

GW - 20

**GENERAL
CORRESPONDENCE**

YEAR(S):

2000 - 1989



Rudy Quiroz
Operations Tech III
Natural Gas & Gas Products

Conoco Inc.
P.O. Box 90
Maljamar, NM 88264
505-676-3528

Certified Mail P 247 784 688
Return Receipt Requested

February 1, 2000

Mr. Roger Anderson, Chief
Oil Conservation Division
Energy and Minerals Department
State Land Office Building
P.O. Box 2088
Santa Fe, NM 87504

**RE: Request for GW-20 Discharge Plan Renewal
Maljamar Gas Plant
Lea County, New Mexico
Conoco Inc., Natural Gas & Gas Products Department**

Dear Mr. Anderson:

Discharge Plan GW-20 for the Maljamar Gas Processing Plant was last renewed June 6, 1995. The current plan expires June 10, 2000.

In accordance with Section 3-109 of New Mexico Water Quality Control Commission Regulations and the current approval, Conoco Inc. hereby requests the discharge plan approval be renewed. Enclosed are two copies of the draft-updated plan.

Only minor changes have been made since the plan was last submitted, in June of 1995. There have been no process or volume changes, which effect plant discharge.

If you have any questions or require additional information, please call Joyce Woodfin at (281) 293-4498. Thank you for your assistance.

Sincerely,


Rudy Quiroz

CC: Joyce Woodfin
File: 215-5-1

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
200 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Revised March 17, 1999

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,
REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

New Renewal Modification

1. Type: Gas Processing

2. Operator: Conoco Inc.

Address: P.O. Box 90 Maljamar, New Mexico 88260

Contact Person: Johnny Lackey Phone: (505) 676-3501

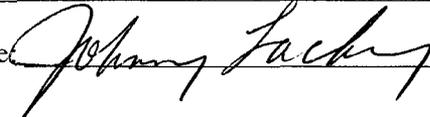
3. Location: SE /4 SW /4 Section 21 Township 17S Range 32E

Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

14. CERTIFICATION I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Johnny Lackey Title: Plant Manager Maljamar Plant

Signature:  Date: 1/21/00

Discharge Plan GW-20
Maljamar Gas Plant

1. **TYPE OF OPERATION**

The Maljamar Gas Plant recovers ethane, propane, butane and condensate from a raw natural gas liquid stream. The natural gas product is sold via pipeline to Enron Gas Pipeline, Public Service of New Mexico or Kansas Nebraska Pipeline Company. Liquid products are transported via pipeline to Mont Belvieu, Texas.

2. **OPERATOR/LEGALLY RESPONSIBLE PARTY & LOCAL REPRESENTATIVE**

a. Natural Gas & Gas Products Environmental Contact

Joyce M. Woodfin
Environmental Consultant
Conoco Inc., Natural Gas and Gas Products Department
P.O. Box 2197 – Humber 3036
Houston, Texas 77252-2197
(281) 293-4498

b. Site Contact

Johnny Lackey
Plant Manager
Conoco Inc. Maljamar Gas Processing Plant
P.O. Box 90
Maljamar, New Mexico 88264
(505) 676-3501

3. **LOCATION OF DISCHARGE/FACILITY DESCRIPTION**

The facility is located 3 miles south of Maljamar off Farm Road 126. The legal description is Section 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

4. **LANDOWNERS**

The Maljamar plant has been fully owned and operated by Conoco Inc. since 1960.

5. **FACILITY DESCRIPTION**

The Maljamar Gas Processing is designed to recover gas liquids (ethane, propane, butane and condensate) from a low, intermediate and high pressure gathering system. The plant capacity is sixty (60) million cubic feet. The plant throughput varies from forty (40) million to sixty million cubic feet a day (MMCFD). The processed product is delivered to Mont Belvieu, Texas via Koch Pipeline for sale.

A site plan and chemical inventory has been included in Appendix A.

6. **MATERIALS STORED AND USED at the FACILITY**

Material	Composition	Inventory	Location	Storage
Diethanolamine	Liquid	3000 gallons	Process Area	Tank
Methanol	Liquid	2000 gallons	Process Area	Tanks
Antifoam	Liquid	110 gallons	Process Area	Drum
Detergent/Soap	Composition	Inventory	Location	Storage
F-20 Low pH	Liquid	400 gallons	Shop Area	Tank
Stoddard Solvent	Liquid	2000 gallons	Clark, Electric Area	Tanks
LCS-20	Liquid	1000 gallons	Clark Area	Tanks
Emulsotron XZ-409	Liquid	55 gallons	Drum Storage Area	Drum
Elmar 3000 Engine Oil	Liquid	6000 gallons	Clark Storage Area	Tank
Elmar Ashless Engine Oil	Liquid	6000 gallons	Yard	Tank
Kerosene	Liquid	1000 gallons	Electric Building Area	Tank
Antifreeze	Liquid	2000 gallons	Clark storage area and Electric Building	Tanks
Diesel	Liquid	1000 gallons	Yard	Tank
Turbine Oil	Liquid	110 gallons	Drum Storage	Drums

7. **SOURCES and QUANTITIES of EFFLUENT and WASTE SOLIDS
GENERATED at the FACILITY**

Major Effluent	Estimated Quantity	Major Additives
Process water	84 barrels per day	None
Used motor oil	100 gallons per month	None
Methanol Alcohol	100 gallons a year	None
Molecular Sieve	40,000 lbs. every 2 - 3years	None
Charcoal Filter media	15,000 lbs. every year	None
Spent Lube Filters	6 cubic yards year	None
Spent Amine Filters	16 cubic yards year	None
Spent Dust Filters	6 cubic yards year	None
Oil Spill Pads	2 cubic yards year	None
Plant Trash	72 cubic yards year	None

Effluent Description

Plant drains, inlet scrubbers, and engine room wash water discharge to the skimmer basin. Any oil separated in the skimmer basin is pumped to tanks 13 and 14. Skimmer basin water, approximately eighty-four (84) barrels per day, is pumped to Conoco's waterflood project for reinjection. The 84 barrels per day is the combination of 20 barrels used in the plant and engine room water and 64 barrels from inlet scrubbers and separators (Appendix. B). The wastewater analysis is included in Appendix C.

The plant process water is separated in the skimmer basin and then pumped to the Conoco production water flood project. A schematic of the skimmer basin is found in Appendix F. The water flood project is adjacent to the plant where it is reinjected in accordance with the Oil Conservation Commission Orders. The oil that is separated in the skimmer basin is pumped to tanks 13 and 14 and then to a three-phase separator. The oil then goes to tank 12 where it is pumped to Navajo Oil Refining in Artesa, N. M.

Sewage

The sanitary wastewaters from the facility are discharged into three 1200-gallon septic tanks. Waste discharged to these tanks does not come in contact with any chemical treatment. All tanks in the septic system are discharged to leach fields. No other wastes are mixed in with sewage

8. **DESCRIPTION OF CURRENT LIQUID AND SOLID WASTE COLLECTION / STORAGE / DISPOSAL PROCEDURES**

Liquid / Solid Waste	Storage	Disposal
Process water	Tanks	See Effluent Description Above
Used motor oil	Tank	Sent to ProCycle for recycling
Methanol Alcohol (Hazardous Waste)	Drum	Picked up by Safety Kleen for disposal
Molecular Sieve	*	*
Charcoal Filter media	*	*
Spent Lube Filters	Special Waste Dumpster	Picked up by Waste Management for disposal
Spent Amine Filters	Special Waste Dumpster	Picked up by Waste Management for disposal
Spent Dust Filters	Special Waste Dumpster	Picked up by Waste Management for disposal
Oil Spill Pads	Special Waste Dumpster	Picked up by Waste Management for disposal
Plant Trash	Dumpster	Picked up by Waste Management for disposal

* Spent molecular sieve and charcoal filter media are not regularly stored at the facility. When the material is changed out, the spent material is tested and if results show to be non-hazardous, the material is disposed of at a local industrial landfill. In the event the material is shown to be hazardous, the material will be handled in accordance with hazardous waste regulations.

Drum Storage

All drums are stored on pad and curb type containment.

Berms

All tanks that contain materials other than freshwater are bermed to contain one and one-third the capacity of the largest tank within the berm or one and one-third the total capacity of all interconnected tanks.

Above Grade Tanks

All above ground tanks are on impermeable pad and curb type containment.

Pads

All compressor pads have adequate containment to prevent contaminants from running onto the ground surface.

Labeling

All tanks, drums and containers are clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

9. PROPOSED MODIFICATIONS

No modifications are planned at this time.

10. INSPECTION, MAINTENANCE, and REPORTING

General Facility

The facility is visually inspected by field personnel for possible malfunctions on each twelve-hour shift.

Sump Inspections

All sumps at this facility are cleaned and visually inspected annually.

Pressure Testing

All underground piping is tested in accordance with the Discharge Plan prior to renewal of the plan (approximately every five years).

11. SPILL / LEAK PREVENTION & REPORTING (CONTINGENCY PLANS)

The Maljamar Gas Plant uses pump transfer and wastewater injection to dispose of plant process and cooling waters. The total wastewater handled is approximately 84 barrels per day.

The skimmer basin and tanks 13 and 14 would be utilized for storage in the event of a pump failure or discontinuance. Under such circumstances, wastewater would be hauled offsite to a commercial injection well for disposal.

All systems designed for spill collection / prevention are inspected to ensure proper operation and to prevent overtopping or system failure. Spills of any materials are cleaned up in a timely manner using environmentally sound methods. In the event that reporting is required, Maljamar personnel will contact the applicable regulatory agency in accordance with OCD Rule 116 and WQCC 1203.

12. SITE CHARACTERISTICS

Hydrological Features

Within one mile of the Maljamar Gas Plant, there are no bodies of water, streams, or other watercourses. In addition, no groundwater discharge sites (marshes, springs, seeps, etc.) or water wells are located within one mile of the facility. A topographical map has been included in Appendix D.

Appendix E contains a water well log taken in the close proximity to the site. This log was run in 1980 and indicated that the upper most aquifer is located 70-150 feet below the ground surface. Analysis of the water quality is not available. As a result, it is not possible to determine if this aquifer meets drinking water standards.

This well log is consistent with the 1961 United States Geologic Ground Water Report 6 that documented water in this area to be 60-176' below surface. The source of water was documented to be sand and gravel (alluvial) of the Tertiary and Quaternary age.

Geologic Description of Discharge Sites

The predominant soil type in the area is a silty sand.

The primary and top most aquifer in the area is in the Ogallala formation. The shallower Alluvium and the Ogallala geologic units form this continuous aquifer.

Flood Protection

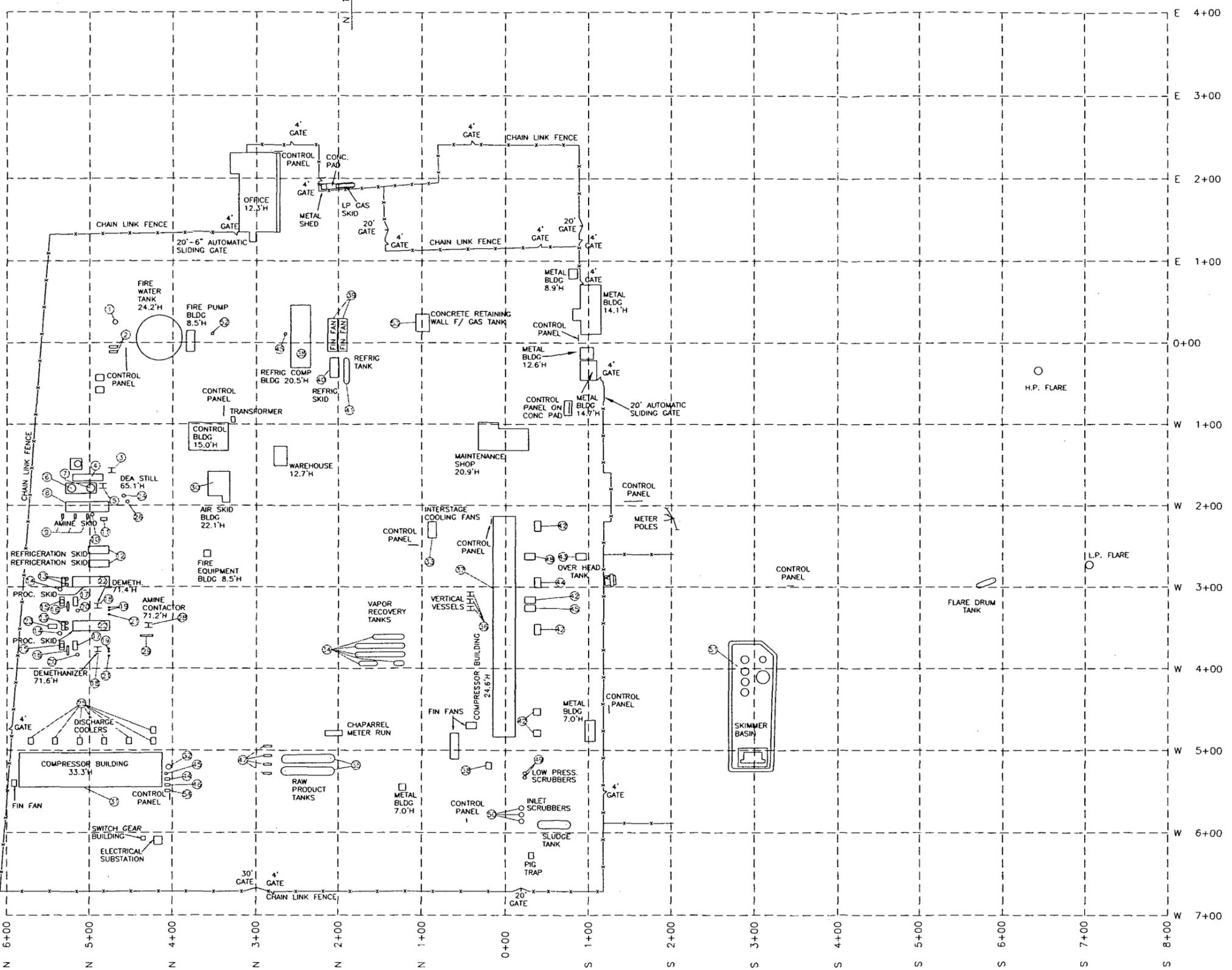
The area of New Mexico in which the plant is located is classified as semi-arid to arid. The annual precipitation is 12-13". The surrounding topography, annual precipitation history and Conoco Inc.'s 39 years of experience as plant operator show no significant flood potential at this site.

APPENDIX A

**SITE PLAN AND CHEMICAL
INVENTORY**



E 6+07'-0"
SOUR FLARE



ITEM NUMBER	EQUIPMENT LIST	CHEMICAL INVENTORY
1	H-760 HOT OIL HEATER (11.1 MMBTU/HR)	HEAT TRANSFER OIL
2	H-750 REGEN GAS HEATERS (1.85 MMBTU/HR) (2)	RESIDUE GAS
3	TK-930 AMINE SUMP	DEA, WATER
4	E-520 AMINE STILL REBOILER	HOT OIL, DEA, WATER
5	T-1300 DEA STILL	DEA, H ₂ S, CO ₂ , WATER
6	AC-700 AMINE COOLER	DEA, WATER
7	AC-705 AMINE STILL CONDENSER	STEAM, H ₂ S, CO ₂
8	AMINE SKID	DEA, RESIDUE GAS, H ₂ S, CO ₂ , WATER
	- RICH DEA FLASH TANK	TRANSFER OIL, ANTIFOAM INHIBITOR
	- DEA FILTER	
	- AMINE SURGE TANK	
	- ANTIFOAM INHIBITOR PUMP	
	- ANTIFOAM INHIBITOR TANK	
	- AMINE EXCHANGER	
	- HOT OIL EXPANSION TANK	
9	AMINE CIRCULATING PUMPS (3)	DEA, WATER
10	F-830 AMINE CHARCOAL FILTER	DEA, ACTIVATED CARBON
11	SAND FILTER	DEA
12	REFRIGERATION SKID #2	PROPANE, RAW GAS, EPBC
	- PROPANE CHILLER	
	- COLD SEPARATOR	
13	V-110 DEHYDRATORS (2 PER TRAIN, TOTAL OF 4)	RAW GAS, MOLESIEVE
14	F-810 INLET GAS FILTER/SEPARATORS (2)	RAW GAS, WATER
	(ON PROCESS SKIDS)	
15	AC-710 REGEN GAS COOLERS (2)	RESIDUE GAS, AIR
16	V-150 TREATED GAS SEPARATORS (2)	RAW GAS, WATER
17	KX-600 EXPANDER/COMPRESSORS (2)	RAW GAS
18	T-1000 DEMETHANIZERS (2)	RAW GAS, EPBC, RESIDUE GAS
19	P-1000 DEMETHANIZER PRODUCT PUMPS (4)	EPBC
20	TX-600 EXPANDER OIL SUMP TANK	LUBE OIL
21	V-260 FUEL GAS SCRUBBERS (2)	RESIDUE GAS
22	PROCESS SKIDS #1&2 (ITEMS PER SKID)	RAW GAS, WATER, EPBC
	- INLET GAS FILTER SEPARATOR	
	- INLET GAS DUST FILTER	
	- REGENERATION GAS COMPRESSOR	
	- WARM GAS/GAS EXCHANGER	
	- COLD GAS/GAS EXCHANGER	
	- PRODUCT HEATER	
	- DEMETHANIZER REBOILER	
	- DEMETHANIZER SIDE HEATER	
	- COLD SEPARATOR	
	- INLET GAS COOLING FAN	
23	METHANOL STORAGE TANK	METHANOL
24	P-470 AMINE/WATER MAKE-UP PUMP	DEA, WATER
25	DISCHARGE COOLERS (7)	RAW GAS, RESIDUE GAS
26	TK-910 AMINE STORAGE TANK	DEA
27	AC-715 RESIDUE GAS COOLER	RESIDUE GAS, AIR
28	T-1200 AMINE CONTACTOR	RAW GAS, DEA, WATER
29	E-500 AMINE UNIT - INLET GAS EXCHANGER	RAW GAS, HOT OIL
30	INSTRUMENT AIR BUILDING	INSTRUMENT AIR
31	COMPRESSOR BUILDING	RAW GAS, LUBE OIL
	- GAS DRIVEN INLET COMP.	
	- ELECTRIC DRIVEN INLET COMP.	
	- ELECTRIC DRIVEN INLET/RES COMP.	
	- ELECTRIC DRIVEN INLET COMP. (3)	
32	COMP. BUILDING SUMP	WASTE OIL
33	INTERSTAGE COOLING FANS	RAW GAS, AIR
34	VAPOR RECOVERY SYSTEM (5 VESSELS)	WASTE OIL, LIGHT HYDROCARBONS
35	RAW PRO. STORAGE TANKS (2)	EPBC
36	INTERSTAGE SCRUBBERS (3)	RAW GAS
37	CLARK COMP. BUILDING	RAW GAS, LUBE OIL
	- RESIDUE COMPRESSOR	
	- INLET COMPRESSORS (7)	
38	COMP. BLDG. (#37) SUMP	WASTE OIL
39	AC-620 PROPANE CONDENSER (2)	PROPANE
40	REFRIGERATION SKID #1	PROPANE, RAW GAS, LUBE OIL
	- PROPANE SUB-COOLER	
	- ECONOMIZER	
	- PROPANE SUCTION SCRUBBER	
	- LUBE OIL COALESCE	
41	V-640 PROPANE ACCUMULATOR	PROPANE
42	WATER/LUBE OIL COOLERS (5)	WATER, LUBE OIL, AIR
43	ENGINE OIL STORAGE TANKS (2)	ENGINE OIL
44	ANTIFREEZE STORAGE TANKS	ETHYLENE GLYCOL
45	NALCO CHEMICAL STORAGE (3)	
46	COMP. OIL STORAGE TANK	COMPRESSOR OIL
47	EPBC PIPELINE PUMPS (4)	EPBC
48	WATER STORAGE TANK	WATER
49	LOW PRESSURE SCRUBBERS (2)	RAW GAS
50	INLET SCRUBBERS (3)	RAW GAS
51	SLOP OIL TANKS (5)	WASTE OIL
52	DIESEL STORAGE TANK	DIESEL
53	GASOLINE STORAGE TANK	UNLEADED GASOLINE
54	KEROSENE STORAGE TANKS (1)	KEROSENE
55		

