial for
 110,000 - 125,000 to be assumed by U.I.I.

	Year ended December 31,	
	1987	1986
Changes in components of working capital:		
Increase (decrease) in current assets		
Cash	\$ (49,086)	\$ (374,066)
Accounts receivable	3,396	(1,227,396)
Receivable from related companies	50,000	(40,335)
Other	-	(11,910)
Inventories	(145,169)	(493,720)
Prepaid expenses	(272,918)	93,957
Notes receivable	(9,834)	(45,623)
Accrued interest receivable	14,943	-
	<u>(408,668)</u>	<u>(2,099,093)</u>
(Increase) decrease in current liabilities:		
Trade accounts payable	(84,301)	761,226
Employee compensation payable	76,482	83,779
Contribution payable to employee profit-sharing plan	(540,439)	663,294
Current portion of long-term debt	(8,805)	(7,970)
State income taxes payable	16,674	30,448
Taxes other than income taxes	(26,677)	64,109
Provision for retrospective insurance premiums and claims	(201,957)	-
Other payables	(6,456)	9,723
	<u>(775,479)</u>	<u>1,604,609</u>
Decrease in working capital	<u><u>\$(1,184,147)</u></u>	<u><u>\$ (494,484)</u></u>

✓ Note: CASH Flow includes
significant CASH transactions
with parent company

• -3,002,269 reduction of payable
-1,037,000 dividends
+4,094,269 total payments
+1,557,601 add'l adv. income

-2,536,668 total (net) paid to parent
3/16 might be good to have some
bonding to assure that parent
doesn't ship cases when wells are
being closed and if there's trouble too

UNICHEM INTERNATIONAL INC.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

December 31, 1987 and 1986

This summary of accounting policies of Unichem International Inc. is presented to assist in understanding the Company's consolidated financial statements. Except as described below as "Premium on acquisition of subsidiary companies," and in Notes 6 and 7, these accounting policies conform to generally accepted accounting principles, and have been consistently applied in the preparation of the consolidated financial statements.

The Company is a wholly-owned subsidiary of Simon United States Holdings Inc.

Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries (see Note 6). The equity method of accounting is used for investments in affiliates which are more than 20% owned by the Company.

Premium on acquisition of subsidiary companies and equity in securities of related companies

Costs in excess of the net tangible assets of companies merged under the purchase method of accounting or reported at equity have been recorded as a premium on acquisition of subsidiary companies. This premium is not allocated to assets based on fair value at time of acquisition and is not depreciated or amortized. This policy is not in accordance with United States generally accepted accounting principles which require acquisition costs to be allocated based on the fair market value of assets with excess to be amortized over not more than forty years.

Inventories

Inventories are valued at cost. Cost is determined by the first-in, first-out method. When market value is determined to be lower than cost, the inventory is reduced to the lower value.

Depreciation and amortization

Depreciation and amortization of property and equipment are provided on the straight-line and accelerated methods. Additions to property and equipment acquired after March 1979 are depreciated on the straight-line method for financial statement reporting and on declining-balance and accelerated cost recovery system methods for income tax reporting.

Depreciation and amortization (Continued)

Estimated useful lives used in the computation of depreciation and amortization of property and equipment are as follows:

Buildings	10-40 years
Processing, laboratory, treating and other equipment	2-11 years
Office equipment	5-10 years
Leasehold improvements	5-12 years

Income taxes

The Company files a consolidated United States Federal income tax return with Simon United States Holdings Inc. and other members of a consolidated group.

The Company and its subsidiaries file state income tax returns on a separate company basis. Liabilities and expenses for state income taxes are reported in these consolidated financial statements, based on the amount allocated to the Company by Simon United States Holdings Inc.

The Company's equity in Agua-Treat, S.A. has been reduced by Mexican income taxes.
see note 2

UNICHEM INTERNATIONAL INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Inventories

	December 31,	
	1987	1986
Raw materials	\$1,154,159	\$1,172,511
Finished products	1,091,625	1,218,442
	<u>\$2,245,784</u>	<u>\$2,390,953</u>

2. Related companies

1987	Equity	Receivable	Payable
Unichem Minerals, Inc.	\$ -	\$ -	\$ 61,756 - 3123
Agua-Treat, S.A. 40%	1,311,455	50,000	-
Wasserhund, Inc. 50%	7,493	-	-
Simon United States Holdings Inc.	-	-	1,044,863 - 159,525
	<u>\$1,318,948</u>	<u>\$50,000</u>	<u>\$1,106,619</u>
1986			- 1,504,667
	<u>\$1,366,973</u>	<u>\$ -</u>	<u>\$2,611,287</u>

Unichem Minerals, Inc. and Simon United States Holdings Inc. are wholly-owned subsidiaries of Simon Engineering Limited, a company organized under the laws of England. Agua-Treat, S. A. is 40% owned by Unichem International Inc. (Note 7). Wasserhund, Inc. is 50% owned by Unichem International Inc.

The payable to Simon United States Holdings Inc. is for advances on an unsecured credit line reported as a non-current liability on the balance sheet. Interest is not being charged by or paid to Simon United States Holdings, Inc.

3. Notes receivable

	1987	1986
10% note receivable, secured by real estate, payable \$30,000 per year plus interest	\$270,000	\$300,000
10% note receivable, secured by second mortgage on land and building, and insurance policies payable on demand or \$2,500 per month including interest	114,447	141,947
Other notes receivable	35,296	43,539
	<u>419,743</u>	<u>485,486</u>
Non-current portion	240,993	296,902
	<u>\$178,750</u>	<u>\$188,584</u>

most of consideration was based on pay ment history - see notes on BA balance sheet - 8.2
December 31, 1985

234,207

-0-

234,207

4. Employee retirement plans

The Company has a profit-sharing plan covering substantially all employees.

The Plan was restated as of September 1, 1987 to permit:

- Pre-tax contributions by employees not to exceed 18% of basic compensation
- Annual minimum contribution by employer of 2% of basic compensation
- Discretionary contribution by employer as determined by its Board of Directors

Benefits are 100% vested and distributed upon retirement, disability or death of the employee. Vesting of benefits for other separations of service is graduated, based on years of participation prior to separation. All nonvested funds of terminated employees are reallocated among the other participants in the Plan. A profit-sharing trust with independent trustees has been established to administer the Plan. Contributions to the Plan were \$540,439 in 1987. No contributions were made to the Plan in 1986. There is no unfunded liability.

*but not
PAID-share
ASCURRENT
liability*

The Plan has been amended to conform with requirements of the Tax Equity and Fiscal Responsibility Act of 1982, the Tax Reform Act of 1984 and the Retirement Equity Act of 1984.

5. Long-term debt

10% notes payable to individuals at \$6,608 per month including interest, balance due November 1, 1993, secured by guarantee of Simon United States Holding, Inc. and assignment of lease

Less current portion

December 31,		
1987	1986	1985
\$ 698,730	\$ 782,814	858,928
92,889	84,084	76,114
<u>\$ 605,841</u>	<u>\$ 698,730</u>	<u>782,814</u>

*No additional
long term debt*

Maturities of long-term debt are as follows:

Year ending December 31,	
1988	\$ 92,889
1989	102,615
1990	113,361
1991	125,231
1992	138,344
Thereafter	126,290
	<u>\$ 698,730</u>

6. Acquisition of subsidiary

On March 1, 1985, the Company acquired 100% of the common stock of Petro Treat, Inc. a company primarily involved in oilfield treatment of producing oil and gas wells. The original acquisition cost was \$1,290,430 plus additional purchase commitment as described in Note 7. The acquisition has been accounted for as a purchase; and accordingly, income from operations has been included in the consolidated financial statements from date of acquisition.

The details of the acquisition are as follows:

Cash and other current assets	\$ 456,352
Less current liabilities	<u>187,022</u>
	269,330
Other assets	<u>258,225</u>
Premium on acquisition	<u>762,875</u>
Premium on acquisition per purchase commitment (Note 7)	<u>1,290,430</u>
	<u>393,027</u>
	<u>\$1,683,457</u>

The Company's policy is that acquisition costs in excess of the acquired subsidiary's costs of assets is recorded as "Premium on acquisition of subsidiary companies". This premium is not allocated to specific assets based on fair value at time of acquisition and is not depreciated or amortized. As disclosed in the "Summary of Significant Accounting Policies" this is not in accordance with United States generally accepted accounting principles which require the acquisition cost to be allocated to the fair market value of assets with excess to be amortized over not more than forty years.

APB 16
BOL
CAPITAL 96
C-111-
CATION OFFICE
97-1000-1000

7. Effect of currency translation on earnings and equity of related company

In accordance with policies of Unichem International, Inc.'s parent company, the Company's equity in earnings of Agua-Treat S.A. (a Mexican corporation) is converted to United States currency using the average annual exchange rate.

The Company's 40% equity in net assets was also revalued using the difference between the beginning and ending of year exchange rate with the resulting adjustment of \$117,310 in 1987 and \$139,784 in 1986 made directly to retained earnings.

8. Purchase commitment

As consideration for the purchase of Petro Treat, Inc., Unichem International, Inc. entered into a deferred purchase agreement contingent upon the financial performance of Petro Treat, Inc. over a thirty-six month period ending December 31, 1987.

In 1986 this agreement was amended and final acquisition costs of \$393,027 were incurred.

8,579,567
7,194,863

3/15

COMBINED RECAPITALIZATION JOURNAL ENTRY (HYPOTHETICAL)

Dr		Cr
PREMIUM ON ACQUISITION OF SUBSIDIARY CO.	1,384,704	
RETAINED EARNINGS	220,204	
COMMON STOCK	6,974,659	
		7,958,289
CAPITAL EXCESS OF PAR		
TREASURY STOCK		621,278

9. Stock retirement and recapitalization

The accounts of Unichem International, Inc. were restated as of December 31, 1987 to report the allocation (pushdown) of the consideration paid for common stock to the respective net assets acquired on the same basis as in consolidation with its parent company. Equity and assets were restated to report this recapitalization and pushdown as follows:

CONTRARY TO APB 16

	<i>*</i> Before	Recapitalization and <u>pushdown</u>	After
Premium on acquisition of subsidiary companies	\$ 6,561,781	\$ 1,384,704	\$ 7,946,485
Common stock	\$ 7,074,659	\$ 6,974,659	\$ 100,000
Capital in excess of par value	\$ -	(7,958,289)	\$ 7,958,289
Treasury stock	\$ 621,278	(621,278)	\$ -
Retained earnings	\$ 12,051,546	- 220,204	\$ 11,831,342
	<u>18,541,927</u>	<u>\$(1,384,704)</u>	<u>19,889,631</u>

1933 Act
*Change from operations,
 currency fluctuation, and
 dividends paid set p4*

**Before recapitalization but
 after reflection of 1987 transactions
 that not to 1933 sec p. 4*



TRUCKERS #1 AND TRUCKERS #2 BRINE STATIONS

DISCHARGE PLAN PERMIT SUBMITTAL #5

Presented to:
STATE OF NEW MEXICO
Environmental Improvement Division

UNICHEM INTERNATIONAL INC.
P. O. BOX 1499
HOBBS, NEW MEXICO 88240

Prepared by:
Wayne Price, Staff Engineer



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

February 16, 1988

FEDERAL EXPRESS AIRBILL # 7071127173

Gini Nelson, Assistant General Counsel
Office of General Counsel
Health & Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

John Parker
Groundwater Bureau
Environmental Improvement
Division
Health & Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

RE: Settlement Agreement for Unichem Intl's Brine Stations as listed:

TRUCKERS I EID Discharge Plan 370
 Location: 10 MI W of Hobbs, NM
 in Lea County
 Sec 1-TS 19S-R 35E

TRUCKERS II EID Discharge Plan 371
 Location: BDW PL in Hobbs, NM
 in Lea County
 Sec 33-TS 18S-R 38E

Please find enclosed the following exhibits:

EXHIBIT I. Signed Amended Settlement Agreement: Please note the original Agreement was amended by Gini Nelson and a Telefacsimile of the "Alternate Schedule of Compliance Language" (Exhibit I-1A) was sent to Unichem and attached to and made part of the original document.

EXHIBIT II. Most recent Annual Financial Statement: Please note these are 1985 and 1986 Consolidated Financial Statements with Accountants' Review Report ending December 31, 1986 and 1985 for Unichem International Inc., all per Amended Schedule of Compliance Section 1.A.

UNICHEM INTERNATIONAL INC.

Gini Nelson
Page Two
February 16, 1988

EXHIBIT III. Submittal Evidence for investigating and seeking other means of satisfying the financial assurances required by Sec. 5-210.B.17 of the NM WQCC Reg's.: Please find attached letter and/or letters from Daniels Insurance Corp., an agent for securing the appropriate surety bonds. Adequate bonds will be listed as \$16,000.00 for TRUCKERS I (DP-370) and \$28,000.00 for TRUCKERS II (DP-371) respectively.

Included in this Exhibit is a bond form initiated by Unichem Intl in order to secure surety bonding (marked Exhibit III-1A).

Please, upon review and acceptance, execute the above mentioned documents per your Settlement Agreement schedule and forward to Unichem Intl a copy of the signed documents.

It is our opinion that upon review of the strong financial statement enclosed you will accept this as our financial assurance.

Yours truly,

UNICHEM INTERNATIONAL INC.



Wayne Price
Staff Engineer

LWP:jmb

Enclosures

cc: Richard Brakey

SETTLEMENT AGREEMENT

This Settlement Agreement is made by and between the Environmental Improvement Division of the New Mexico Health and Environment Department, and Unichem International, Inc., a New Mexico Corporation. This Settlement Agreement is intended to resolve all pending disputes between the parties with regard to certain violations specified hereinafter, and is made upon the following terms and conditions.

WHEREAS, on February 25, 1987, the New Mexico Environmental Improvement Division (EID) requested Unichem International, Inc. to submit an application for renewal of a discharge plan pursuant to Section 3-104 and 5-101.B.2 of the New Mexico Water Quality Control Commission (Commission) Regulations for discharges from the brine facility and brine well Truckers #1 located in Section 1, Township 19 South, Range 35 East, N.M.P.M., Lea County, New Mexico; and the brine facility and brine well Truckers #2 located in Section 33, T185, R38E, Lea County, New Mexico; and

WHEREAS, the Director of EID has not at this time approved a renewal discharge plan for Unichem International, Inc.; and

WHEREAS, Unichem International, Inc. failed to satisfy the requirements of Section 5-101.G of the Commission Regulations by its failure to submit a complete application for discharge plan renewal by June 15, 1987; and

WHEREAS, neither the regulations nor an extension to discharge without an approved discharge plan issued by the Director, nor any Court Order, allows Unichem International, Inc. to operate Truckers #1 and Truckers #2 beyond December 18, 1987; and

WHEREAS, all the information required to be submitted for the renewal discharge plan application has been submitted to EID and reviewed and commented upon by EID except for submission of adequate financial assurances as required by Section 5-210.B.17 of the Commission Regulations; and

WHEREAS, Unichem International, Inc. has committed to EID to proceed with all diligence to prepare and secure an approved Discharge Plan; and

WHEREAS, EID and Unichem International, Inc. deem it appropriate to enter into this Settlement Agreement.

Unichem International, Inc. agrees to the following:

NOTE

1. SCHEDULE OF COMPLIANCE: It is agreed that Unichem International, Inc. shall comply with the following schedule:

A. Unichem International, Inc. shall submit adequate financial assurances pursuant to Section 5-210.B.17 of the Commission Regulations to EID on or before February 19, 1988.

B. EID shall review the materials submitted under paragraph 1.A and shall either approve the materials or will notify Unichem International, Inc. of the materials' inadequacies on or before March 18, 1988.

C. Unichem International, Inc. shall, within twenty (20) days of EID's notice of inadequacies, if any, submit revised or alternate financial assurances to EID for review. Unichem International, Inc. shall be in violation of the Settlement Agreement if EID finds that the revised or alternative financial assurances are inadequate.

D. The EID Director shall approve or disapprove the discharge plan application on or before April 15, 1988.

2. NOTICE: Whenever under the terms of this Settlement Agreement notice or information is required to be given by one party to another, it shall be directed to the individuals at the addresses specified below. Notice or the supplying of information shall be perfected upon the mailing of such notice or information.

For Unichem International, Inc.:

Wayne Price, Staff Engineer
Unichem International, Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

For EID:

John Parker
Groundwater Bureau
Environmental Improvement
Division
Health & Environment Dept.
P. O. Box 968
Santa Fe, NM 87504-0968

and

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P. O. Box 968
Santa Fe, NM 87504-0968

3. MUTUAL COOPERATION: Unichem International, Inc. and EID shall mutually cooperate in accomplishing on a timely basis the matters contemplated by this Settlement Agreement. In this respect, routine communications may be exchanged between Unichem International, Inc. representatives and EID personnel, but no such communication shall alter or waive any rights and/or obligations of the parties under this Settlement Agreement.

4. ENFORCEMENT: EID shall not undertake enforcement against Unichem International, Inc. for the continuation of current discharges occurring during the pendency of this Settlement Agreement so long as Unichem International, Inc. complies with the terms of this Settlement Agreement. This Paragraph shall not preclude appropriate action by the Director or the Commission under Section 74-6-11 N.M.S.A. 1978.

Nothing in this Settlement Agreement shall relieve Unichem International, Inc. from the responsibility for complying with all the provisions of the Water Quality Act, the regulations promulgated thereunder or any other provision of law except as otherwise specifically provided herein.

5. COURT JURISDICTION AND VENUE: The parties agree that Unichem International, Inc. may seek judicial review of EID final action by filing an action in the district court for Lea County New Mexico, within thirty (30) days of the date of the EID final action, to modify or set aside the action. Judicial review of EID final actions shall be in accord with applicable standards for judicial review of administrative decisions. Additionally, the parties agree that this Agreement shall be enforceable by either party by the filing of a civil action in the district court for Lea County. In the event of such civil action, the parties agree that such court has jurisdiction over the subject matter of this Agreement and the parties hereto waive their right to challenge such jurisdiction either in the district court for Lea County or any other forum.

6. PENALTIES FOR NONCOMPLIANCE: Unichem International, Inc. agrees that, if it fails to comply with any of the requirements of this Agreement, EID shall be free to proceed with any lawful enforcement action against Unichem International, Inc. and to seek penalties for all of Unichem International, Inc.'s acts, including acts occurring before, during, and after the term of the Settlement Agreement.

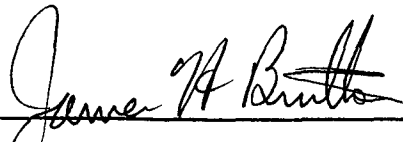
7. TERMINATION: Unichem International, Inc.'s obligations under this Settlement Agreement shall terminate upon EID's certification to Unichem International, Inc. in writing that EID has reviewed and approved the financial assurances submittal described in paragraph 1 above.

8. MERGER: This Settlement Agreement contains all the terms of the Settlement Agreement between the parties, there being no oral agreements not contained herein.

This Settlement Agreement is effective when signed by all parties to this Settlement Agreement.

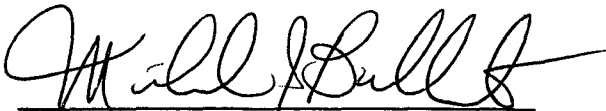
FOR UNICHEM INTERNATIONAL, INC.

FOR ENVIRONMENTAL IMPROVEMENT
DIVISION



President
Unichem International, Inc.
P. O. Box 1499

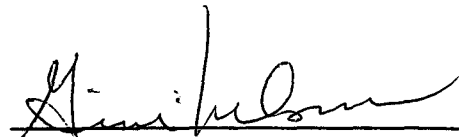
Hobbs, New Mexico 88240



MICHAEL J. BURKHART
Director, Environmental
Improvement Division
Chairman, Water Quality Control
Commission
P. O. Box 968
Santa Fe, N.M. 87504-0968

2-17-88
Date

Feb. 24, 1988
Date



GINI NELSON
Assistant General Counsel
Office of General Counsel
Health & Environment Department
P. O. Box 968
Santa Fe, N.M. 87504-0968

Date



Date

EXHIBIT I-1A

TELEFACSIMILE TRANSMITTAL SHEET

TO: WAYNE PRICE, UNICHEM
FROM: GINI NELSON, EID
DATE: FEBRUARY 12, 1988
RE: ALTERNATE SCHEDULE OF COMPLIANCE LANGUAGE

This proposed schedule of compliance language is transmitted to you as we discussed on February 10, 1988.