ISSUE	DATE	DRAWN	DESIGNED	CHECKED	APPROVED	ISSUE	DATE	DRAWN	DESIGNED	CHECKED	APPROVED

CONOCO

NATURAL GAS & GAS PRODUCTS DEPARTMENT

CONOCO NG&GP
MALJAMAR GAS PLANT
PLOT PLAN & CHEMICAL INVENTORY

SCALE: 1"=60'
LOCATION: MALJAMAR GAS PLANT
FILE NO:
MJ20001
REV NO:
B

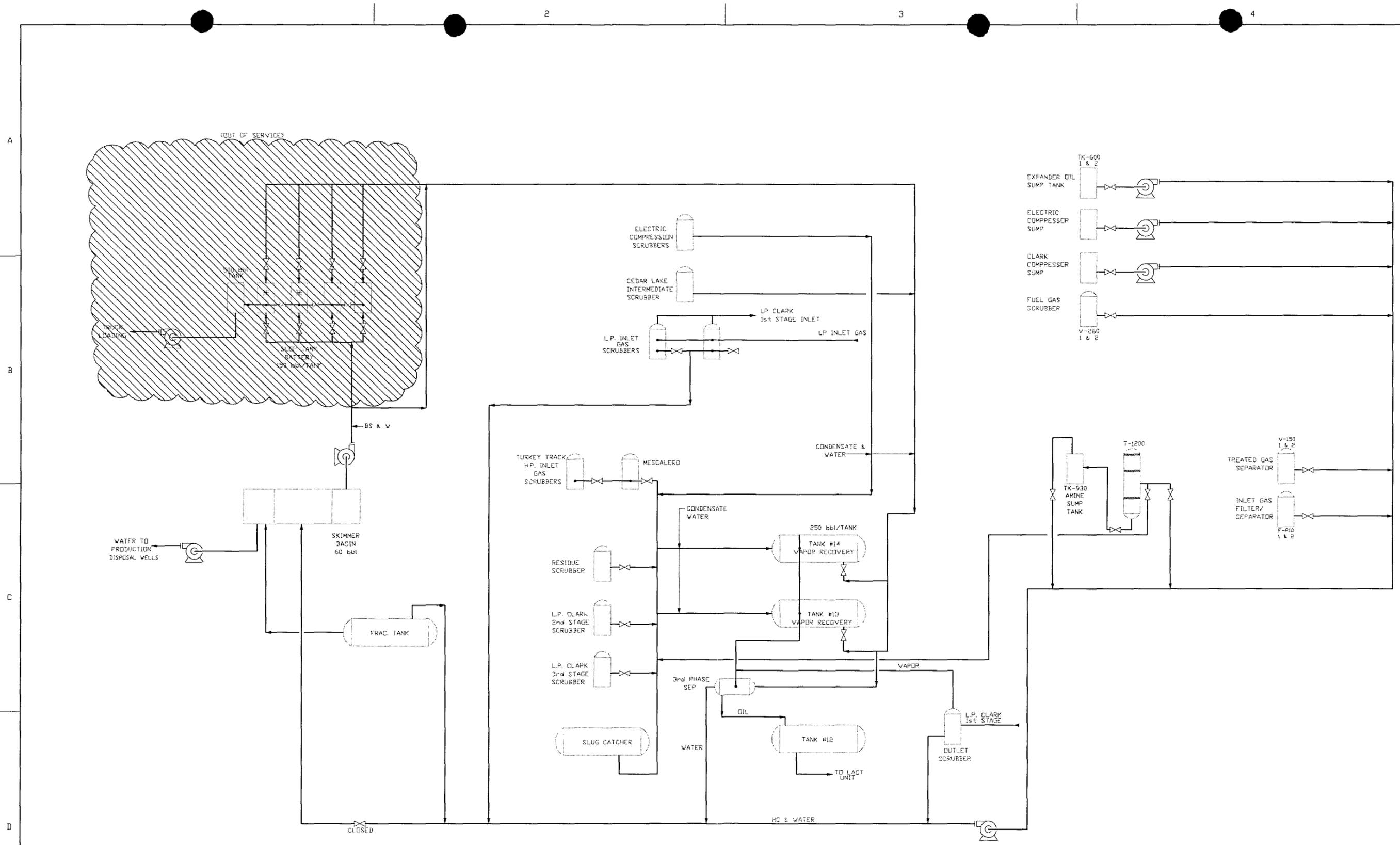
B
ADDED (3) VAPOR RECOVERY VESSELS & REV'D EQUIPMENT ITEM #34
6/5/97 RCK

APPENDIX B

PLANT WATER BALANCE

LIQUID WASTE DRAINAGE SYSTEM

**AMINE WASTE CONTAINMENT &
DRAINAGE SYSTEM**



* STAND-BY

REFERENCE DRAWINGS:

NO.	DATE	REVISION

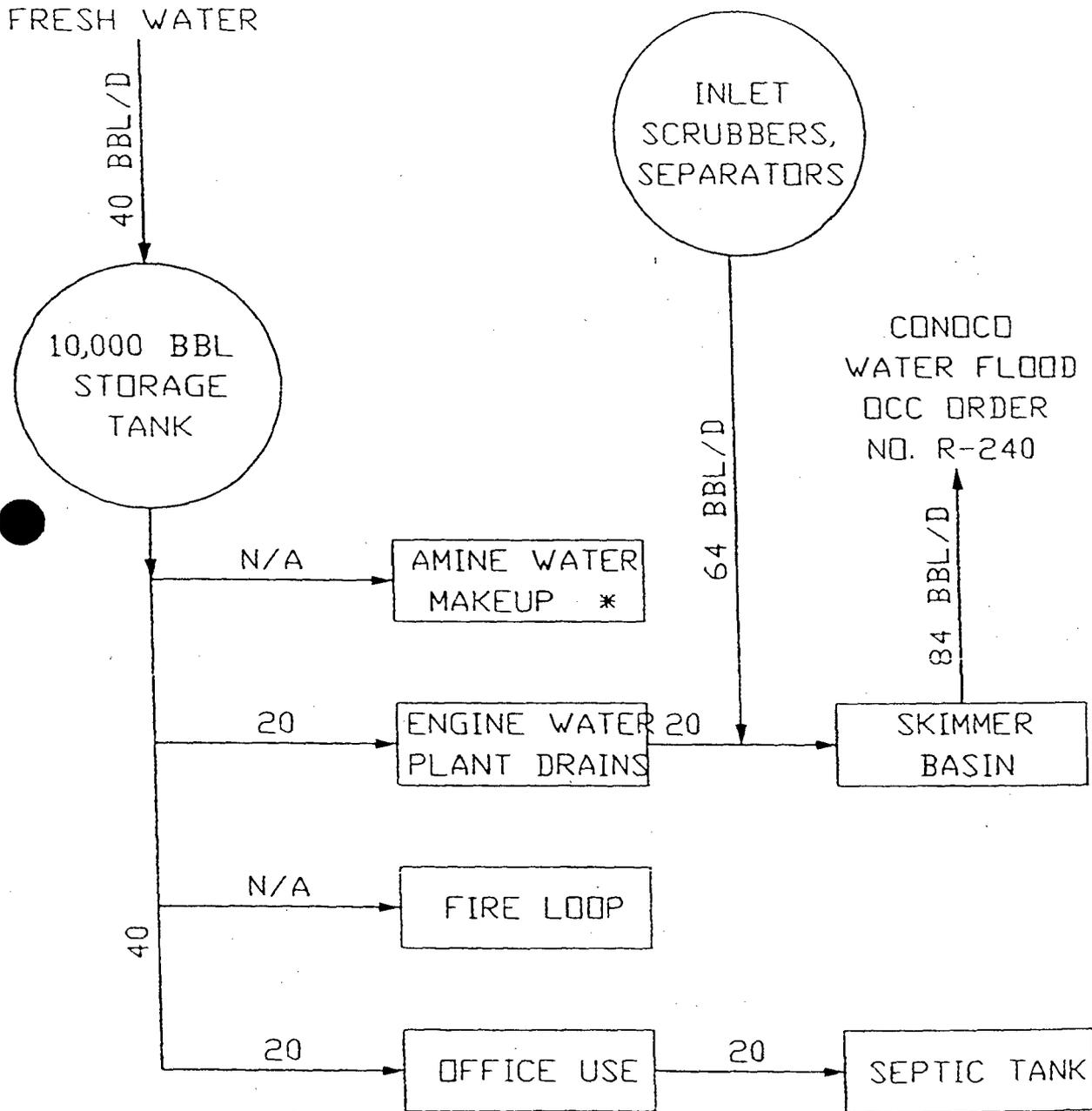
NO.	DATE	REVISION	DRW.	DES.	CHK.	APP.
A	01/07/00	ISSUE FOR APPROVAL	PLM			



MALJAMAR GAS PLANT
LIQUID WASTE DRAINAGE SYSTEM
 FLOW DIAGRAM

SCALE: NONE	PLOT SCALE: 1=1
AFE: 	LOCATION: MALJAMAR, NM
DWG. NO. NG&GP-MJ-29201	REV. A

PLANT WATER BALANCE MALJAMAR GAS PLANT



APPENDIX C

WASTEWATER ANALYSIS

**Certificate of
Analysis**

Quanterra Incorporated
5307 Industrial Oaks Boulevard, Suite 160
Austin, Texas 78735

512 892-6684 Direct
512 892-6652 Fax



ANALYTICAL REPORT

PROJECT NO. MALJAMAR NM

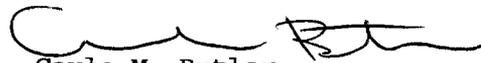
Conoco Plant Discharge

Lot #: IOA140146

Rudy Quiroz

Conoco Inc

QUANTERRA INCORPORATED


Carla M. Butler
Project Manager

January 24, 2000

CASE NARRATIVE

I0A140146

Samples received in good condition at a cooler temperature of 4 degrees C.

Because pH was not performed at the time of collection, the analysis is considered out of hold time.

Recovery of benzene was outside limits for the Matrix Spike of the non-project specific QC sample for 8021B batch 0019335.

Recovery of chloride was outside limits for the Matrix Spike Duplicate of sample 001 for 325.2 batch 0021166.

EXECUTIVE SUMMARY - Detection Highlights

I0A140146

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
GW-20 DISCHARGE 01/13/00 07:10 001				
Benzene	68000	500	ug/L	SW846 8021B
Ethylbenzene	1700	500	ug/L	SW846 8021B
Toluene	31000	500	ug/L	SW846 8021B
Xylenes (total)	4100	500	ug/L	SW846 8021B
Calcium	7.1	5.0	mg/L	SW846 6010B
Potassium	9.3	5.0	mg/L	SW846 6010B
Sodium	98.1	5.0	mg/L	SW846 6010B
pH (liquid)	9.6 H	0.10	No Units	MCAWW 150.1
Total Dissolved Solids	515	10.0	mg/L	MCAWW 160.1
Carbonate Alkalinity	1100	5.0	mg/L	MCAWW 310.1
Chloride - Automated	78.1	2.0	mg/L	MCAWW 325.2
Sulfate	38.7	20.0	mg/L	MCAWW 375.4
Bicarbonate Alkalinity	2630	5.0	mg/L	MCAWW 310.1

ANALYTICAL METHODS SUMMARY

I0A140146

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
pH (Electrometric)	MCAWW 150.1
Bicarbonate Alkalinity	MCAWW 310.1
Carbonate Alkalinity	MCAWW 310.1
Chloride (Colorimetric, Automated Ferricyanide)	MCAWW 325.2
Filterable Residue (TDS)	MCAWW 160.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Sulfate	MCAWW 375.4
Volatiles by GC	SW846 8021B

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I0A140146

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 150.1	David A. Tocher	800002
MCAWW 160.1	Renvye Byrd	090000
MCAWW 310.1	James Gwaltney	002355
MCAWW 325.2	Renvye Byrd	090000
MCAWW 375.4	Heidi Marchette	003289
SW846 6010B	Lynette Scott	013264
SW846 8021B	Mark Shafer	001952

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

IOA140146

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
D7F6D	001	GW-20	DISCHARGE	01/13/00	07:10

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

CONOCO INC.

Client Sample ID: GW-20 DISCHARGE

GC Volatiles

Lot-Sample #...: IOA140146-001 Work Order #...: D7F6D101 Matrix.....: WATER
Date Sampled...: 01/13/00 07:10 Date Received...: 01/14/00
Prep Date.....: 01/18/00 Analysis Date...: 01/18/00
Prep Batch #...: 0019335
Dilution Factor: 500 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	68000	500	ug/L
Ethylbenzene	1700	500	ug/L
Toluene	31000	500	ug/L
Xylenes (total)	4100	500	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	101	(70 - 130)

CONOCO INC.

Client Sample ID: GW-20 DISCHARGE

General Chemistry

Lot-Sample #...: IOA140146-001 Work Order #...: D7F6D
 Date Sampled...: 01/13/00 07:10 Date Received...: 01/14/00

Matrix.....: WATER

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (liquid)	9.6 H	0.10	No Units	MCAWW 150.1	01/14/00	0014324
				Dilution Factor: 1		
Bicarbonate Alkalinity	2630	5.0	mg/L	MCAWW 310.1	01/20/00	0020189
				Dilution Factor: 1		
Carbonate Alkalinity	1100	5.0	mg/L	MCAWW 310.1	01/20/00	0020190
				Dilution Factor: 1		
Chloride - Automated	78.1	2.0	mg/L	MCAWW 325.2	01/21/00	0021166
				Dilution Factor: 1		
Sulfate	38.7	20.0	mg/L	MCAWW 375.4	01/24/00	0024164
				Dilution Factor: 4		
Total Dissolved Solids	515	10.0	mg/L	MCAWW 160.1	01/19-01/20/00	0021171
				Dilution Factor: 1		

NOTE(S):

RL Reporting Limit

H The sample was prepared or analyzed after the EPA recommended holding time had been exceeded.

CONOCO INC.

Client Sample ID: GW-20 DISCHARGE

TOTAL Metals

Lot-Sample #...: IOA140146-001

Matrix.....: WATER

Date Sampled...: 01/13/00 07:10 Date Received...: 01/14/00

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Prep Batch #...: 0018304						
Calcium	7.1	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7F6D104
		Dilution Factor: 1				
Potassium	9.3	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7F6D107
		Dilution Factor: 1				
Magnesium	ND	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7F6D106
		Dilution Factor: 1				
Sodium	98.1	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7F6D105
		Dilution Factor: 1				

QC DATA ASSOCIATION SUMMARY

IOA140146

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 150.1		0014324	0014108
	WATER	MCAWW 160.1		0021171	0021052
	WATER	MCAWW 310.1		0020190	
	WATER	MCAWW 325.2		0021166	0021048
	WATER	SW846 6010B		0018304	0018126
	WATER	SW846 8021B		0019335	0019139
	WATER	MCAWW 375.4		0024164	
	WATER	MCAWW 310.1		0020189	

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: IOA140146
MB Lot-Sample #: IOA190000-335

Work Order #...: D7KJN101

Matrix.....: WATER

Analysis Date...: 01/18/00
Dilution Factor: 1

Prep Date.....: 01/18/00

Prep Batch #...: 0019335

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	1.0	ug/L	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	103	(70 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: IOA140146

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
MB Lot-Sample #: IOA180000-304 Prep Batch #... : 0018304						
Calcium	ND	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7JFD116
		Dilution Factor: 1				
Magnesium	ND	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7JFD117
		Dilution Factor: 1				
Potassium	ND	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7JFD118
		Dilution Factor: 1				
Sodium	ND	5.0	mg/L	SW846 6010B	01/18-01/19/00	D7JFD10C
		Dilution Factor: 1				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: I0A140146

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Chloride - Automated	ND	Work Order #: D7MX3101 2.0	mg/L	MB Lot-Sample #: B0A210000-166 MCAWW 325.2	01/21/00	0021166
		Dilution Factor: 1				
Sulfate	ND	Work Order #: D7QN9101 5.0	mg/L	MB Lot-Sample #: B0A240000-164 MCAWW 375.4	01/24/00	0024164
		Dilution Factor: 1				
Total Dissolved Solids	ND	Work Order #: D7N00101 10.0	mg/L	MB Lot-Sample #: B0A210000-171 MCAWW 160.1	01/19-01/20/00	0021171
		Dilution Factor: 1				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: IOA140146 Work Order #...: D7KJN102 Matrix.....: WATER
 LCS Lot-Sample#: IOA190000-335
 Prep Date.....: 01/18/00 Analysis Date...: 01/18/00
 Prep Batch #...: 0019335
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Methyl tert-butyl ether	95	(67 - 128)	SW846 8021B
Benzene	93	(78 - 125)	SW846 8021B
Ethylbenzene	103	(84 - 116)	SW846 8021B
Toluene	97	(82 - 119)	SW846 8021B
Xylenes (total)	100	(86 - 114)	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	104	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: I0A140146

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: I0A180000-304 Prep Batch #...: 0018304					
Sodium	106	(80 - 120)	SW846 6010B	01/18-01/19/00	D7JFD11C
		Dilution Factor: 1			
Calcium	106	(80 - 120)	SW846 6010B	01/18-01/19/00	D7JFD126
		Dilution Factor: 1			
Magnesium	103	(80 - 120)	SW846 6010B	01/18-01/19/00	D7JFD127
		Dilution Factor: 1			
Potassium	106	(80 - 120)	SW846 6010B	01/18-01/19/00	D7JFD128
		Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: I0A140146

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride - Automated		WO#:D7MX3102-LCS/D7MX3103-LCSD			LCS Lot-Sample#:	B0A210000-166	
	108	(82 - 110)			MCAWW 325.2	01/21/00	0021166
	93 *	(82 - 110)	15	(0-10)	MCAWW 325.2	01/21/00	0021166
		Dilution Factor: 1					
Sulfate		WO#:D7QN9102-LCS/D7QN9103-LCSD			LCS Lot-Sample#:	B0A240000-164	
	92	(90 - 110)			MCAWW 375.4	01/24/00	0024164
	101	(90 - 110)	8.8	(0-20)	MCAWW 375.4	01/24/00	0024164
		Dilution Factor: 1					
Total Dissolved Solids		WO#:D7N00102-LCS/D7N00103-LCSD			LCS Lot-Sample#:	B0A210000-171	
	98	(80 - 114)			MCAWW 160.1	01/19-01/20/00	0021171
	96	(80 - 114)	2.0	(0-10)	MCAWW 160.1	01/19-01/20/00	0021171
		Dilution Factor: 1					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

* Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: I0A140146

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH (liquid)	95	Work Order #: D7FV1101 (90 - 110)	LCS Lot-Sample#: I0A140000-324 MCAWW 150.1	01/14/00	0014324

Dilution Factor: 1

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: I0A140146 Work Order #...: D7AQM105-MS Matrix.....: WATER
 MS Lot-Sample #: I0A120167-002 D7AQM106-MSD
 Date Sampled...: 01/07/00 15:30 Date Received...: 01/12/00
 Prep Date.....: 01/18/00 Analysis Date...: 01/18/00
 Prep Batch #...: 0019335
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Methyl tert-butyl ether	84	(70 - 130)			SW846 8021B
	93	(70 - 130)	1.6	(0-30)	SW846 8021B
Benzene	79 a, MSC	(80 - 118)			SW846 8021B
	80 MSC	(80 - 118)	0.09	(0-11)	SW846 8021B
Ethylbenzene	100	(77 - 120)			SW846 8021B
	100	(77 - 120)	0.39	(0-14)	SW846 8021B
Toluene	97	(84 - 116)			SW846 8021B
	96	(84 - 116)	0.67	(0-10)	SW846 8021B
Xylenes (total)	98	(85 - 116)			SW846 8021B
	98	(85 - 116)	0.60	(0-11)	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	106	(70 - 130)
	107	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters
 MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.
 a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: I0A140146

Matrix.....: WATER

Date Sampled...: 01/11/00 12:25 Date Received...: 01/11/00

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MS Lot-Sample #: I0A160103-001 Prep Batch #...: 0018304							
Calcium	105	(75 - 125)			SW846 6010B	01/18-01/19/00	D7GTK138
	107	(75 - 125)	1.5	(0-20)	SW846 6010B	01/18-01/19/00	D7GTK139
Dilution Factor: 1							
Magnesium	101	(75 - 125)			SW846 6010B	01/18-01/19/00	D7GTK13C
	103	(75 - 125)	1.4	(0-20)	SW846 6010B	01/18-01/19/00	D7GTK13D
Dilution Factor: 1							
Potassium	90	(75 - 125)			SW846 6010B	01/18-01/19/00	D7GTK13F
	97	(75 - 125)	3.9	(0-20)	SW846 6010B	01/18-01/19/00	D7GTK13G
Dilution Factor: 1							
Sodium	83	(75 - 125)			SW846 6010B	01/18-01/19/00	D7GTK10Q
	93	(75 - 125)	2.6	(0-20)	SW846 6010B	01/18-01/19/00	D7GTK10R
Dilution Factor: 1							

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: I0A140146

Matrix.....: WATER

Date Sampled...: 01/13/00 07:10 Date Received...: 01/14/00

PARAMETER	PERCENT	RECOVERY	RPD		METHOD	PREPARATION-	PREP
	RECOVERY	LIMITS	RPD	LIMITS		ANALYSIS DATE	BATCH #
Chloride - Automated			WO#: D7F6D10F-MS/D7F6D10G-MSD		MS Lot-Sample #:	I0A140146-001	
	107	(82 - 110)			MCAWW 325.2	01/21/00	0021166
	77 N, MSC	(82 - 110)	3.4	(0-10)	MCAWW 325.2	01/21/00	0021166
			Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: I0A140146

Work Order #...: D7F6D-SMP
D7F6D-DUP

Matrix.....: WATER

Date Sampled...: 01/13/00 07:10

Date Received...: 01/14/00

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH (liquid)	9.6 H	9.6 H	No Units	0.21	(0-20)	MCAWW 150.1	SD Lot-Sample #: I0A140146-001 01/14/00	0014324
			Dilution Factor: 1					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

H The sample was prepared or analyzed after the EPA recommended holding time had been exceeded.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: I0A140146

Work Order #...: D7JVF-SMP
D7JVF-DUP

Matrix.....: WATER

Date Sampled...: 01/18/00 16:50 Date Received...: 01/18/00

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD</u> <u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Dissolved Solids	285	309	mg/L	8.1	(0-10)	MCAWW 160.1	01/19-01/20/00	0021171
Dilution Factor: 1							SD Lot-Sample #: B0A190106-003	

APPENDIX D

TOPOGRAPHICAL MAP

R 31 E

R 32 E

MALJAMAR QUADRANGLE
NEW MEXICO
S.E. 1/4 OF 15 MINUTE SERIES (TOPOGRAPHIC)

CONT. ON DWG. 4-161-90005

T 16 S

T 16 S

T 17 S

T 17 S

T 18 S

T 18 S

R 31 E

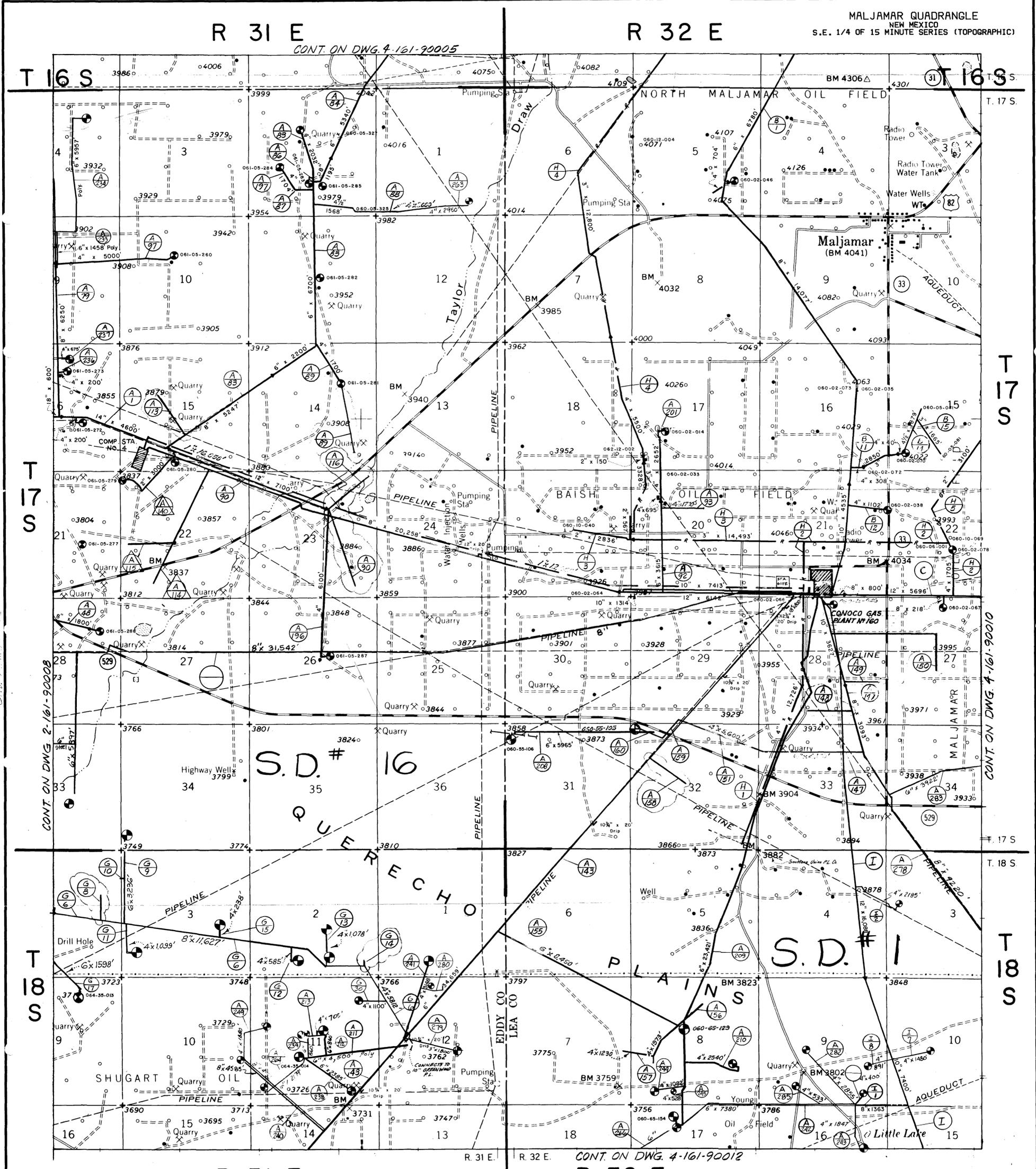
R 32 E

CONT. ON DWG. 4-161-90012

CONOCO INC.
NATURAL GAS PRODUCTS DEPARTMENT
HOUSTON, TEXAS

S.E. MALJAMAR QUADRANGLE
T 16 S-T 18 S, R 31 E-R 32 E
LEA & EDDY COUNTIES, NEW MEXICO
SCALE 1" = 2000' ISSUE 12-31-93

NGCP 161-90000



CONT. ON DWG. 2-161-90005

CONT. ON DWG. 4-161-90010

5-161-90000

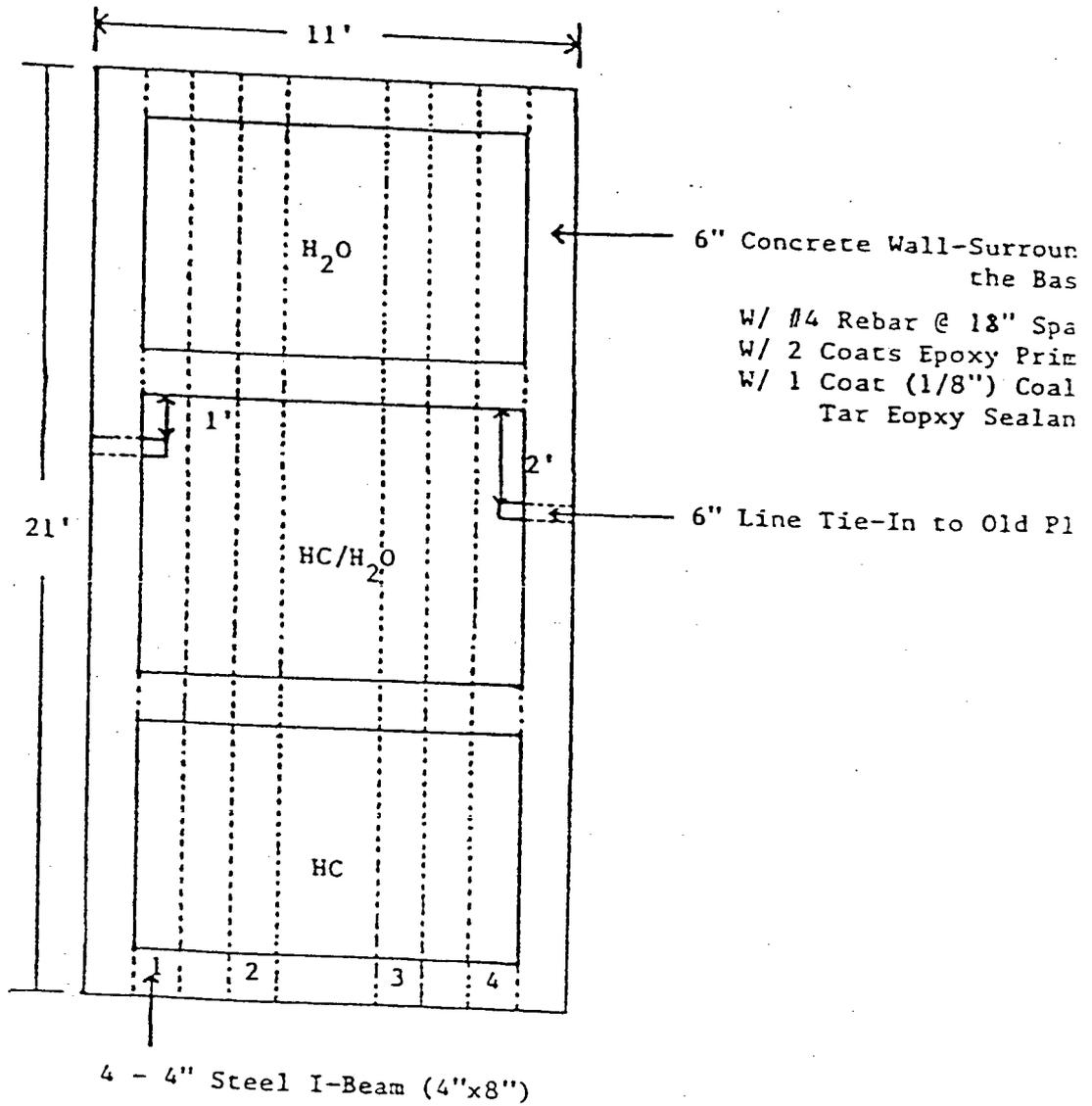
APPENDIX E

WATER WELL LOG

APPENDIX F

SKIMMER BASIN

HC/Water Skimmer Basin



Basin Cover: 3/8" Corrugated Carbonsteel Plating. Cover Rests on the I-Beams.



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

Jennifer A. Salisbury
CABINET SECRETARY

Oil Conservation Div.
Environmental Bureau
2040 S. Pacheco
Santa Fe, NM 87505

Memorandum of Meeting or Conversation

Telephone [X]
Personal
E-Mail [X]
Time: 11 am
Date: January 7, 2000

Originating Party: Wayne Price-OCD

Other Parties: Neal Goates- Conoco Inc. E-Mail r-neal.goates@usa.conoco.com

Subject: Discharge Plan Renewal Notice for the following Facilities:

Table with 4 columns: ID, Name, Status, Date. Row 1: GW-020, Maljamar, expires, 06/10/2000. Subsequent rows: GW- Name expires.

WQCC 3106.F. If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved.

Discussion: Discussed WQCC 3106F and gave notice to submit Discharge Plan renewal application with \$50.00 filing fee for the above listed facilities.

Conclusions or Agreements:

Signed: [Signature]

CC: r-neal.goates@usa.conoco.com

FAX 915-686-5468

FAX 281-273-1214 E-MAIL JOYCE.M. WOODFIN@USA.CONOCO.COM

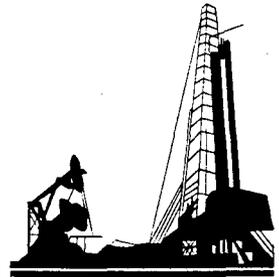
P.O. Box 2197 Ho. TX 77252

ALL PLANTS IN N.M.

Called Joyce Woodfin 3:36 pm 1/14/2000
281-273-4498

OIL CONSERVATION DIVISION

**2040 South Pacheco
Santa Fe, NM 87505
(505) 827-7133
Fax: (505) 827-8177**



(PLEASE DELIVER THIS FAX)

To: NEAL GOATES - CONOCO

From: OCD

Date: 1/07/2000

Number of Pages (Includes Cover Sheet) 2

Message: NEAL: WOULD YOU PASS THIS TO
WHO HANDLES THE MAKJAMAN PLANT

**If you have any trouble receiving this, please call:
(505) 827-7133**



Rick McCalip
Director - Safety , Health & Env. Services
Safety and Environmental Services
Natural Gas and Gas Products

Conoco Inc.
P.O. Box 2197, HU3000
Houston, TX 77252
(713) 293-1123
Fax: (713) 293-1214

Certified Mail P 365 854 517
Return Receipt Requested

November 29, 1994

Mr. Roger Anderson, Chief
Oil Conservation Division
Energy and Minerals Department
State Land Office Building
P.O. Box 2088
Sante Fe, NM 87504

RECEIVED
DEC 09 1994
OIL CONSERVATION DIV.
SANTA FE

**RE: Request for GW-20 Discharge Plan Renewal
Maljamar Gas Plant
Lea County, New Mexico
Conoco Inc., Natural Gas & Gas Products Department**

Dear Mr. Anderson:

Discharge Plan GW-20 for the Maljamar Gas Processing Plant was last renewed on June 6, 1990. The current plan approval expires on June 6, 1995.

In accordance with Section 3-109 of the New Mexico Water Quality Control Commission Regulations and the current approval, Conoco Inc. hereby requests the discharge plan approval be renewed. Enclosed are two copies of the draft updated plan.

There has been an increase in the amount of gas processed at this facility. During the past five years, volumes have increased from 30 MMCFD to 55 MMCFD. Corresponding to this gas volume increase is a proportional increase in the amount of water generated from inlet scrubbers and separators. Hence, the water volume has increased to 64 B/D from 35 B/D during 1990 (see Appendix D - Plant Water Balance).

Section VI, Quality of Effluent, will contain analyses of wastewater from the plant. The wastewater analysis is currently being performed, and the test results will be forwarded as soon as they are available.

If you have any questions or require additional information, please call Chris Hansen at (713) 293-1124. Thank you for your assistance.

Sincerely,

Rick McCalip

Rick McCalip

OR

*CHRIS HANSEN
(713) 293-1124*

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87501

**DISCHARGE PLAN APPLICATION FOR NATURAL GAS PROCESSING PLANTS,
OIL REFINERIES AND GAS COMPRESSOR STATIONS**

(Refer to OCD Guidelines for assistance in completing the application.)

- I. TYPE: Gas Processing
- II. OPERATOR: Conoco Inc.
ADDRESS: P.O. Box 2197-HU3000, Houston, TX 77252-2197
CONTACT PERSON: Rick McCalip PHONE: (713)293-1123
- III. LOCATION: SE /4 SW /4 Section 21 Township 17S Range 32E
Submit large scale topographic map showing exact location.
- IV. Attach the name and address of the landowner(s) of the facility site.
- V. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
- VI. Attach a description of sources, quantities and quality of effluent and waste solids.
- VII. Attach a description of current liquid and solid waste transfer and storage procedures.
- VIII. Attach a description of current liquid and solid waste disposal procedures.
- IX. Attach a routine inspection and maintenance plan to ensure permit compliance.
- X. Attach a contingency plan for reporting and clean-up of spills or releases.
- XI. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact fresh water. Depth to and quality of ground water must be included.
- XII. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
- XIII. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Rick McCalip Title: Director - Safety, Health, & Env.
Services

Signature: Rick McCalip Date: 12-1-94

DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.

**Discharge Plan GW-20
Maljamar Gas Plant**

I. TYPE OF OPERATION

The Maljamar gas plant recovers ethane, propane, butane and condensate from a raw natural gas liquid stream. The natural gas product is sold via pipeline to the Gas Company of New Mexico. Liquid products are transported via Chaparral pipeline to Mont Belvieu, Texas.

II. OPERATOR/LEGALLY RESPONSIBLE PARTY & LOCAL REPRESENTATIVE

a. Natural Gas & Gas Products Environmental Contact

Rick McCalip
Director of Safety & Environmental Services
Conoco Inc., Natural Gas and Gas Products Department
P.O. Box 2197 - Humber 3000
Houston, Texas 77252-2197
(713) 293-1123

b. Site Contact

David Westmoreland
Plant Manager
Conoco - Maljamar Gas Processing Plant
P.O. Box 90
Maljamar, New Mexico 88264
(505) 676-2961

III. LOCATION OF DISCHARGE/FACILITY DESCRIPTION

The facility is located 3 miles south of Maljamar off Farm Road 126. The legal description is Sections 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

A topographical map has been included in Appendix A.

IV. LANDOWNERS

The Maljamar plant has been fully owned and operated by Conoco Inc. since 1960.

V. FACILITY DESCRIPTION

The Maljamar Gas Processing Plant is designed to recover gas liquids (ethane, propane, butane and condensate) from six low pressure gas gathering systems and one high

pressure gathering system¹. The plant throughput is approximately fifty-five (55) million cubic feet per day (MMCFD). The processed product is delivered to Mont Belvieu, Texas via Chaparral Pipeline for sale.

A site plan has been included in Appendix B.

VI SOURCES, QUANTITIES & QUALITY OF EFFLUENT & WASTE SOLIDS

A. Types of Effluent

Wastewater is generated from sanitary usage in the field office, plant process and cooling. The wastewater from the office is collected in a septic system for treatment and disposal. The plant wastewater is reinjected at the Conoco water flood project.

The plant process waters are made up of water from the plant drains, inlet scrubbers, and engine room wash water.

B. Effluent Quantity

Plant drains, inlet scrubbers, and engine room wash water discharge to the skimmer basin. Any oil is separated in the skimmer basin and is pumped to an adjacent storage tank. Skimmer basin water, approximately eighty-four (84) barrels per day, is pumped to Conoco's waterflood project for reinjection. The 84 barrels per day is the combination of 20 barrels used in the plant and engine room water and 64 barrels from inlet scrubbers and separators. See Appendix C - Plant Water Balance.

C. Quality Characteristics

See wastewater analysis.

VII TRANSFER & STORAGE OF PROCESS FLUIDS & EFFLUENT

See VIII Effluent Disposal.

VIII EFFLUENT DISPOSAL

As described above, the two sources of effluent at the site are sanitary sewage and plant process water. The effluent disposal for each is described below.

¹Ajax, Anderson Ranch, Caprock, Greenwood, Lusk, Skelly, and Mescallero (high pressure).

A. Sanitary Sewage Treatment

The sanitary wastewaters from the facility are discharged into three 1200 gallon septic tanks. Waste discharged to these tanks does not come in contact with any chemical treatment. All tanks in the septic system are discharged to leach fields.

B. Plant Process Waters and Oil

The plant process water is separated in the skimmer basin and then pumped to the Conoco production water flood project. A schematic of the skimmer basin used for the engine room wash water is found in Appendix D. The water flood project is adjacent to the plant where it is reinjected in accordance with the Oil Conservation Commission Orders. The oil that is separated in the skimmer basin is stored in an adjacent storage tank prior to being trucked to Navajo Oil Refining in Artesa, N.M.

IX INSPECTION, MAINTENANCE AND REPORTING

The facility is visually inspected by field personnel for possible malfunctions on each eight hour shift.

X SPILL/LEAK PREVENTION & REPORTING (CONTINGENCY PLANS)

The Maljamar Gas Plant uses pump transfer and wastewater injection to dispose of plant process and cooling waters. The total wastewater handled is approximately eighty-four (84) bbls/day.

The skimmer basin, tanks #13, #14, and five slop tanks would be utilized for storage in the event of a pump failure or discontinuance. The slop tanks have a storage capacity of 150 bbls. Two are empty and reserved for emergency use. In addition, one tank has a storage capacity of 500 bbls. Total tank capacity is 1,360 barrels, which allows for up to five (5) days of wastewater and slop oil production. Under such circumstances, wastewater would be hauled offsite to a commercial injection well for disposal.

XI SITE CHARACTERISTICS

A. Hydrological Features

Within one mile of the Maljamar Gas plant, there are no bodies of water, streams or other watercourses. In addition, no groundwater discharge sites (marshes, springs, seeps etc.) or water wells are located within one mile of the facility.

Appendix E contains a water well log taken in the close proximity to the site. This log was run in 1980 and indicated that the upper most aquifer is located 70-150' below the surface. Analysis of the water quality is not available. As a result, it is

not possible to determine if this aquifer meets drinking water standards.

This well log is consistent with the 1961 United States Geologic Survey Ground-Water Report 6 that documented water in this area to be 60-176' below surface². The source of water was documented to be sand and gravel (alluvial) of the Tertiary and Quaternary age.

B. Geologic Description of Discharge Sites

1. The predominant soil type in the area is a silty sand.
2. Name of aquifer(s)

The primary and top most aquifer in the area is in the Ogallala formation. The shallower Alluvium and the Ogallala geologic units form this continuous aquifer.

C. Flood Protection

The area of New Mexico in which the plant is located is classified as semi-arid to arid. The annual precipitation is 12-13". The surrounding topography, annual precipitation history and Conoco Inc.,'s 34 years of experience as plant operator show no significant flood potential at this site.

²Nicholson, Alexander and Alfred Clebsch (1961). *Geology and Ground-Water Conditions in Southern Lea County, New Mexico.*

APPENDIX A
TOPOGRAPHICAL MAP

R 31 E

R 32 E

MALJAMAR QUADRANGLE
NEW MEXICO
S.E. 1/4 OF 15 MINUTE SERIES (TOPOGRAPHIC)