Please call with any questions, 827-2854.

cc: John Parker

EXHIBIT #I-1A

1. SCHEDULE OF COMPLIANCE: It is agreed that Unichem International, Inc. shall comply with the following schedule:

a. Unichem International, Inc. shall submit to EID on or before February 19, 1988 its most recent annual financial statement. Unichem International, Inc. shall also submit evidence by February 19, 1988 that it is investigating and seeking other means of satisfying the financial assurances requirement of Section 5-210.B.17 of the Commission Regulations, such as evidence that it has submitted a complete application for an adequate surety bond. Unichem International, Inc. shall use its best efforts to investigate and seek other means of satisfying the financial assurances requirement in an expedited manner, both for the submittal required in this paragraph 1.a. and for the submittals required in paragraphs 1.c. and 1.e.

b. EID shall evaluate Unichem International, Inc.'s most recent annual financial statement for adequacy under the financial assurances requirement of Section 5-210.B.17 of the Commission Regulations, and shall notify Unichem International, Inc. in writing by March 4, 1988 of EID's approval or disapproval of the submittal as satisfaction of the financial assurance requirement of Section 5-210.B.17. If EID approves the financial statement submittal, Unichem International, Inc. shall not be required to submit further financial assurances under this Settlement Agreement.

c. Unichem International, Inc. shall submit to EID completed adequate financial assurances pursuant to Section 5.210.B.17 of the Commission Regulations (other than the most recent annual financial statement submitted to EID on or before February 19, 1988) at the earliest date that they are completed, but no later than March 18, 1988.

d. EID shall review the materials submitted under paragraph 1.c. and shall either approve the materials or will notify Unichem International, Inc. of the materials' inadequacies on or before April 15, 1988.

e. Unichem International, Inc. shall, within twenty (20) days of EID's notice of inadequacies, if any, submit revised or alternate financial assurances to EID for review. Unichem International, Inc. shall be in violation of the Settlement Agreement if EID finds that the revised or alternative financial assurances are inadequate.

f. The EID Director shall approve or disapprove the discharge plan application on or before May 13, 1988.

EXHIBIT II

UNICHEM INTERNATIONAL INC.

CONSOLIDATED FINANCIAL STATEMENTS
with
ACCOUNTANTS' REVIEW REPORT

YEARS ENDED DECEMBER 31, 1986 AND 1985

Johnson,
Miller & Co.

certified public accountants

A PROFESSIONAL CORPORATION

EXHIBIT #11

UNICHEM INTERNATIONAL INC.

CONSOLIDATED FINANCIAL STATEMENTS
with
ACCOUNTANTS' REVIEW REPORT
YEARS ENDED DECEMBER 31, 1986 AND 1985

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Consolidated financial statements:	
Balance sheets	2
Statements of income and retained earnings	3
Summary of accounting policies	4
Notes to consolidated financial statements	6

Johnson,
Miller & Co.

certified public accountants
A PROFESSIONAL CORPORATION

ACCOUNTANTS' REVIEW REPORT

The Board of Directors
Unichem International Inc.
Hobbs, New Mexico

these are one year old

We have reviewed the accompanying balance sheet of Unichem International, Inc. as of December 31, 1986, and the related statements of earnings and retained earnings, for the year then ended, in accordance with standards established by the American Institute of Certified Public Accountants. All information included in these financial statements is the representation of the management of Unichem International, Inc.

these are not audited financials -

A review consists principally of inquiries of company personnel and analytical procedures applied to financial data. It is substantially less in scope than an examination in accordance with generally accepted auditing standards, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

but, there are no "red flags" re: liquidity

Based on our review, with the exception of the matters described in the following paragraphs, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in conformity with generally accepted accounting principles.

As disclosed in the Summary of Significant Accounting Policies, the Company records as a "Premium on acquisition of subsidiary companies" the purchase costs in excess of the net tangible assets as carried by the subsidiary companies. This premium is not allocated to assets based on fair value at time of acquisition and is not depreciated or amortized as is required by United States generally accepted accounting principles.

As disclosed in Note 6, the Company's investment and equity in earnings of a Mexican corporation are restated to record the effect of currency fluctuations using a method to conform with Unichem International, Inc.'s parent company but not United States generally accepted accounting principles. The effect of the currency exchange rate fluctuation during the year was used in revaluation of the Company's 40% equity in the net assets of its subsidiary.

The Board of Directors

February 19, 1987

The accompanying financial statements do not include a statement of changes in financial position. Presentation of this statement, summarizing the company's financing and investing activities and other changes in its financial position, is required by United States generally accepted accounting principles.

The financial statements for the year ended December 31, 1985 were examined by us and we expressed an opinion on them in our report dated February 24, 1986 with the opinion qualified for the exception of the matters described in the above paragraphs. We have not performed any auditing procedures since that date.

Hobbs, New Mexico
February 19, 1987

Johnson, Miller & Co.

CONSOLIDATED FINANCIAL STATEMENTS

Assets		
Current Assets		
Cash	100.0	
Accounts Receivable	200.0	
Inventory	150.0	
Prepaid Expenses	50.0	
Fixed Assets		
Property, Plant, and Equipment	500.0	
Accumulated Depreciation	(100.0)	
Liabilities and Equity		
Current Liabilities		
Accounts Payable	150.0	
Short-Term Debt	100.0	
Long-Term Debt	200.0	
Equity		
Common Stock	100.0	
Retained Earnings	150.0	

UNICHEM INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEETS
(See Accountants' Review Report)

ASSETS

	December 31,	
	1986	1985
Current assets:		
Cash	\$ 550,701	\$ 924,767
Accounts receivable:		
Trade accounts, net of allowance for doubtful accounts of \$175,905 in 1986 and \$206,246 in 1985	3,064,724	4,292,120
Receivable from related companies (Note 2)	-	40,335
Other	-	11,910
Inventories (Note 1) <i>all materials</i>	2,390,953	2,884,673
Prepaid expenses	589,174	495,217
Notes receivable, secured by real estate	188,584	234,207
Total current assets	<u>6,784,136</u>	<u>8,883,229</u>
Investments and other assets:		
Premium on acquisition of subsidiary companies (Note 5) <i>+ 393,028 (see Note 7) no. 10/1/86</i>	6,561,781	6,168,755
Equity in securities of related companies (Note 2)	1,366,973	1,417,901
Non-current portion of notes receivable	296,902	-
Other assets, at cost	-	1,681
	<u>8,225,656</u>	<u>7,588,337</u>
Property and equipment, at cost:		
Land	463,739	443,739
Buildings	2,646,497	2,572,946
Automotive equipment	8,588,054	8,671,770
Processing, laboratory, treating and other equipment	6,965,684	6,848,362
Office equipment	531,306	527,308
Leasehold improvements	79,621	79,958
Construction-in-progress	217,639	235,790
	<u>19,492,540</u>	<u>19,379,873</u>
Less accumulated depreciation and amortization	<u>11,644,925</u>	<u>10,451,968</u>
	<u>7,847,615</u>	<u>8,927,905</u>
	<u>\$22,857,407</u>	<u>\$25,399,471</u>

The accompanying summary of accounting policies and notes
are integral parts of the financial statements.

LIABILITIES AND STOCKHOLDER'S EQUITY

	December 31,	
	1986	1985
Current liabilities:		
Trade accounts payable	\$ 639,146	\$ 1,400,372
Employee compensation payable	151,742	235,521
Contribution payable to employee profit-sharing plan <i>Note 3</i>	-	663,294
Current portion of long-term debt (Note 4)	84,084	76,114
State income taxes payable	35,220	65,668
Taxes other than income taxes	128,839	192,948
Other payables	5,365	15,088
Total current liabilities	<u>1,044,396</u>	<u>2,649,005</u>
Long-term debt (Note 4)	<u>698,730</u>	<u>782,814</u>
Payable to related companies (Note 2)	<u>2,611,287</u>	<u>5,072,941</u>
Stockholder's equity:		
Common stock, no par value		
Authorized - 1,000,000 shares		
Issued - 762,839 shares	7,074,659	7,074,659
Retained earnings	12,049,613	10,441,330
	19,124,272	17,515,989
Less treasury stock, at cost (288,822 shares)	621,278	621,278
	<u>18,502,994</u>	<u>16,894,711</u>
	<u>\$22,857,407</u>	<u>\$25,399,471</u>

Net Equity →

2/27/87
50,000 shares
with a value of \$10,000
issued to the company
in exchange for services
provided by the company
to the company after
completion of the

UNICHEM INTERNATIONAL INC.

CONSOLIDATED STATEMENTS OF INCOME AND RETAINED EARNINGS

(See Accountants' Review Report)

	Year ended December 31,	
	1986	1985
Sales	\$23,087,384	\$29,446,199
Cost of sales	7,381,776	9,094,400
Gross margin on sales	15,705,608	20,351,799
Operating expenses:		
Selling, general and administrative expenses	12,293,784	15,687,556
Depreciation and amortization	1,972,992	2,098,048
Operating leases and rentals	323,658	270,181
	14,590,434	18,055,785
Income from operations	1,115,174	2,296,014
Other income (expense):		
Gain on sale of equipment	592,808	119,628
Interest income	63,900	67,558
Miscellaneous income	42,532	22,058
Interest expense (Note 2)	(88,070)	(198,628)
	611,170	10,616
Income before equity in income of related company	1,726,344	2,306,630
Equity in net income of related company before income taxes (Note 6)	172,652	170,144
Income before income taxes	1,898,996	2,476,774
Equity in income taxes of related company	(83,794)	(72,778)
State income taxes	(67,135)	(65,288)
Net income	76 1,748,067	74 2,338,708
Retained earnings at beginning of year	10,441,330	8,305,090
Retained earnings adjustment (Note 6)	(139,784)	(202,468)
Retained earnings at end of year	\$12,049,613	\$10,441,330

*No U.S. Federal
Income Tax*

*Revaluation of Mexico
subsidiary assets based
on exchange rate*

The accompanying notes and summary of accounting policies are integral parts of these financial statements.

UNICHEM INTERNATIONAL INC.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

December 31, 1986 and 1985

This summary of accounting policies of Unichem International Inc. is presented to assist in understanding the Company's consolidated financial statements. Except as described below as "Premium on acquisition of subsidiary companies," and in Notes 5 and 6, these accounting policies conform to generally accepted accounting principles, and have been consistently applied in the preparation of the consolidated financial statements.

The Company is a wholly-owned subsidiary of Simon (New Mexico) Inc.

Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries (see Note 5). The equity method of accounting is used for investments in affiliates which are more than 20% owned by the Company.

Premium on acquisition of subsidiary companies and equity in securities of related companies

Costs in excess of the net tangible assets of companies merged under the purchase method of accounting or reported at equity have been recorded as a premium on acquisition of subsidiary companies. This premium is not allocated to assets based on fair value at time of acquisition and is not depreciated or amortized. This policy is not in accordance with United States generally accepted accounting principles which require acquisition costs to be allocated based on the fair market value of assets with excess to be amortized over not more than forty years.

Inventories

Labor and overhead are not significant factors in the Company's production process; therefore, inventories of finished products are valued at materials cost only. Raw materials, containers and other inventory items are valued at cost. Cost is determined by the first-in, first-out method. When market value is determined to be lower than cost, the inventory is reduced to the lower value.

Depreciation and amortization

Depreciation and amortization of property and equipment are provided on the straight-line and accelerated methods. Additions to property and equipment acquired after March 1979 are depreciated on the straight-line method for financial statement reporting and on declining-balance and accelerated cost recovery system methods for income tax reporting.

Depreciation and amortization (Continued)

Estimated useful lives used in the computation of depreciation and amortization of property and equipment are as follows:

Buildings	10-40 years
Processing, laboratory, treating and other equipment	2-11 years
Office equipment	5-10 years
Leasehold improvements	5-12 years

Income taxes

The Company files a consolidated United States Federal income tax return with Simon United States Holdings Inc. and other members of a consolidated group. These consolidated financial statements do not include a provision for United States Federal income taxes since there are none attributable to the Company and its subsidiaries.

The Company and its subsidiaries file state income tax returns on a separate company basis. Liabilities and expenses for state income taxes are reported in these consolidated financial statements.

The Company's equity in Agua-Treat, S.A. has been reduced by Mexican income taxes.

UNICHEM INTERNATIONAL INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Inventories

	December 31,	
	1986	1985
Raw materials	\$1,172,511	\$1,727,022
Finished products	1,218,442	1,157,651
	<u>\$2,390,953</u>	<u>\$2,884,673</u>

2. Related companies

<u>1986</u>	Equity	Receivable	Payable
Unichem Minerals, Inc.	\$ -	\$ -	\$ 64,895
Agua-Treat, S.A.	1,359,480	-	-
Wasserhund, Inc.	7,493	-	-
Simon United States Holdings Inc.	-	-	2,546,392
	<u>\$1,366,973</u>	<u>\$ -</u>	<u>\$2,611,287</u>
<u>1985</u>			
	<u>\$1,417,901</u>	<u>\$40,335</u>	<u>\$5,072,941</u>

Arabian TR Oil Services, Limited; Simon (New Mexico) Inc.; Unichem Minerals, Inc.; Unichem International, Inc.; and Simon United States Holdings Inc. are all wholly-owned subsidiaries of Simon Engineering Limited, a company organized under the laws of England.

The payable to Simon United States Holdings Inc. is for advances on an unsecured credit line reported as a non-current liability on the balance sheet. Total bank charges to Simon United States Holdings Inc. was \$15,387 in 1986 and \$65,572 in 1985. Interest is not being paid to Simon United States Holdings, Inc. on amounts borrowed to purchase related companies.

3. Employee retirement plans

The Company has a profit-sharing plan covering substantially all employees. Benefits are 100% vested and distributed upon retirement, disability or death of the employee. Vesting of benefits for other separations of service is graduated, based on years of participation prior to separation. All nonvested funds of terminated employees are reallocated among the other participants in the Plan. A profit-sharing trust with independent trustees has been established to administer the Plan. No contributions were made to the plan in 1986. Contributions to the plan were \$697,350 in 1985. There is no unfunded liability.

The Plan has been amended to conform with requirements of the Tax Equity and Fiscal Responsibility Act of 1982, the Tax Reform Act of 1984 and the Retirement Equity Act of 1984.

4. Long-term debt

	December 31,	
	1986	1985
10% notes payable to individuals at \$6,608 per month including interest, balance due November 1, 1993, secured by guarantee of Simon United States Holding, Inc. and assignment of lease	\$ 782,814	\$ 858,928
Less current portion	84,084	76,114
	<u>\$ 698,730</u>	<u>\$ 782,814</u>

Maturities of long-term debt are as follows:

<u>Year ending December 31,</u>	
1987	\$ 84,084
1988	92,889
1989	102,615
1990	113,361
1991	125,231
Thereafter	264,634
	<u>\$ 782,814</u>

5. Acquisition of subsidiary

On March 1, 1985, the Company acquired 100% of the common stock of Petro Treat, Inc. a company primarily involved in oilfield treatment of producing oil and gas wells. The original acquisition cost was \$1,290,430 plus additional purchase commitment as described in Note 7. The acquisition has been accounted for as a purchase; and accordingly, income from operations has been included in the consolidated financial statements from date of acquisition.

The details of the acquisition are as follows:

Cash and other current assets	\$ 456,352
Less current liabilities	187,022
	269,330
Other assets	258,225
Premium on acquisition	762,875
Premium on acquisition per purchase commitment (Note 7)	393,027
	<u>\$1,683,457</u>

1,155,902

1,290,430 sub total

The Company's policy is that acquisition costs in excess of the acquired subsidiary's costs of assets is recorded as "Premium on acquisition of subsidiary companies". This premium is not allocated to specific assets based on fair value at time of acquisition and is not depreciated or amortized. As disclosed in the "Summary of Significant Accounting Policies" this is not in accordance with United States generally accepted accounting principles which require the acquisition cost to be allocated to the fair market value of assets with excess to be amortized over not more than forty years.

6. Effect of currency translation

In accordance with policies of Unichem International, Inc.'s parent company, the Company's equity in earnings of Agua-Treat S.A. (a Mexican corporation) is converted to United States currency using the average annual exchange rate. The Company's 40% equity in net assets was also revalued using the difference between the beginning and ending of year exchange rate with the resulting adjustment of \$139,784 in 1986 and \$202,468 in 1985 made directly to retained earnings.

7. Purchase commitment

As consideration for the purchase of Petro Treat, Inc., Unichem International, Inc. entered into a deferred purchase agreement contingent upon the financial performance of Petro Treat, Inc. over a thirty-six month period ending December 31, 1987.

In 1986 the purchase agreement was amended and final acquisition costs of \$393,027 were incurred.



DANIELS INSURANCE INC.

P.O. Box 1258 • 300 N. Linam • Hobbs, New Mexico 88241 • (505) 393-5191

February 15, 1988

Ms. Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Department
P. O. Box 968
Santa Fe, NM 87504-0968

RE: Unichem International, Inc.

Dear Ms. Nelson:

This letter will advise you that this firm has made application to us to execute Brine Station Bonds per the bond form attached as follows:

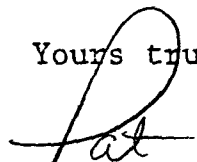
Truckers #1 Brine Station (Sec 1, T19S, R35E, App. 10 miles West of Hobbs. DP-370)	Amount \$16,000.00
Truckers #2 Brine Station (Sec. 33, T18S, R38E, Broadway Place, Hobbs. DP-371)	Amount \$28,000.00

We are working with several bonding companies to secure these bonds for Unichem. We cannot guarantee the execution of the bonds and I am sure you are aware that securing approval for a new bond form may sometimes require considerable time.

So that we may answer underwriting questions with regard to the obligations imposed by the bond, we would appreciate your providing us with a copy of the Water Quality Act, 74-6-1, which it is our understanding addresses the requirements of the bond.

We will advise you as soon as we have further information concerning these bonds.

Yours truly,


Ms. Pat Cargile

CC: Mr. Wayne Price
Unichem International, Inc.
P. O. Box 1499
Hobbs, NM 88241

BOND

BOND NO. _____
 (For Use of Surety Company)

File with Environmental Improvement Division, P.O. Box 968, Santa Fe,
 New Mexico 87504

KNOW ALL MEN BY THESE PRESENTS:

That _____, (an individual) (partnership) (a corporation organized in the State of _____, with its principal office in the City of _____, State of _____, and authorized to do business in the State of New Mexico), as PRINCIPAL, and _____, a corporation organized and existing under the laws of the State of _____, and authorized to do business in the State of New Mexico with duly appointed resident agent licensed in the State of New Mexico, to execute this bond on behalf of the surety company, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Environmental Improvement Division of the New Mexico Health and Environment Department pursuant to the Water Quality Act, §74-6-1 et seq., NMSA, 1978, as amended ("Water Quality Act"), and to the State of New Mexico in the sum of _____ (\$ _____) Dollars lawful money of the United States for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into the process of producing and extracting brine water from an in situ extraction well located in Section _____, Township _____ (North) (South), Range _____ (East) (West), N.M.P.M., _____ County, New Mexico.

NOW, THEREFORE, this \$ _____ performance bond is conditioned upon substantial compliance with the Water Quality Act and all rules, regulations, and orders of the Environmental Improvement Division of the New Mexico Health and Environment Department related thereto, and upon plugging and abandonment of the well bore and the clean up of the well site to standards of the Environmental Improvement Division, as set forth in the Water Quality Act and all rules and regulations thereunder; otherwise the principal amount of the bond to be forfeited to the State of New Mexico.

PROVIDED, HOWEVER, That sixty (60) days after receipt by the Environmental Improvement Division of written notice of cancellation from the SURETY, the obligation of the SURETY shall terminate as to activities or operations conducted by PRINCIPAL after said sixty (60) day period but shall continue in effect, notwithstanding said notice, as to such activities or operations conducted or commenced before the expiration of the sixty day period.

SIGNED AND SEALED this _____ day of _____, 19____.

PRINCIPAL _____

SURETY _____

Mailing Address _____

Mailing Address _____

By: _____
Signature Title

By _____
Attorney-in-Fact

(If the Principal is not a resident of New Mexico, the resident New Mexico agent shall countersign here below).

Countersigned by:

New Mexico Resident Agent _____

Address _____

STATE OF _____)
COUNTY OF _____) SS.

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____.

NOTARY PUBLIC _____

My Commission Expires:

ACKNOWLEDGMENT FORM FOR CORPORATION

STATE OF _____)
COUNTY OF _____) SS.

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of _____, a _____ corporation, on behalf of the corporation.

NOTARY PUBLIC _____

My Commission Expires:

STATE OF _____)
COUNTY OF _____) SS.

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____.

NOTARY PUBLIC

My Commission Expires:

(Note: Corporate surety attach power of attorney)

APPROVED BY:
ENVIRONMENTAL IMPROVEMENT
DIVISION

By: _____



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

February 16, 1988

FEDERAL EXPRESS AIRBILL # 7071127173

Gini Nelson, Assistant General Counsel
Office of General Counsel
Health & Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

John Parker
Groundwater Bureau
Environmental Improvement
Division
Health & Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

RE: Settlement Agreement for Unichem Intl's Brine Stations as listed:

TRUCKERS I

EID Discharge Plan 370
Location: 10 MI W of Hobbs, NM
in Lea County
Sec 1-TS 19S-R 35E

TRUCKERS II

EID Discharge Plan 371
Location: BDW PL in Hobbs, NM
in Lea County
Sec 33-TS 18S-R 38E

Please find enclosed the following exhibits:

EXHIBIT I. Signed Amended Settlement Agreement: Please note the original Agreement was amended by Gini Nelson and a Telefacsimile of the "Alternate Schedule of Compliance Language" (Exhibit I-1A) was sent to Unichem and attached to and made part of the original document.

EXHIBIT II. Most recent Annual Financial Statement: Please note these are 1985 and 1986 Consolidated Financial Statements with Accountants' Review Report ending December 31, 1986 and 1985 for Unichem International Inc., all per Amended Schedule of Compliance Section 1.A.

UNICHEM INTERNATIONAL INC.

SETTLEMENT AGREEMENT

This Settlement Agreement is made by and between the Environmental Improvement Division of the New Mexico Health and Environment Department, and Unichem International, Inc., a New Mexico Corporation. This Settlement Agreement is intended to resolve all pending disputes between the parties with regard to certain violations specified hereinafter, and is made upon the following terms and conditions.