CONT. ON DWG. 4-161-90005

T 16 S

T 16 S

T 17 S

T 17 S

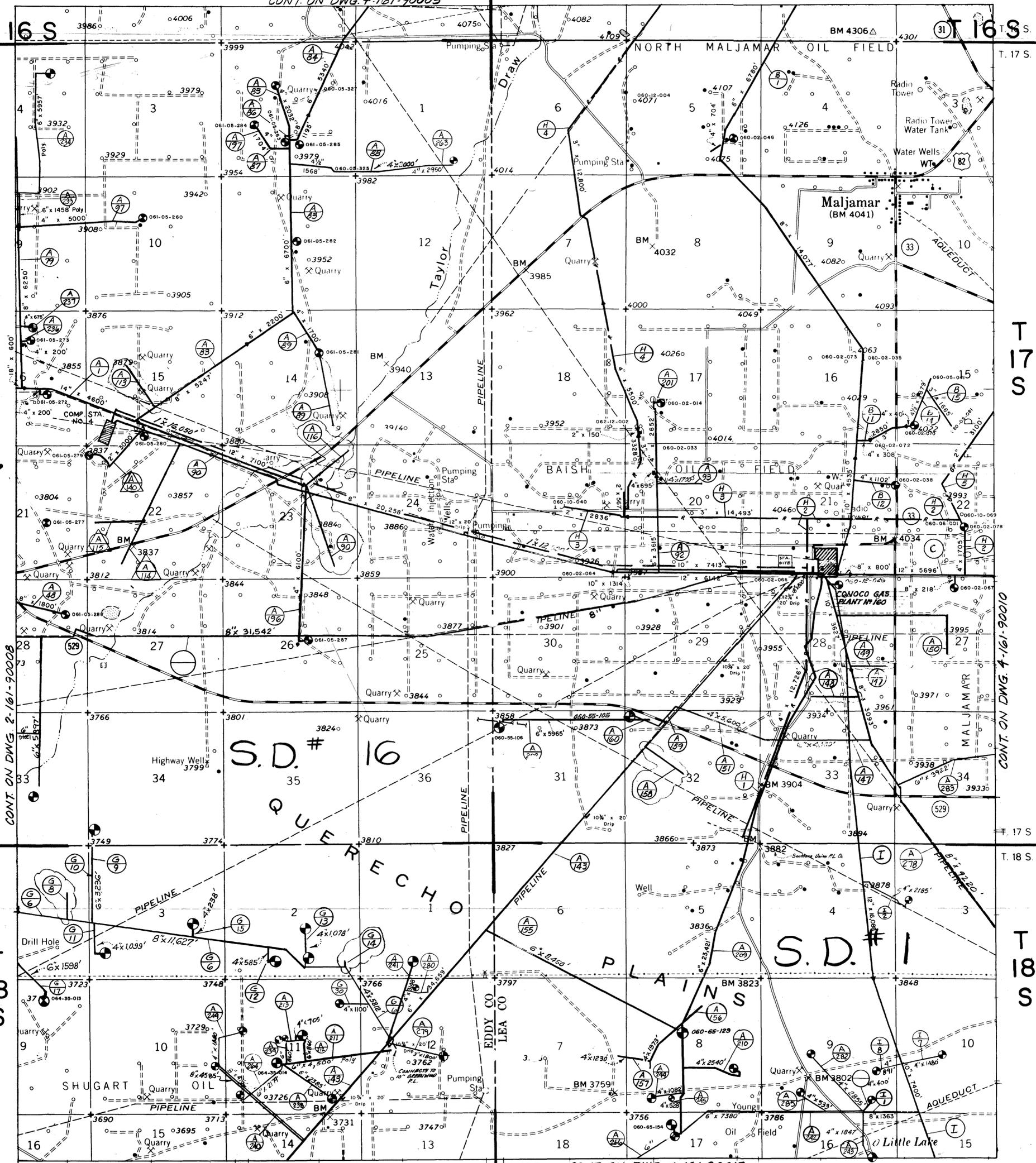
T 18 S

T 18 S

R 31 E

R 32 E

CONT. ON DWG. 4-161-90012



CONT. ON DWG. 2-161-90008

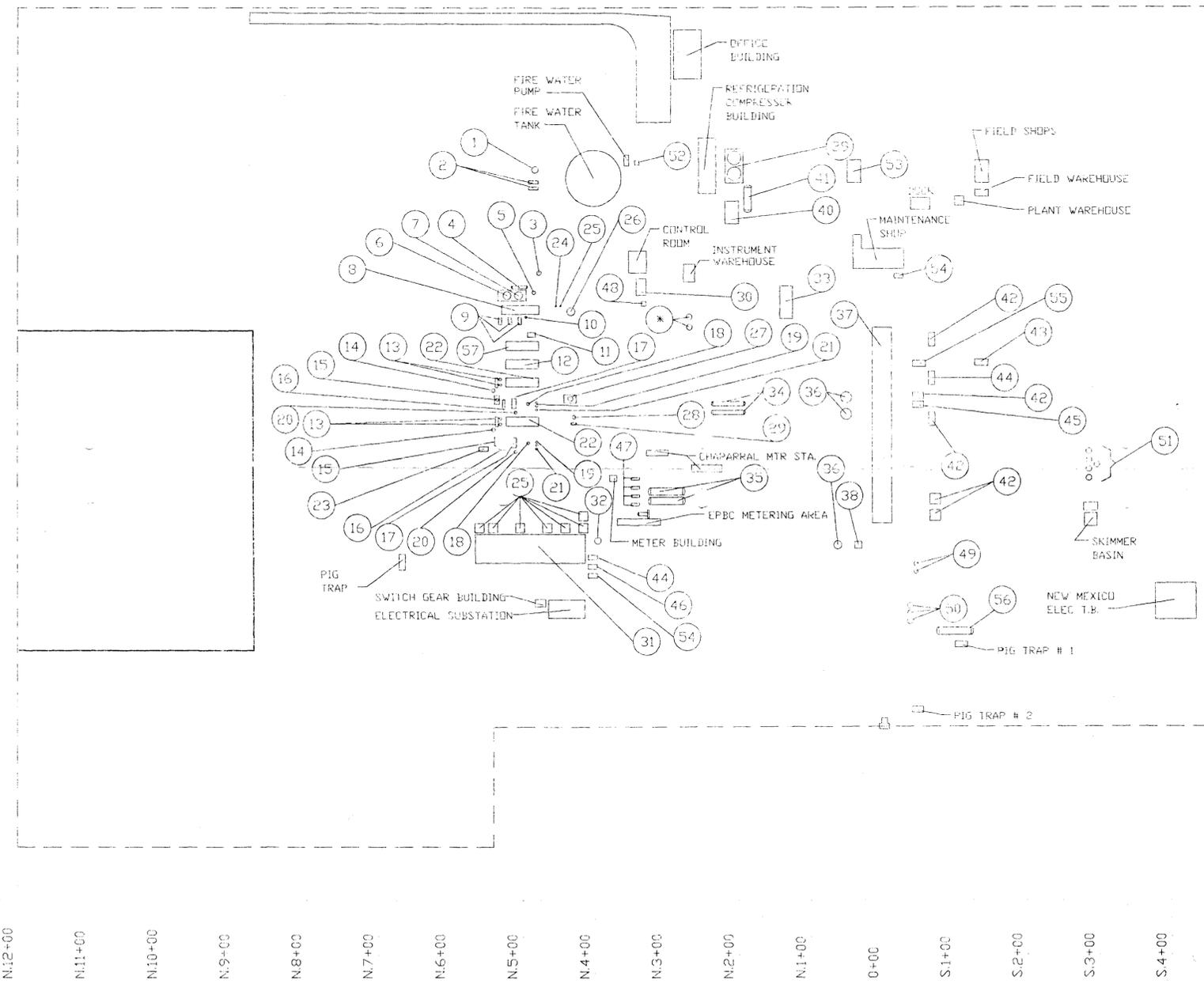
CONT. ON DWG. 4-161-90010

CONOCO INC.
NATURAL GAS PRODUCTS DEPARTMENT
HOUSTON, TEXAS

S.E. MALJAMAR QUADRANGLE
T 16 S-T 18 S, R 31 E-R 32 E
LEA & EDDY COUNTIES, NEW MEXICO
SCALE 1" = 2000' ISSUE 12-31-73

NCCP 161-90000

APPENDIX B
FACILITY SITE PLAN



ITEM	NUMBER	EQUIPMENT	CHEMICAL INVENTORY
1	H-760	HOT OIL HEATER (111 MMBTU/HR)	HEAT TRANSFER OIL
2	H-750	REGEN GAS HEATERS (1.85 MMBTU/HR) (2)	RESIDUE GAS
3	TK-930	AMINE SUMP	DEA, WATER
4	E-520	AMINE STILL REBOILER	HOT OIL, DEA, WATER
5	T-1300	DEA STILL	DEA, H ₂ S, CO ₂ , WATER
6	AC-700	AMINE COOLER	DEA, WATER
7	AC-705	AMINE STILL CONDENSER	STEAM, H ₂ S, CO ₂
8		AMINE SKID	DEA, RESIDUE GAS, H ₂ S, CO ₂ , WATER HEAT TRANSFER OIL, ANTIFOAM INHIBITOR
		- RICH DEA FLASH TANK	
		- DEA FILTER	
		- AMINE SURGE TANK	
		- ANTIFOAM INHIBITOR PUMP	
		- ANTIFOAM INHIBITOR TANK	
		- AMINE EXCHANGER	
		- HOT OIL EXPANSION TANK	
9		AMINE CIRCULATING TANK	DEA, WATER
10	F-830	AMINE CHARCOAL FILTER	DEA, ACTIVATED CARBON
11		SAND FILTER	DEA
12		REFRIGERATION SKID #2	PROPANE, RAW GAS, EPBC
		- PROPANE CHILLER	
		- COLD SEPARATOR	
13	V-110	DEHYDRATORS (2 PER TRAIN; TOTAL OF 4)	RAW GAS, MOLESIEVE
14	F-810	INLET GAS FILTER/SEPARATORS (2)	RAW GAS, WATER
		(ON PROCESS SKIDS)	
15	AC-710	REGEN GAS COOLERS (2)	RESIDUE GAS, AIR
16	V-150	TREATED GAS SEPARATORS (2)	RAW GAS, WATER
17	KX-600	EXPANDER/COMPRESSORS (2)	RAW GAS
18	T-1000	DEMETHANIZERS (2)	RAW GAS, EPBC, RESIDUE GAS
19	P-10A/B	DEMETHANIZER PRODUCT PUMPS (4)	EPBC
20	TK-600	EXPANDER OIL SUMP TANK	LUBE OIL
21	V-260	FUEL GAS SCRUBBERS (2)	RESIDUE GAS
22		PROCESS SKIDS #1 & 2 (ITEMS PER SKID)	RAW GAS, WATER, EPBC
		- INLET GAS FILTER SEPARATOR	
		- INLET GAS DUST FILTER	
		- REGENERATION GAS COMPRESSOR	
		- WARM GAS/GAS EXCHANGER	
		- COLD GAS/GAS EXCHANGER	
		- PRODUCT HEATER	
		- DEMETHANIZER REBOILER	
		- DEMETHANIZER SIDE HEATER	
		- COLD SEPARATOR	
		- INLET GAS COOLING FAN	
23		METHANOL STORAGE TANK	METHANOL
24	P-47,45	AMINE/WATER MAKE-UP PUMPS (2)	DEA, WATER
25		DISCHARGE COOLERS (7)	RAW GAS, RESIDUE GAS
26	TK-910	AMINE STORAGE TANK	DEA
27	AC-715	RESIDUE GAS COOLER	RESIDUE GAS, AIR
28	T-1200	AMINE CONTACTOR	RAW GAS, DEA, WATER
29	E-500	AMINE UNIT - INLET GAS EXCHANGER	RAW GAS, HOT OIL
30		INSTRUMENT AIR BUILDING	INSTRUMENT AIR
31		COMPRESSOR BUILDING	RAW GAS, LUBE OIL
		- GAS DRIVEN INLET COMPRESSOR	
		- ELECTRIC DRIVEN RESIDUE COMPRESSOR	
		- ELECTRIC DRIVEN INLET/RES COMPRESSOR	
		- ELECTRIC DRIVEN INLET COM. SSORS (2)	
32		COMPRESSOR BUILDING SUMP	WASTE OIL
33		INTERSTAGE COOLING FANS	RAW GAS, AIR
34		VAPOR RECOVERY TANKS (2)	WASTE OIL, LIGHT HYDROCARBONS
35	V-300	RAW PRODUCT STORAGE TANKS (2)	EPBC
36		INTERSTAGE SCRUBBERS (3)	RAW GAS
37		CLARK COMPRESSOR BUILDING	RAW GAS, LUBE OIL
		- RESIDUE COMPRESSOR	
		- INLET COMPRESSORS (7)	
38		COMPRESSOR BLDG. (#37) SUMP	WASTE OIL
39	AC-620	PROPANE CONDENSER	PROPANE
40		REFRIGERATION SKID #1	PROPANE, RAW GAS, LUBE OIL
		- PROPANE SUB-COOLER	
		- ECONOMIZER	
		- PROPANE SUCTION SCRUBBER	
		- LUBE OIL COALESCER	
41	V-541	PROPANE ACCUMULATOR	PROPANE
42		WATER/LUBE OIL COOLERS (5)	WATER, LUBE OIL, AIR
43		ENGINE OIL STORAGE TANKS (2)	ENGINE OIL
44		ANTIFREEZE STORAGE TANKS	ETHYLENE GLYCOL
45		KETONE CHEMICAL STORAGE	
46		COMPRESSOR OIL STORAGE TANK	COMPRESSOR OIL
47		EPBC PIPELINE PUMPS (4)	EPBC
48		KEROSENE STORAGE TANK	KEROSENE
49		LOW PRESSURE SCRUBBERS (2)	RAW GAS
50		INLET SCRUBBERS (3)	RAW GAS
51		SLOP OIL TANKS (5)	WASTE OIL
52		DIESEL STORAGE TANK	DIESEL
53		GASOLINE STORAGE TANK	UNLEADED GASOLINE
54		SOLVENT STORAGE TANKS (2)	MINERAL SPIRITS
55		WATER STORAGE TANK	WATER
56		SLUG CATCHER	RAW GAS, WATER, LIGHT HYDROCARBON
57		REFRIGERATION SKID	PROPANE, RAW GAS, EPBC

* EQUIPMENT OUT OF SERVICE

F	REVISED PER MARK-UPS 10FEB94 JWU WCB	D	ISSUE FOR APPROVAL 10FEB92 MSR T. KILLIAN	B	ISSUE FOR APPROVAL 2/3/90 BKJ T. KILLIAN	CONOCO INC. NATURAL GAS & GAS PRODUCTS DEPARTMENT	MALJAMAR GASOLINE PLANT CHEMICAL INVENTORY	SCALE: 1" = 100'-0" LOCATION: LEA COUNTY, N.M. FILE NO: MJ29001 NG&GP-MJ-29001
E	ISSUED FOR APPROVAL 29JAN93 JWU WCB	C	ISSUE FOR APPROVAL 28FEB91 BKJ T. KILLIAN	A	ISSUE FOR APPROVAL 2/3/88 BKJ T. KILLIAN			
ISSUE	DATE	DRAWN	DESIGNED	CHECKED	APPROVED			

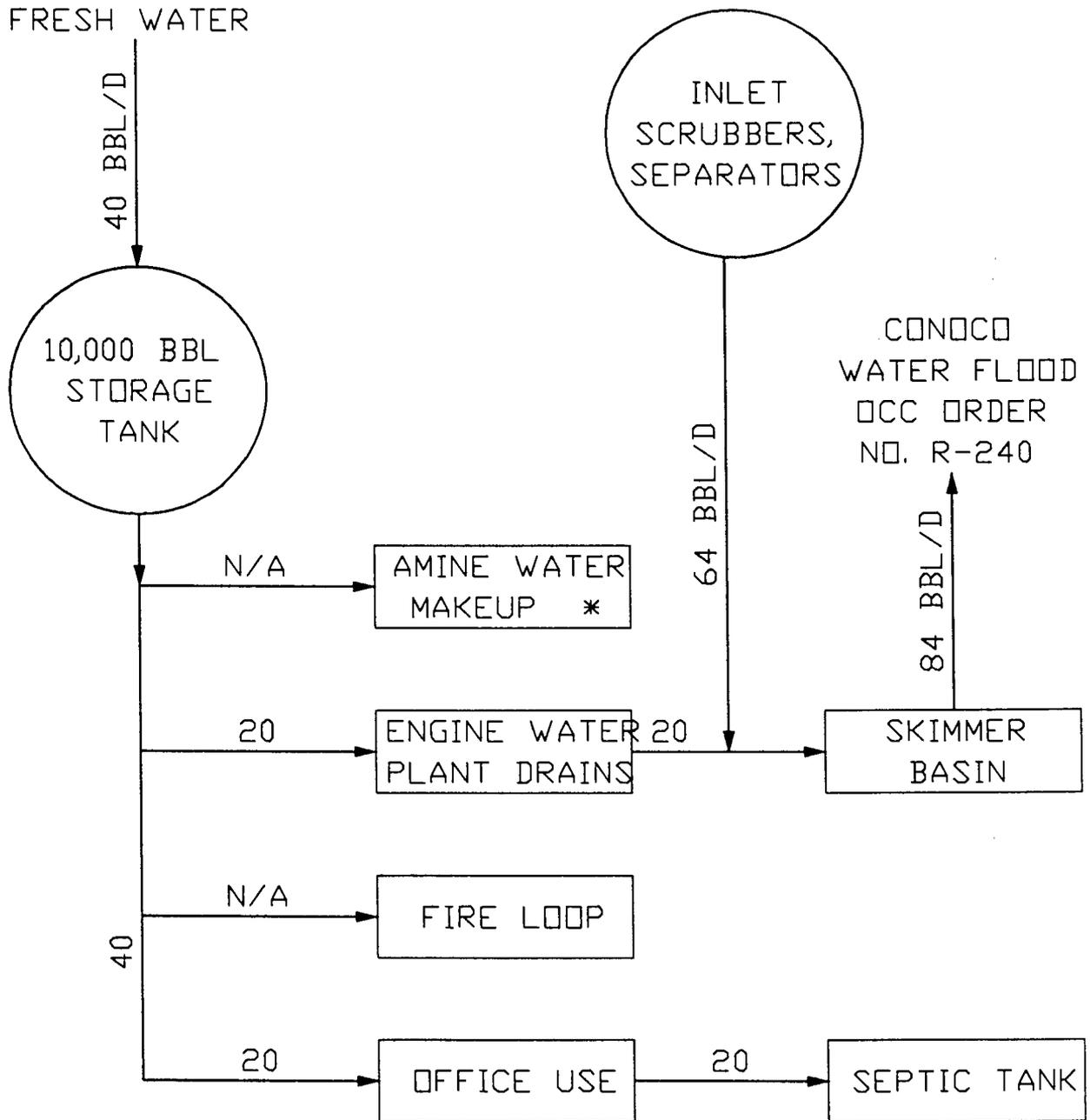
APPENDIX C

PLANT WATER BALANCE

LIQUID WASTE DRAINAGE SYSTEM

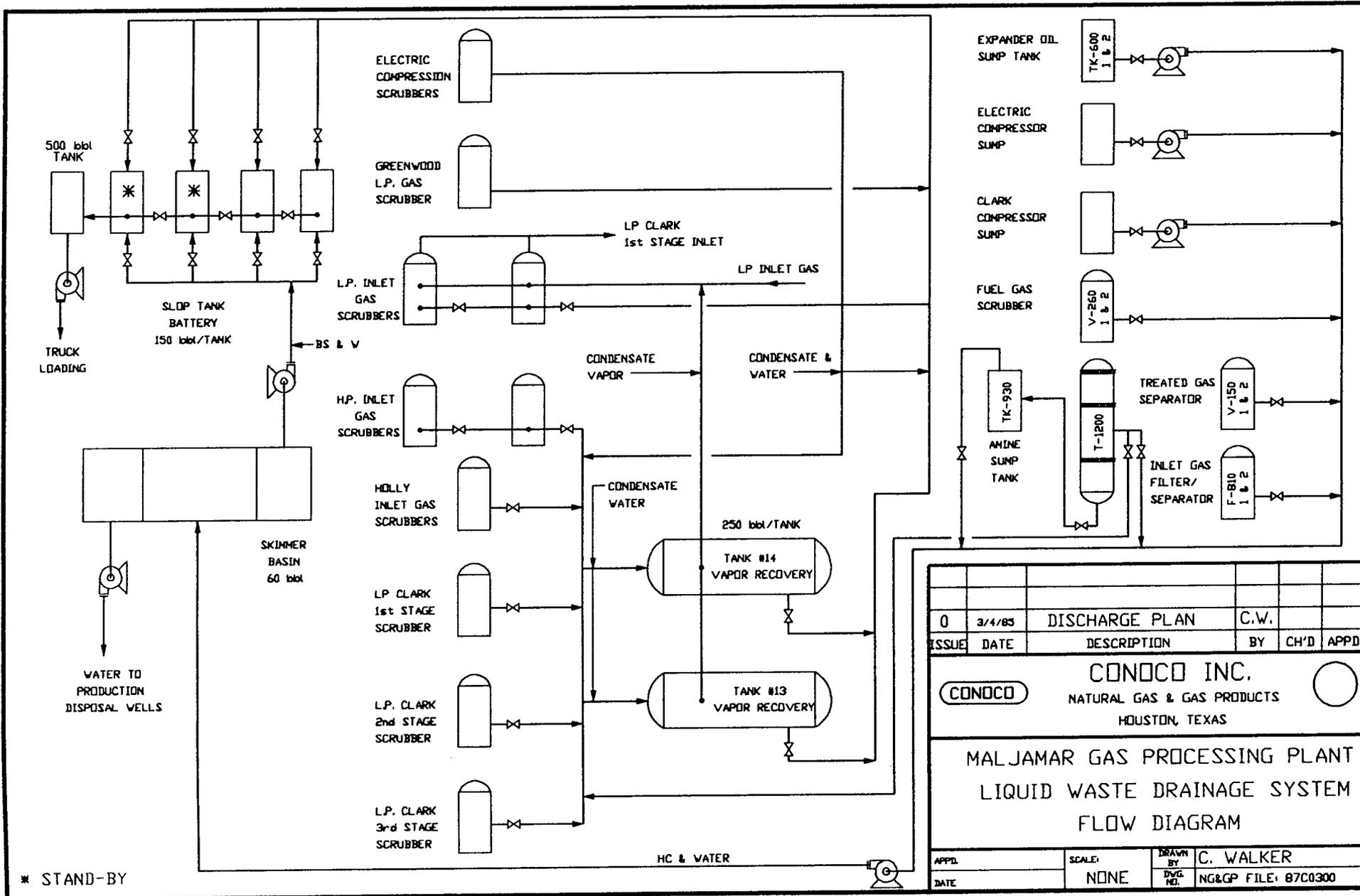
AMINE WASTE CONTAINMENT & DRAINAGE SYSTEM

PLANT WATER BALANCE MALJAMAR GAS PLANT



* CLOSED SYSTEM

NG&GP FILE: 87C0299-2



0	3/4/83	DISCHARGE PLAN	C.W.		
ISSUE	DATE	DESCRIPTION	BY	CH'D	APP'D

CONOCO INC.
 NATURAL GAS & GAS PRODUCTS
 HOUSTON, TEXAS

MALJAMAR GAS PROCESSING PLANT
 LIQUID WASTE DRAINAGE SYSTEM
 FLOW DIAGRAM

APP'D.	SCALE:	DRAWN BY:	C. WALKER
DATE	NONE	DWG. NO.:	NG&GP FILE: 87C0300

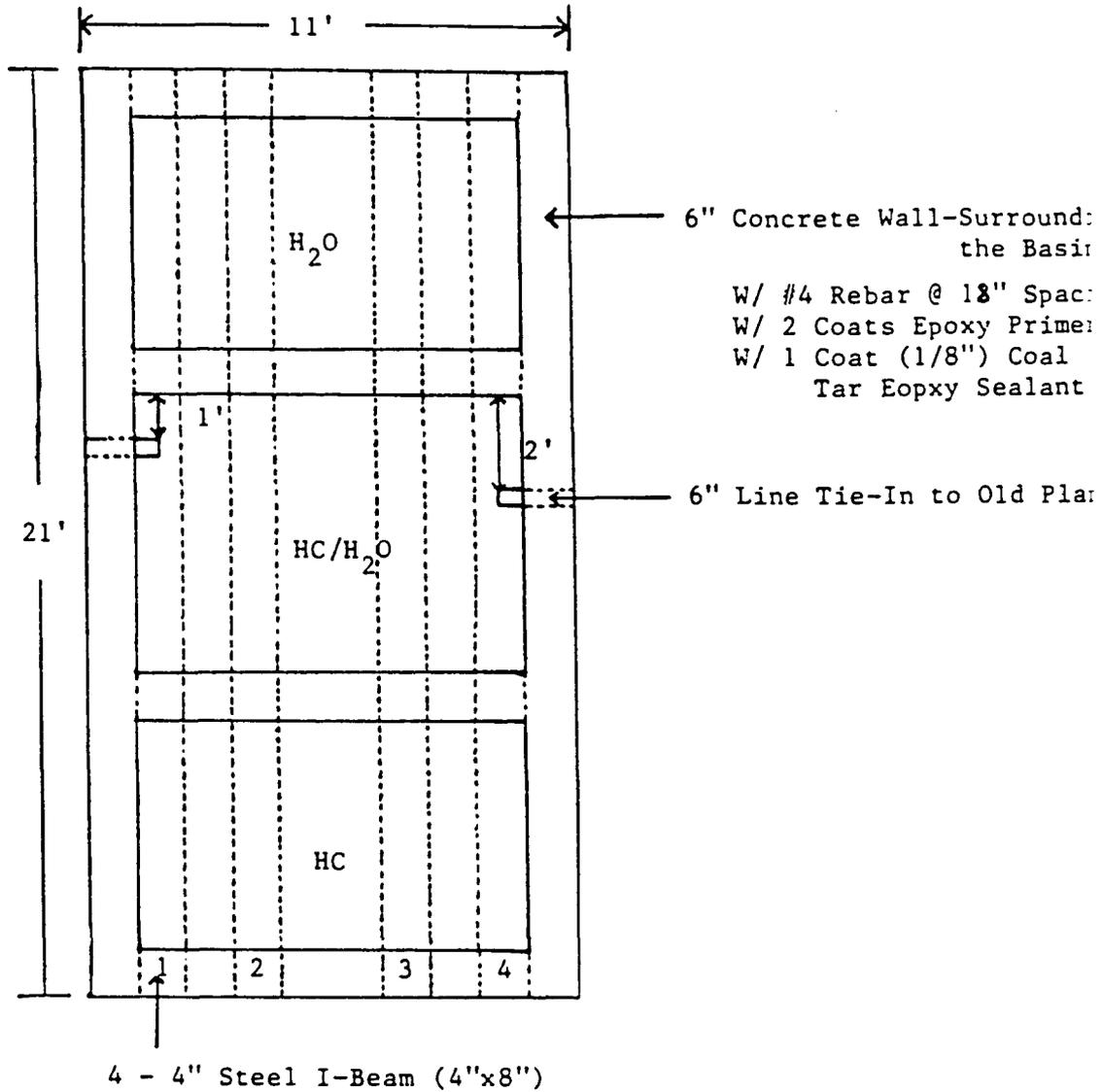
* STAND-BY

APPENDIX D
SKIMMER BASIN

MALJAMAR GAS PLANT

Skimmer Basin: Plan View

HC/Water Skimmer Basin

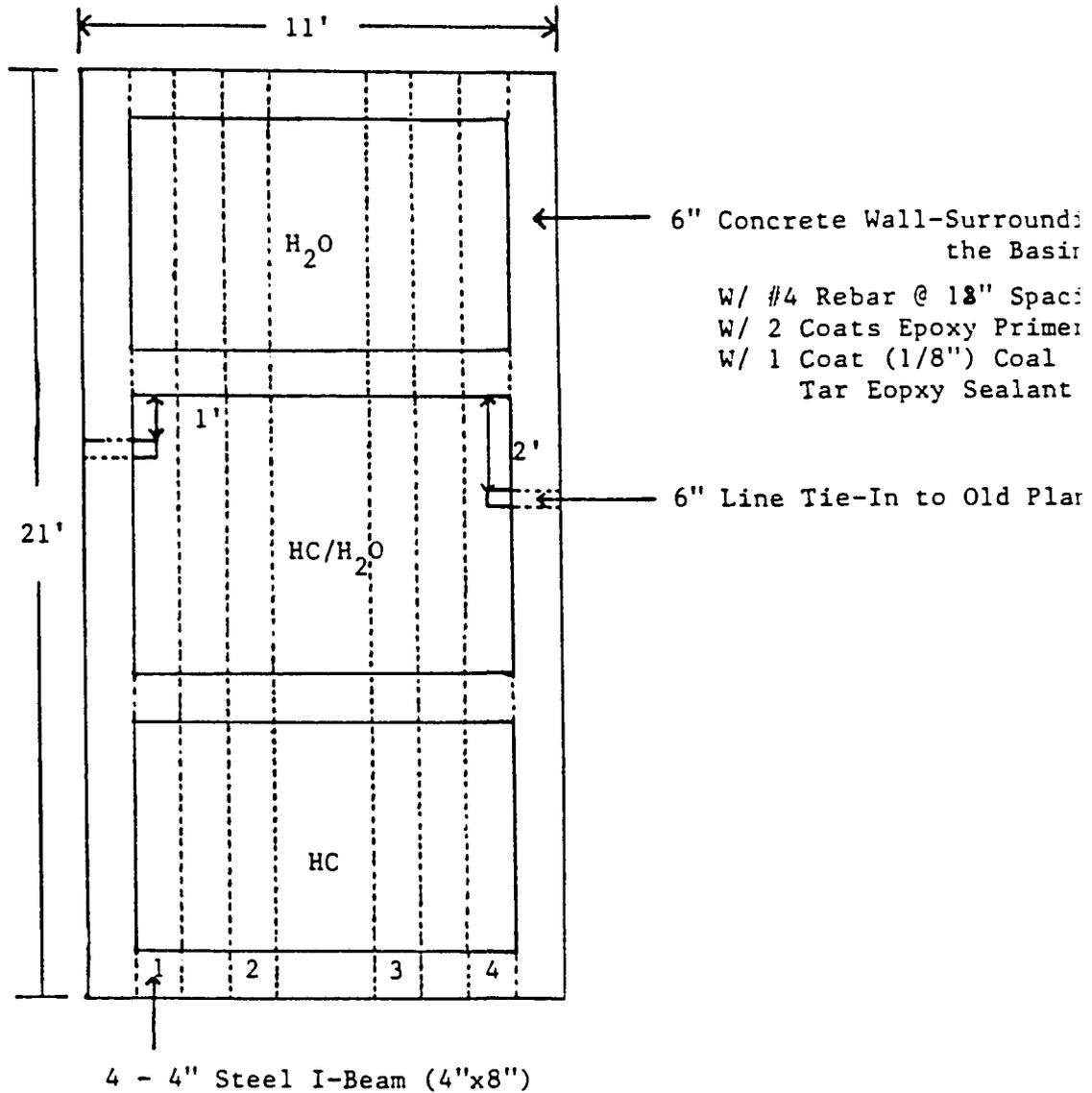


Basin Cover: 3/8" Corrugated Carbonsteel Plating. Cover Rests on the I-Beams.

MALJAMAR GAS PLANT

Skimmer Basin: Plan View

HC/Water Skimmer Basin



Basin Cover: 3/8" Corrugated Carbonsteel Plating. Cover Rests on the I-Beams.

APPENDIX E

WELL LOG

WELL NAME WILLIAM MITCHELL "B" NO. 20 FIELD BAISH-MALJAMAR-PEARSALL DATE 9/22/80

LOCATION EST. GRD 3963' KB 3975' PROPOSED T.D. 4200'

LOCATION (SURFACE) 660' FSL & 1980' FEL OF SECTION 18 T-17S R-32E

COUNTY LEA STATE NM SPACING

GEOLOGICAL ESTIMATES

<u>ZONE</u>	<u>TOP</u>	<u>CONTENT</u> (O=Oil, G=Gas, W=Water)
WATER SS.	70'-150'	FRESH WATER
RUSTLER ANHY.	700'	-
SALADO SALT	810'	-
BASE SALT	1870'	-
YATES SS.	2030'	O,W,G
SEVEN RIVERS DOLO.	2390'	O,W,G
QUEEN SS.	2990'	O,W,G
GRAYBURG DOLO.	3390'	O,W,G
SAN ANDRES DOLO.	3770'	O,W,G

LOG SURVEYS - (List types by code numbers as follows: Directional and/or Deviation (1); Deflection (2); Caliper (3); Temperature (4); Electrical (5); Radioactive (6); Geolograph (7); Photoclinometer (8); Mudlogging (9); Other (10) and name of that type)

<u>DEPTH POINTS</u>	<u>TYPE</u>	<u>HOLE SIZE</u>	<u>REMARKS</u>
0'-4200'	(7) Geolograph	17-1/2" & 7-7/8"	One every 250' to base of salt. One every 500' thereafter.
0'-4200'	(1) Deviation	17-1/2" & 7-7/8"	
2000'-4200'	(5) DLL-GR	7-7/8"	2" & 5" Scales
2000'-4200'	(6) FDC-CNL-GR-CAL	7-7/8"	2" & 5" Scales
2000'-4200'	(6) PDC(GR-COLLAR)	5-1/2" Casing	Depth Control
0'-4200'	(4) Temperature	5-1/2" Casing	Determine top of cement if necessary

CONTRACTOR TO FURNISH WATER, CONTRACTOR TO FURNISH FUEL.

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 3/21/95

or cash received on 3/29/95 in the amount of \$ 50.00

from CONOCO, INC

for MALJAMAR GAS PLANT GW-020

(Facility Name)

(OP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: ROGER ANDERSON Date: 3/29/95

Received in ASD by: _____ Date: _____

Filing Fee New Facility Renewal

Modification Other _____

(specify)

Organization Code 521.07 Applicable FY 95

To be deposited in the Water Quality Management Fund.

Full Payment or Annual Increment



No. [REDACTED]

62-31

CONOCO INC
PONCA CITY, OK 74602

To: Citibank Delaware
New Castle, DE

MARCH 21, 1995

*** VOID AFTER 90 DAYS ***

Vendor Code: 165931R02

Exactly *****\$50.00**

Pay
To the
Order
of



NMED - WATER QUALITY
MANAGEMENT
2040 S PACHECO ST
SANTA FE

NM 87505-5472

Bob E. Soyent

Authorized Signature





Rick McCalip
Director - Safety , Health & Env. Services
Safety and Environmental Services
Natural Gas and Gas Products

Conoco Inc.
P.O. Box 2197, HU3000 OIL CONSERVATION DIVISION
Houston, TX 77252
(713) 293-1123
Fax: (713) 293-1214

1995 MAR 24 PM 8 52

Certified Mail P 365 856 056
Return Receipt Requested

March 16, 1995

William J. LeMay, Director
Environmental Bureau
Oil Conservation Division
2040 S. Pachero
Sante Fe, NM 87505

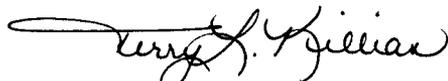
**RE: Fee Payment for GW-20 Discharge Plan Renewal
Maljamar Gas Plant
Lea County, New Mexico
Conoco Inc., Natural Gas & Gas Products Department**

Dear Mr. LeMay:

Enclosed are checks for \$1667.50 and \$50.00 for renewal of Discharge Plan GW-20 for the Maljamar Gas Processing Plant.

If you have any questions or require additional information, please call Chris Hansen at (713) 293-1124. Thank you for your assistance.

Sincerely,


for Rick McCalip

Vendor Code: 165931R02

Company: 001 - CONOCO INC

Check No. : [REDACTED]

S H	Voucher Reference	Invoice Date	Invoice Number	1099 CD	Gross Amount	ADJ CD	Adjustmen Amount	Discount Amount	Net Amount
--------	----------------------	-----------------	-------------------	------------	-----------------	-----------	---------------------	--------------------	---------------

VENDOR NAME: NMED - WATER QUALITY

IN CASE OF QUESTIONS ABOUT THE FOLLOWING INVOICES, PLEASE CALL (713) 293-1643

S 0306115DC0798026 19950316 RQC97760

50.00

.00

.00

50.00

*NEW MEXICO DISCHARGE PLAN RENEWED (MALJAMAR PLANT)

* * * INQUIRIES ON ABOVE INVOICES SHOULD BE DIRECTED TO PHONE NO. LISTED ABOVE
TO CHANGE VENDOR NAME OR ADDRESS ONLY -- PLEASE CALL (405) 767-4342

TOTAL NET AMOUNT

\$50.00

1099 CODES - R=RENTAL L=ROYALTIES P=PERSONAL SERVICES M=MEDICAL I=INTEREST F=FOREIGN VDR PYMT N=NET PROFIT
D=PERMIT/DAMAGE G=PRIZES/AWARDS C=BWP REFUND/INTEREST B=BWP REFUND/MISC A=NON-REPORTABLE TYPES
ADJ CODES - Q=WRONG QUANTITY P=WRONG PRICE C=WRONG CALCULATION M=MULTIPLE ERRORS F=CORRECTED FREIGHT CHARGES
D=CORRECTED DISCOUNT T=TAX REMOVAL B=BACKUP WITHHOLDING OF 31% PER IRS REGULATIONS O=OTHER

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 3/14/95,
or cash received on 3/29/95 in the amount of \$ 1667.50
from CONOCO, INC.

for MALTAMAR GAS PLANT GW-020
(Facility Name) (OP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: ROGER ANDERSON Date: 3/29/95

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal

Modification _____ Other _____
(specify)

Organization Code 52107 Applicable FY 95

To be deposited in the Water Quality Management Fund.

Full Payment or Annual Increment _____



No. [REDACTED]

62
31

CONOCO INC
PONCA CITY, OK 74602

To: Citibank Delaware
New Castle, DE

MARCH 14, 1995

*** VOID AFTER 90 DAYS ***

Vendor Code: 165931R02

Exactly *****\$1,667.50**

Pay
To the
Order
Of

|||||
NMED - WATER QUALITY
MANAGEMENT
2040 S PACHECO ST
SANTA FE NM 87505-5472

Robert E. Sargent
Authorized Signature



Vendor Code: 165931R02 Company: 001 - CONOCO INC

Check No.:

S H	Voucher Reference	Invoice Date	Invo Number	1099 CD	Gross Amount	ADJ CD	Adjustment Amount	Discount Amount	Net Amount
--------	----------------------	-----------------	----------------	------------	-----------------	-----------	----------------------	--------------------	---------------

VENDOR NAME: NMED - WATER QUALITY

IN CASE OF QUESTIONS ABOUT THE FOLLOWING INVOICES, PLEASE CALL (713) 293-1643

S	0306115DC072A003	19950309	RQC090760		1,667.50			.00	.00	1,667.50
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*DISCHARGE PLAN RENEWAL GW-20

* * * INQUIRIES ON ABOVE INVOICES SHOULD BE DIRECTED TO PHONE NO. LISTED ABOVE
TO CHANGE VENDOR NAME OR ADDRESS ONLY -- PLEASE CALL (405) 767-4342

TOTAL NET AMOUNT \$1,667.50

1099 CODES - R=RENTAL L=ROYALTIES P=PERSONAL SERVICES M=MEDICAL I=INTEREST F=FOREIGN VDR PYMT N=NET PROFIT
D=PERMIT/DAMAGE G=PRIZES/AWARDS C=BWP REFUND/INTEREST B=BWP REFUND/MISC A=NON-REPORTABLE TYPES
ADJ CODES - Q=WRONG QUANTITY P=WRONG PRICE C=WRONG CALCULATION M=MULTIPLE ERRORS F=CORRECTED FREIGHT CHARGES
D=CORRECTED DISCOUNT T=TAX REMOVAL B=BACKUP WITHHOLDING OF 31% PER IRS REGULATIONS O=OTHER



GW-20

To **ROGER ANDERSON**

From **JEFF DRIVER** *Z*

Date **March 10, 1995**

Subject **PERMISSION TO DISPOSE OF PROCESS CLEANING SOLUTION**

Dear Sir:

Recently we completed a turnaround which involved cleaning of our amine system. We now need to dispose of the cleaning solution that was required to remove particulate from our process equipment. I desire to dispose of 800 bbl of solution and will provide total metal analysis for your evaluation of product. We wish to have your permission to properly dispose of an agent which is necessary to maintain the integrity of our equipment for natural gas processing.

**JEFF DRIVER
MAINT TECH III
MALJAMAR GAS PLANT**

*P.O. BOX 90
MALJAMAR, NM
88264*

JMD



Mobile Analytical Laboratories

1111 UNIVERSITY DR SUITE 1001 MIDLAND & STACY DAM
 WEST UNIVERSITY AND WESTOVER STREET
 P.O. BOX 88210
 ODessa, TEXAS 79789-0210
 PHONE 337-4744
 FAX 337-8781

MARCH 9, 1995

MR. JEFF DRIVER
 CONOCO, INC.
 P.O. BOX 90
 MALJAMAR, NEW MEXICO 88264

DEAR MR. DRIVER:

THE FOLLOWING IS THE RESULT OF THE 15% HCL LIQUID FROM THE MALJAMAR PLANT FOR TOTAL RCRA METALS ANALYSIS, RECEIVED 03-03-95, LAB NO. 530:

TEST REQUESTED	METHOD	TOTAL METALS mg/L NO. 530 SAMPLE RESULTS	Q.C. REF. mg/L	SPIKE RECOVERY
ARSENIC	206.2	< 0.10	0.10	82%
BARIUM	208.2	2.96	0.10	80%
CADMIUM	213.2	0.33	0.10	90%
CHROMIUM	218.2	1.46	0.10	81%
LEAD	239.2	0.79	0.10	89%
MERCURY	245.2	< 0.02	0.02	75%
SELENIUM	270.2	0.15	0.10	66%
	281.2	0.10	0.10	85%

SAMPLE MATRIX: LIQUID

SAMPLES CONTAINING HAZARDOUS AND TOXIC SUBSTANCES WILL BE RETURNED TO THE POINT OF ORIGIN FOR DISPOSAL. IF THIS IS NOT POSSIBLE AND MOBILE LABS HAS TO DISPOSE OF THE SAMPLE IN ACCORDANCE WITH EPA REGULATIONS, THEN ADDITIONAL CHARGES WILL BE BILLED TO COVER THE COST OF DISPOSAL OF THIS SAMPLE.

WE APPRECIATE THE OPPORTUNITY TO WORK WITH YOU ON THESE TESTS. IF YOU HAVE ANY QUESTIONS OR REQUIRE ANY FURTHER INFORMATION, PLEASE FEEL FREE TO CONTACT ME AT ANY TIME.

SINCERELY,

Stephen Reid
 STEPHEN REID
 SR/rk

Post-It™ brand fax transmittal memo 7671 # of pages 2

To: <i>Roger Anderson</i>	From: <i>Jeff Driver</i>
Co.:	Co. <i>CONOCO</i>
Dept.:	Phone # <i>505-676-2965</i>
Fax #:	Fax # <i>505-676-2711</i>



CERTIFICATE OF ANALYSIS

CONOCO, INC.
600 NORTH DAIRY ASHFORD
HOUSTON, TX 77492
CHRIS HANSEN

Date: 12/20/94

Work Order: B4-12-032

This is the Certificate of Analysis for the following samples:

Client Work ID: MALJAMAR PLANT
Date Received: 12/02/94 08:41
Number of Samples: 1
Sample Type: WATER

I. Introduction

Samples were labeled as follows:

<u>SAMPLE IDENTIFICATION</u>	<u>LABORATORY #</u>
GW-20 DISCHARGE	B4-12-032-01

Reviewed and Approved:

Jon Bartell
Jon Bartell
Laboratory Director

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories
American Association for Laboratory Accreditation

5307 Industrial Oaks Boulevard, Suite 160, Austin, TX 78735 • (512) 892-6684

Page: 2 of 7



Company: CONOCO, INC.

Date: 12/20/94

Client Work ID: MALJAMAR PLANT

Work Order: B4-12-032

II. QA/QC

The results presented in this report meet the statement of work requirements in accordance with Quality Control and Quality Assurance protocol except as noted in Section IV or in an optional sample narrative at the end of Section III.

In the presented analytical data, 'ND' or '<' indicates that the compound is not detected at the specified limit.

III. Analytical Data

The following page(s) supply results for requested analyses performed on the samples listed above.

The test results relate to tested items only. Quanterra reserves the right to control report production except in whole.

Page: 3 of 7



Company: CONOCO, INC.

Date: 12/20/94

Client Work ID: MALJAMAR PLANT

Work Order: B4-12-032

SAMPLE ID: GW-20 DISCHARGE

SAMPLE DATE: 12/01/94 14:00:00

SAMPLE MATRIX: WATER

Test Name	Note		Reporting		Date	Method
	Ref	Result	Limit	Units	Analyzed	Reference
Calcium by ICP		ND	5.0	MG/L	12/08/94	EPA6010
Chloride		ND	15	MG/L	12/09/94	EPA325_2
Carbonate		ND		MG/L AS CaCO3	12/14/94	EPA310_1
Bicarbonate		88	4.0	MG/L AS CaCO3	12/14/94	EPA310_1
Potassium by ICP		ND	5.0	MG/L	12/08/94	EPA6010
Magnesium by ICP		ND	5.0	MG/L	12/08/94	EPA6010
Sodium by ICP		ND	5.0	MG/L	12/08/94	EPA6010
pH		7.2		NONE	12/05/94	EPA150_1
Sulfate		ND	10	MG/L	12/20/94	EPA375_4
Total Dissolved Solids		32	10	MG/L	12/06/94	EPA160_1

Page: 4 of 7



*Environmental
Services*

Company: CONOCO, INC.

Date: 12/20/94

Client Work ID: MALJAMAR PLANT

Work Order: B4-12-032

TEST NAME: BTEX - Purge and Trap

METHOD REFERENCE: EPA8020

SAMPLE ID: GW-20 DISCHARGE

SAMPLE DATE: 12/01/94

SAMPLE MATRIX: WATER

ANALYSIS DATE: 12/15/94

DILUTION FACTOR: 200

UNITS: UG/L

	Result	Reporting Limit
Benzene	17000	200
Ethylbenzene	320	200
Toluene	6000	200
Xylenes (total)	1100	200
Total BTEX concentration:	24420	UG/L
Surrogates	% Recovery	
A,A,A-Trifluorotoluene	95	
4-Bromofluorobenzene	99	

Page: 5 of 7



Company: CONOCO, INC.

Date: 12/20/94

Client Work ID: MALJAMAR PLANT

Work Order: B4-12-032

Referenced notes for this work order:

B412032

Batch MS outside control limits due to high native sample concentration on calcium analysis by ICP. LCS/LCSD results and method Quality Control were acceptable.

Page: 6 of 7



Company: CONOCO, INC.

Date: 12/20/94

Client Work ID: MALJAMAR PLANT

Work Order: B4-12-032

IV. Methodology

Requested analyses were performed according to the following methods.

TEST NAME ICP Metals

TEST CODE 6010

Metals by ICP

Inductively coupled emission spectroscopy according to Method 6010, Test Methods for Evaluating Solid Waste Physical/Chemical Methods, SW-846, Third Edition.

TEST NAME BTEX - Purge and Trap

TEST CODE BTEX

BTEX

Method 8020, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. This technique uses a purge and trap with gas chromatography (GC) and photo ionization detection (PID) with a five point curve. This method exceeds the requirement of Method 602. Prep method is 5030.

TEST NAME Chloride

TEST CODE CL_A

Chloride

EPA 325.2 - Chemical Analysis of Water and Wastewater. Colorimetric, Automated Ferricyanide analysis by Lachat. Equivalent to EPA 9250.

TEST NAME Carbonate

TEST CODE CO3_A

Carbonate

EPA 310.1 - USEPA Methods for Chemical Analysis of Water and Wastes. Titrimetric analysis of alkalinity and calculation of carbonate content.

TEST NAME Bicarbonate

TEST CODE HCO3_A

Bicarbonate

EPA 310.1 - Methods for Chemical Analysis of Water and Wastes, USEPA 1983. Titrimetric with sulfuric acid for alkalinity and calculation of bicarbonate content.

TEST NAME pH

TEST CODE PH

pH

USEPA Method 150.1- Methods for Chemical Analysis of

Page: 7 of 7



Company: CONOCO, INC.

Date: 12/20/94

Client Work ID: MALJAMAR PLANT

Work Order: B4-12-032

TEST NAME pH

TEST CODE PH

Water and Wastes. SW846 Method 9040 pH Electrometric Measurement. SW846 Method 9045 soil pH.

TEST NAME Sulfate

TEST CODE SO4

Sulfate

Method 375.4-Chemical Analysis of Water and Wastewater. Turbidimetric analysis. Equivalent to SW-846 9038.

TEST NAME Total Dissolved Solids

TEST CODE TDS

Total Dissolved Solids

USEPA Method 160.1- Methods for Chemical Analysis of Water and Wastes. Gravimetric analysis.

TEST NAME ICPES Digestion - Water

TEST CODE Z3010

Water Digestion

Method 3010A, SW-846, Test Methods for Evaluating Solid Wastes, Third Edition. Digestion procedure for the preparation of aqueous samples, EP Toxicity and TCLP extracts, and wastes that contain suspended solids for analysis by flame atomic absorption spectroscopy and inductively coupled plasma spectroscopy. The procedure determines total metals.