WHEREAS, on February 25, 1987, the New Mexico Environmental Improvement Division (EID) requested Unichem International, Inc. to submit an application for renewal of a discharge plan pursuant to Section 3-104 and 5-101.B.2 of the New Mexico Water Quality Control Commission (Commission) Regulations for discharges from the brine facility and brine well Truckers #1 located in Section 1, Township 19 South, Range 35 East, N.M.P.M., Lea County, New Mexico; and the brine facility and brine well Truckers #2 located in Section 33, T18S, R38E, Lea County, New Mexico; and

WHEREAS, the Director of EID has not at this time approved a renewal discharge plan for Unichem International, Inc.; and

WHEREAS, Unichem International, Inc. failed to satisfy the requirements of Section 5-101.G of the Commission Regulations by its failure to submit a complete application for discharge plan renewal by June 15, 1987; and

WHEREAS, neither the regulations nor an extension to discharge without an approved discharge plan issued by the Director, nor any Court Order, allows Unichem International, Inc. to operate Truckers #1 and Truckers #2 beyond December 18, 1987; and

WHEREAS, all the information required to be submitted for the renewal discharge plan application has been submitted to EID and reviewed and commented upon by EID except for submission of adequate financial assurances as required by Section 5-210.B.17 of the Commission Regulations; and

WHEREAS, Unichem International, Inc. has committed to EID to proceed with all diligence to prepare and secure an approved Discharge Plan; and

WHEREAS, EID and Unichem International, Inc. deem it appropriate to enter into this Settlement Agreement.

Unichem International, Inc. agrees to the following:

****NOTE****
1. SCHEDULE OF COMPLIANCE: It is agreed that Unichem International, Inc. shall comply with the following schedule:

A. Unichem International, Inc. shall submit adequate financial assurances pursuant to Section 5-210.B.17 of the Commission Regulations to EID on or before February 19, 1988.

B. EID shall review the materials submitted under paragraph 1.A and shall either approve the materials or will notify Unichem International, Inc. of the materials' inadequacies on or before March 18, 1988.

C. Unichem International, Inc. shall, within twenty (20) days of EID's notice of inadequacies, if any, submit revised or alternate financial assurances to EID for review. Unichem International, Inc. shall be in violation of the Settlement Agreement if EID finds that the revised or alternative financial assurances are inadequate.

D. The EID Director shall approve or disapprove the discharge plan application on or before April 15, 1988.

2. NOTICE: Whenever under the terms of this Settlement Agreement notice or information is required to be given by one party to another, it shall be directed to the individuals at the addresses specified below. Notice or the supplying of information shall be perfected upon the mailing of such notice or information.

For Unichem International, Inc.:

Wayne Price, Staff Engineer
Unichem International, Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

For EID:

John Parker
Groundwater Bureau
Environmental Improvement
Division
Health & Environment Dept.
P. O. Box 968
Santa Fe, NM 87504-0968

and

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P. O. Box 968
Santa Fe, NM 87504-0968

3. MUTUAL COOPERATION: Unichem International, Inc. and EID shall mutually cooperate in accomplishing on a timely basis the matters contemplated by this Settlement Agreement. In this respect, routine communications may be exchanged between Unichem International, Inc. representatives and EID personnel, but no such communication shall alter or waive any rights and/or obligations of the parties under this Settlement Agreement.

4. ENFORCEMENT: EID shall not undertake enforcement against Unichem International, Inc. for the continuation of current discharges occurring during the pendency of this Settlement Agreement so long as Unichem International, Inc. complies with the terms of this Settlement Agreement. This Paragraph shall not preclude appropriate action by the Director or the Commission under Section 74-6-11 N.M.S.A. 1978.

Nothing in this Settlement Agreement shall relieve Unichem International, Inc. from the responsibility for complying with all the provisions of the Water Quality Act, the regulations promulgated thereunder or any other provision of law except as otherwise specifically provided herein.

5. COURT JURISDICTION AND VENUE: The parties agree that Unichem International, Inc. may seek judicial review of EID final action by filing an action in the district court for Lea County New Mexico, within thirty (30) days of the date of the EID final action, to modify or set aside the action. Judicial review of EID final actions shall be in accord with applicable standards for judicial review of administrative decisions. Additionally, the parties agree that this Agreement shall be enforceable by either party by the filing of a civil action in the district court for Lea County. In the event of such civil action, the parties agree that such court has jurisdiction over the subject matter of this Agreement and the parties hereto waive their right to challenge such jurisdiction either in the district court for Lea County or any other forum.

6. PENALTIES FOR NONCOMPLIANCE: Unichem International, Inc. agrees that, if it fails to comply with any of the requirements of this Agreement, EID shall be free to proceed with any lawful enforcement action against Unichem International, Inc. and to seek penalties for all of Unichem International, Inc.'s acts, including acts occurring before, during, and after the term of the Settlement Agreement.

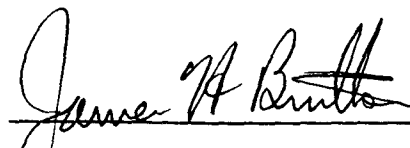
7. TERMINATION: Unichem International, Inc.'s obligations under this Settlement Agreement shall terminate upon EID's certification to Unichem International, Inc. in writing that EID has reviewed and approved the financial assurances submittal described in paragraph 1 above.

8. MERGER: This Settlement Agreement contains all the terms of the Settlement Agreement between the parties, there being no oral agreements not contained herein.

This Settlement Agreement is effective when signed by all parties to this Settlement Agreement.

FOR UNICHEM INTERNATIONAL, INC.


FOR ENVIRONMENTAL IMPROVEMENT
DIVISION



President
Unichem International, Inc.
P. O. Box 1499

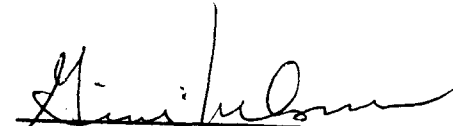
Hobbs, New Mexico 88240

2-17-88
Date



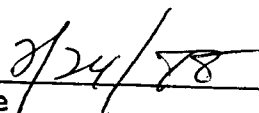
MICHAEL J. BURKHART
Director, Environmental
Improvement Division
Chairman, Water Quality Control
Commission
P. O. Box 968
Santa Fe, N.M. 87504-0968

Feb. 24, 1988.
Date



GINI NELSON
Assistant General Counsel
Office of General Counsel
Health & Environment Department
P. O. Box 968
Santa Fe, N.M. 87504-0968

Date


Date

1. SCHEDULE OF COMPLIANCE: It is agreed that Unichem International, Inc. shall comply with the following schedule:

a. Unichem International, Inc. shall submit to EID on or before February 19, 1988 its most recent annual financial statement. Unichem International, Inc. shall also submit evidence by February 19, 1988 that it is investigating and seeking other means of satisfying the financial assurances requirement of Section 5-210.B.17 of the Commission Regulations, such as evidence that it has submitted a complete application for an adequate surety bond. Unichem International, Inc. shall use its best efforts to investigate and seek other means of satisfying the financial assurances requirement in an expedited manner, both for the submittal required in this paragraph 1.a. and for the submittals required in paragraphs 1.c. and 1.e.

b. EID shall evaluate Unichem International, Inc.'s most recent annual financial statement for adequacy under the financial assurances requirement of Section 5-210.B.17 of the Commission Regulations, and shall notify Unichem International, Inc. in writing by March 4, 1988 of EID's approval or disapproval of the submittal as satisfaction of the financial assurance requirement of Section 5-210.B.17. If EID approves the financial statement submittal, Unichem International, Inc. shall not be required to submit further financial assurances under this Settlement Agreement.

c. Unichem International, Inc. shall submit to EID completed adequate financial assurances pursuant to Section 5.210.B.17 of the Commission Regulations (other than the most recent annual financial statement submitted to EID on or before February 19, 1988) at the earliest date that they are completed, but no later than March 18, 1988.

d. EID shall review the materials submitted under paragraph 1.c. and shall either approve the materials or will notify Unichem International, Inc. of the materials' inadequacies on or before April 15, 1988.

e. Unichem International, Inc. shall, within twenty (20) days of EID's notice of inadequacies, if any, submit revised or alternate financial assurances to EID for review. Unichem International, Inc. shall be in violation of the Settlement Agreement if EID finds that the revised or alternative financial assurances are inadequate.

f. The EID Director shall approve or disapprove the discharge plan application on or before May 13, 1988.



P.O. Box 24240, Washington, D.C. 20024 (202) 628-4200

Amoco has had problem
drilling through casing at approx
500' - no water infiltrated

Ran an MIT yesterday
checked out fine.

Fluoride were not 10# brine
and were in excess of flows
that could be produced from
Eames Brine Facility.

Allie's

GAMBITTS

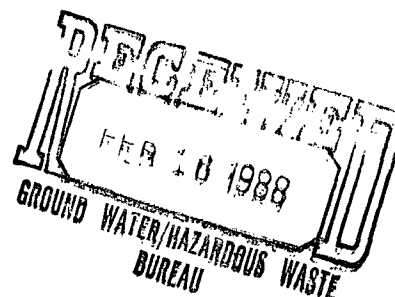


OFFICE OF GENERAL COUNSEL
Post Office Box 968
Santa Fe, New Mexico 87504-0968
(505) 827-2990

GARREY CARRUTHERS
Governor
LARRY GORDON
Secretary
CARLA L. MUTH
Deputy Secretary

Federal Express

February 12, 1988



Scotty Holloman, Esq.
Maddox, Renfrow and Saunders
1401 North Turner
Broadmoor Building
Hobbs, New Mexico 88240

Dear Mr. Holloman:

As we discussed by telephone today, I enclose for your consideration two proposals:

1. a surety bond guaranteeing payment into a standby trust fund, entitled "Financial Guarantee Bond," "Trust Agreement," and "Certificate of Acknowledgment;" and
2. a surety bond guaranteeing performance, with a provision for payment into a standby trust fund, entitled "Performance Bond," "Trust Agreement," and "Certificate of Acknowledgement."

The trust forms are exactly the same; the only difference between the two bonds is that the Performance Bond first provides the surety the opportunity to perform the tasks itself, rather than requiring immediate payment into the trust fund.

These instruments are modified from ones required under the New Mexico Hazardous Waste Management Regulations for the provision of financial assurance for closure and postclosure care of hazardous waste facilities; and also from ones required by the U.S. Environmental Protection Agency for its Underground Injection Well Program. I also enclose a copy of the applicable federal regulations.

The New Mexico Hazardous Waste Management Regulations, good guidance even while not directly applicable here, require that the surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury, and also require that the trustee of a trust fund must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

Scotty Holloman, Esq.
February 12, 1988
Page Two

Please review these forms, and telephone me with any question or comments. I will be back in my office on Tuesday, February 16.

Thank you for your cooperation and assistance.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gini Nelson", with a long horizontal flourish extending to the right.

GINI NELSON
Assistant General Counsel

GN:dmv

cc: John Parker, UIC Program



OFFICE OF GENERAL COUNSEL
Post Office Box 968
Santa Fe, New Mexico 87504-0968
(505) 827-2990

GARREY CARRUTHERS
Governor
LARRY GORDON
Secretary
CARLA L. MUTH
Deputy Secretary

MEMORANDUM

TO: John Parker, GWB
FROM: Gini Nelson, OGC *Gini Nelson*
DATE: January 27, 1988
RE: UNICHEM INTERNATIONAL, INC., TRUCKERS #1 and #2

I enclose for your consideration a Settlement Agreement proposal for Unichem. I understand that you are in the process of making the legal request formally.

Please note that the Settlement Agreement does not require Unichem to pay any penalty for its violations to date of signing of the Settlement Agreement; nor does it provide for penalties for violation of the Settlement Agreement itself. It does reserve to EID the right to seek penalties for the underlying violations of the WQCC Regulations for the entire period of time should EID go to court on the underlying violations.

I suggest that this proposal be sent to Unichem by cover letter, certified mail, indicating that EID has set a deadline for signature of two weeks from their receipt of the letter and Settlement Agreement; emphasize Unichem's need to respond to the proposal in enough time to allow EID and Unichem to negotiate any changes that Unichem may seek to get, before the expiration of the deadline.

Wayne Price indicated to me that Unichem will prefer to have the dollar amount of the sureties required specified in the Settlement Agreement; you and I talked on January 21, 1988 about what the program probably needs to be doing to determine that figure in an equitable and consistent manner. I suggest that the Settlement Agreement be sent out as is, i.e., without the dollar amount specified; the cover letter can acknowledge that Unichem may want that figure specified, and that EID can consider that, but that the correct figure is not yet available for inclusion.

Please review this and get back to me with any questions and/or comments at your earliest convenience; Wayne Price is expecting to get a Settlement Agreement proposal soon, and the program keeps this matter on a better enforcement track to get the Settlement Agreement negotiations formally progressing.

cc: Kevin Lambert
Ernest Rebuck

EQUAL OPPORTUNITY EMPLOYER

SETTLEMENT AGREEMENT

This Settlement Agreement is made by and between the Environmental Improvement Division of the New Mexico Health and Environment Department, and Unichem International, Inc., a New Mexico Corporation. This Settlement Agreement is intended to resolve all pending disputes between the parties with regard to certain violations specified hereinafter, and is made upon the following terms and conditions.

WHEREAS, on February 25, 1987, the New Mexico Environmental Improvement Division (EID) requested Unichem International, Inc. to submit an application for renewal of a discharge plan pursuant to Section 3-104 and 5-101.B.2 of the New Mexico Water Quality Control Commission (Commission) Regulations for discharges from the brine facility and brine well Truckers #1 located in Section 1, Township 19 South, Range 35 East, N.M.P.M., Lea County, New Mexico; and the brine facility and brine well Truckers #2 located in Section 33, T185, R38E, Lea County, New Mexico; and

WHEREAS, the Director of EID has not at this time approved a renewal discharge plan for Unichem International, Inc.; and

WHEREAS, Unichem International, Inc. failed to satisfy the requirements of Section 5-101.G of the Commission Regulations by its failure to submit a complete application for discharge plan renewal by June 15, 1987; and

WHEREAS, neither the regulations nor an extension to discharge without an approved discharge plan issued by the Director, nor any Court Order, allows Unichem International, Inc. to operate Truckers #1 and Truckers #2 beyond December 18, 1987; and

WHEREAS, all the information required to be submitted for the renewal discharge plan application has been submitted to EID and reviewed and commented upon by EID except for submission of adequate financial assurances as required by Section 5-210.B.17 of the Commission Regulations; and

WHEREAS, Unichem International, Inc. has committed to EID to proceed with all diligence to prepare and secure an approved Discharge Plan; and

WHEREAS, EID and Unichem International, Inc. deem it appropriate to enter into this Settlement Agreement.

Unichem International, Inc. agrees to the following:

1. SCHEDULE OF COMPLIANCE: It is agreed that Unichem International, Inc. shall comply with the following schedule:

A. Unichem International, Inc. shall submit adequate financial assurances pursuant to Section 5-210.B.17 of the Commission Regulations to EID on or before February 11, 1988.

B. EID shall review the materials submitted under paragraph 1.A and shall either approve the materials or will notify Unichem International, Inc. of the materials' inadequacies on or before March 11, 1988.

C. Unichem International, Inc. shall, within twenty (20) days of EID's notice of inadequacies, if any, submit revised or alternate financial assurances to EID for review. Unichem International, Inc. shall be in violation of the Settlement Agreement if EID finds that the revised or alternative financial assurances are inadequate.

D. EID Director's approval or disapproval of the discharge plan application shall be promulgated on or before April 8, 1988.

2. NOTICE: Whenever under the terms of this Settlement Agreement notice or information is required to be given by one party to another, it shall be directed to the individuals at the addresses specified below. Notice or the supplying of information shall be perfected upon the mailing of such notice or information.

For Unichem International, Inc.:

Wayne Price, Staff Engineer
Unichem International, Inc.
P. O. Box 1499
Hobbs, New Mexico 88240

For EID:

John Parker
Groundwater Bureau
Environmental Improvement
Division
Health & Environment Dept.
P. O. Box 968
Santa Fe, NM 87504-0968

and

Gini Nelson
Assistant General Counsel
Office of General Counsel
Health & Environment Dept.
P. O. Box 968
Santa Fe, NM 87504-0968

3. MUTUAL COOPERATION: Unichem International, Inc. and EID shall mutually cooperate in accomplishing on a timely basis the matters contemplated by this Settlement Agreement. In this respect, routine communications may be exchanged between Unichem International, Inc. representatives and EID personnel, but no such communication shall alter or waive any rights and/or obligations of the parties under this Settlement Agreement.

4. ENFORCEMENT: EID shall not undertake enforcement against Unichem International, Inc. for the continuation of current discharges occurring during the pendency of this Settlement Agreement so long as Unichem International, Inc. complies with the terms of this Settlement Agreement. This Paragraph shall not preclude appropriate action by the Director or the Commission under Section 74-6-11 N.M.S.A. 1978.

Nothing in this Settlement Agreement shall relieve Unichem International, Inc. from the responsibility for complying with all the provisions of the Water Quality Act, the regulations promulgated thereunder or any other provision of law except as otherwise specifically provided herein.

5. COURT JURISDICTION AND VENUE: The parties agree that Unichem International, Inc. may seek judicial review of EID final action by filing an action in the district court for Lea County New Mexico, within thirty (30) days of the date of the EID final action, to modify or set aside the action. Judicial review of EID final actions shall be in accord with applicable standards for judicial review of administrative decisions. Additionally, the parties agree that this Agreement shall be enforceable by either party by the filing of a civil action in the district court for Lea County. In the event of such civil action, the parties agree that such court has jurisdiction over the subject matter of this Agreement and the parties hereto waive their right to challenge such jurisdiction either in the district court for Lea County or any other forum.

6. PENALTIES FOR NONCOMPLIANCE: Unichem International, Inc. agrees that, if it fails to comply with any of the requirements of this Agreement, EID shall be free to proceed with any lawful enforcement action against Unichem International, Inc. and to seek penalties for all of Unichem International, Inc.'s acts, including acts occurring before, during, and after the term of the Settlement Agreement.

7. TERMINATION: Unichem International, Inc.'s obligations under this Settlement Agreement shall terminate upon EID's certification to Unichem International, Inc. in writing that EID has reviewed and approved the financial assurances submittal described in paragraph 1 above.

8. MERGER: This Settlement Agreement contains all the terms of the Settlement Agreement between the parties, there being no oral agreements not contained herein.

This Settlement Agreement is effective when signed by all parties to this Settlement Agreement.

FOR UNICHEM INTERNATIONAL, INC. FOR ENVIRONMENTAL IMPROVEMENT
DIVISION

President
Unichem International, Inc.
P. O. Box 1499

Hobbs, New Mexico 88240

MICHAEL J. BURKHART
Director, Environmental
Improvement Division
Chairman, Water Quality Control
Commission
P. O. Box 968
Santa Fe, N.M. 87504-0968

Date

Date

GINI NELSON
Assistant General Counsel
Office of General Counsel
Health & Environment Department
P. O. Box 968
Santa Fe, N.M. 87504-0968

Date

Date

TELEFACSIMILE TRANSMITTAL SHEET

TO: WAYNE PRICE, UNICHEM
FROM: GINI NELSON, EID
DATE: FEBRUARY 12, 1988
RE: ALTERNATE SCHEDULE OF COMPLIANCE LANGUAGE

This proposed schedule of compliance language is transmitted to you as we discussed on February 10, 1988.

Please call with any questions, 827-2854.

cc: John Parker

1. **SCHEDULE OF COMPLIANCE:** It is agreed that Unichem International, Inc. shall comply with the following schedule:

a. Unichem International, Inc. shall submit to EID on or before February 19, 1988 its most recent annual financial statement. Unichem International, Inc. shall also submit evidence by February 19, 1988 that it is investigating and seeking other means of satisfying the financial assurances requirement of Section 5-210.B.17 of the Commission Regulations, such as evidence that it has submitted a complete application for an adequate surety bond. Unichem International, Inc. shall use its best efforts to investigate and seek other means of satisfying the financial assurances requirement in an expedited manner, both for the submittal required in this paragraph 1.a. and for the submittals required in paragraphs 1.c. and 1.e.

b. EID shall evaluate Unichem International, Inc.'s most recent annual financial statement for adequacy under the financial assurances requirement of Section 5-210.B.17 of the Commission Regulations, and shall notify Unichem International, Inc. in writing by March 4, 1988 of EID's approval or disapproval of the submittal as satisfaction of the financial assurance requirement of Section 5-210.B.17. If EID approves the financial statement submittal, Unichem International, Inc. shall not be required to submit further financial assurances under this Settlement Agreement.

c. Unichem International, Inc. shall submit to EID completed adequate financial assurances pursuant to Section 5.210.B.17 of the Commission Regulations (other than the most recent annual financial statement submitted to EID on or before February 19, 1988) at the earliest date that they are completed, but no later than March 18, 1988.

d. EID shall review the materials submitted under paragraph 1.c. and shall either approve the materials or will notify Unichem International, Inc. of the materials' inadequacies on or before April 15, 1988.

e. Unichem International, Inc. shall, within twenty (20) days of EID's notice of inadequacies, if any, submit revised or alternate financial assurances to EID for review. Unichem International, Inc. shall be in violation of the Settlement Agreement if EID finds that the revised or alternative financial assurances are inadequate.

f. The EID Director shall approve or disapprove the discharge plan application on or before May 13, 1988.