PAGE.009/009 FROM INDCO SES HL3005 TO 8150 78177 MAR 1 '95 10:27



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

8912032
Reference Document No. 377516
Page 1 of

Project Name/No. 1 Malabar Plant
Sample Team Members 2
Profit Center No. 3
Project Manager 4
Purchase Order No. 6

Samples Shipment Date 7
Lab Destination 8 Quanterra, Austin
Lab Contact 9 Cindy Quy
Project Contact/Phone 12
Carrier/Waybill No. 13 Fed Ex # 5753974753
DU 12-2-94

Bill to: 5 Conoco Inc.
Dairy Ashford
Houston, TX
ATTN: Chris Hansen
Report to: 10 Same as above

Required Report Date 11

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
GW-20 Discharge	water	12/11/94 1400	Glass	40 ml	HCl	BTEX (2 vials)	GOOD 100 988 12-2-94	
GW-20 Discharge	water	12/11/94 1400	Plastic	250 ml	HNO3	Na, K, Ca, Mg		
GW-20 Discharge	water	12/11/94 1400	Plastic	1 L	none	Cl, SO4, HCO3, CO3, TDS, pH		
COOPY								
FOR LAB USE ONLY								

Special Instructions: 23

Possible Hazard Identification: 24
 Non-hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal: 25
 Return to Client Disposal by Lab Archive (mos.)

Turnaround Time Required: 28
 Normal Rush

QC Level: 27
 I. II. III. Project Specific (specify):

1. Relinquished by 28 *[Signature]*
 (Signature/Affiliation) *Chris Hansen - Conoco Inc.*
 Date: 12/11/94
 Time: 1400

1. Received by 28 *[Signature]*
 (Signature/Affiliation) *Chris Hansen - Conoco Inc.*
 Date: 12-2-94
 Time: 0841

2. Relinquished by
 (Signature/Affiliation)
 Date:
 Time:

2. Received by
 (Signature/Affiliation)
 Date:
 Time:

3. Relinquished by
 (Signature/Affiliation)
 Date:
 Time:

3. Received by
 (Signature/Affiliation)
 Date:
 Time:

Comments: 29

** 600 SEALS TOTAL **
 White: To accompany samples
 Yellow: Field copy
 * See back of form for special instructions.
 MAR-01-95 MED 10:21 713 293 1214 P.09

RECEIVED
USFWS, AFO
#1077 1050
JAN 4 '95

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan applications have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

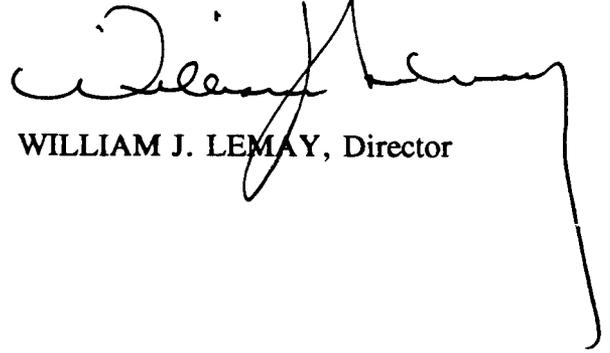
(GW-020) - Conoco Inc., Rick McCalip, Director - Safety, Health, and Environmental Services, P.O. Box 2197, HU3000, Houston, Texas 77252-2197, has submitted an application for renewal of its previously approved discharge plan for its Maljamar Gas Plant in the SE/4 of the SW/4 of Section 21, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico. Approximately 3500 gallons per day of waste water is disposed in Conoco's waterflood project for secondary oil recovery. The waterflood project consists of Class II injection wells and was approved by Oil Conservation Division Order No. R-2403. The wastewater has a total dissolved solids concentration of approximately 3240 mg/l. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 120 feet with a total dissolved solids concentration of approximately 440 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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 applications may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday thru 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. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 9th day of December, 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY, Director

SEAL

NO EFFECT FINDING

The described action will have no effect on listed species, wetlands, or other important wildlife resources.

Date January 27, 1995

Consultation # 2-22-95-I-142

Approved by R. M. Wilson

U.S. FISH and WILDLIFE SERVICE
NEW MEXICO ECOLOGICAL SERVICES FIELD OFFICE
ALBUQUERQUE, NEW MEXICO



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

December 27, 1994

ALBUQUERQUE JOURNAL
717 Silver Southwest
Albuquerque, New Mexico 87102

RE: NOTICE OF PUBLICATION

ATTN: ADVERTISING MANAGER

Dear Sir/Madam:

Please publish the attached notice one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

1. **Publisher's affidavit in duplicate.**
2. **Statement of cost (also in duplicate.)**
3. **CERTIFIED invoices for prompt payment.**

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice no later than January 3, 1995 ~~xx1994~~.

Sincerely,

Sally Martinez
Sally E. Martinez
Administrative Secretary

Attachment

7 765 963 271

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	<i>Journal</i>
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	



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



BRUCE KING
 GOVERNOR

ANITA LOCKWOOD
 CABINET SECRETARY

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

December 27, 1994

LOVINGTON DAILY LEADER
P. O. Box 1717
Lovington, New Mexico 88260

RE: NOTICE OF PUBLICATION

ATTN: ADVERTISING MANAGER

Dear Sir/Madam:

Please publish the attached notice one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

1. **Publisher's affidavit in duplicate.**
2. **Statement of cost (also in duplicate.)**
3. **CERTIFIED invoices for prompt payment.**

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice no later than January 3, 1995, ~~x1994x~~

Sincerely,

Sally Martinez
 Sally E. Martinez
 Administrative Secretary

Attachment

Z 765 963 542

Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)



Sent to		Lovington Daily Leader	
Street and No.		P.O. Box 1717	
City, State, and Zip Code		Lovington, NM 88260	
Postage	\$	Special Delivery Fee	
Certified Fee		Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered		TOTAL Postage & Fees	\$
Return Receipt Showing to Whom, Date, and Addressee's Address		Postmark or Date	

NOTICE OF PUBLICATION

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

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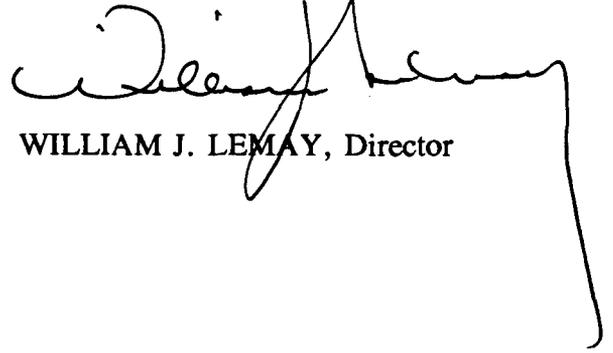
(GW-020) - Conoco Inc., Rick McCalip, Director - Safety, Health, and Environmental Services, P.O. Box 2197, HU3000, Houston, Texas 77252-2197, has submitted an application for renewal of its previously approved discharge plan for its Maljamar Gas Plant in the SE/4 of the SW/4 of Section 21, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico. Approximately 3500 gallons per day of waste water is disposed in Conoco's waterflood project for secondary oil recovery. The waterflood project consists of Class II injection wells and was approved by Oil Conservation Division Order No. R-2403. The wastewater has a total dissolved solids concentration of approximately 3240 mg/l. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 120 feet with a total dissolved solids concentration of approximately 440 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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 applications may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday thru 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. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 9th day of December, 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'William J. Lemay', written over the typed name below. The signature is fluid and cursive, with a long, sweeping tail that extends downwards and to the right.

WILLIAM J. LEMAY, Director

SEAL

NOTICE OF PUBLICATION

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

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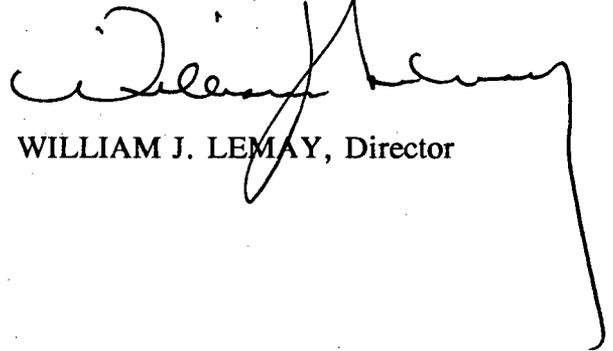
(GW-020) - Conoco Inc., Rick McCalip, Director - Safety, Health, and Environmental Services, P.O. Box 2197, HU3000, Houston, Texas 77252-2197, has submitted an application for renewal of its previously approved discharge plan for its Maljamar Gas Plant in the SE/4 of the SW/4 of Section 21, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico. Approximately 3500 gallons per day of waste water is disposed in Conoco's waterflood project for secondary oil recovery. The waterflood project consists of Class II injection wells and was approved by Oil Conservation Division Order No. R-2403. The wastewater has a total dissolved solids concentration of approximately 3240 mg/l. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 120 feet with a total dissolved solids concentration of approximately 440 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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 applications may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday thru 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. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on
this 9th day of December, 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'William J. Lemay', written over the printed name below.

WILLIAM J. LEMAY, Director

SEAL

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY



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

June 15, 1994

CERTIFIED MAIL

RETURN RECEIPT NO. P 111 334 317

Mr. Rick McCalip
Conoco, Incorporated
P.O. Box 2197, HU3048
Houston, TX 77252

**RE: Discharge Plan GW-020 Renewal
Maljamar Gas Plant
Lea County, New Mexico**

Dear Mr. McCalip,

On June 10, 1985, the groundwater discharge plan, GW-020 for the Maljamar Gas Plant located in Sections 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico, was approved by the Director of the Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years, and was subsequently renewed on June 6, 1990. The current approval will expire on June 6, 1995.

If your facility continues to have potential or actual effluent or leachate discharges and you wish to continue operation, you must renew your discharge plan. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several months. Please indicate whether you have made, or intend to make, any changes in you system, and if so, please include these modifications in your application for renewal.

Note that the completed and signed application form must be submitted with your discharge plant renewal request.

If you no longer have any actual or potential discharges please identify this office. If you have any questions, please do not

Mr. Rick McCalip
June 15, 1994
Page 2

hesitate to contact me at (505)827-5812.

Sincerely,

A handwritten signature in cursive script that reads "Roger C. Anderson". The signature is written in dark ink and is positioned above the typed name and title.

Roger C. Anderson
Environmental Bureau Chief

RCA/rlm

xc: OCD Hobbs 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

June 11, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-242

Mr. Rick McCalip, Coordinator
Natural Gas Products Department
CONOCO, INCORPORATED
P. O. Box 2197, HU3048
Houston, Texas 77252

RE: Discharge Plan GW-20
Maljamar Gas Processing Plant
Lea County, New Mexico

Dear Mr. McCalip:

The groundwater discharge plan renewal (GW-20) for the Conoco Inc. Maljamar Gas Plant located in Sections 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico, is hereby approved. The original discharge plan was approved on June 10, 1985 and expires on June 10, 1990. The renewal application consists of the original discharge plan as approved June 10, 1990, the renewal application dated December 7, 1989 and information dated April 27, 1990 submitted as a supplement to the application.

The discharge plan was submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. It is renewed pursuant to Section 3-109.A., which provides for the possible future amendments 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.

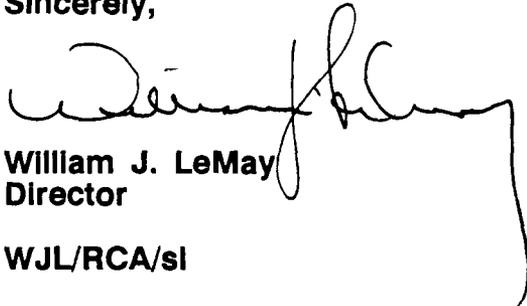
Please be advised that all exposed pits, including lined pits and open top tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

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. Rick McCallp
May 22, 1990
Page -2-

Pursuant to Section 3-109.G.4., this plan approval is for a period of five (5) years. This approval will expire June 10, 1995 and you should submit an application for renewal in ample time before that date. It should be noted that all gas processing plants and oil refineries in excess of twenty-five years of age will be required to submit plans for, or the results of an underground drainage testing program as a requirement for discharge plan renewal.

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/RCA/si

cc: OCD Hobbs District Office



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Ecological Services
Suite D, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107

5 10 8 51

May 30, 1990

William J. Lemay, Director
Oil Conservation Division
Energy, Minerals and Natural Resources Department
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Lemay:

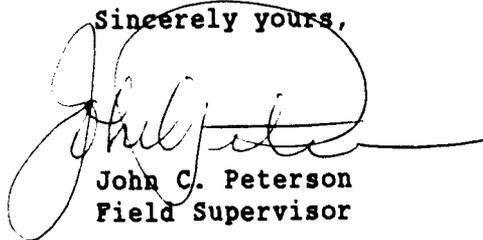
We have reviewed the Public Notice dated May 1, 1990 requesting comments for three groundwater discharge plan permit renewals as follows:

- (6W-20) - Conoco Incorporated, P.O. Box 2197, HU 3048, Houston, Texas 77252.
The permit is for a previously approved discharge plan. The plans call for the discharge of 2,300 gallons per day of process wastewater into an Oil Conservation Division (OCD) approved (Order #R-2403). The Maljamar Gas Plant located in Sections 21 and 28, T17S, R32E, NMPM, Lea County, New Mexico.
- (6W-25) - Warren Petroleum Company, P. O. Box 1589, Tulsa, Oklahoma 74102.
The permit is for a previously approved discharge plan. The plan calls for the discharge of 50,000 gallons per day of process wastewater into an OCD approved Class II injection wells from the Monument Gas Processing Plant located in the SW 1/4, Section 36, T19S, R36E, NMPM, Lea County, New Mexico.
- (6W-23) - Phillips 66 Natural Gas Company, 4001 Penbrook, Odessa, Texas 79762.
the permit is for a previously approved discharge plan. The plan calls for the discharge of 23,000 gallons per day of process wastewater into an OCD approved Class II injection well from the Artesia plant located in Section 7, T18S, R28E, NMPM, Eddy County, New Mexico.

We recommend that screens or mesh be placed over any open pits or tanks that may contain wastewater in order to eliminate risks to Federally protected migratory birds.

If you have any questions, please contact Richard Roy at (505) 883-7877.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "John C. Peterson", written over a circular stamp or mark.

John C. Peterson
Field Supervisor

cc:

Regional Director, U.S. Fish and Wildlife Service, Fish and Wildlife
Enhancement, Albuquerque, New Mexico

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

LEGAL NOTICE
NOTICE OF PUBLICATION
STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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.

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan 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:

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
May 8, 1990

and ending with the issue of
May 8, 1990

And that the cost of publishing said notice is the sum of \$ 41.59

which sum has been (Paid) ~~XXXXXXXX~~ as Court Costs

Joyce Clemens
Subscribed and sworn to before me this 9th

day of May, 1990

Mrs. Jean Arvici
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 1990

(GW-20) Conoco Inc., Rick McCallip, Director of Safety and Environmental Services, P. O. Box 2197, HU 3048, Houston, Texas 77252, has submitted an application for renewal of its previously approved discharge plan for its Maljamar Gas Plant located in Sections 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico. Approximately 2300 gallons per day of process wastewater is disposed in Conoco Inc.'s waterflood project for secondary oil recovery. The waterflood project consists of Class II injection wells and was approved by Oil Conservation Commission Order No. R-2403. The wastewater has a total dissolved solids concentration of approximately 3240 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of approximately 120 feet with a total dissolved solids concentration of 440 mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

(GW-25) Warren Petroleum Company, L.T. Reed, Senior Engineer, P. O. Box 1589, Tulsa, Oklahoma 74102, has submitted an application for renewal of its previously approved discharge plan for its Monument Gas Processing Plant located in the SW/4, Section 36, Township 19 South, Range 36 East and the NW/4, Section 1, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico. Approximately 50,000 gallons per day of process wastewater is disposed of in an OCD approved Class II injection well. The wastewater has a total dissolved solids concentration of approximately 2800 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of approximately 35 to 60 feet with a total dissolved solids concentration ranging from 500 to 3000 mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

(GW-23) Phillips 66 Natural Gas Company, Michael D. Ford, Environmental Scientist, 4001 Penbrook, Odeasa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Artesia Plant located in Section 7, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico. Approximately 23,000 gallons per day of process wastewater is disposed of in an OCD approved Class II injection well. The total dissolved solids concentration of the wastewater is approximately 2000 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of 300 mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

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 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 1st day of May, 1990. To be published on or before May 11, 1990.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
William J. Lemby
WILLIAM J. LEMBY, Director

S E A L

Published in the Lovington Daily Leader May 8, 1990.

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

STATE OF NEW MEXICO } ss
County of Bernalillo }

90 MAY 16 AM 8 34

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.....11.....day
of.....May....., 1990, and the subsequent consecutive
publications on....., 1990.

Thomas J. Smithson
Sworn and subscribed to before me, a Notary Public in
and for the County of Bernalillo and State of New
Mexico, this11..... day of.....May....., 1990.

PRICE.....\$38.74.....

Statement to come at end of month.

ACCOUNT NUMBER.....C81184.....

OFFICIAL SEAL

Bernadette Ditz

09117

STATE OF NEW MEXICO

12-18-93

EDJ-15 (R-12/89)

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan 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-20) Conoco Inc., Rick McCallip, Director of Safety and Environmental Services, P.O. Box 2197, HU 3048, Houston, Texas 77252, has submitted an application for renewal of its previously approved discharge plan for its Maljamar Gas Plant located in Sections 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico. Approximately 2300 gallons per day of process wastewater is disposed in Conoco Inc.'s waterflood project for secondary oil recovery. The waterflood project consists of Class II injection wells and was approved by Oil Conservation Commission Order No. R-2403. The wastewater has a total dissolved solids concentration of approximately 3240 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of approximately 120 feet with a total dissolved solids concentration of 440mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

(GW-25) Warren Petroleum Company, L.T. Reed, Senior Engineer, P.O. Box 1589, Tulsa, Oklahoma 74102, has submitted an application for renewal of its previously approved discharge plan for its Monument Gas Processing Plant located in the SW/4 Section 36, Township 19 South, Range 36 East and the NW/4, Section 1, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico. Approximately 50,000 gallons per day of process wastewater is disposed of in an OCD approved Class II injection well. The wastewater has a total dissolved solids concentration of approximately 2800 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of approximately 35 to 60 feet with a total dissolved solids concentration ranging from 500 to 3000 mg/l. The discharge plan addresses how spills, leaks, or other discharges to the ground will be handled.

(GW-23) Phillips 66 Natural Gas Company, Michael D. Ford, Environmental Scientist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Artesia Plant located in Section 7, Township 16 South, Range 28 East, NMPM, Eddy County, New Mexico. Approximately 23,000 gallons per day of process wastewater is disposed of in an OCD approved Class II injection well. The total dissolved solids concentration of the wastewater is approximately 2000 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of 300 mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

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 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 disapp-

Affidavit of Publication

No. 13122

STATE OF NEW MEXICO,

County of Eddy:

Gary D. Scott being duly sworn, says: That he is the Publisher of The Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 consecutive weeks on the same day as follows:

First Publication May 10, 1990

Second Publication _____

Third Publication _____

Fourth Publication _____

Gary D. Scott
Subscribed and sworn to before me this 10th day

of May 19 90

Barbara Ann Beams
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1991

LEGAL NOTICE

NOTICE OF PUBLICATION
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 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:

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(GW-25) Warren Petroleum Company, L.T. Reed, Senior Engineer, P.O. Box 1589, Tulsa, Oklahoma 74102, has submitted an application for renewal of its previously approved discharge plan for its Monument Gas Processing Plant located in the SW/4, Section 36, Township 19 South, Range 36 East and the NW/4, Section 1, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico. Approximately 50,000 gallons per day of process wastewater is disposed of in an OCD approved Class II injection well. The wastewater has a total dissolved solids concentration of approximately 2800 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of approximately 35 to 60 feet with a total dissolved solids concentration ranging from 500 to 3000 mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

(GW-23) Phillips 66 Natural Gas Company, Michael D. Ford, Environmental Scientist, 4001 Penbrook, Odessa, Texas, 79762, has submitted an application for renewal of its previously approved discharge plan for its Artesia Plant located in Section 7, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico. Approximately 23,000 gallons per day of process wastewater is disposed of in an OCD approved Class II injection well. The total dissolved solids concentration of the wastewater is approximately 2000 mg/l. Ground water most likely to be affected by any discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of 300 mg/l. The discharge plan addresses how spills, leaks or other discharges to the ground will be handled.

Any interested person may ob-





Rick McCallip, Director
Safety & Environmental Services
Natural Gas & Gas Products Department

Conoco Inc.
600 N. Dairy Ashford Rd.
P. O. Box 2197, HU 3048
Houston, TX 77252
(713) 293-1123

RECEIVED
90 APR 30 AM 9 09

Certified Mail No. P 551 250 858
Return Receipt Requested

April 27, 1990

Mr. Roger Anderson
Environmental Engineer
Oil Conservation Division
Energy, Minerals and Natural Resources Department
P. O. Box 2088
Santa Fe, NM 87504

Re: Additional Information Request
Discharge Plan GW-20
Maljamar Gas Plant, Lea County
Conoco Inc., Natural Gas & Gas Products Department

Dear Mr. Anderson:

A renewal application for the Maljamar Plant discharge plan was submitted on December 7, 1989. The Oil Conservation Division, after conducting a site inspection on March 12, 1990, issued a request for comments, commitments, and additional information. This letter acknowledges that request and, in response, provides the following information:

1. Concrete curbing will be installed around the expander skid pads. The curbing will be designed to contain any oil leaks.
2. Chemical storage (including drums) will be consolidated in an area south of the electric compressor building. A concrete pad and curbing will be installed for containment purposes.
3. Due to operation and safety considerations, the skimmer basin must be out of service to inspect thereby necessitating a plant shutdown. Conoco Inc., therefore, requests that visual inspection be required during each turnaround. Typically, plant turnarounds are scheduled every two years. A record will be made after each inspection and will be maintained in plant files. If/when a new system is installed, the appropriate leak detection will be incorporated in the design in accordance with OCD policy.

Mr. Roger Anderson
Environmental Engineer
April 27, 1990
Page 2

4. The existing concrete pad for the unleaded gasoline tank will be extended with concrete curbing added. A concrete pad and curbing for containment will be installed for the diesel tank.

All concrete work for the listed containment measures is scheduled for completion by June 30, 1990.

If you have any questions or need additional information, please call Terry Killian at (713) 293-1188. Thank you for your assistance during this review.