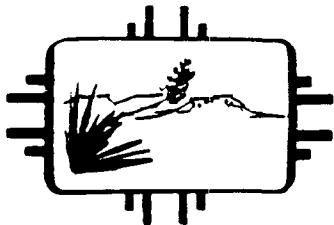
P 331 627 132

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		
Richard Brakey		
STREET AND NO. P.O. Box 1499		
P.O., STATE AND ZIP CODE Hobbs, NM 88240		
POSTAGE \$		
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢
	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	OPTIONAL SERVICES	
	RETURN RECEIPT SERVICE	
	SHOW TO WHOM AND DATE DELIVERED	¢
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES \$		
POSTMARK OR DATE		

PS Form 3800, Apr. 1976



NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

OFFICE OF GENERAL COUNSEL

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

TO: Richard Brakey, Vice President
Unichem International, Inc.
Post Office Box 1499
Hobbs, New Mexico 88240

DATE: February 5, 1988

RE: Copy of letter dated February 3, 1988, with copy of Settlement Agreement enclosed.

The following documents are enclosed: The above enclosures are mailed today, certified mail, because I inadvertently failed to place the return card on the envelope with the original letter and Settlement Agreement which I mailed out on February 4, 1988.

PLEASE:

<input type="checkbox"/> File	<input type="checkbox"/> For Your Information
<input type="checkbox"/> Record	<input type="checkbox"/> Per Your Request
<input type="checkbox"/> Approve, Sign and Return	<input type="checkbox"/> Serve
<input type="checkbox"/> Return Conformed Copies	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Check of \$ _____ Enclosed for Proper Fee	
<input type="checkbox"/> Self-Addressed, Stamped Envelope Enclosed	

Thank you very much.

Linda Romero

Attorney at Law
Legal Assistant

Enclosure(s)

3/87

REQUEST FOR LEGAL SERVICES

NAME OF CASE: Unichem Int. "Truckers I & II"

REQUEST MADE BY: John W. Parker WRSTI
Name, Title, and Bureau

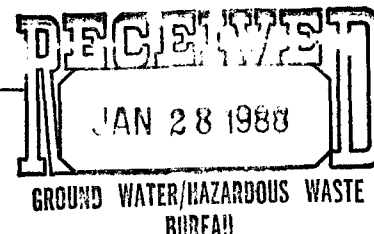
RECEIVED

JAN 27 1988

APPROVAL OF BUREAU CHIEF: [Signature] 1/25/88
(Signature)

LEGAL

APPROVAL OF LEGAL LIAISON: _____
(Signature)



DATE OF REQUEST: 01/20/88

PERSON ATTORNEY SHOULD CONTACT: Parker No. 0027

PRIORITY: _____ EMERGENCY (explain) _____
X NORMAL
LOW

DUE DATE (Deadline) _____

NATURE OF REQUEST: Prepare a "Settlement Agreement" to allow
Unichem facilities to continue operation while pursuing DP renewal.
Please provide a memo or narrative description, and attach any other
documentation explaining the assistance sought.

PLEASE FILL IN AS APPLICABLE:

SPECIAL INSTRUCTIONS: Gini Nelson is familiar with
this case.

To be completed by Deputy General Counsel

This matter has been referred to Gini Nelson on 1/27/88
with the following instructions _____

(Where applicable) This matter has been transferred to _____
on _____ with the following instructions _____

Internal #

32-88

[Signature]
Deputy General Counsel

Date Completed _____

John W. Parker
Ground Water Bureau



Post Office Box 968
Santa Fe, New Mexico 87504-0968

ENVIRONMENTAL IMPROVEMENT DIVISION

Michael J. Burkhart
Director

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

January 4, 1988

Wayne Price
Unichem International
P.O. Box 1499
Hobbs, NM 88240

Dear Mr. Price:

The Underground Injection Control staff of the New Mexico Environmental Improvement Division Ground Water Section would like to thank you for your cooperation during our recent inspections of Truckers #1, Truckers #2, Unichem Carlsbad, and Unichem Eunice brine facilities. Copies of the inspection forms are attached for your reference. Deficiencies noted during the inspections are as follows:

Truckers #1

1. Leaks around wellhead observed. Should be repaired.
2. Top of western-most brine storage tank needs replacing.
3. Well set up for injection down tubing, and production of brine through the annulus. Flow should be reversed.

Truckers #2

1. Brine storage pond should be kept free of weeds and other debris.
2. Frequent spillage of produced waters has left oily residues in collection system. Loading area should be cleaned periodically so as to be free of oily residues. Berming of loading area should be improved so as to prevent spillage/leakage from leaving property.

Unichem Carlsbad

1. Runoff from spillage leaving property. Facility needs considerable surface work. Need to properly grade and install spill collection system. Need to place berm around facility to prevent runoff of spillage or

Wayne Price
January 4, 1988
Page 2

Unichem Eunice

1. Spill collection system has accumulation of oily residues and produced waters with oil in collection pond. Pond should be cleaned frequently and kept free of produced waters.
2. Some brine and/or produced waters leaving property. Should regrade so as to prevent contaminants from leaving property.

Thank you for your continued cooperation. Should you have any questions feel free to contact me (827-2902) or John Parker (827-0027).

Sincerely,



Kevin Lambert
Hydrologist
Ground Water Section

KL:JP:egr

Enclosure

P-573 875 142

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

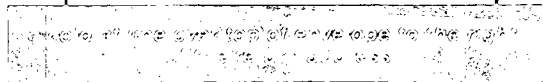
NOT FOR INTERNATIONAL MAIL

(See Reverse)

U.S.G.P.O. 153-506

PS Form 3800, June 1985

Sent to	Grayne Price	
Street and No.	709 N Leech	
P.O., State and ZIP Code	Hobbs, NM	
Postage		\$
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt showing to whom and Date Delivered		
Return Receipt showing to whom, Date, and Address of Delivery		
TOTAL Postage and Fees		\$
Postmark or Date		





Post Office Box 968
Santa Fe, New Mexico 87504-0968

GARREY CARRUTHERS
Governor
LARRY GORDON
Secretary
CARLA L. MUTH
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 24, 1987

Wayne Price, Staff Engineer
Unichem International Inc.
707 N. Leech
Hobbs, NM 88240

Dear Mr. Price:

The Environmental Improvement Division (EID) has received your letter of June 13, 1987, requesting an extension of sixty (60) days for the submission of renewal applications for discharge plan's DP-370 and DP-371, citing Section 5.101.G. of the Water Quality Control Commission (WQCC) Regulations.

WQCC Sections 5-101.G. provides the discharger the opportunity to continue operating under his existing approved discharge plan if one is in compliance with the approved discharge plan on the date of its expiration and one has submitted a complete renewal application at least 180 days before discharge plan expiration. No provision exists for an extension under Section 5-101.G. Consequently, your request for a 60 day extension for DP-370 and DP-371 cannot be granted.

Therefore, Unichem International must submit complete renewal applications for DP-370 and DP-371 as soon as possible, so that the EID has sufficient time to review and evaluate your discharge plans before they expire on December 15, 1987. If your renewal applications are not approved by the expiration date of your existing discharge plans, you must stop all operations authorized under subject discharge plans until a decision is reached by the EID.

If you have any questions, please feel free to contact me at the address on the letterhead or telephone 827-2902.

Sincerely,

Kevin Lambert
Hydrologist
Ground Water Section - UIC Program

KL:egr

cc: Garrison McCaslin, EID District IV Manager, Roswell



Post Office Box 968
Santa Fe, New Mexico 87504-0968

GARREY CARPENTERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 25, 1987

Wayne Price
Unichem International
P.O. Box 1499
Hobbs, NM 88240

RE: Discharge Plan DP-370 and DP-371

Dear Mr. Price:

In the summer of 1983, the Water Quality Control Commission (WQCC) transferred its delegation of authority from the Oil Conservation Division (OCD) to the Environmental Improvement Division (EID) to administer discharge plans for brine extraction facilities. On December 18, 1982, the discharge plan DP-370 and DP-371 for the Truckers #1 and #2 brine facilities near Hobbs located in Lea County was approved by the Director of the OCD. This discharge plan was required and submitted pursuant to WQCC Regulations and it was approved for a period of up to five years. The approval will expire on December 18, 1987.

If you are still discharging at this facility and wish to continue discharging, please submit your application for renewal of plan approval, including a complete Part 5 discharge plan amendment/renewal, as quickly as possible. The necessary forms for making those submissions are enclosed. Submitting your application in a timely fashion will aid the EID in processing your discharge plan prior to the expiration date. Also, please indicate whether you have made or intend to make any changes in your discharge.

Section 5-101.G. of the WQCC regulations assures that those who are in compliance with their approved discharge plan on the date of its expiration, and who submit a complete application for a discharge plan renewal at least 180 days before the expiration date, which in this case would be June 15, 1987, will remain in compliance until the application for discharge plan renewal has been approved or disapproved. Applications for renewals submitted after June 15, 1987 may result in a discharge not in compliance, if EID is not provided sufficient time to process the application. Therefore, the EID recommends you submit an application for discharge plan renewal which include and adequately address all of the information necessary for evaluation of a new discharge plan well in advance of June 15, 1987.

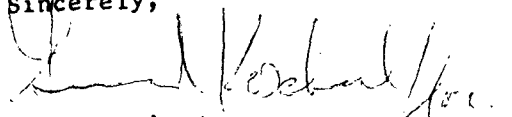
EQUAL OPPORTUNITY EMPLOYER

Wayne Price
February 25, 1987
Page 2

If you are no longer discharging and discharge plan renewal is not needed,
please notify this office.

If you have any questions, please do not hesitate to contact me at the address
listed on the letterhead or telephone number 827-2902.

Sincerely,



Kevin Lambert
Hydrologist
Ground Water Section/Underground
Injection Control

KL:egr

Enclosures

cc: Garrison McCaslin, EID District IV Manager, Roswell

PS Form 3800, Feb. 1982		★ U.S.G.P.O. 1984-446-014	
Sent to	Wayne Price		
Street and No.	P.O. Box 1499		
P.O., State and ZIP Code	Albany, NM		
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to whom and Date Delivered			
Return receipt showing to whom, Date, and Address of Delivery			
TOTAL Postage and Fees	\$		
Postmark or Date			

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P 131 115 630

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plan has been submitted for approval to the Director of the Oil Conservation Division, P. O. Box 2088, State Land Office Building, Santa Fe, New Mexico 87501, telephone (505) 827-3260.

UNICHEM INTERNATIONAL, P. O. Box 1499, Hobbs, New Mexico 88240, telephone (505) 393-7751, requests approval of their discharge plan for their four brine in situ extraction wells and facilities located in Section 3, Township 22 South, Range 37 East, NMPM, Lea County, ^{*}New Mexico; Section 33, Township 18 South, Range 38 East, NMPM, Lea County; Section 3, Township 22 South, Range 37 East, NMPM, Lea County; ^{*}Section 36, Township 22 South, Range 26 East, NMPM, Eddy County, New Mexico. Unichem injects water down each injection well to an underlying salt formation thereby dissolving the salt to form a brine water solution with a total dissolved solids content of approximately 300,000 mg/L. Unichem extracts and sells the brine water solution to various companies for use in oil and gas production.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

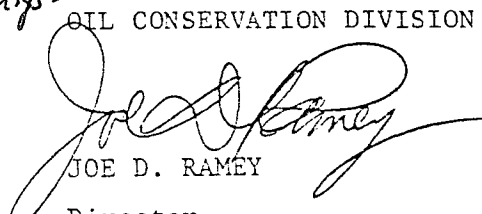
If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

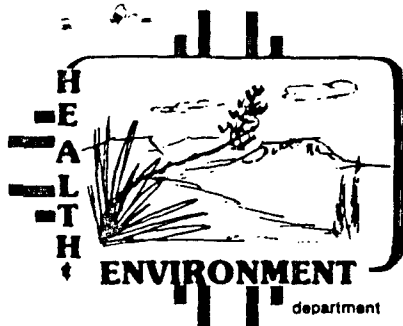
GIVEN Under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 12th day of November, 1982.

** These 2 land descriptions
are in error. Correct descrip-
tions are:*

*Sec. 34, T21S R 37E
and
Sec. 1, T19S R 35E*

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 984-0020

Steven Asher, Director

TONEY ANAYA
GOVERNOR

ROBERT McNEILL
SECRETARY

ROBERT L. LOVATO, M.A.P.A.
DEPUTY SECRETARY

JOSEPH F. JOHNSON
DEPUTY SECRETARY

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 9, 1984

Robert J. Brakey, Vice President
Unichem International
P.O. Box 1499
Hobbs, NM 88240

Dear Mr. Brakey:

For your information, the responsibility for regulating brine extraction wells in the state of New Mexico was transferred in September, 1983 from the Oil Conservation Division (OCD) of the Energy and Minerals Department, to the Environmental Improvement Division (EID) of the Health and Environment Department.

The transfer will probably have no effect on your operation until 1986, when, if you plan to continue producing brine at your facility, you will need to start the process of applying for renewed approval of your discharge plan. Your present approval expires December 18, 1987, five years after the date the plan was approved.

At that time, you will need to prepare a discharge plan which includes the elements required under Section 5 as well as Section 3 of the Water Quality Control Commission (WQCC) Regulations (copy enclosed). Prior to December 20, 1982, a discharge plan consisted of only those elements listed in Section 3. Section 5 was added to the regulations in order to comply with federal Environmental Protection Agency (EPA) regulations to protect drinking water from pollution that might occur due to injection of fluids underground. The preparation of a Part 5 UIC application will require you to provide considerably more technical information than was needed for Part 3 discharge plan approval. It is for this reason that we recommend you begin to prepare your discharge plan renewal about eighteen months before the date that your current permit lapses. This should allow ample time for preparation, review, correction and final submittal of your new plan.

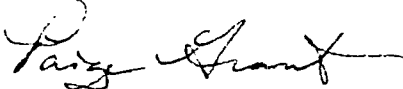
In the meantime, you are required to operate your facility in compliance with the standards of Section 3 of the WQCC Regulations. As time permits, we will

Mr. Brakey
February 9, 1984
Page 2

undertake a review of your present discharge plan and your field operation, to assure that it meets those standards.

If you have any questions or require further information, please contact me at the above address and telephone number (ext. 285).

Sincerely,



Paige Grant
Hydrologist
Ground Water Section

PG:egr

Enclosure

cc: John Guinn, EID District IV, Manager
EID Field Office, Hobbs
Joe Ramey, Director, OCD

ms22

PS Form 3800, Feb. 1982

Sent to	
Robert Brakey	
Street and No.	
P.O. Box 1499	
P.O. State and ZIP Code	
Hobbs, NM	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

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P 506 253 722



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

October 6, 1982

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

UNICHEM INTERNATIONAL
P.O. Box 1499
Hobbs, NM 88240

RE: Discharge Plans for
Brine Wells in Southeast
New Mexico

ATTENTION: R. J. Brakey

Dear Sir:

I have received your discharge plans for the four brine supply well facilities that you operate. In order to meet the requirements for a discharge plan, additional information must be supplied for each location. Therefore, please refer to the Water Quality Control Commission regulations Part III, Section 3-106 (C), questions 1 through 8 and Section 3-107 (A), C, D, for guidance of the type of information needed.

In particular, for each discharge plan please submit the following information:

1. Submit a topographic map showing the locations of each of your facilities. Suggested Map USGS Topographic Maps 7.5 minute series or equivalent.
2. Submit a detailed schematic diagram of each of your brine wells which illustrates: (1) the depths to and tops of geologic formations penetrated, depth to the top of the salt section, type and weight of casing and tubing, and tubing lining material. Refer to the attached sheet "Injection Well Data Sheet" and fill out this form.
3. Submit a narrative describing present and past workovers done on each well and a history of each well. What type of mechanical integrity testing has been performed for each well.
4. Submit water analysis of supply and brine waters.

5. Submit yearly totals of brine produced for each well since wells were constructed.
6. Submit OCD pit permit numbers for all applicable pits and when last OCD inspection was performed on the pit.
7. Submit detailed information on the type of liner used for each storage pit and/or holding tank. What monitoring systems are used to detect leakage?
8. Submit a detailed narrative describing how each facility functions and what mechanisms and systems, and/or inspections are made to insure each part of each facility is functioning properly and not leaking or spilling brine to the ground surface.
9. Submit detailed information on ground water conditions beneath each facility such as depth to ground water, name of formation containing ground water, chemical quality of ground water (total dissolved solids (TDS) concentrations).
10. State and relate to topographic map each facility's flooding potential and precautions taken if applicable.
11. Show locations of present and past water wells within a 2 mile radius of each of your facilities and submit pertinent information about each water well (owner, use, depth, etc.).
12. Submit photographs which illustrate each part of each of your facilities and correlate them to the above requirements.
13. What type of metering devices are used on supply water and brine water. Is there an accounting system used to keep track of supply water used versus brine water produced.
14. Submit a copy of your plugging bond for each well.

If you have any questions regarding this matter, please call me at (505) 827-2534.

Sincerely,



Oscar Simpson, III
Water Resource Specialist

OS/dp

Response in each separate well file.



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

IL CONSERVATION DIVISION

DEC 9 1982

RECEIVED

December 2, 1982

Mr. Oscar Simpson
Energy and Minerals Department
Oil Conservation Division

RE: Discharge Plans for Brine Wells
in southeast New Mexico

Dear Sir:

In response to your letter of October 6, 1982, the following information is respectfully submitted:

1. The topographic maps as requested were not available locally and were obtained from the Denver Mapping Service of the USGS. The 7.5 minute series were not available in all instances. The next largest series were selected.
2. The detailed schematic diagrams of each well that was previously submitted has been transposed to the prescribed "injection well data sheet" of the OCD.
3. Two of the wells used as brine wells have been converted to brine wells from old abandoned oil wells; complete history's are not available. The information used in preparing schematics and filling out the data sheets has been accumulated from the files of the office of the OCD.

The other two wells included in the application were drilled by the Company for the sole purpose of creating a brine well. None of the four wells have been worked over; i.e., they are all producing from the same interval in the salt section as they were originally completed. The only service and/or maintenance that has been necessary has been to pull log occasionally to remove salt buildup and/or replace the bottom jts of tbgs that have been mechanically damaged by that salt buildup and/or caving in the salt section. Fresh water is metered in all cases and compared to brine water produced, and there has never been an occasion to suspicion a loss of fluid sub-surface. In three of the brine stations, the water is purchased from the City and is taken, metered, and paid for from the City fresh water distribution lines. Obviously a discrepancy would quickly be noted if fresh water were being lost.

UNICHEM INTERNATIONAL INC.

During periods of high level activity, the wells are checked on a daily basis to insure that sufficient quantities of water are available for sale. The sales meter is checked against signed tickets to insure that sales are being recorded. Pressures on the well are checked to insure that there are no malfunctions downhole, and the pump is working properly. Three of the brine stations have storage facilities above ground, and any failures in the storage facilities becomes very evident. The other storage facility is in a pit, fabricated in accordance to OCD specifications and has been inspected and approved by the OCD, and is monitored regularly by that agency. The observations of water quantities, qualities, and pressures involved in production of the wells has been the only method of so-called "mechanical integrity testing" that has been done.

4. Three of the brine stations: Trucker's Brine Well #2 in Hobbs, Eunice Brine Well, and City of Carlsbad Brine Well, use potable water from each City's fresh water lines as a supply. We have not in the past had that water analyzed. Trucker's Brine Well #1 has a water well as a supply system. An analysis of the water well supply as well as one of each of the municipal systems is attached to the individual brine well discharge plans.
5. Yearly totals of brine produced for each well are attached to the individual discharge plans.
6. Trucker's Brine Station in Hobbs is the only facility that uses a pit for storage; the permit number is LP-H-107 (copy attached).
7. Detailed information on the type of liner used in the Hobbs pit is attached. A schematic of the pit construction and the monitoring system is attached.
8. All four of the brine stations are operated in the same manner as discussed in Item #3. The frequency of inspection is, generally speaking, daily, but again depends on sales volumes. In any case, the frequency of inspection is never greater than weekly.
9. With the exception of the Carlsbad brine station, all of the stations have ground water in existence. The formation producing the ground water is the Ogallala aquifer. The top of which is \pm 60 feet in all cases. There is no ground water above the salt section at the Carlsbad brine well.

As mentioned in the original discharge plan, the well was drilled with cable tools in hopes that a fresh water aquifer would be found and evaluated. None was encountered, and it was necessary to negotiate with the City of Carlsbad for the fresh water supply.

10. (a) In the instance of the Carlsbad facility, and referring to the USGS topographic map as attached, the major drainage system for the area is the Pecos River. The brine station is one mile east of the Carlsbad City Airport on land used at one time by the Federal Government as an ammunition storage depot. There has never been a history of flooding in the area.

Mr. Oscar Simpson
December 2, 1982
Page 3

10. (b). Trucker's Brine Well #2 is in the Hobbs city limits. Major flood drainage exists to the south and southeast. The drainage system is well maintained, and major flooding in the area has not been a problem.

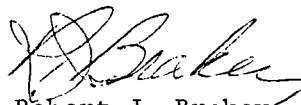
(c). Trucker's Brine Well #1 is located approximately 20 miles west of Hobbs on the edge of the Caprock. Drainage exists to the southwest into Iron Horse Draw. The brine station sits on a local high area and has never had a problem with flooding.

(d). The Eunice Brine Well is located within the city limits of Eunice in the southwest corner of town. Drainage exists to the southeast, as in evidence in the attached USGS topographic map. The drainage is extreme and flooding has never existed at this station.
11. Since all of the brine stations are in the city limits or farming and ranching areas, there are numerous water wells that have been drilled in the proximity of the stations. We requested information from the State Engineer's Office on wells in the areas, and have attached re-productions from their card system in their files to each discharge plan. Many of the wells that have been permitted no longer exist, but were probably just abandoned and capped but not plugged.
12. Since you will be given a personal tour and explanation of the functions of each station, we have not taken photographs of the stations, but will provide those pending your requests during the field trip.
13. The metering devices used at the brine stations are of the same type used by the cities in metering water for commercial use. We do have a rather complex system for accounting for water purchased and comparing it to water that is sold.
14. A blanket plugging bond is used by the Company because of the number of wells that we own and operate. A copy of the plugging bond is attached.

We hope we have answered all of your questions as required in your letter. Should there be further questions, please advise.

Very truly yours,

UNICHEM INTERNATIONAL INC.


Robert J. Brakey
Vice President

RJB/ds

Attachments

LINE NO		Pioneer Brine Sts	Booths Brine Sts 11,1244	Carlsbad Brine Sts 11,1244	Nebo Brine Sts
1	1965	106,411 BBLs	Purchased From		
2			Industrial Liquids -		
3	1966	172,056 BBLs	Already in Production		
4					
5	1967	30,002 BBLs			
6					
7	1968	323,571 BBLs	47,977 BBLs		
8					
9	1969	133,127 BBLs	74,242 BBLs		
10					
11	1970	34,344 BBLs	107,777 BBLs		
12					
13	1971	55,116 BBLs	224,338 BBLs		
14					
15	1972	122,609 BBLs	342,350 BBLs		
16					
17	1973	153,402 BBLs	51,941 BBLs		
18					
19	1974	44,219 BBLs	109,745 BBLs		
20					
21	1975	430,767 BBLs	72,784 BBLs		
22					
23	1976	371,198 BBLs	116,319 BBLs	44028 BBLs	
24					
25	1977	449,342 BBLs	220,399 BBLs	306,829 BBLs	
26					
27	1978	352,671 BBLs	224,032 BBLs	322,689 BBLs	
28					
29	1979	431,313 BBLs	457,178 BBLs	370,545 BBLs	
30					
31	1980	615,786 BBLs	452,495 BBLs	377,217 BBLs	42,666 BBLs
1	1981	504,418 BBLs	212,248 BBLs	443,986 BBLs	236,606 BBLs
2					
3	1982 - Jan thru Sept	206,003 BBLs	201,254 BBLs	335,330 BBLs	156,611 BBLs
4					
5					
6	Totals	5015,958 BBLs	2986,599 BBLs	2400,624 BBLs	535,893 BBLs
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31					

Annual Brine production From Sales Reports

SIMON

Environmental
Services

September 25, 1991

401 West Main, Suite 400
Norman, Oklahoma 73069

Telephone (405) 329-8300
Fax (405) 366-8722

Mr. Wayne Price
Staff Engineer
Unichem International Inc.
P.O. Box 1499
Hobbs, New Mexico 88241

Re: Carlsbad Brine Well Fracture Pressure
Simon Environmental Services Project No. 502-939-01

Dear Mr. Price:

Per your request we have estimated the formation fracture pressure for the Carlsbad brine well. The following estimation equation was derived in our letter of June 3, 1991 regarding formation fracture pressure of the Eunice brine well.

$$P_f/z \cong (S_z/z + 2p/z)/3$$

This equation is also known as the Hubbert and Willis (1957) equation for minimum fracture pressure gradient estimation.

For the Carlsbad Brine Well:

$$\begin{aligned} S_z/z &\cong 1.0 \text{ psi/ft (overburden gradient)} \\ p/z &= .46 \text{ psi/ft (original formation pressure gradient)} \\ z &= 710 \text{ ft} \end{aligned}$$

Therefore,

$$P_f/710 \cong (1.0 + 2(.46))/3$$

$$P_f/710 \cong .64$$

$$P_f \cong 454 \text{ psi}$$

Hydrostatic gradient of injected fluid = .433 psi/ft.

$$\begin{aligned} \text{Surface fracture pressure} &= 454 \text{ psi} - (710 \text{ ft} \times .433 \text{ psi/ft}) \\ &= 147 \text{ psi} \end{aligned}$$

Friction pressure loss ~ 0 psi

Total surface fracture pressure = 147 psi

Maximum injection pressure = 110 psi

Mr. Wayne Price
September 25, 1991
Page Two

The calculated formation fracture pressure for the Carlsbad brine well is 454 psi. The surface fracture pressure, including friction pressure losses, is 147 psi. The maximum injection pressure is 110 psi. This gives a 37 psi (25%) safety factor for the Carlsbad brine well.

In work conducted by F.D. Hansen on the quasi-static strength and deformational characteristics of salt, he determined that at increased confining pressures and moderate temperature increases salt tends to flow plastically rather than fracture. Therefore in the Carlsbad brine well, it is probable that if injection pressure happens to increase up to the fracture pressure, the salt is more likely to flow plastically rather than fracture. With a safety factor of 37 psi and the tendency of salt to flow plastically, the Carlsbad brine well poses insignificant to zero risk of fracturing.

Please contact me if you have any questions.

Sincerely,

J.L. Gray
J.L. Gray
Project Manager

/kh

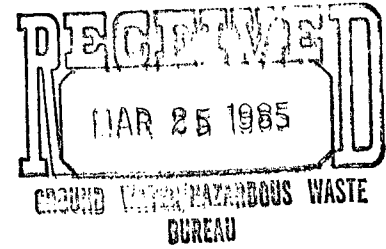
cc: Talib Syed
Sheila Baber

References

1. Hubbert, M.K. and Willis, D.G., "Mechanics of Hydraulic Fracturing." Transactions AIME, Vol. 210, 1957, pp. 153-166.

EUNICE BRINE STATION "UPGRADE"

Prepared by:
UNICHEM INTERNATIONAL INC.
Hobbs, New Mexico



EUNICE BRINE STATION "UPGRADE"

Presented to:
STATE OF NEW MEXICO
Environmental Improvement Division

UNICHEM INTERNATIONAL INC.
P. O. BOX 1499
HOBBS, NEW MEXICO 88240

Prepared by:
Wayne Price, Staff Engineer
3-21-85



TO: STATE OF NEW MEXICO
Environmental Improvement Division
P.O. Box 968
Santa Fe, New Mexico 87504-0968

ATTN: Paige Grant Morgan
Water Resource Specialist
Ground Water Section

RE: EUNICE BRINE STATION "UPGRADE"

Per your request, enclosed is a detailed outline of the complete progress and proposed work. We are submitting this in voluntary compliance with the WQCC regulations.

EUNICE BRINE STATION MODIFICATION (UPGRADE) OUTLINE

I. PARTICULAR CONCERN OF PARTIES INVOLVED

- A. Spillage of oily brine from existing emergency pit.
- B. Steady leakage of brine from existing redwood tanks.
- C. Leaking valve on a loading line.

II. SOLUTIONS TO ITEMS LISTED ABOVE

- A. Redesign drainage scheme to prevent pond overflow under worst case conditions.
- B. Replace three old existing tanks with new 1000-barrel metal API rated tanks.
- C. Replace all existing valves with new valves.

III. ENGINEERING ENHANCEMENT TO FURTHER IMPROVE THE OVERALL DESIGNS

- A. Sandblast and coat inside all tanks with a 15-mil thick tank protection coating.
- B. Tear down existing pond, remove old liner; build new catch basin with 4-ft. dikes, install new 30-mil thick liner (specifications to match OCD requirements).
- C. Build concrete driveway with drainage curbs and ditches for incidental spillage of brine during loading.
- D. Install new tank level controls.
- E. Install emergency decanting monitor.
- F. Install new pump house to cover brine well and pump for weather and freeze protection.
- G. Design elevation scheme to prevent accumulation of rain water under worst case conditions, which includes 6" rain in one hour over additional 35,980 square feet and 1-1000 barrel spillage.

IV. ENGINEERING WORK COMPLETED

- A. Unichem International Inc. Authority for Expenditure, AFE dated January 7, 1985, Exhibit I, includes the following:
 - 1. Original AFE
 - 2. Cost estimate and details
 - 3. Design options
- B. Unichem International Inc. Authority for Expenditure dated March 19, 1985, Addendum, Phase I, Exhibit II, includes the following:
 - 1. AFE addendum
 - 2. Scope of work
 - 3. Phase I cost estimate
 - 4. Cost estimate and details
 - 5. Existing plot plan
 - 6. Proposed plot plan
- C. Existing topographic elevation and drainage scheme
- D. Proposed elevation and drainage scheme
 - 1. Description
 - 2. Proposed plot plan
- E. Piping schematic (to be submitted by April 15, 1985)
- F. Electrical schematic (to be submitted by April 15, 1985)

V. PROGRESS REPORT

The following is a list of items for your review and verification:

- A. 3-1000 Barrel API tanks have been placed on order; delivery should be the first week of April.
Verification: Gooch Tank and Manufacturing Co.,
P.O. Box 133, Tatum, New Mexico
- B. Bids received on the following dirt work:
 - 1. Johnson Construction Co., Eunice, New Mexico
 - 2. Standard Welding, Eunice, New Mexico
- C. Equipment (see "Cost Estimate Plan") See Exhibit II, page 22.

UNICHEM INTERNATIONAL INC.
AUTHORITY FOR EXPENDITURE

4

AFE NO. _____
DATE 1-7-85

DESCRIPTION OF PROJECT:

REBUILD TRUCKER'S BRINE Station in the
EUNICE AREA.

PLEASE ANSWER THE FOLLOWING:

1. Budget item: Yes X No _____
2. Budget item no. R-17 1st QTR
3. If not budgeted, explain why and tell why needed:

4. Amount budgeted: \$ 76,000.00
5. Replacement: X Addition: _____
6. Other comments:

7. Total estimated cost (attach sheet for detailed estimate) \$ 76,000.00
8. If estimated cost exceeds budgeted cost, give brief explanation:

Submitted by: P. H. BRACEY / Div. Approval: P. H. Bracey Date 1-7-85
Executive Approval: _____ Date _____
Accounting Dept. Approval: _____ Date _____

EUNICE BRINE STATION
COST ESTIMATE

Major expense items:

- I. Tanks
- II. Dirt work
- III. Concrete pad & curbs
- IV. Equipment
- V. Electrical work
- VI. Mechanical

I. TANKS

- A. Dismantle and remove three old existing tanks.....\$.....1500.00
(verbal quote per STANDARD WELDING)
- B. Purchase of three new 1000 Bbl tanks.....\$.....19800.00
INCLUDES DELIVERY AND TANK SETTING
- C. Tank blasting and coating\$.....8812.00
PER CAMCO; STANDARD WELDING to submit bid on 3-11-85
- Relocate existing 1000 Bbl metal tank.....\$.....250.00

II. DIRT WORK

- A. Tank pad construction: 100'x 30'x 1' caliche pad with .
pea size gravel cover.....\$.....
Estimated @ 1.15 sq ft(Globe const)
- B. Tear down existing disposal pond and build new catch
basin with 4 foot dike on three sides
\$.....
- C. Build 2 foot berm as shown on plot plan \$.....
- D. Level lot and slope per elevation plans ;
lot to be sloped so all drainage will commence toward
catch basin:.....\$.....
- E. New catch basis to be lined with 30 mil
thick plastic liner; @ .45 sq ft 20 year \$....2500.00
catch basin 76'x 76'x 4' designed to
handle one 1000 bbl tank plus a worst case
6" rain

DIRT WORK TOTALS....items A THRU D\$.....15500.00
verbal bids by: Johnson construction

: Standard welding

.....ESTIMATED.....\$....2500.00

ESTIMATED TOTALS \$.....88230.00



February 15, 1985

RE: Eunice Brine Station

There are seven options. In all options the south dike will have to be moved approximately twelve feet to the north in order to remain on our property and to remove ourselves from the city-owned alley. All the options do not include moving the pond 30 feet to the east.

Option No. 1:

Option no. 1 will include putting the tanks in line from north to south; however, it will require extensive work in what is known as the soft area. The advantage of this particular option will include letting the trucks remain on our property while loading or unloading as the case may be. Another disadvantage is that we will have to move the pump house. We will have to protect the well. We will have to do some piping on the manifold. We will have to remove and relocate the existing electrical feed.

Option No. 2:

We will have to move the electrical feed, move the pump house; however, we will stay out of the soft area. The tanks will be clustered in fours, will be moved back to the southwest side of the property. This will allow two trucks to load in the immediate area of the tanks, with one truck loading to the north side of the property. Disadvantage of this particular option will be underground piping will be required.

Option No. 3:

Very similar to Option No. 2, except one additional truck loading facility has been added.

Option No. 4:

Tanks will sit from a north to south direction. One of the distinct disadvantages is that the truck will have to pull in and back out, and also the tail end of the truck will be off our property. However, I do not believe this to be a great disadvantage because the right-of-way of the particular street involved (Avenue G) is probably within that area.

Option No. 5:

Once again, tanks align north to south. Advantage of this particular situation: all three trucks will be allowed to load entirely on our property.

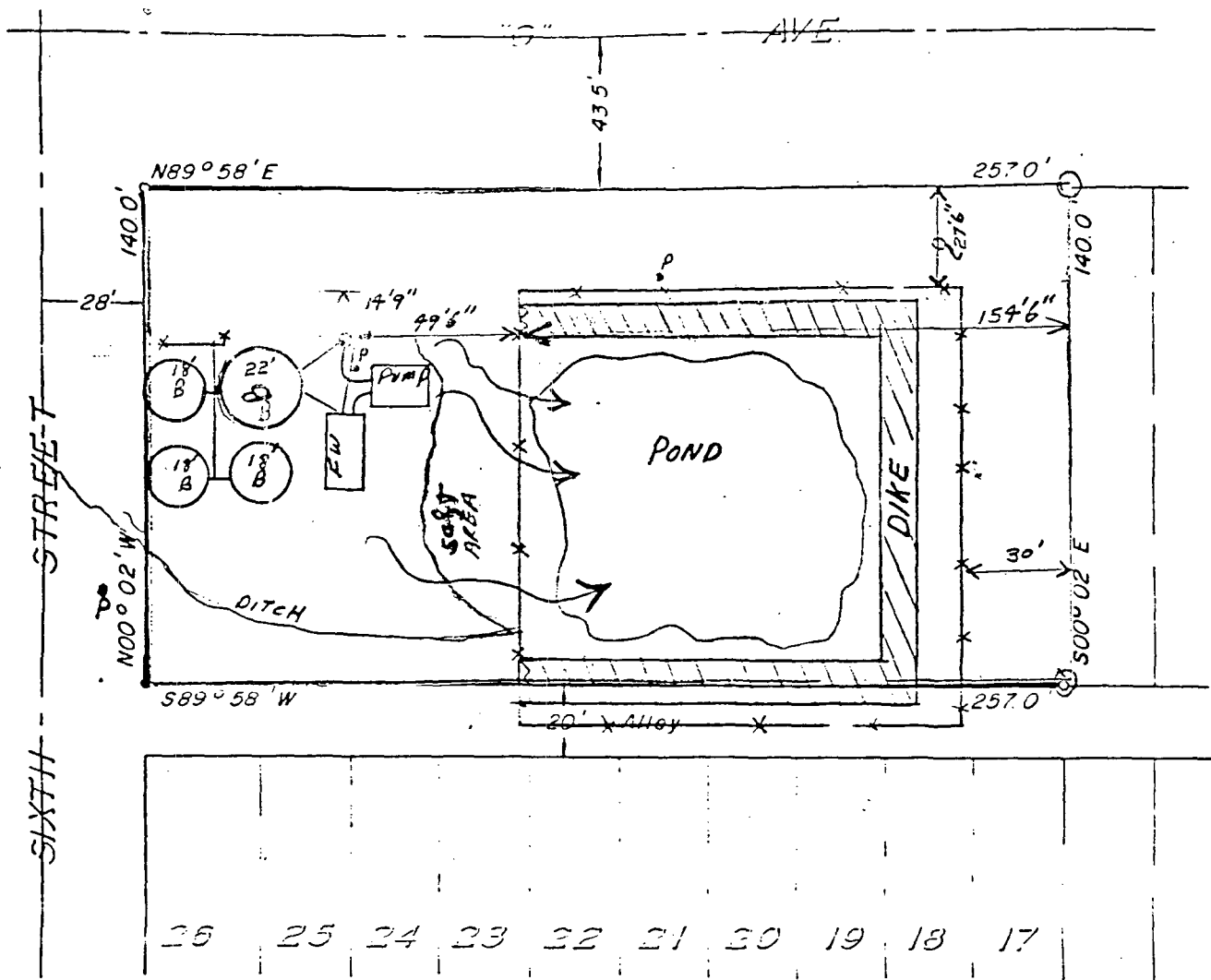
Option No. 6:

Tanks clustered very similarly to the way they are now located. Two trucks will be able to load on our property, one truck in the right-of-way on Sixth Street.

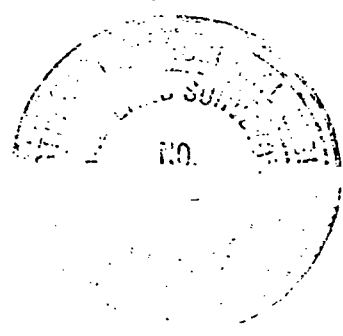
February 15, 1985
Eunice Brine Station
Page Two

Option No. 7:

Tanks located in a cluster the way they are now. Pump house remains the same. Trucks will park at angled parking. This particular option is probably the best; requires less dirt work, less piping, less electrical work. However, the trucks will have to back out, creating somewhat of a safety hazard. Also, the tail end of the trucks will extend somewhat into Sixth Street and Avenue G.



W WELL
P POLE
B BRINE TANK
FW FRESH WATER TANK
o Denotes Steel Set w/Yellow Caps

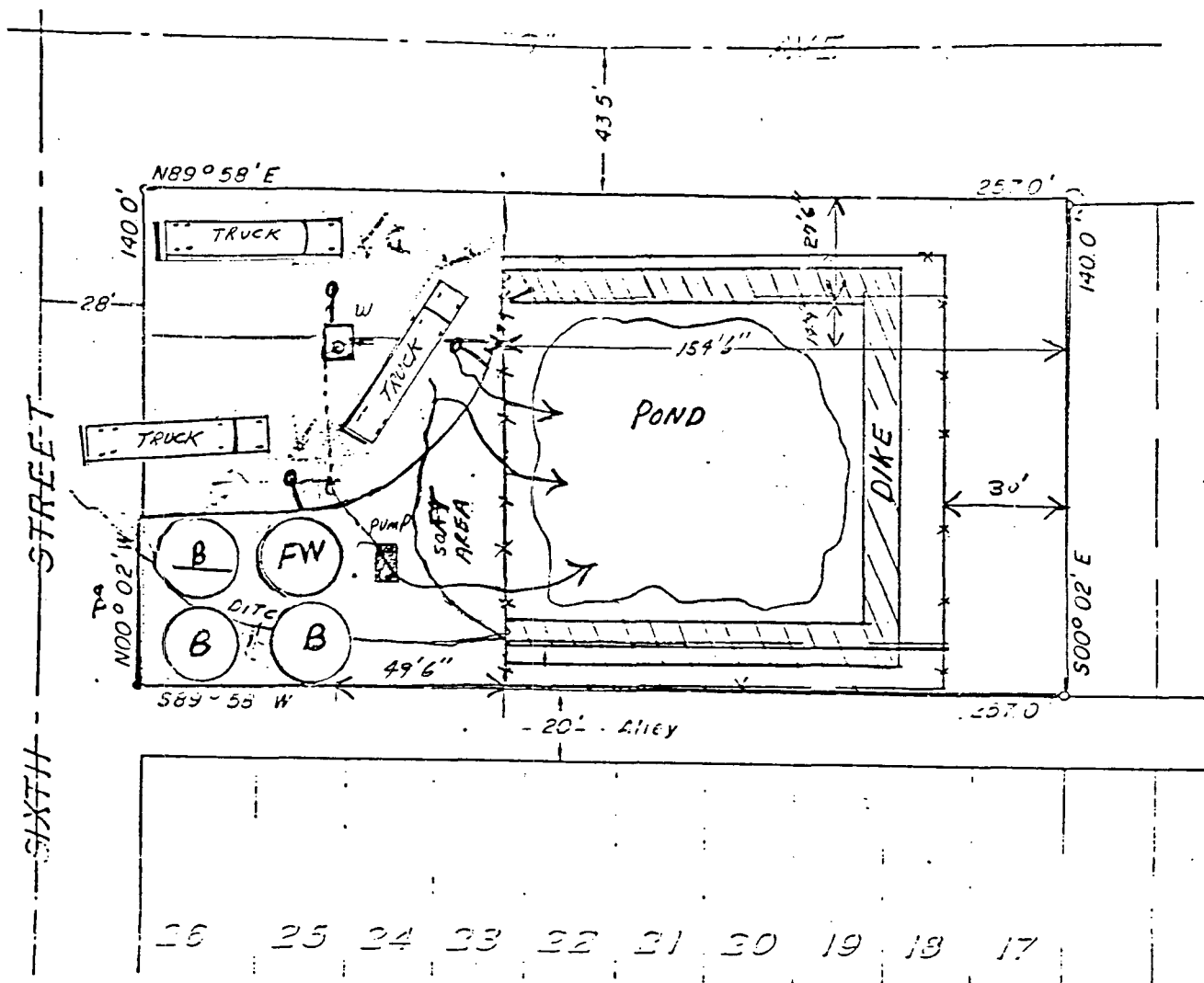


EXISTING
EUNICE BRINE STATION

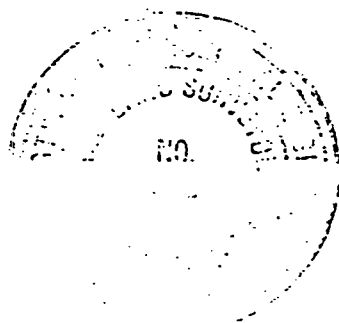
I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