Sincerely,

Rick McCalip

Rick McCalip

NOTICE OF PUBLICATION

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 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:

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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 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 1st day of May, 1990. To be published on or before May 11, 1990.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY, Director

S E A L



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

April 16, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-115

Mr. Rick McCalip, Coordinator
Natural Gas Products Department
CONOCO, INCORPORATED
P. O. Box 2197, HU3048
Houston, Texas 77252

**RE: Discharge Plan GW-20
Maljamar Gas Processing Plant
Lea County, New Mexico**

Dear Mr. McCalip:

The Oil Conservation Division (OCD) is in the process of reviewing your discharge plan renewal application, dated December 7, 1989, for the above referenced facility. A site inspection was conducted at the facility on March 12, 1990. The following comments, request for commitments, and requests for additional information are based on the review of the application and observations during the site inspection:

1. Oil was leaking off the pad containing the expander skids. Submit a plan and timetable to provide containment on the concrete pad for any spills and/or leaks from this unit.
2. The chemical storage South of the electric compressor building did not have containment curbs. Submit a plan and timetable for the curbing of this storage area and for the paving and curbing of all other drum storage areas.
3. The skimmer basins are not equipped with leak detection. It is OCD's policy that all below grade sumps, tanks and basins be constructed with leak detection. Those below grade facilities now in service that do not have leak detection are required to be visually inspected yearly to insure integrity. A commitment to incorporate leak detection in the design and construction of any replacement or newly constructed facilities is also required.

4. The diesel and unleaded saddle tanks were on concrete pads but did not have containment curbs. Submit a plan and timetable for the construction of containment.

If you have any questions, please do not hesitate to call me at (505) 827-5884.

Sincerely,


Roger C. Anderson
Environmental Engineer

RCA/si

cc: OCD Hobbs Office



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

GARREY CARRUTHERS
GOVERNOR

January 8, 1990

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

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-484

Mr. Rick McCalip, Coordinator
Natural Gas Products Department
CONOCO, INCORPORATED
P. O. Box 2197, HU3048
Houston, Texas 77252

**RE: Discharge Plan GW-20
Maljamar Gas Processing Plant
Lea County, New Mexico**

Dear Mr. McCalip:

The Oil Conservation Division (OCD) has received and is in the process of reviewing the discharge plan renewal application, dated December 7, 1989, for the above referenced facility.

As part of the discharge plan review process, information obtained from a site inspection by OCD personnel will be included in our comments and requests for additional information. I will be contacting you in the near future to schedule a mutually agreeable time to conduct an inspection of the Maljamar facility.

If you have any questions, please do not hesitate to call me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Hobbs Office



Rick McCalip, Director
Safety & Environmental Services
Natural Gas & Gas Products Department

Conoco Inc.
600 N. Dairy Ashford Rd.
P. O. Box 2197, HU3048
Houston, Texas 77252
(713) 293-1123

December 7, 1989

Mr. Dave Boyer, Chief
Oil Conservation Division
Energy and Minerals Department
State Land Office Building
P. O. Box 2088
Santa Fe, NM 87501

RECEIVED

DEC - 8 1989

OIL CONSERVATION DIV.
SANTA FE

Re: Request for Renewed Approval
Discharge Plan GW-20
Maljamar Gas Plant, Lea County
Conoco Inc., Natural Gas & Gas Products Department

Dear Mr. Boyer:

Discharge Plan GW-20 for the Maljamar Gas Processing Plant was originally approved on June 10, 1985. Minor revisions were submitted and subsequently approved on July 21, 1987. Plan approval expires on June 10, 1990.

In accordance with Subsection 3-109.G.4 of the New Mexico Water Quality Control Commission Regulations and the current approval, Conoco Inc. hereby requests the discharge plan approval be renewed. Enclosed are two copies of the updated plan.

Section III, Water Quality, will contain analyses of fresh water to the plant and wastewater from the plant. Results of recent sampling are pending and will be forwarded as soon as available.

Only minor changes have been made since the plan was last submitted, in July 1987. There have been no process or volume changes which effect plant discharge.

If you have any questions or require additional information, please call Ms. Terry Killian at (713) 293-1188. Thank you for your assistance.

Sincerely,

Rick McCalip

Rick McCalip



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 8, 1989

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-201

Mr. Rick McCalip, Coordinator
Natural Gas Products Department
CONOCO, INCORPORATED
P. O. Box 2197
Houston, Texas 77252

**RE: Discharge Plan GW-20
Maljamar Gas Processing Plant
Lea County, New Mexico**

Dear Mr. McCalip:

On June 10, 1985, the ground water discharge plan, GW-20 for the Maljamar Gas Processing Plant located in Sections 21 and 28, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico, was approved by the Director of the Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. The approval will expire on June 10, 1990.

If your facility continues to have effluent or leachate discharges and you wish to continue discharging, please submit your application for renewal of plan approval as quickly as possible. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can often extend for several months. Please indicate whether you have made, or intent to make, any changes in your discharge system, and if so, include an application for plan amendment with your application for renewal. To assist you in preparation of your renewal application, I have enclosed a copy of the OCD's guidelines for preparation of ground water discharge plans at natural gas processing plants. These guidelines will be used in review of your renewal application. The guidelines are presently being revised to include berming of tanks, curbing and paving of process areas susceptible to leaks or spills and the disposition of any solid wastes. Please include these items in your renewal application.

If you no longer have such discharges and discharge plan renewal is not needed, please notify this office.

Mr. Rick McCalip
December 8, 1989
Page -2-

Please note that all gas plants, refineries and compressor stations in excess of 25 years of age will be required to submit plans for, or the results of, an underground drainline testing program as a requirement for discharge plan renewal.

If you have any questions, please do not hesitate to contact Roger Anderson at (505) 827-5884.

Sincerely,



David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: OCD Hobbs Office



Rick McCalip, Director
Safety & Environmental Services
Natural Gas & Gas Products Department

Conoco Inc.
600 N. Dairy Ashford Rd.
P. O. Box 2197, HU3048
Houston, Texas 77252
(713) 293-1123

December 7, 1989

Mr. Dave Boyer, Chief
Oil Conservation Division
Energy and Minerals Department
State Land Office Building
P. O. Box 2088
Santa Fe, NM 87501

RECEIVED

DEC - 8 1989

OIL CONSERVATION DIV.
SANTA FE

Re: Request for Renewed Approval
Discharge Plan GW-20
Maljamar Gas Plant, Lea County
Conoco Inc., Natural Gas & Gas Products Department

Dear Mr. Boyer:

Discharge Plan GW-20 for the Maljamar Gas Processing Plant was originally approved on June 10, 1985. Minor revisions were submitted and subsequently approved on July 21, 1987. Plan approval expires on June 10, 1990.

In accordance with Subsection 3-109.G.4 of the New Mexico Water Quality Control Commission Regulations and the current approval, Conoco Inc. hereby requests the discharge plan approval be renewed. Enclosed are two copies of the updated plan.

Section III, Water Quality, will contain analyses of fresh water to the plant and wastewater from the plant. Results of recent sampling are pending and will be forwarded as soon as available.

Only minor changes have been made since the plan was last submitted, in July 1987. There have been no process or volume changes which effect plant discharge.

If you have any questions or require additional information, please call Ms. Terry Killian at (713) 293-1188. Thank you for your assistance.

Sincerely,

Rick McCalip

Rick McCalip

DISCHARGE PLAN GW-20
MALJAMAR GAS PROCESSING PLANT

LEA COUNTY
P. O. BOX 90
MALJAMAR, NEW MEXICO 88264

Conoco Inc.
Natural Gas & Gas Products Department
P. O. Box 2197 - HU 3048
Houston, Texas 77252

RECEIVED

DEC - 8 1989

OIL CONSERVATION DIV.
SANTA FE

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	A. DESCRIPTION
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SECTION IV	<u>WATER TREATMENT AND DISPOSAL</u>
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	B. SANITARY SEWAGE TREATMENT
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	D. SPILL REPORTING PROCEDURES GUIDE

SECTION I
GENERAL INFORMATION

A. LOCATION AND CONTACT

1. Name

Conoco Inc., Natural Gas & Gas Products Department
P. O. Box 2197 - Humber 3048
Houston, Texas 77252

Contact: Rick McCalip
Director of Safety & Environmental Services
(713) 293-1123

2. Facility

Maljamar Gas Processing Plant
P. O. Box 90
Maljamar, New Mexico 88264

Contact: David Westmoreland
Plant Manager
(505) 676-2961

3. Location

The Maljamar Plant is located three miles south of Maljamar off Farm Road 126. The legal description is Sections 21 and 28, Township 17 South, Range 32 East.

B. PLANT DESCRIPTION

The Maljamar Gas Processing Plant was purchased in 1960 and is now fully owned and operated by Conoco Inc. The plant is designed to recover natural gas liquids (ethane, propane, butanes, and pentanes+) from 50 million cubic feet per day (MMCFD).

At the time of purchase, the plant consisted solely of one refrigerated oil absorption (ROA) train. In 1981, an additional cryogenic process train, design capacity 50 MMCFD, was installed. In 1982, the ROA process train was shut down and subsequently dismantled; total plant capacity became 50 MMCFD. Removal of the ROA also resulted in decreased wastewater flow due to the shutdown of the cooling tower associated with ROA process train.

Currently, low pressure gas is gathered from six gathering systems (Ajax, Anderson Ranch, Caprock, Greenwood, Lusk, and Skelly), compressed and processed. Plant throughput varies between 16 MMCFD and 44 MMCFD.

The plant produces an EPBC (ethane, propane, butane, and condensate) product stream which is delivered to Mont Belvieu, Texas via Chaparral Pipeline. Residue gas is delivered to Gas Company of New Mexico and Transwestern Pipeline.

A site plan of the plant is included in Appendix A.

SECTION II
WATER BALANCE

A. DESCRIPTION

The Maljamar Plant uses 40 barrels per day. Approximately 20 barrels is for office use and 20 barrels is used in the plant and for engine jacket water. The water is acquired from water wells owned and operated by Conoco Production.

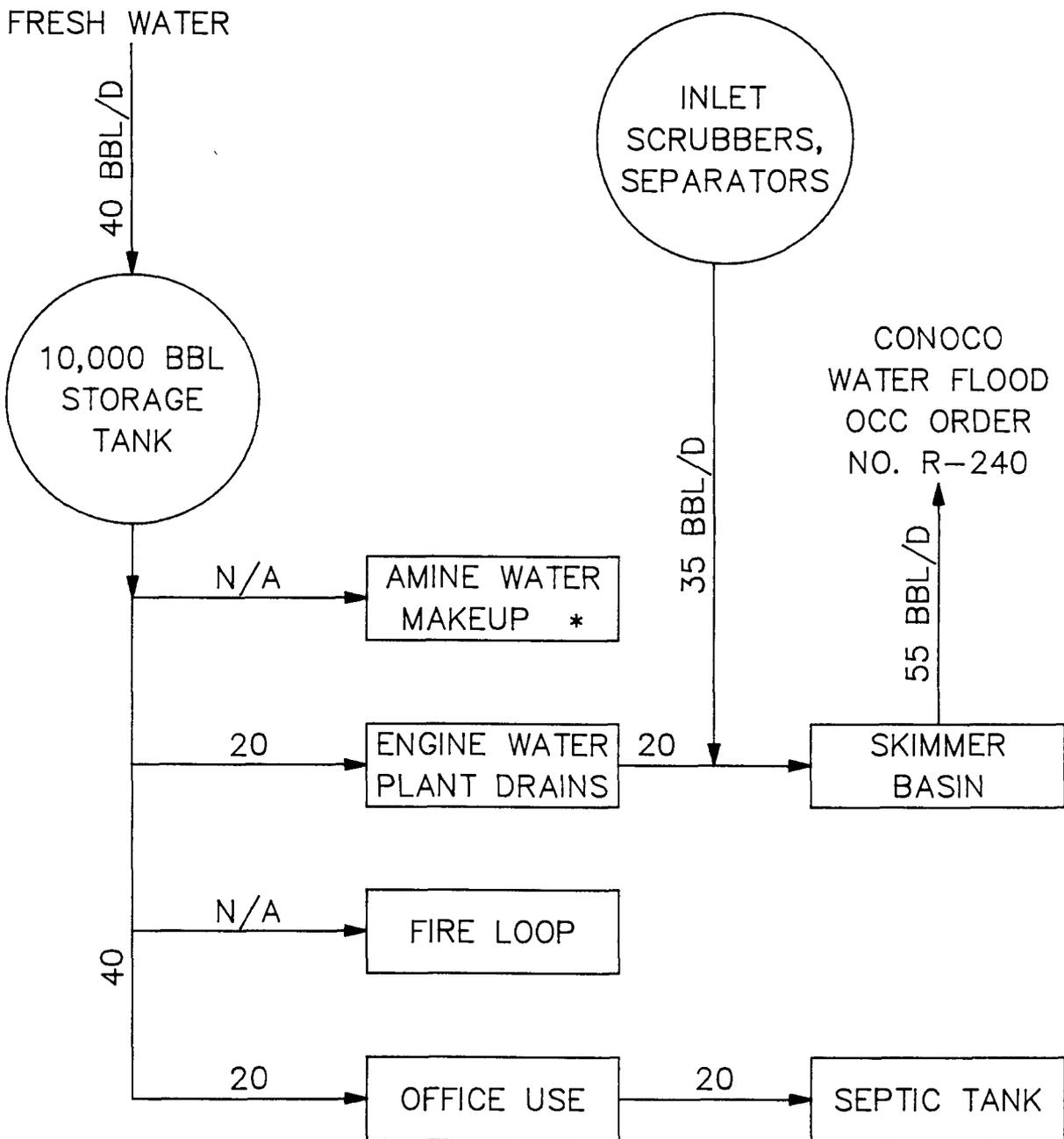
Water used by the office is calculated based on 33 employees and 25 gallons per person per day. All water used in the office is discharged to a sanitary septic system.

Plant drains, inlet scrubbers, and engine jacket water discharge to the skimmer basin. Any oil is separated in the skimmer basin and pumped to an adjacent storage tank. Skimmer basin water, approximately 55 barrels per day, is pumped to Conoco's waterflood project for reinjection. The 55 barrels per day is the total of the 20 barrels used in the plant and engine jacket water and 35 barrels from inlet scrubbers and separators.

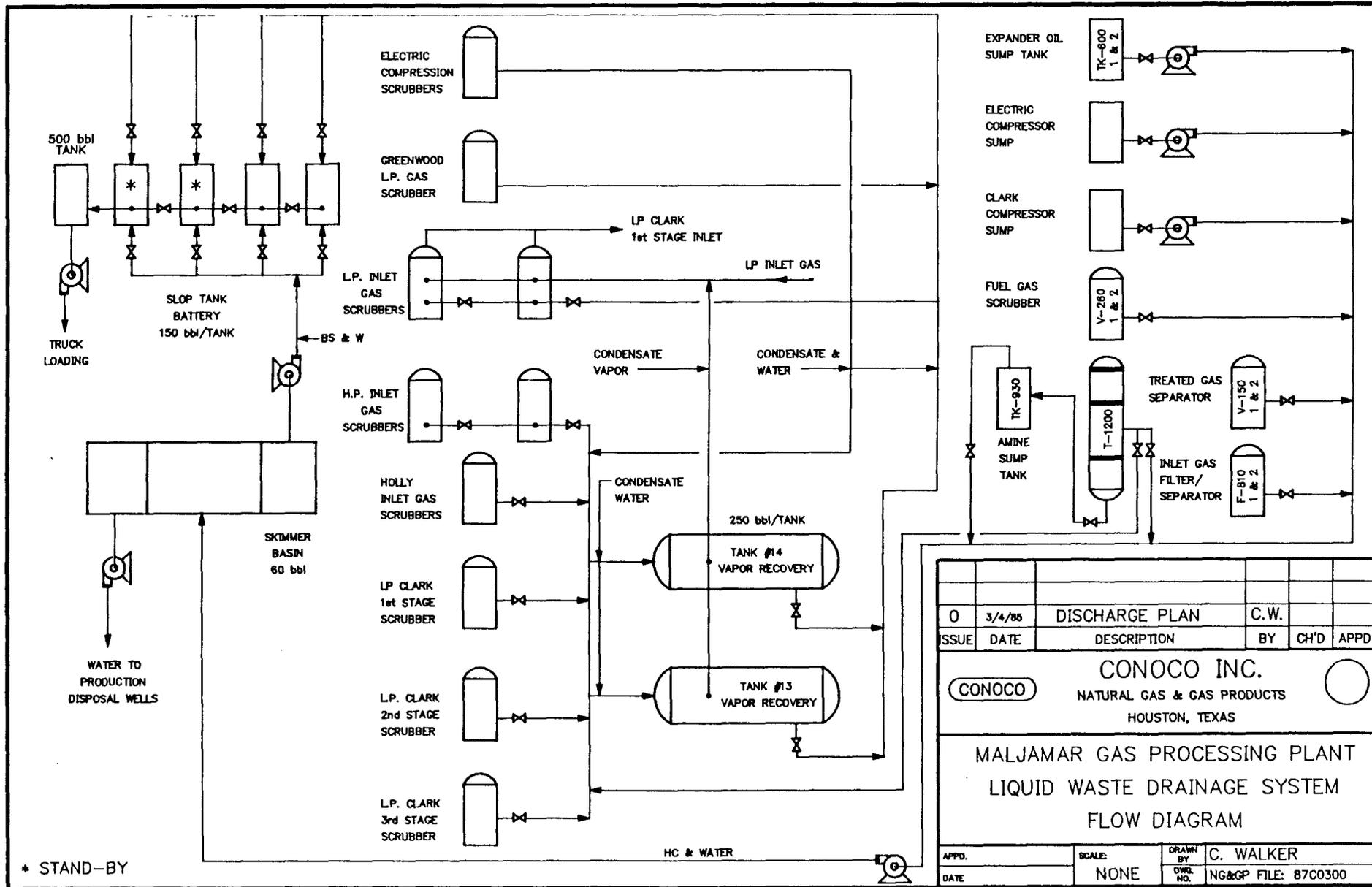
B. SCHEMATICS

Attachment 1 is a schematic of the plant water flow. Attachments 2 and 3 are flow diagrams of the plant liquid waste drainage system and the amine waste containment & drainage system, respectively.

PLANT WATER BALANCE

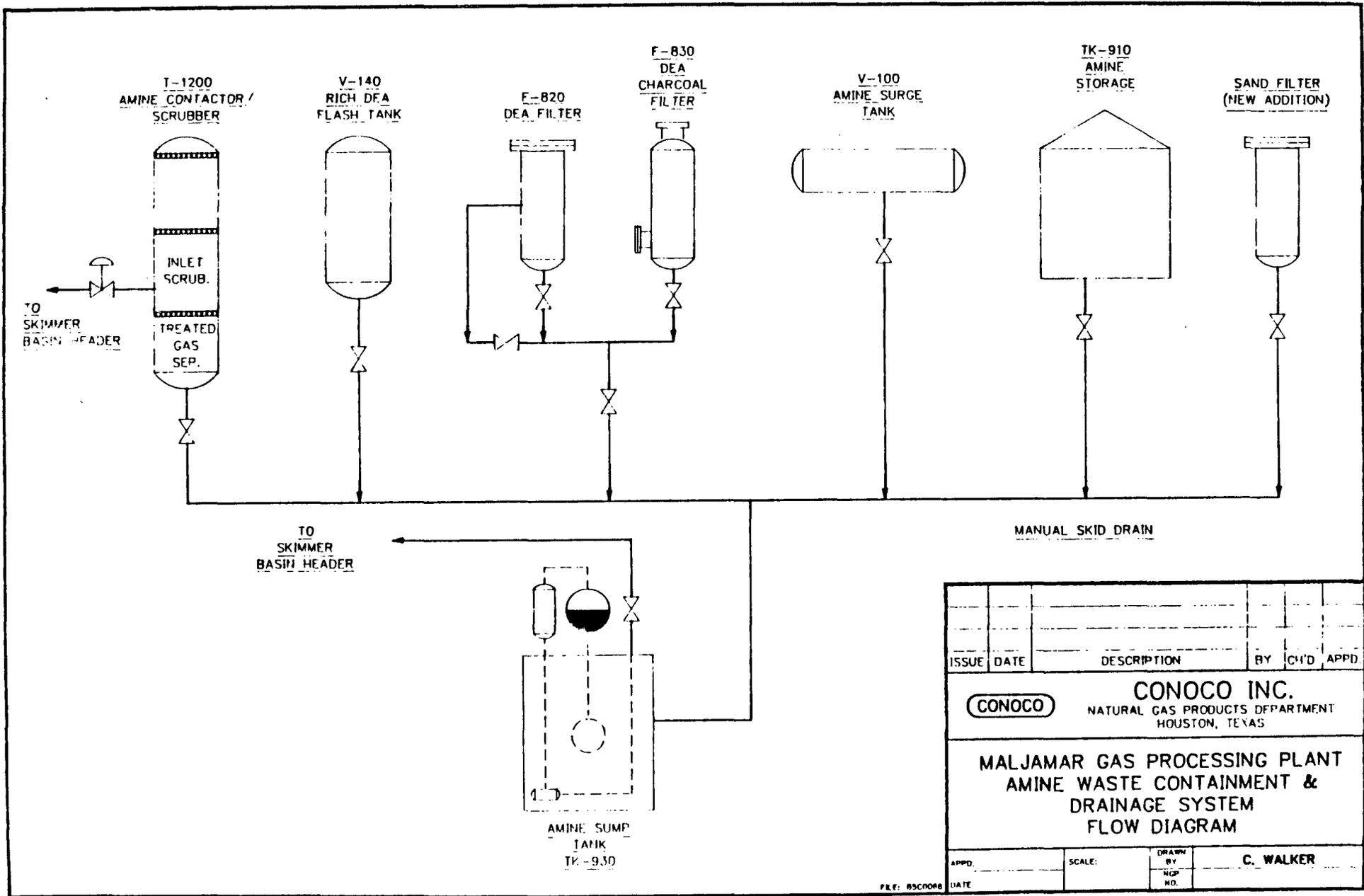


* CLOSED SYSTEM



* STAND-BY

0	3/4/85	DISCHARGE PLAN	C.W.		
ISSUE	DATE	DESCRIPTION	BY	CH'D	APPD
CONOCO INC. NATURAL GAS & GAS PRODUCTS HOUSTON, TEXAS					
MALJAMAR GAS PROCESSING PLANT LIQUID WASTE DRAINAGE SYSTEM FLOW DIAGRAM					
APPD.	SCALE:	DRAWN BY:	C. WALKER		
DATE	NONE	DWG. NO.	NG&GP FILE: 87C0300		



ATTACHMENT III

ISSUE	DATE	DESCRIPTION	BY	CH'D	APP'D.
CONOCO INC. NATURAL GAS PRODUCTS DEPARTMENT HOUSTON, TEXAS					
MALJAMAR GAS PROCESSING PLANT AMINE WASTE CONTAINMENT & DRAINAGE SYSTEM FLOW DIAGRAM					
APPD.	SCALE:	DRAWN BY NCP NO.		C. WALKER	
DATE					

P/E: 85C0088

SECTION III
WATER QUALITY

Recent analyses of water supplied to the plant and wastewater from the plant follow.