John W. West
JOHN W. WEST, NM PE & LS No 676
TEXAS RPS No 1138
RONALD J. EIDSON, NM LS No 3239
TEXAS RPS No 1983

ROSLAND TRUCKING COMPANY			
LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS ADDITION TO THE CITY OF EUNICE, LEA COUNTY, NEW MEXICO			
JOHN W. WEST ENGINEERING COMPANY CONSULTING ENGINEERS HOBBS NEW MEXICO			
Scale	1" = 10'	Drawn By	C. BASS
Date		Chk	
Sheet	1	of	1
Sheets			



0 Denotes Steel Set w/Yellow Caps



OPTION 2
FURICE BRINE STATION

ROLAND FRICKING COMPANY

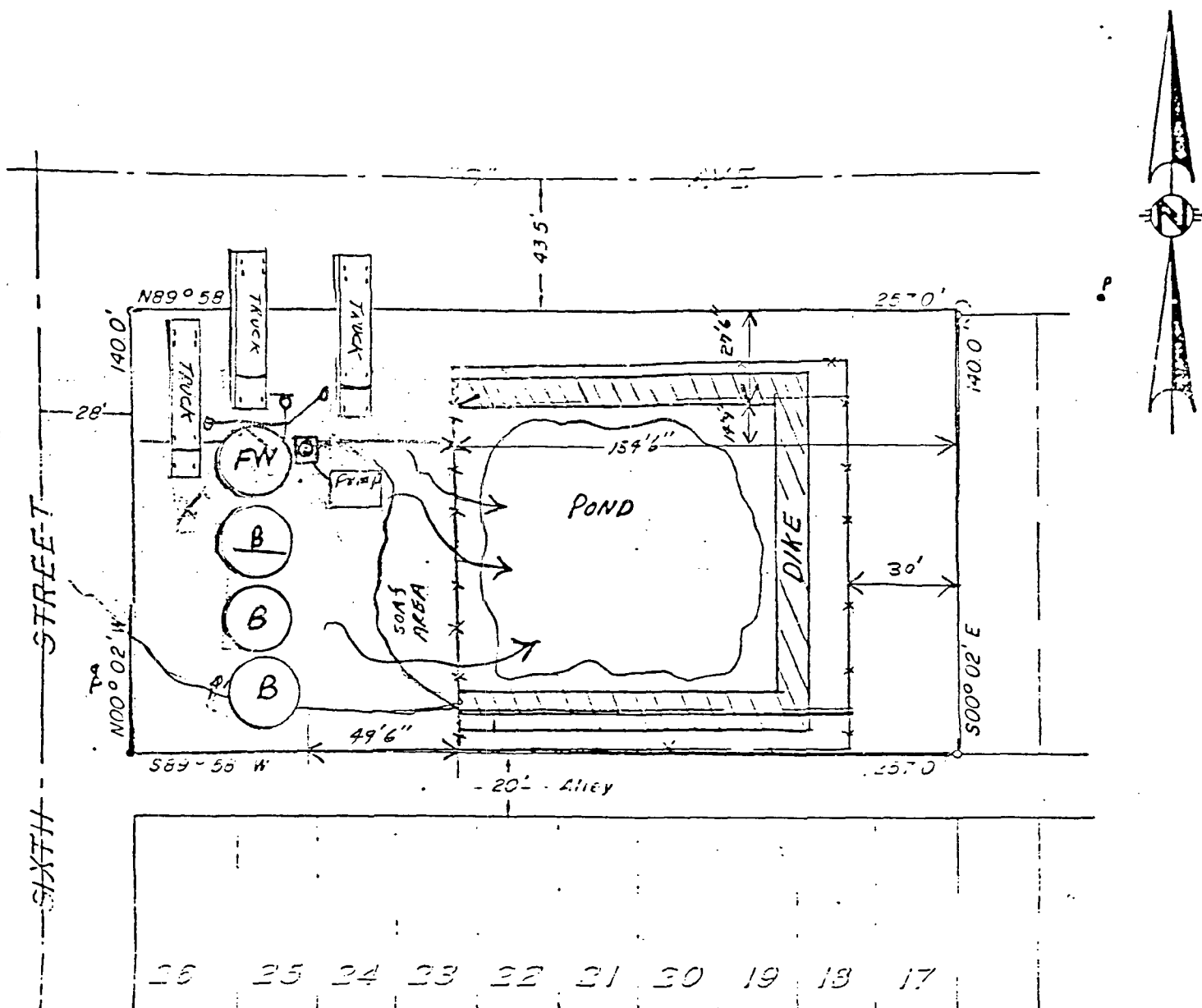
LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS
ADDITION TO THE CITY OF TUNICA, LINCOLN COUNTY,
NEW MEXICO

JOHN W WEST ENGINEERING COMPANY
CONSULTING ENGINEERS HOBERS, NEW MEXICO

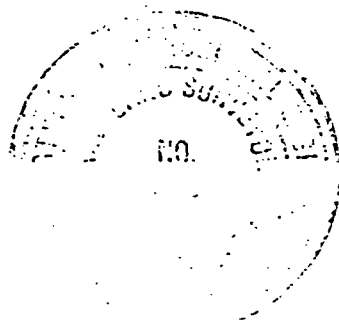
Scale	1" = 10'		Drawn by	C. BASS	
Date	11/1/54	Ch	Sheet	1 of 1	Sheets

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

JOHN W WEST, NM P E & L S	NO 676
TEXAS RPS	NO 1138
RONALD EIDSON, NM P E & L S	NO 3234
TEXAS RPS	NO 1138



o Denotes Steel Set w/Yellow Caps



OPTION # 4

EUNICE BRINE STATION

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

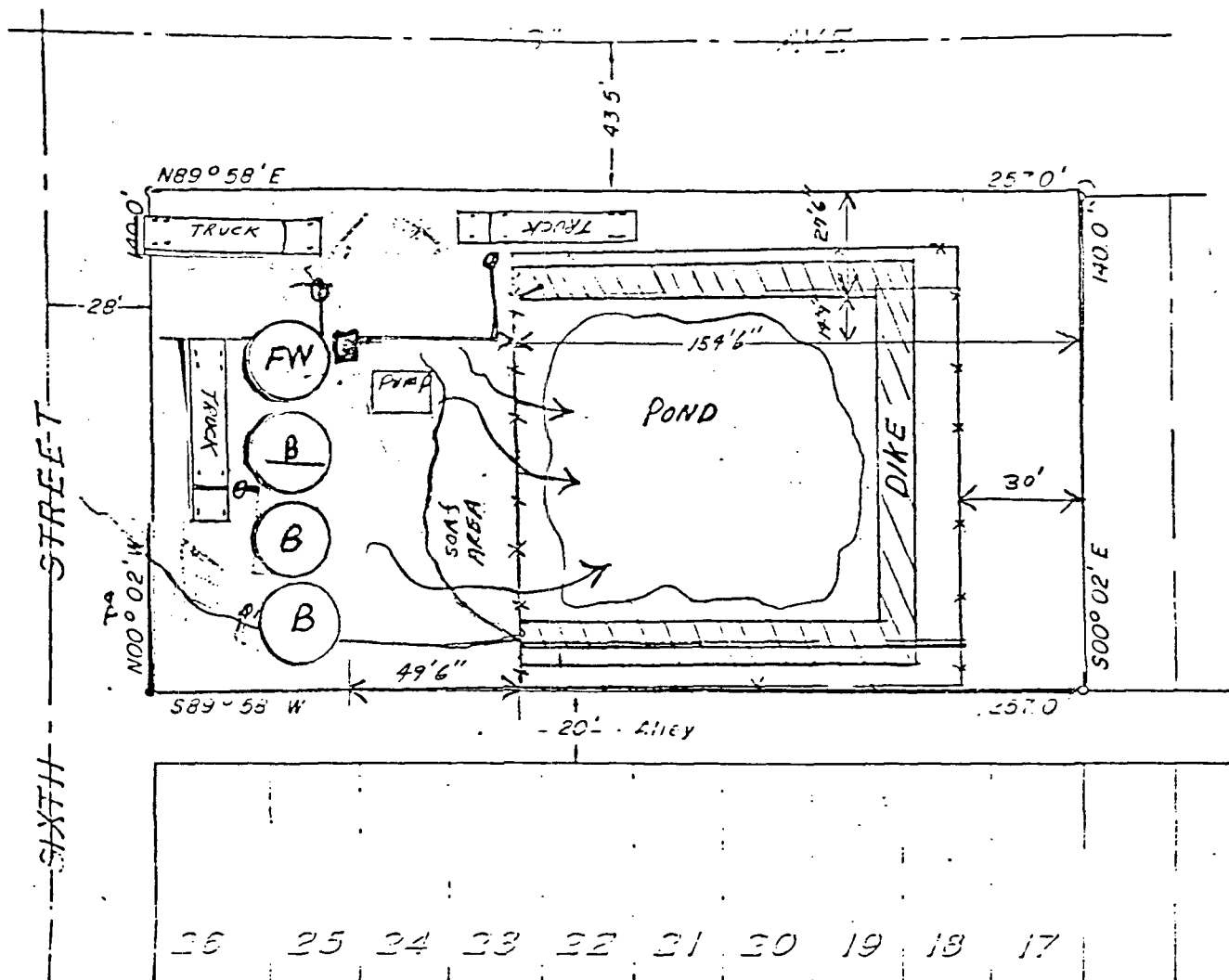
JOHN W. WEST, N.M. P.E. & L.S. NO. 676
TEXAS R.P.S. NO. 1138
RONALD L. EDSON, N.M. L.S. NO. 3239
TEXAS R.P.S. NO. 1557

ROSLAND TRUCKING COMPANY

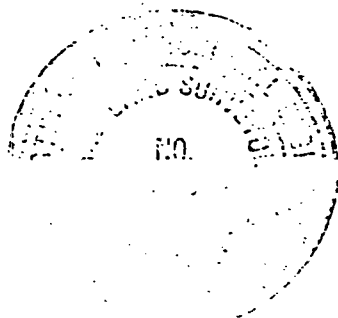
LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS ADDITION TO THE CITY OF EUNICE, LIA COUNTY, NEW MEXICO

JOHN W. WEST ENGINEERING COMPANY
CONSULTING ENGINEERS
EUNICE, NEW MEXICO

Scale 1" = 40' Drawn by C. BASS
Date 1/1/57 Sheet 1 of 1 Sheets



o Denotes Steel Set w/Yellow Caps



OPTION 5 EUNICE DRIVE STATION

I HEREBY CERTIFY THAT THIS PLAT
WAS MADE FROM NOTES TAKEN IN THE FIELD
IN A BONA FIDE SURVEY MADE UNDER MY
SUPERVISION, AND THAT THE SAME IS TRUE
AND CORRECT TO THE BEST OF MY KNOW-
LEDGE AND BELIEF

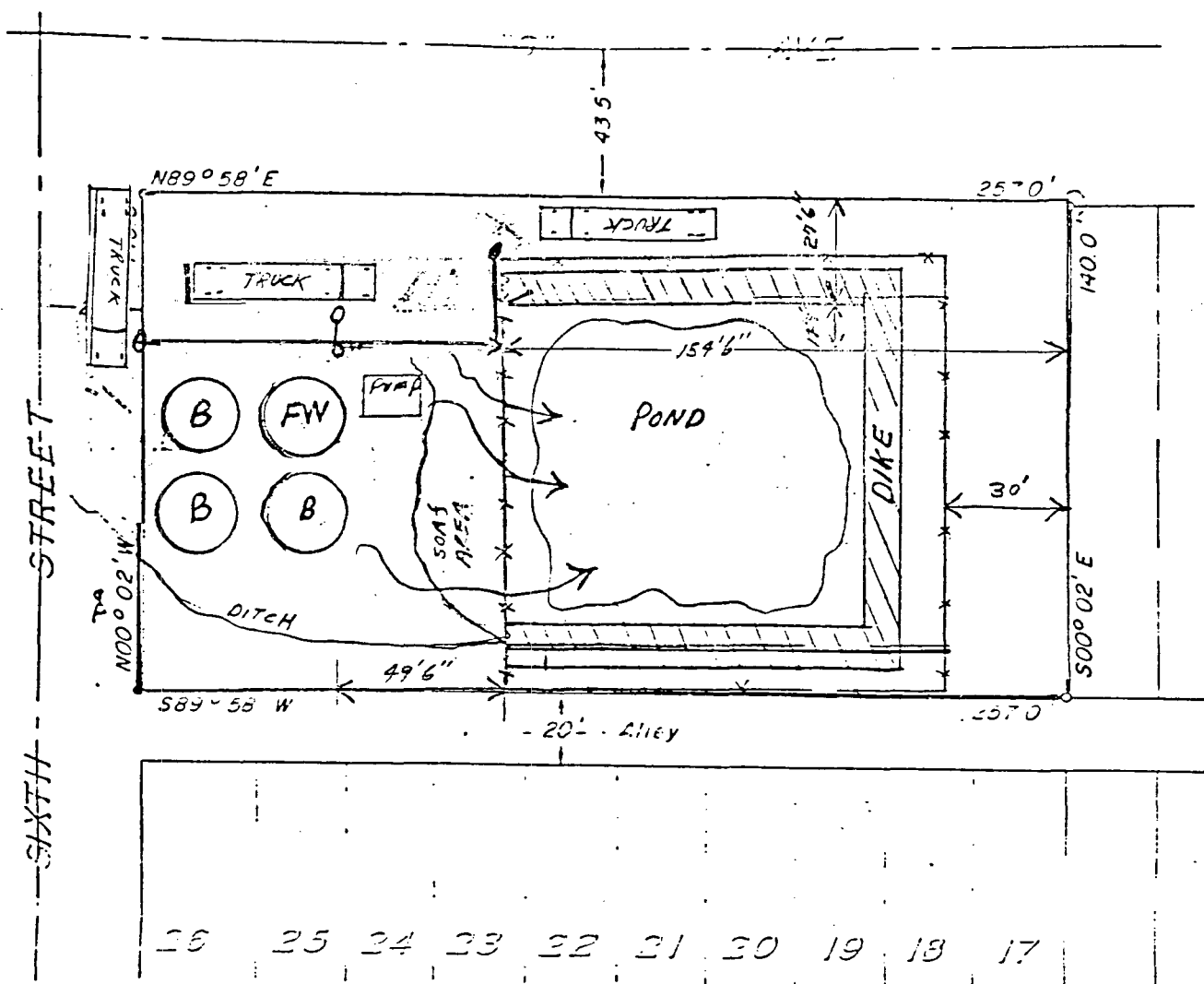
JOHN W. WEST, NM PE & LS NO 676
TEXAS RPS NO 1138
RONALD EIDSON, NM LS NO 3239
TEXAS RPS NO 1593

ROGELAND TRUCKING COMPANY

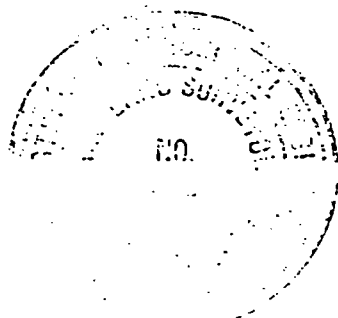
LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS
ADDITION TO THE CITY OF EUNICE, LIA COUNTY,
NEW MEXICO

JOHN W. WEST ENGINEERING COMPANY
CONSULTING ENGINEERS HOBBS, NEW MEXICO

Scale 1" = 40' Drawn by J. W. WEST
Date 10/1/50 1 Sheet of 1 Sheets



o Denotes Steel Set w/Yellow Caps



OPTION 6 EUNICE BRINE STATION

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

JOHN W. WEST, NM PE & LS NO 676
TEXAS RPS NO 1138
RONALD L. EDSON, NM LS NO 3236
TEXAS RPS NO 1883

ROLAND TRUCKING COMPANY

LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS
ADDITION TO THE CITY OF EUNICE, LEA COUNTY,
NEW MEXICO

JOHN W. WEST ENGINEERING COMPANY
CONSULTING ENGINEERS
ALBUQUERQUE, NEW MEXICO
Scale: 1" = 40' Drawn by: J. BASS
Date: Check Sheet: 6 of 1 Sheets

EXHIBIT II

UNICHEM INTERNATIONAL INC.
AUTHORITY FOR EXPENDITURE

19

DESCRIPTION OF PROJECT:

AFE NO. _____
DATE 03/19/85

ADDENDUM to AFE submitted on January 7, 1985

"Rebuild Truckers Brine Station in the Eunice Area"

PHASE I

PLEASE ANSWER THE FOLLOWING:

1. Budget item: Yes X No _____
2. Budget item no. R-17, 1st qtr.
3. If not budgeted, explain why and tell why needed:

4. Amount budgeted: \$ 76,000
5. Replacement: X Addition: _____
6. Other comments:

To comply with EID section 5-101.B.3 discharge plans and
voluntary compliance with the WQCC regulations

Phase I cost: \$42,087.00

7. Total estimated cost (attach sheet for detailed estimate) \$ 88,230
8. If estimated cost exceeds budgeted cost, give brief explanation:

Submitted by Rich Bracey /Div. Approval Phil Bracey Date 3-14-85
Executive Approval: _____ Date _____
Accounting Dept. Approval: _____ Date _____

WORK TO BE COMPLETED IN THREE SEPARATE PHASES:

SCOPE OF WORK

PHASE I:

1. Includes preparing a new tank pad, purchasing three new tanks and relocating an existing tank as shown on the attached proposed plot plan. New tanks will be prepared for operation by blasting and coating with a 15-mil thick Matco coal tar material.
2. Complete permanent piping between new tanks; keep temporary piping between brine well, city water, and new tanks.
3. Dismantle existing redwood tanks to provide access to new tanks.
4. Provide temporary electrical service for tank level controls.

PHASE II:

Complete all remaining dirt work per cost estimate plan and complete concrete driveway (details to follow).

PHASE III:

Complete permanent piping and electrical services, set new pump and complete automatic water system (details to follow).

EUNICE BRINE STATIONCOST ESTIMATEPHASE I:

I. DIRT WORK

Tank pad construction: 100' x 30' x 1' caliche pad with pea size gravel cover	\$ 3,000.00
--	-------------

II. TANKS

A. Purchase of three new 1000 Bbl. tanks	19,800.00
B. Tank blasting and costing	8,812.00
Per CAMCO: STANDARD WELDING to submit bid on 3/11/85	
C. Dismantle and remove three old existing tanks	1,500.00

III. MECHANICAL EQUIPMENT

A. Pipe	
1. 120' 3" pipe @ \$4.00/ft	480.00
2. 70' 6" pipe @ \$10.00/ft	700.00
3. 300' 4" pipe @ \$4.00/ft	1,200.00
B. Valves	
1. 5'3" DI butterfly-wafer type	555.00
2. 4-4" DI butterfly-wafer type	568.00
3. 4-6" DI butterfly-wafer type	972.00
C. Valve fittings	1,000.00
D. Labor to install	2,500.00

IV. ELECTRICAL

A. Level controller	
B. Install temporary electrical service between brine well controller and new level controllls	<u>1,000.00</u>

PHASE I ESTIMATE TOTAL:

\$ 42,087.00

EUNICE BRINE STATION
COST ESTIMATE

Major expense items:

- I. Tanks
- II. Dirt work
- III. Concrete pad & curbs
- IV. Equipment
- V. Electrical work
- VI. Mechanical

I. TANKS

- A. Dismantle and remove three old existing tanks.....\$.....1500.00
(verbal quote per STANDARD WELDING)
- B. Purchase of three new 1000 BBl tanks.....\$.....19800.00
INCLUDES DELIVERY AND TANK SETTING
- C. Tank blasting and coating\$.....8812.00
PER CAMCO; STANDARD WELDING to submit bid on 3-11-85
- Relocate existing 1000 BBl metal tank.....\$.....250.00

II. DIRT WORK

- A. Tank pad construction: 100'x 30'x 1' caliche pad with . pea size gravel cover.....\$.....
Estimated @ 1.15 sq ft (Globe const)
- B. Tear down existing disposal pond and build new catch basin with 4 foot dike on three sides
\$.....
- C. Build 2 foot berm as shown on plot plan \$.....
- D. Level lot and slope per elevation plans ;
lot to be sloped so all drainage will commence toward catch basin:.....\$.....
- E. New catch basis to be lined with 30 mil thick plastic liner; @ .45 sq ft 20 year \$....2500.00
catch basin 76'x 76'x 4' designed to handle one 1000 bbl tank plus a worst case 6" rain

DIRT WORK TOTALS....items A THRU D\$.....15500.00
verbal bids by: Johnson construction

: Standard welding

.....item E\$.....2500.00

TOTALS.....\$.....18000.00

III. CONCRETE PAD AND DRAINAGE CURBS

30'X 225'X 8" STEEL WIRE AND REBAR RE-ENFORCED DRIVEWAY
Concrete: 166 yards @ \$56.40 (Wallach ottie russell)

\$....9100.00

Labor : (Dan Garza verbal quote).....\$....7400.00
labor includes 200 ft of curb

concrete specs; 5 sack-(3-3.5") slump(dry pour)
expansion joints every 30 ft;
possible dow guides, 14 day min cure
()psi after 28 days
labor specs ; allowed to make two pours, to include
all forms wire, steel and 12" footer
around edges and under curbs

IV. EQUIPMENT

1-840 GPM centrifugal pump with 60' head
(quote per Master Pump)
1800 rpm ---6"x 4" x 13" 20 hp.....\$...4200.00

1-10'x 20' metal shed with 10' sides to handle 8'
garage type door; to be skid mounted and insulated
quote per Don Lester Lasco\$...5500.00

V. ELECTRICAL EQUIPMENT AND LABOR

A. primary service (check with SPS).....\$.....0.00

B. secondary service

1. Install new overhead service pole for power
and control circuits
2. Install motor controller and push button stations
and all inter-connecting wiring
3. Relocate existing well pump controller
4. Install two new overhead lights
5. Install and connect three level devices

Totals....(kirkmeyer).....\$.....4193.0
(Gary elect).....\$5500.00-----

VI. MECHANICAL EQUIPMENT

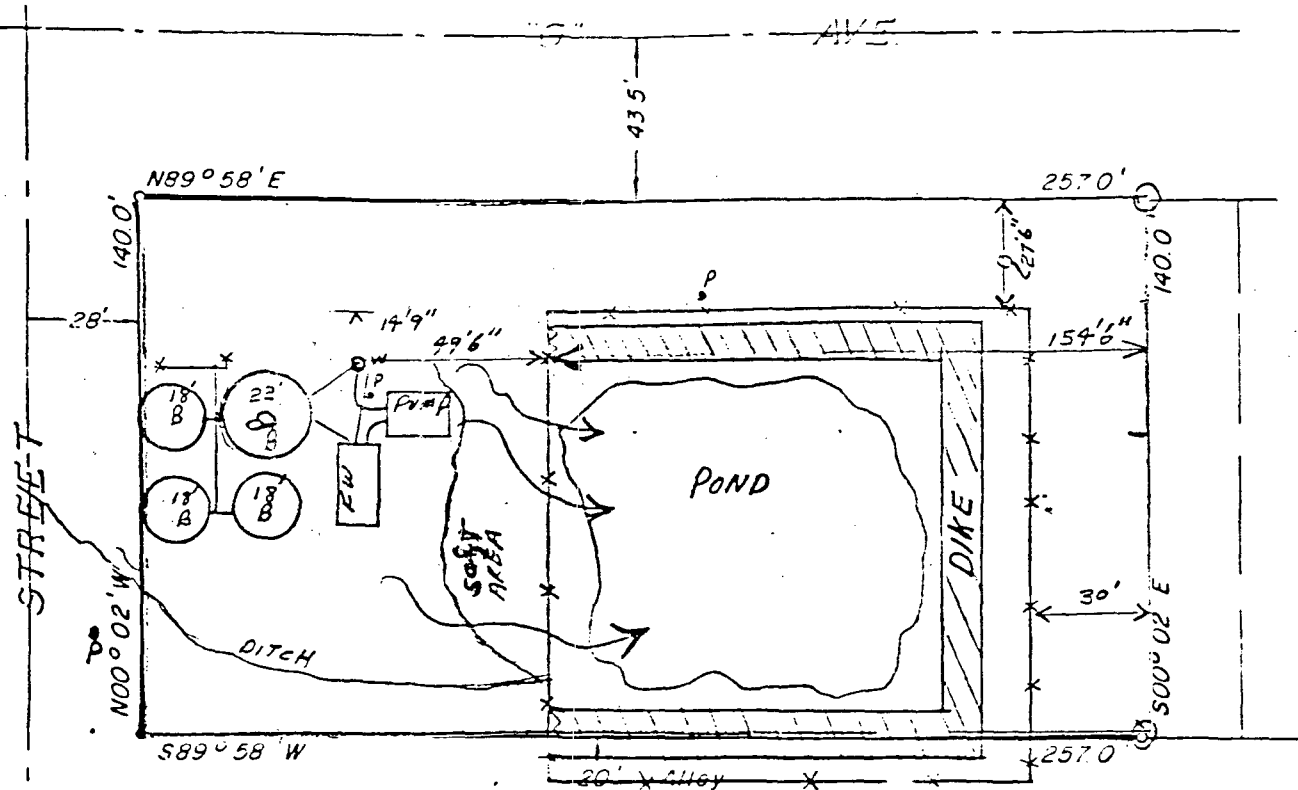
A. Pipe

1. 120' 3" pipe @ \$4.00/ft.....\$.....480.00
2. 70' 6" pipe @ \$10.00/ft.....\$.....700.00
3. 300' 4" pipe @ \$4.00/ft.....\$.....1200.00

B. Valves

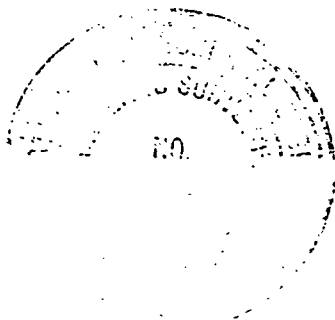
1. 5-3" DI butterfly-wafer type.....\$.....555.00
2. 4-4" DI " " "\$.....568.00
3. 4-6" DI " " "\$.....972.00

C. Labor to install



26 25 24 23 22 21 20 19 18 17

W WELL
 P POLE
 B BRINE TANK
 FW FRESH WATER TANK
 o Denotes Steel Set w/Yellow Caps



EXISTING

EUNICE BRINE STATION

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JOHN W. WEST, N.M. P.E. & L.S. No. 676
 TEXAS R.P.S. No. 1138
 RONALD J. EDSON, N.M. L.S. No. 3235
 TEXAS R.P.S. No. 1887

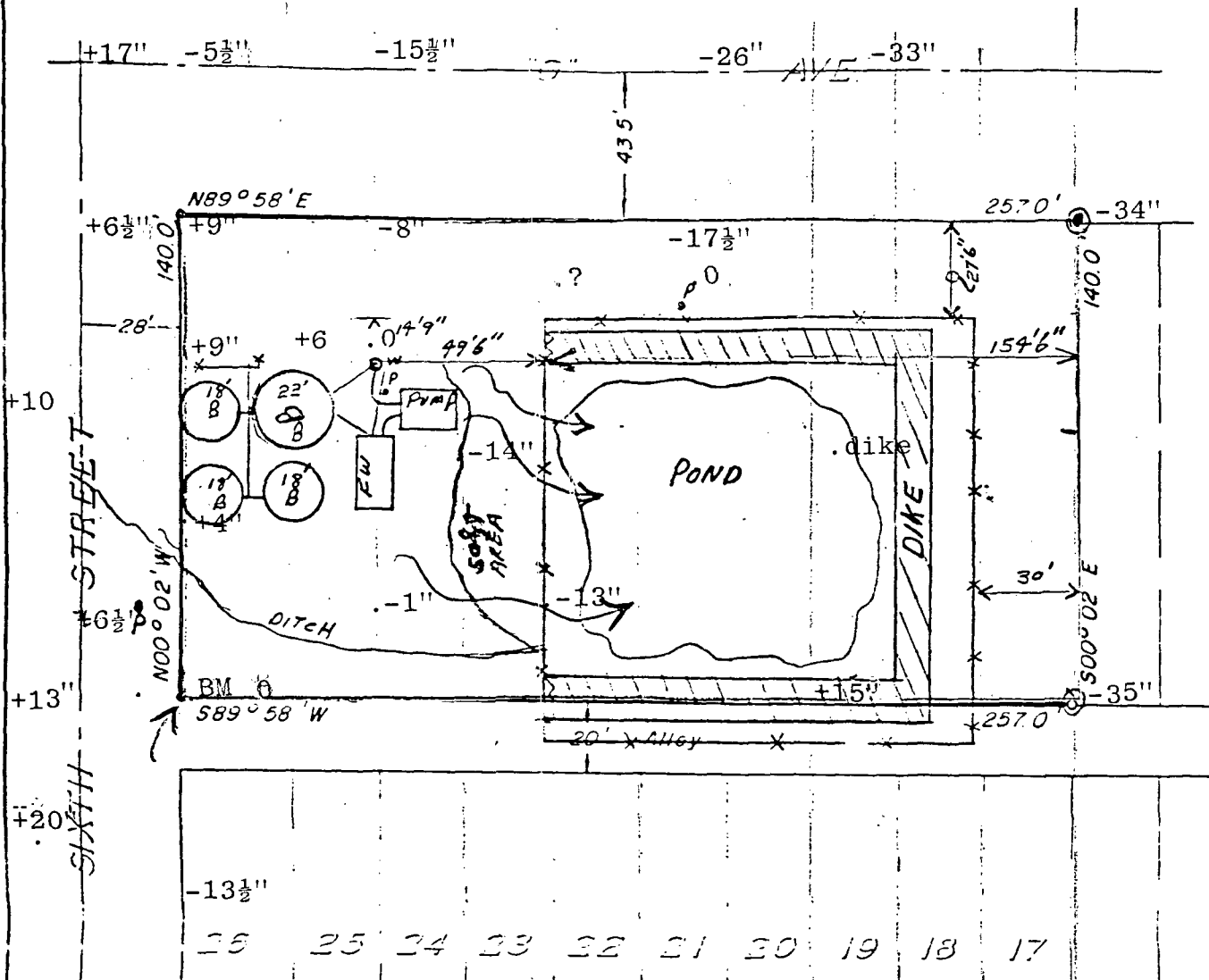
ROWLAND TRUCKING COMPANY

LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS
 ADDITION TO THE CITY OF EUNICE, LEA COUNTY,
 NEW MEXICO

JOHN W. WEST ENGINEERING COMPANY
 CONSULTING ENGINEERS HOBBS, NEW MEXICO

DATE: 11/1/57 CK: 1 Sheet

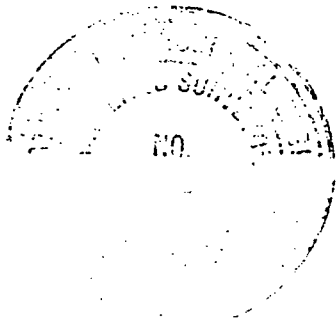
EXISTING TOPOGRAPHIC
ELEVATION & DRAINAGE SCHEME



W WELL
P POLE
B BRINE TANK
FW FRESH WATER TANK

o Denotes Steel Set w/ Yellow Caps

BM-Bench Mark 0



EXISTING

EUNICE BRINE STATION

I HEREBY CERTIFY THAT THIS PLAT
WAS MADE FROM NOTES TAKEN IN THE FIELD
IN A BONA FIDE SURVEY MADE UNDER MY
SUPERVISION, AND THAT THE SAME IS TRUE
AND CORRECT TO THE BEST OF MY KNOW-
LEDGE AND BELIEF

JOHN W WEST, N.M. P.E. & L.S. No. 676
TEXAS R.P.S. No. 1138
ROBERT J. EDSON, N.M. L.S. No. 3239
TEXAS R.P.S. No. 1987

ROWLAND TRUCKING COMPANY

LOTS 1-10, BLOCK L, SECOND UNIT, OWENS
ADDITION TO THE CITY OF EUNICE, LEA COUNTY,
NEW MEXICO

JOHN W WEST ENGINEERING COMPANY
CONSULTING ENGINEERS HOBBS NEW MEXICO
Scale 1" = 40' Date Sheet 1 of 1

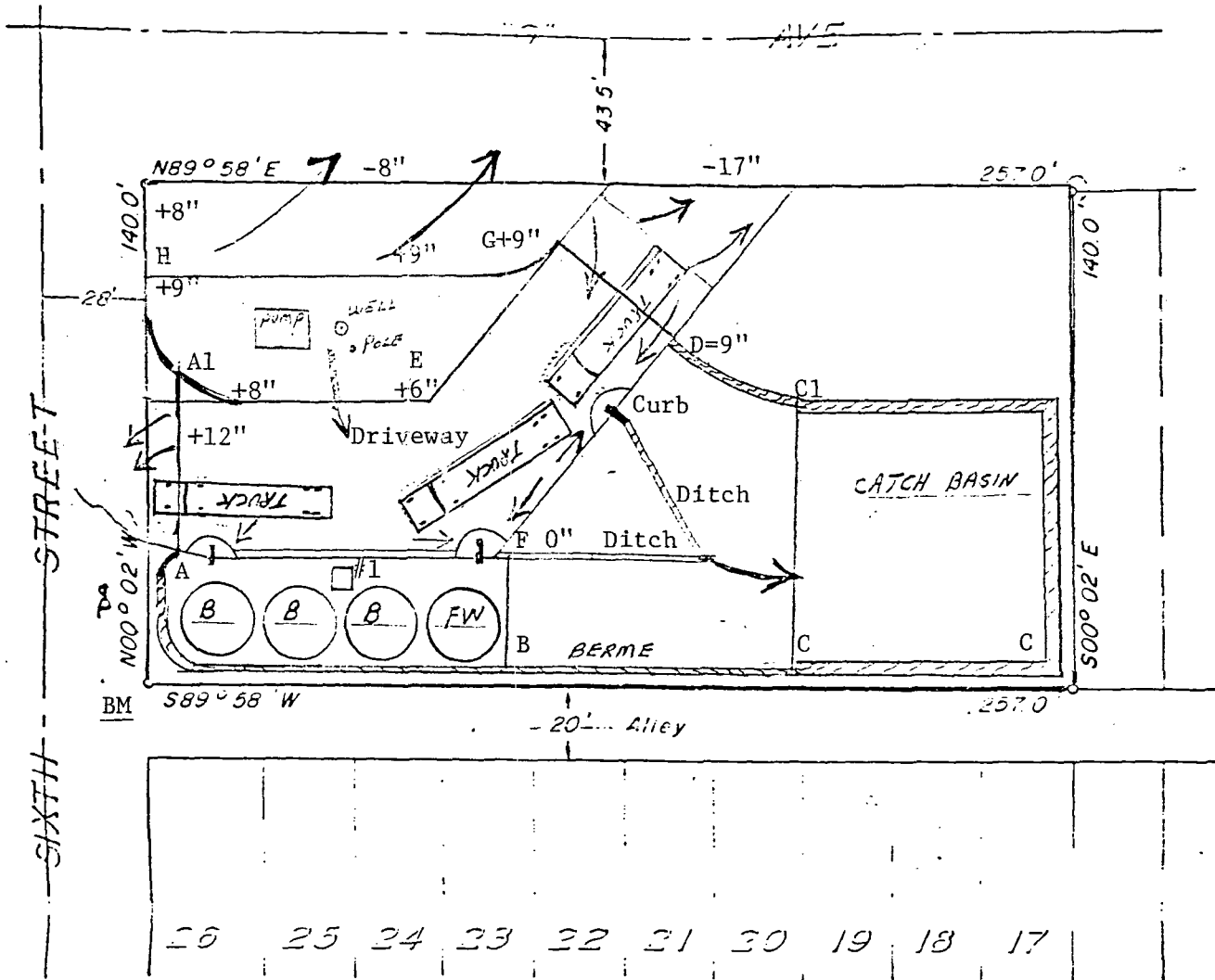
PROPOSED ELEVATIONS & DRAINAGE SCHEME

Bench mark SW corner of lot, set at 0'-0"

1. Tank pad elevation to be level +12" above bench mark.
2. Berm to start at point "A" + 2' above BM and remain level until reaching point "B" berm from B to C shall be + 2' above existing grade until it ties into catch basin.
3. Catch basin dike to be level on top at same elevation of point "C". Catch basin to have a mean depth of 4' below point "C". Tie "C" berm to "D" + 9" driveway.
4. Driveway with curbs. Driveway entrance west side shall be from "A" to "A1" + 12" sloped back to Sixth Street, which is + 6".

Driveway	"A-A1"	+ 12"
	"E"	+ 6"
	"G"	+ 9"
	"D"	+ 9"
	"F"	0-0
5. Pump and well area. Area "A" to "G" south will drain to driveway and catch basin.
6. Area North of well. Area "H" to "G" north of well will be at + 9" sloped toward Avenue "G".
7. NE Area. Has natural drainage to Avenue "G"

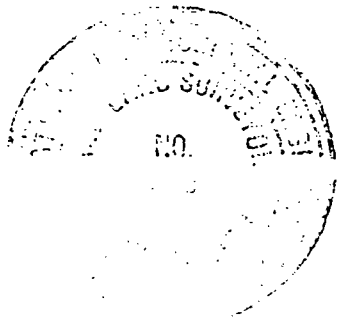
PROPOSED ELEVATIONS & DRAINAGE SCHEME



o Denotes Steel Set w/Yellow Caps

BM: Bench mark = 0'-0"

SCALE: 1" = 50'



I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

JOHN W WEST, N.M. P.E. & L.S. No. 1138
TEXAS R.P.S. No. 1138
RONALD J. EIDSON, N.M. L.S. No. 3239
TEXAS R.P.S. No. 1883

Proposed
EUNICE DRIVE STATION

ROWLAND TRUCKING COMPANY

LOTS 1-10, BLOCK 1, SECOND UNIT, OWENS
ADDITION TO THE CITY OF EUNICE, LIA COUNTY,
NEW MEXICO.

JOHN W WEST ENGINEERING COMPANY
CONSULTING ENGINEERS HORBS, NEW MEXICO

Scale 1" = 50' Drawn By C. BASS
Date Sheet of Sheets

IV.

E. PIPING SCHEMATIC (To be submitted by April 15, 1985)

IV.

F. ELECTRICAL SCHEMATIC (To be submitted by April 15, 1985)

SUGGESTED OUTLINE FOR DISCHARGE PLAN SUBMITTAL:

In Situ Extraction Facilities

I. GENERAL DESCRIPTION

A. Name of facility and name and address of responsible party

On file with EID

B. Location: county, township, range and $\frac{1}{4}$ Section or latitude/longitude coordinates (3-106.C.2)
-indicate on USGS topo map, $7\frac{1}{2}'$ or 15' quad

On file with EID

C. Schematic or plot plan of facility
 -include short verbal description of process, including transportation elements (e.g., loading trucks), and
-quantity, quality, and flow characteristics of the discharge (3-101.C.1)

Operation to remain same; new plot plan, see attachments IV, D (page 29)

D. Operational history of injection and production at facility
(5-203.C.4)
 -include dates of well construction and beginning of injection

On file with EID

II. DESCRIPTION OF FACILITY

A. Surface Facilities

1. Dimension of storage and/or disposal pond(s)/tank(s)
 -include side slope angle for ponds

See attachments:

Eunice Brine Station Modification (Upgrade) Outline:

Item IV, A, #2 and Item IV, B, #6 (slopes 3:1) See page 2.

Cost Estimate Sheet:

Item I; A, B, and C See page 22.

Item II; A, B, C, D, and E See page 22.

2. Length and type of pipe(s) carrying fluids to/from well to/from pond(s)/tank(s)

See attachment Eunice Brine Station Modification (Upgrade) Outline, Item IV, E. (page 30)

3. Average daily discharge to and, if applicable, withdrawal from pond/tank (3-106.C.1)

Pond to be decanted on regular basis, or at pre-set level

4. Type of pond liner, if any
-include manufacturer's specs, technique used to seal seams

BF Goodrich Flex-Seal reinforced liner (sun resistant)

Hypalon blanket 30-mil (scrim)

Product bulletin #64-46-4736-98-3 with anchor trench design

B. Underground Facilities

1. Depth, diameter, production and protection casing and tubing specs of well(s)
-include schematic drawings (5-102.B.1.d.8.; 5-210.B.13; 5-205.A.3.d.)

On file with EID

2. Construction procedures, including cementing and casing program, logging procedures, deviation checks and a drilling, testing and coring program (5-102.B.1.d.9.; 5-210.B.14; 5-204.B.2.b; 5-205.A.3.d,e). Include logs and results of tests for all new and worked-over wells (5-205.A.4).

N/A or on file with EID

3. Stimulation program (5-102.B.1.d.6.; 5-210.B.11). Note: 5-206 limitations.

N/A

4. Maximum and average injection pressures, injection volume, and other injection procedures (5-102.B.1.d.7.; 5-210.B.12; 5-203.B.1; 5-205.A.3.b,f).

300 PSI - on file with EID

5. Notification prior to drilling, casing etc. (5-205.A.5).

N/A

6. The proposed formation testing program to obtain an analysis or description, whichever the Director requires, of the chemical, physical and radiological characteristics of, and other information on, the receiving formation (5-102.B.1.d.5)

N/A

III. SITE CHARACTERISTICS N/A

- A. Soils (This section need only be submitted if unlined surface impoundments are proposed or in use. Additional ground water monitoring may be required for facilities using unlined surface impoundments. If impoundments do not adequately protect ground water, they will not be approved for use.)

1. Texture class
2. Soil Conservation Service (SCS) assessment of capability/limitations
3. Percolation test

B. Geology (5-203.C.3)

1. Stratigraphic section (drilling log) of well(s) on the site, indicating depth, thickness and chemical characteristics of water-bearing strata 3-106.C.3,6; 5-205.A.3.j). Also give the lithology, stratigraphy, and fracture pressure of the receiving formation and confining zones (5-205.A.3.i).
2. Maps and cross-sections detailing the geology and geologic structures of the local area, including faults (known or suspected) (5-102.B.1.d.4.; 5-210.B.6 & 7). Are the faults known conduits or barriers to ground water flow?
3. Depth to and lithologic description of rock at base of alluvium below the discharge site, if such information is available (3-106.C.6)

C. Hydrology (5-203.C.3)

1. Maps and cross-sections indicating the general vertical and lateral limits of all ground water having 10,000 mg/l or less TDS within one mile of the site, the position of such ground water within this area relative to the injection formation, and the direction of water movement, where known, in each zone of ground water which may be affected by the proposed injection operation (5-102.B.1.d.3.; 5-210.B.5).
2. A map showing the injection well(s) which are to be constructed and the number, name, and location of all producing wells, injection wells, abandoned wells, dry holes, surface bodies of water, springs, mines, quarries, residences and roads, and any other pertinent surface features that are within a quarter-mile radius of the well or well field (5-102.B.1.d.2.; 5-202.B.3; 5-210.B.2.)
3. Flooding potential of the site (3-106.C.4).
4. Depth to and quality of ground water most likely to be affected by spills/leaks (3-106.C.3). Analysis should include sodium (Na^+), potassium (K^+), calcium (Ca^{++}), magnesium (Mg^{++}), bicarbonate (HCO_3^-), carbonate ($\text{CO}_3^{=}$), chloride (Cl^-), sulfate ($\text{SO}_4^{=}$), and nitrate (NO_3^-) TDS.
5. Analysis or description of water used for injection (if different from III.C.4, above) (3-106.C.1; 5-203.C.1). Include density, corrosiveness and temperature (5-205.A.3.g), as well as above constituents. Analyses to be submitted at least quarterly (5-207.C.1), unless the source is such that a change in makeup is very unlikely (e.g. a city water system).
6. Chemical analysis or description of discharge to the surface (if facility is presently in operation) (3-106.C.1). Analysis should include those constituents indicated in III.C.4. Once in operation, reports to be submitted quarterly (5-207.C.1).

IV. PROCEDURES TO PROTECT GROUND WATER QUALITY

A. During Operation

1. Identify those abandoned wells/shafts or other conduits in the area of review which penetrate the injection zone and which, through being improperly sealed, completed or abandoned, provide a pathway for migration of contaminants. Detail what corrective action (e.g. plugging open holes) will be taken to prevent any movement of contaminants into ground water of less than/equal to 10,000 mg/l TDS through such conduits due to the proposed injection activity (5-203.A, B.1). Include completion and plugging records of such wells/shafts (5-203.C.5.).

2. In the event that operations have begun before information comes to light regarding such a conduit that will require plugging, injection pressure will be required to be limited to avoid movement of contaminants through such a conduit into protected ground water (5-203.B.2).

N/A

3. Mechanical integrity testing, such as:

- a. pressure test prior to start of operation (5-204.B.1.a).

Will review with EID or OCD

- b. monitoring of annulus pressure (5-204.B.1.b; 5-204.C.)

SAB

4. Means and locations for measuring inflow to and outflow from the pond/tank (locations may be indicated on the schematic required under I.C) (3-106.C.2, 5).

Measurement is taken by continuous integrating flow meter.

5. Compare volumes of fresh water injected to volume of fluid extracted to detect underground losses (3-107.A.1). May be done by recording injection pressure and either flow rate or volume every two weeks, or by metering and daily recording of fluid volumes (5-207.C.2).

Monitored on daily basis; records on file

6. Location and design of site(s) and method(s) for sampling for quality of fresh water and discharge fluids at facility (3-106.C.5).

N/A

7. Leak detection system under pond: drains, lysimeters, other? (3-107.A.1,3,9).

N/A

8. Monitoring to detect any deterioration of ground water quality in area; do you have access to water well(s) within _____ (distance) down-gradient from the facility, in order to detect variation in quality? If not, may need to put in observation wells (3-107.A.2,9; 5-205.C); and make periodic quality reports (5-207.C.2.b,c). Also, identify wells in the area for which the potential contamination from your brine operation is very low, which can serve to indicate "background" levels of water quality parameters in the area.

N/A

9. How will spillage/leakage be prevented during truck loading or at transfer points within the facility?

New system design

10. Contingency plans (3-107.A.10) in the event of:

- a. leak/spill from surface facilities;

New system design will prevent leaks

- b. loss of mechanical integrity of injection/production well. How will ground water be protected from contamination or treated if contamination has occurred (1-203.A.2)?

Open for comments

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OIL CONSERVATION DIV.
SANTA FE

1/25/92

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
FOURTH QUARTER, 1991

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
DECEMBER	1282300	30531	40523
NOVEMBER	929700	22136	14931
OCTOBER	756900	18021	21692

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2968900

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70688

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77146



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WATER ANALYSIS

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING
FACILITY: HOBBS
LOCATION: HOBBS, NM

DATE: 1/3/92
SAMPLE DATE: 1/2/92
DATE ANALYZED: 1/3/92

SAMPLE IDENTIFICATION :

PIONEER
BRINE
STATION

TRUCKER'S
BRINE
STATION

TRUCKER'S
II

pH		6.26	5.93	6.26
PHEND ALKALINITY	(CaCO3)	NIL	NIL	NIL
TOTAL ALKALINITY	(CaCO3)	68	108	128
BICARBONATE	(HCO3)	83.0	131.8	156.2
CARBONATE	(CO3)	NIL	NIL	NIL
HYDROXIDE	(OH)	NIL	NIL	NIL
TOTAL HARDNESS	(CaCO3)	5100	4300	5600
CALCIUM	(Ca)	1840.0	1560.0	1440.0
CALCIUM	(CaCO3)	4600	3900	3600
MAGNESIUM	(Mg)	120.0	96.0	480.0
MAGNESIUM	(CaCO3)	500	400	2000
CHLORIDE	(Cl)	225500	170000	169000
SULFATE	(SO4)	5100	5000	6625
TOTAL PHOSPHATE	(PO4)	***	***	***
ORTHO PHOSPHATE	(PO4)	***	***	***
POLY PHOSPHATE	(PO4)	***	***	***
SILICA	(SiO2)	25.0	25.0	37.0
SPECIFIC CONDUCTANCE	(mmhos)	***	***	***
IRON	(Fe)	0.70	1.20	0.10
COPPER	(Cu)	0.70	0.40	0.30
CALCULATED :				
TOTAL DISSOLVED SOLIDS		378896	287421	287889
SODIUM	(Na)	146228	110608	110150

ANALYZED BY: Steve P. Moore
(HOBBS LAB)

APPROVED BY: John Baunig

*** INDICATES THAT THIS TEST WAS NOT RUN

UNICHEM INTERNATIONAL INC.



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W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING
FACILITY: HOBBS
LOCATION: HOBBS, NM

DATE: 1/3/92
SAMPLE DATE: 1/2/92
DATE ANALYZED: 1/3/92

SAMPLE IDENTIFICATION :

PIONEER
BRINE
STATION

TRUCKER'S
BRINE
STATION

TRUCKER'S
II

RESISTIVITY

.04 ohm @ 72 F .04 ohm @ 72 F .04 ohm @ 72 F

*** INDICATES THAT THIS TEST WAS NOT RUN

UNICHEM INTERNATIONAL INC.

ROWLAND TRUCKING COMPANY

A DIVISION OF

UNICHEM INTERNATIONAL, INC.

PHONE
[505] 393-7751

P.O. BOX 1499
HOBBS, NEW MEXICO 88241

FAX
[505] 393-7751, Ext. 283

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OCT 24 1991

OIL CONSERVATION DIV.
SANTA FE

10/22/91

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
THIRD QUARTER, 1991

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
APRIL	511200	12171	12003
MAY	413000	9833	17744
SEPTEMBER	897900	21379	23530

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THE ORIGINAL**



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W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME:	ROWLAND TRUCKING	DATE:	10/11/91
FACILITY:	HOBBS	SAMPLE DATE:	10/9/91
LOCATION:	HOBBS, NM	DATE ANALYZED:	10/10/91

SAMPLE IDENTIFICATION :	PIONEER	TRUCKER'S	CARLSBAD
	BRINE	#2	BRINE
	WELL		WELL

pH		7.19	6.89	6.65
PHEND ALKALINITY	(CaCO3)	NIL	NIL	NIL
TOTAL ALKALINITY	(CaCO3)	76	156	156
BICARBONATE	(HCO3)	92.7	190.3	190.3
CARBONATE	(CO3)	NIL	NIL	NIL
HYDROXIDE	(OH)	NIL	NIL	NIL
TOTAL HARDNESS	(CaCO3)	5232	5164	4120
CALCIUM	(Ca)	1417.6	340.0	1556.6
CALCIUM	(CaCO3)	3544	2100	3692
MAGNESIUM	(Mg)	405.1	740.2	54.7
MAGNESIUM	(CaCO3)	1638	3084	228
CHLORIDE	(Cl)	134000	150400	186400
SULFATE	(SO4)	4900	5190	3525
TOTAL PHOSPHATE	(PO4)	***	***	***
ORTHO PHOSPHATE	(PO4)	***	***	***
POLY PHOSPHATE	(PO4)	***	***	***
SILICA	(SiO2)	79.0	89.0	82.0
SPECIFIC CONDUCTANCE	(mah/cm)	136700	115000	119600
IRON	(Fe)	0.20	0.30	0.20
COPPER	(Cu)	1.30	0.60	0.60

CALCULATED :			
TOTAL DISSOLVED SOLIDS		310062	255066
SODIUM	(Na)	119187	97616
			312441
			120632

ANALYZED BY: *Steve J. Moore*

APPROVED BY: *[Signature]*

UNICHEM INTERNATIONAL INC.

*** INDICATES THAT THIS ION WAS NOT RUN

7
7/15/91

EUNICE
PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
SECOND QUARTER, 1991

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
APRIL	511200	12171	12003
JUNE	576100	13717	19505
MAY	413000	9833	17744

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WATER ANALYSIS

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING
FACILITY: HOBBS
LOCATION: HOBBS, NM

DATE: 7/11/91
SAMPLE DATE: 7/11/91
DATE ANALYZED: 7/11/91

SAMPLE IDENTIFICATION :		TRUCKER'S BRINE CARLSBAD	TRUCKER'S #2 HOBBS	PIONEER BRINE STATION EUNICE
pH		6.91	7.06	7.16
PHENO ALKALINITY	(CaCO3)	NIL	NIL	NIL
TOTAL ALKALINITY	(CaCO3)	108	204	80
BICARBONATE	(HCO3)	131.8	248.9	97.6
CARBONATE	(CO3)	NIL	NIL	NIL
HYDROXIDE	(OH)	NIL	NIL	NIL
TOTAL HARDNESS	(CaCO3)	3200	2000	4300
CALCIUM	(Ca)	1120.0	400.0	1348.8
CALCIUM	(CaCO3)	2800	1000	3372
MAGNESIUM	(Mg)	96.0	240.0	222.7
MAGNESIUM	(CaCO3)	400	1000	928
CHLORIDE	(Cl)	134000	128000	124000
SULFATE	(SO4)	4080	4240	5780
TOTAL PHOSPHATE	(PO4)	***	***	***
ORTHO PHOSPHATE	(PO4)	***	***	***
POLY PHOSPHATE	(PO4)	***	***	***
SILICA	(SiO2)	70.0	115.0	77.0
SPECIFIC CONDUCTANCE	(mmhos)	144200	136100	141100
IRON	(Fe)	0.50	0.20	0.10
COPPER	(Cu)	0.50	0.40	0.50
CALCULATED :				
TOTAL DISSOLVED SOLIDS		226847	217379	212693
SODIUM	(Na)	87350	84135	81166

ANALYZED BY: Hope L. Moreno
(HOBBS LAB)

APPROVED BY: [Signature]

*** INDICATES THAT THIS TEST WAS NOT RUN

UNICHEM INTERNATIONAL INC.

5/06/91

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
FIRST QUARTER, 1991

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
JANUARY	663500	15798	22961
FEBRUARY	1476400	35152	23310
MARCH	397100	9455	13555

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WATER ANALYSIS

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING
FACILITY: HOBBS
LOCATION: HOBBS, NM

DATE: 4/30/91
SAMPLE DATE: 4/26/91
DATE ANALYZED: 4/29/91

SAMPLE IDENTIFICATION :

PIONEER
BRINE
EUNICE

TRUCKER'S
DRIVE BRINE
HOBBS

ROWLAND
TRUCKING
CARLSBAD

pH		7.20	7.20	6.23
PHENO ALKALINITY	(CaCO3)	NIL	NIL	NIL
TOTAL ALKALINITY	(CaCO3)	84	124	100
BICARBONATE	(HCO3)	102.5	151.3	122.0
CARBONATE	(CO3)	NIL	NIL	NIL
HYDROXIDE	(OH)	NIL	NIL	NIL
TOTAL HARDNESS	(CaCO3)	6300	5600	6500
CALCIUM	(Ca)	1440.0	1120.0	1680.0
CALCIUM	(CaCO3)	3600	2800	4200
MAGNESIUM	(Mg)	648.0	672.0	552.0
MAGNESIUM	(CaCO3)	2700	2800	2300
CHLORIDE	(Cl)	43200	38800	60400
SULFATE	(SO4)	5520	7050	3425
TOTAL PHOSPHATE	(PO4)	***	***	***
ORTHO PHOSPHATE	(PO4)	***	***	***
POLY PHOSPHATE	(PO4)	***	***	***
SILICA	(SiO2)	4.7	28.2	2.3
SPECIFIC CONDUCTANCE	(mmhos)	63800	32600	53500
IRON	(Fe)	0.10	NIL	0.20
COPPER	(Cu)	2.50	1.10	0.80
CALCULATED :				
TOTAL DISSOLVED SOLIDS		78690	73819	104011
SODIUM	(Na)	27774	25997	37830

ANALYZED BY: Jose J. Moreno
(HOBBS LAB)

APPROVED BY: Dylk Browning

*** INDICATES THAT THIS TEST WAS NOT RUN

UNICHEM INTERNATIONAL INC.

1/30/91

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
1990

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
JANUARY	1382900	32926	30973
FEBRUARY	913000	21738	32014
MARCH	1274000	30333	23942
APRIL	297900	7093	11327
MAY	665500	15845	21833
JUNE	1043200	24838	18115
JULY	999800	23805	9105
AUGUST	0	0	10095
SEPTEMBER	137800	3281	18158
OCTOBER	326100	7764	12429
NOVEMBER	1020900	24307	14752
DECEMBER	504400	12010	24955

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WATER ANALYSIS

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND TRUCKING
FACILITY: HOBBS
LOCATION: HOBBS, NEW MEXICO

DATE: 1/30/91
SAMPLE DATE: 1/28/91
DATE ANALYZED: 1/29/91

SAMPLE IDENTIFICATION :		PIONEER BRINE	TRUCKERS II	TRUCKERS BRINE CARLSBAD
pH		5.89	7.60	7.02
PHENO ALKALINITY	(CaCO3)	NIL	NIL	NIL
TOTAL ALKALINITY	(CaCO3)	60	120	140
BICARBONATE	(HCO3)	73.2	146.4	170.8
CARBONATE	(CO3)	NIL	NIL	NIL
HYDROXIDE	(OH)	NIL	NIL	NIL
TOTAL HARDNESS	(CaCO3)	4000	3600	3800
CALCIUM	(Ca)	1040.0	800.0	1000.0
CALCIUM	(CaCO3)	2600	2000	2500
MAGNESIUM	(Mg)	336.0	384.0	312.0
MAGNESIUM	(CaCO3)	1400	1600	1300
CHLORIDE	(Cl)	172000	15600	154000
SULFATE	(SO4)	1410	1925	1225
TOTAL PHOSPHATE	(PO4)	***	***	***
ORTHO PHOSPHATE	(PO4)	***	***	***
POLY PHOSPHATE	(PO4)	***	***	***
SILICA	(SiO2)	2.3	2.3	2.3
SPECIFIC CONDUCTANCE	(mmhos)	90300	74600	74500
IRON	(Fe)	1.65	0.11	0.11
COPPER	(Cu)	0.80	0.20	4.90
CALCULATED :				
TOTAL DISSOLVED SOLIDS		285161	28286	255388
SODIUM	(Na)	110300	9429	98678

ANALYZED BY:

(HOBBS LAB)

APPROVED BY:

*** INDICATES THAT THIS TEST WAS NOT RUN
UNICHEM INTERNATIONAL INC.

10/16/89

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON
THIRD QUARTER, 1989

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
JULY	605600	14419	21227
AUGUST	487000	11595	12465
SEPTEMBER	273500	6512	31122

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WATER ANALYSIS

ALL RESULTS EXPRESSED IN MG/L UNLESS OTHERWISE NOTED

CLIENT NAME: ROWLAND
FACILITY: UNICHEM
LOCATION:

DATE: 10/10/89
SAMPLE DATE: 10/02/89
DATE ANALYZED: 10/06/89

SAMPLE IDENTIFICATION : PIONEER BRINE
EUNICE, NM

pH		6.23
PHENO ALKALINITY	(CaCO3)	NIL
TOTAL ALKALINITY	(CaCO3)	60
BICARBONATE	(HCO3)	73.2
CARBONATE	(CO3)	NIL
HYDROXIDE	(OH)	NIL
TOTAL HARDNESS	(CaCO3)	5600
CALCIUM	(Ca)	1240.0
CALCIUM	(CaCO3)	3100
MAGNESIUM	(Mg)	600.0
MAGNESIUM	(CaCO3)	2500
CHLORIDE	(Cl)	143200
SULFATE	(SO4)	3375
TOTAL PHOSPHATE	(PO4)	***
ORTHO PHOSPHATE	(PO4)	***
POLY PHOSPHATE	(PO4)	***
SILICA	(SiO2)	47.0
SPECIFIC CONDUCTANCE	(mmhos)	117500
IRON	(Fe)	1.50
COPPER	(Cu)	0.66
CALCULATED :		
TOTAL DISSOLVED SOLIDS		240381
SODIUM	(Na)	91846

ANALYZED BY: Mitchell Tavin
(HOBBS LAB)

APPROVED BY: Dyle Browning

*** INDICATES THAT THIS TEST WAS NOT RUN

2/27/89

PIONEER BRINE STATION
FRESH WATER TO BRINE WATER COMPARISON FOR 1988

MONTH	FRESH WATER GALLONS PURCHASED	FRESH WATER BARRELS PURCHASED	BRINE WATER SALES BARRELS
JANUARY	1699600	40467	29444
FEBRUARY	827900	19712	16930
MARCH	358000	8524	20151
APRIL	1603300	38174	35849
MAY	1261400	30033	32112
JUNE	990300	23579	25292
JULY	815400	19414	15075
AUGUST	579900	13807	21786
SEPTEMBER	598900	14260	27849
OCTOBER	844300	20102	20246
NOVEMBER	743900	17712	21680
DECEMBER	620200	14767	14776

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R E C E I V E D

FEB 28 1989

GROUND WATER BUREAU



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W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED


CLIENT NAME: N.M.E.I.D.
FACILITY: EUNICE BRINE WELL
LOCATION: EUNICE, NM.

DATE: 01/18/89
SAMPLE DATE: 01/16/89
DATE ANALYZED: 01/17/89

SAMPLE IDENTIFICATION : EUNICE
BRINE
WELL

pH		6.95
PHENO ALKALINITY	(CaCO ₃)	NIL
TOTAL ALKALINITY	(CaCO ₃)	56
BICARBONATE	(HCO ₃)	68.3
CARBONATE	(CO ₃)	NIL
HYDROXIDE	(OH)	NIL
TOTAL HARDNESS	(CaCO ₃)	5500
CALCIUM	(Ca)	576.0
CALCIUM	(CaCO ₃)	1440
MAGNESIUM	(Mg)	974.4
MAGNESIUM	(CaCO ₃)	4060
CHLORIDE	(Cl)	192000
SULFATE	(SO ₄)	6175
TOTAL PHOSPHATE	(PO ₄)	***
ORTHO PHOSPHATE	(PO ₄)	***
POLY PHOSPHATE	(PO ₄)	***
SILICA	(SiO ₂)	53.4
SPECIFIC CONDUCTANCE	(mmhos)	134700
IRON	(Fe)	0.50
COPPER	(Cu)	0.50

CALCULATED :
TOTAL DISSOLVED SOLIDS 324696
SODIUM (Na) 124849

ANALYZED BY: 

(HOBBS LAB)

APPROVED BY: 

*** INDICATES THAT THIS TEST WAS NOT RUN



Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

W A T E R A N A L Y S I S

ALL RESULTS EXPRESSED IN PPM UNLESS OTHERWISE NOTED

CLIENT NAME: N.M.E.I.D.
FACILITY: EUNICE BRINE WELL
LOCATION: EUNICE, NM.

DATE: 01/18/89
SAMPLE DATE: 01/16/89
DATE ANALYZED: 01/17/89

SAMPLE IDENTIFICATION : EUNICE
BRINE
WELL

POTASSIUM (as K)	412.0
NITRATES (as NO3)	19.4
NITRATES (as N)	4.4

*** INDICATES THAT THIS TEST WAS NOT RUN