SECTION IV
WATER TREATMENT AND DISPOSAL

A. GENERAL

Wastewater from the Maljamar Plant is generated from sanitary usage in the office, plant process, and cooling. Wastewater from the office flows to a septic system for treatment and disposal. Plant wastewater ultimately is reinjected at a Conoco waterflood project.

B. SANITARY SEWAGE TREATMENT

Sanitary wastewaters from the Maljamar Gas Processing Plant office are discharged to three-1200 gallon septic tanks. Wastes discharged to these septic tanks receive no chemical treatment. All septic tanks discharge to leach fields.

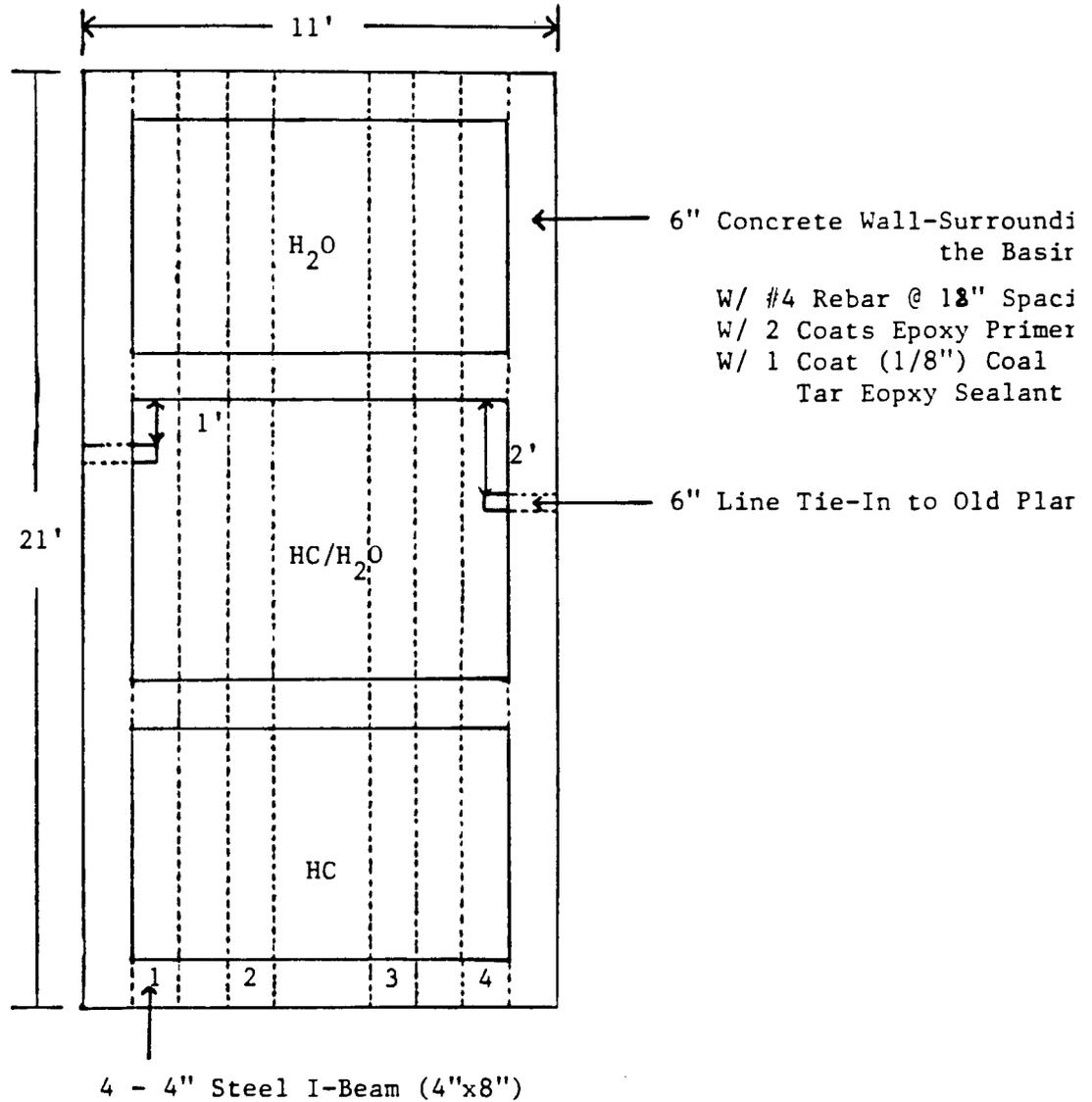
C. PLANT PROCESS WATERS

Plant drains, inlet scrubbers, and engine jacket water discharge to the skimmer basin. Diagrams of the skimmer basin, plan and side views, are Attachments 4 and 5.

Oil separated in the skimmer basin is pumped to an adjacent storage tank prior to disposal. Water from the skimmer basin is pumped to a waterflood project, operated by Conoco Inc.'s North American Production Department, adjacent to the plant. The water is then reinjected in accordance with Oil Conservation Commission Order No. R-2403. A copy of this order is provided in Appendix B.

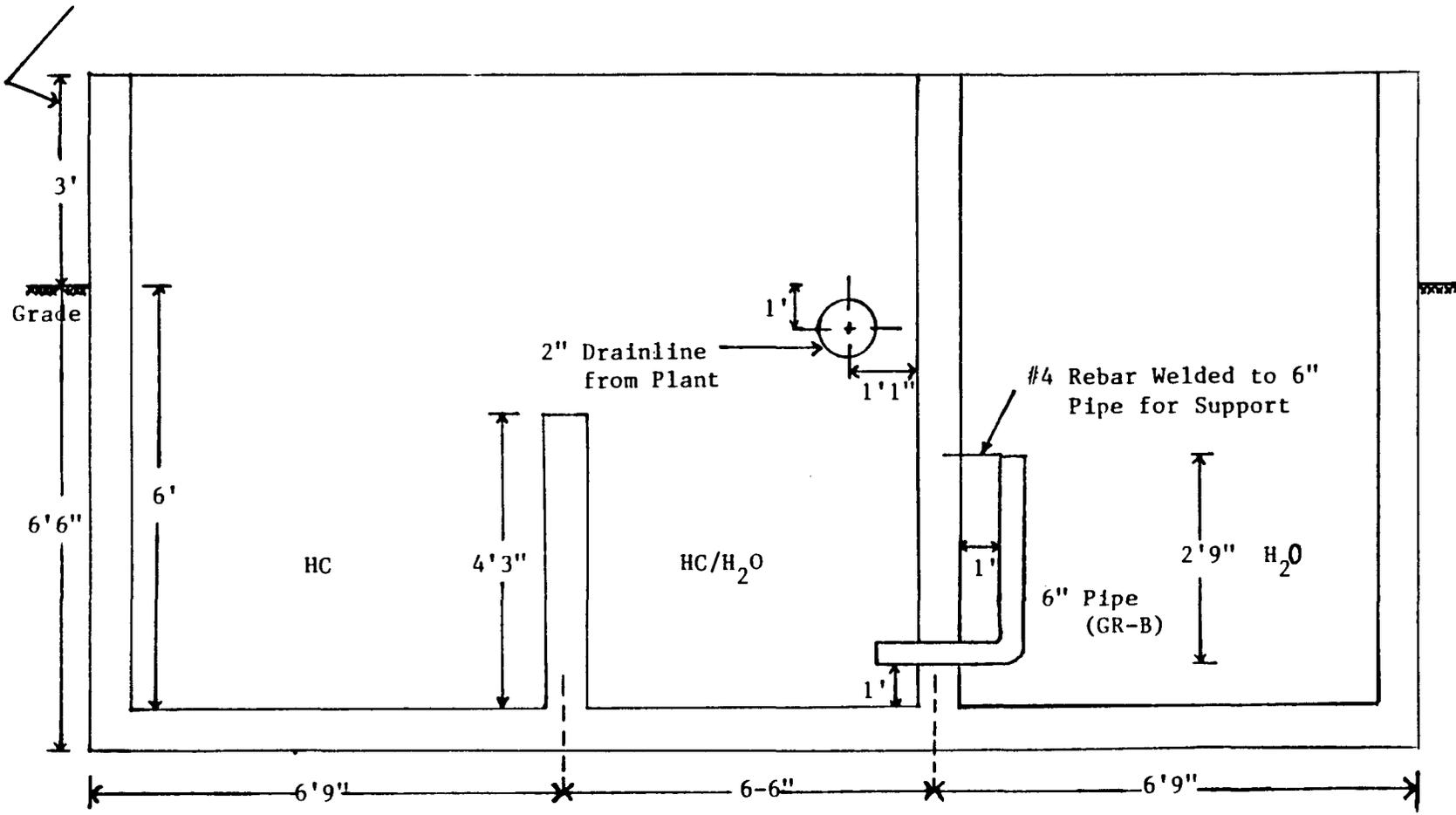
MALJAMAR GAS PLANT

HC/Water Skimmer Basin



Basin Cover: 3/8" Corrugated Carbonsteel Plating. Cover Rests on the I-Beams.

Not Shown: 4x8 Steel I-Beam Across Top and Level With Top of Concrete



SECTION V
CONTINGENCY PLAN

Currently, the Maljamar Plant depends upon pump transfer and wastewater injection to dispose of plant process and cooling waters. The total wastewater handled is approximately 55 barrels per day.

In the event of a pump failure or a discontinuance of the waterflood reinjection program, all plant wastewater would be stored in the skimmer basin, tanks #13 and #14, and the five slop tanks; see Attachment 2, Liquid Waste Drainage System. Four of the slop tanks have a capacity of 150 barrels; the fifth has a capacity of 500 barrels. Two of the smaller tanks are empty at all times. The other two tanks plus the 500-barrel capacity tank are used for slop oil storage.

The plant produces approximately 195 barrels per day of slop oil. This results in a total daily wastewater and slop oil production of 250 barrels per day. Given a total capacity of 1,360 barrels in the slop oil tanks, tanks #13 and #14, and the skimmer basin, the plant maintains the capacity to retain up to 5.5 days of wastewater and slop oil production. Under such circumstances, wastewater would be hauled offsite to a commercial injection well for disposal.

SECTION VI
HYDROLOGY/GEOLOGY & FLOOD PROTECTION

A. HYDROLOGY AND GEOLOGY

Appendix C has the results of well log which is believed to closely approximate the geological formations underlying the Maljamar Gas Plant. The log was run on a well drilled in 1980 in the Maljamar Field. It indicates a water-bearing sandstone formation between 70 and 150 feet. No analyses of this water are available; therefore, it is not possible to determine if it may be considered a source of drinking water. The sedimentology above this formation is not known.

B. FLOOD PROTECTION

The plant is located in a semi-arid region of southeastern New Mexico. Due to the surrounding topography and Conoco Inc.'s experience as the plant operator, Conoco does not believe there is any significant flood potential at this site.

C. SPILL PREVENTION

All slop oil tanks and the skimmer basin are diked to prevent any accidental releases resulting from equipment malfunction. Plant personnel visually inspect for leaks on each eight-hour shift.

Appendix D is the Spill Reporting Procedures Guide to be used in the unlikely event of any spills.

SECTION VII
SOLID WASTE HANDLING

Solid wastes generated by the Maljamar Plant are the following: (1) slop oil, (2) empty chemical drums, (3) oil and diethanolamine (DEA) filters, and/or (4) paper trash. During normal operations, the plant does not generate any RCRA hazardous wastes.

Slop oil is separated from the process and cooling wastewater stream in the skimmer basin, is pumped to the slop oil storage tank battery, and is temporarily stored prior to transfer to Navajo Pipeline. All empty chemical drums are collected by the chemical supplier for re-use. Previously, used oil and DEA filters have been analyzed and found to be non-hazardous, as described in EPA regulations 40 CFR 261. Used filters and paper trash are hauled to approved landfills by New Mexico Waste Company.

APPENDIX A
FACILITY SITE PLAN

APPENDIX B

OCC ORDER R-2403

MALJAMAR POOL
(Maljamar Cooperative Area Consolidated Order)
Lea County, New Mexico

Order No. R-2403, Approving a Supplemental Cooperative Agreement, Full Unitization, and Determining Other Matters Relating to the Maljamar Cooperative Agreement Area, Maljamar Pool, Lea County, New Mexico, December 21, 1962, as Amended by Order No. R-2403-A, February 9, 1970.

See separate Order No. R-3375, March 1, 1968, deleting references to State Engineer or State Engineer office.

Application of Continental Oil Company, as Operator, for Approval of a Supplemental Cooperative Agreement Utilizing Certain Leases, Plan of Operation for Continued Gas and Water Injection, Modification of Allocation Method for Transfer of Allowables, Certain Administrative Procedures, and Permission to Produce More Than 16 Wells Into a Single Tank Battery, Maljamar Pool, Lea County, New Mexico.

CASE NO. 2718
Order No. R-2403

ORDER OF THE COMMISSION

THE COMMISSION: This cause came on for hearing at [redacted] on December 6, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 31st day of December, 1962, the Commission, quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter hereof.

(2) That, by Order No. 485, the Commission approved the Maljamar Cooperative Repressuring Agreement, said agreement having been entered into on August 5, 1941, by the parties signatory thereto, for pressure maintenance in the Grayburg-San Andres formations under the Maljamar Cooperative Repressuring Agreement area in the Maljamar Pool, Lea County, New Mexico, unitizing gas in the area, making provisions for gas injection wells and the expansion thereof by administrative approval. The order further provided that the proration units within the committed area should not exceed the production of 4 barrels of oil daily; provided for expansion of the committed area by administrative approval; provided for the management of said project by the Operators Committee; and included other provisions for the conduct of the repressuring program.

(3) That, by Order No. 595, the Commission amended Order No. 485 and provided a method of allocation to the committed area and the reallocation to the respective proration units on a basis which included an acreage allowable up to 15 barrels per day, a maximum marginal well allowable of 20 barrels per day, and a void space allowable determined by reservoir conditions as reflected by each well's bottomhole pressure and gas-oil ratio.

(4) That numerous other orders have been entered approving additional injection wells for expansion of the repressuring program and for non-standard locations for both injection and producing wells. The order number or date of administrative approval providing for the present injection wells or non-standard locations is set out in the attached Exhibit "A".

(5) That, by Order No. R-841, the Commission approved the injection of water into the Pearl "B" Well No. 26, located 2615 feet from the South line and 25 feet from the West line of Section 30, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico. By Order No. R-1075 the Commission authorized the expansion of Order No. R-841 to include the drilling and conversion of certain wells to water injection wells, said wells also being listed on Exhibit "A" attached. The order further provided for administrative approval for expansion of the water injection program.

(6) That by adoption of Supplement No. 4 to the Maljamar Cooperative Repressuring Agreement, the applicant, the Continental Oil Company, was elected Chairman of the Operators Committee and the name was changed to the Maljamar Cooperative Agreement.

(7) That the owners of the Maljamar Cooperative Agreement area have adopted Supplement No. 5 to the Maljamar Cooperative Agreement with Continental Oil Company as Operator of the Participating Area. The effect of Supplement No. 5 is to unitize all liquid hydrocarbons in the Grayburg-San Andres formations underlying the Participating Area, and to adopt a Plan of Operations for the expansion of the pressure maintenance program by gas and water injection.

(8) That the pressure maintenance program heretofore carried out has been successful and that approval of Supplement No. 5 and the Plan of Operation contemplated thereunder, and the revision of the allocation method for transferring allowables should increase the efficiency and ultimate recovery of the pressure maintenance program.

(9) That said repressuring project was instituted during the early primary life of the Maljamar Pool; that the Maljamar Pool, without the benefit of fluid injection, would be in or approaching a "stripper" state of depletion, and that any secondary recovery project instituted at the present time would in all probability be classified by the Commission as a waterflood project subject to Commission Rule 701-E governing waterflood projects.

(10) That to afford continuity of operations under the existing pressure maintenance rules, the present void space formula for the project should remain in effect, with the added privilege of allowable transfer for injection tracts, for wells shut-in for engineering reasons, and for wells incapable of making their computed share of the void space allowable. Provided however, that the maximum allowable assigned to any 40-acre proration unit should be limited to the Southeast New Mexico Waterflood Allowable Factor currently in effect or as modified by future orders of the Commission.

(11) That, by application in this case, Continental Oil Company, as Chairman for the Maljamar Cooperative Agreement area and operator of the Participating Area, seeks the consolidation of prior orders, modification of the allocation method for transfer of allowables, an administrative procedure for expansion or revision of the fluid injection program and expansion of the Participating Area within the Maljamar Cooperative Agreement boundaries; further, applicant seeks an exception to the provisions of Rule 309-A of the Commission Rules and Regulations to permit production of more than sixteen proration units into a single tank battery.

(12) That the proposed program will promote conservation and will tend to prevent waste through the production of oil which might not otherwise be recovered.

**(MALJAMAR (MALJAMAR COOPERATIVE AREA
CONSOLIDATED ORDER) POOL - Cont'd.)****IT IS THEREFORE ORDERED:**

(1) That the Maljamar Cooperative Repressuring Agreement and its supplements, including Supplement 4 which changed the name to Maljamar Cooperative Agreement and appointed Continental Oil Company as Chairman of the Operators Committee, are hereby continued in effect.

(2) That Supplement No. 5, being a Supplemental and Amendatory Agreement to the Maljamar Cooperative Agreement, and the Initial Plan of Operations pursuant thereto, are hereby approved.

(3) That all oil produced from the Grayburg-San Andres formations underlying the Participating Area, as hereinafter defined, is fully unitized as provided in said Supplement No. 5, and all gas produced and utilized as provided in said Supplements No. 4 and No. 5 is fully utilized as provided therein.

(4) That the Cooperative Area, heretofore approved by this Commission for pressure and maintenance of the Grayburg-San Andres formations and hereinafter called MCA Unit Area, consists of the following lands:

**TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
LEA COUNTY, NEW MEXICO**

Sections 14 to 23, inclusive
Sections 25 to 35, inclusive

**TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
LEA COUNTY, NEW MEXICO**

Section 30: W/2
containing 13,786.66 acres, more or less.

That the following-described lands lying within such Cooperative Area are hereby designated and recognized as constituting the Participating Area for the Grayburg-San Andres formations:

**TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
LEA COUNTY, NEW MEXICO**

Section 15: SW/4 SW/4
Section 16: S/2 S/2, W/2 NW/4, and NE/4 NW/4
Section 17: E/2 E/2 and NW/4 NE/4 SE/4 NW/4, and S/2 SW/4
Section 18: SW/4 SW/4
Section 19: All
Section 20: All
Section 21: All
Section 22: NW/4 NW/4, S/2 NW/4, S/2 NE/4, and S/2
Section 23: W/2, S/2 NE/4, and SE/4
Section 25: N/2, N/2 SW/4, N/2 SE/4 and SE/4 SE/4
Section 26: N/2, SW/4, and NW/4 SE/4
Section 27: All
Section 28: All
Section 29: All
Section 30: All
Section 31: NE/4 NW/4
Section 33: N/2
Section 34: W/2 NW/4, NE/4 NW/4, and NW/4 NE/4

**TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
LEA COUNTY, NEW MEXICO**

Section 30: NW/4 and N/2 SW/4
containing 8,055.16 acres, more or less.

That the Participating Area described above and the following-described lands lying outside of the Participating Area but

within the Cooperative Area, are hereby designated and recognized as constituting the committed acreage to the Maljamar Cooperative Agreement.

**TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
LEA COUNTY, NEW MEXICO**

Section 14: SW/4 (156.25 acres of 160-acre tract), and E/2
Section 16: NE/4, N/2 SE/4, and SE/4 NW/4
Section 17: SW/4 NE/4, W/2 SE/4, N/2 NW/4, SW/4 NW/4, and N/2 SW/4
Section 18: E/2, E/2 W/2, and Lots 1, 2 and 3
Section 22: N/2 NE/4 and NE/4 NW/4
Section 23: N/2 NE/4
Section 25: SW/4 SE/4, and S/2 SW/4
Section 26: NE/4 SE/4, and S/2 SE/4
Section 31: N/2, SE/4 NW/4, E/2 SW/4, and Lots 1, 2, 3, and 4
Section 32: NE/4 and N/2 NW/4, below 5000 feet only
Section 33: S/2
Section 34: N/2 SE/4 below 5000 feet only, NE/4 NE/4, S/2 NE/4, and SE/4 NW/4
Section 35: W/2

**TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
LEA COUNTY, NEW MEXICO**

Section 30: Lot 4, and SE/4 SW/4

(5) That the fully Unitized Area shall be those lands designated above as the Participating Area of the MCA Unit for the Grayburg-San Andres formation.

(6) That the Participating Area may be enlarged as provided in said Supplement No. 5 and additional acreage committed to the MCA Unit; provided, however, that administrative approval for the expansion of the Participating Area or the committed acreage must be obtained from the Secretary-Director of the Commission; and provided, further, that any extension of the Cooperative Area, or of the Unitized Area beyond the boundaries of the Cooperative Area as described herein, shall be made only after notice and hearing.

(7) That the MCA Unit Operator shall file with the Commission an executed original or executed counterpart of the Supplement No. 5 within thirty (30) days after the effective date thereof. In the event of subsequent joinder by any party or expansion of the Participating Area, the unit operator shall file with the Commission within thirty (30) days thereafter counterparts of the unit agreement reflecting the subscription of those interests having subsequently joined or ratified.

IT IS FURTHER ORDERED:

(1) That the applicant, Continental Oil Company, an operator, is hereby authorized to continue the gas and water injection project authorized by Orders 425,595, and R-841, and to continue and expand the water injection project as further authorized by Order No. R-1075 and as proposed by the Plan of Operations submitted with Supplement No. 5.

(2) That the MCA Unit approved gas and water injection wells shall be those wells listed in Exhibit "A" attached hereto. Additional wells may be drilled for gas or water injection, gas injection wells may be converted to water injection, water injection wells may be converted to gas injection wells, and producing wells may be converted to injection wells and injection wells to producing wells within the boundaries of the Maljamar Cooperative Agreement Area upon administrative approval of the Secretary-Director of the Commission without notice or hearing; provided, however, that all information required by Rule 701-B of the Commission Rules and Regulations shall be included in the application for administrative approval; and provided, further, that all offset operators to the well, if

MALJAMAR (MALJAMAR COOPERATIVE AREA CONSOLIDATED ORDER) POOL - Cont'd.

By there be, whose acreage is not included within the Participating Area, and the State Engineer shall also be notified by registered or certified mail of such request for administrative approval. The Secretary-Director may approve the application if no such offset operator or the State Engineer has objected within 20 days. The Secretary-Director may grant immediate approval of the application upon receipt of written waivers of objection from all such offset operators and the State Engineer.

(As Added by Order No. R-2403-A, February 9, 1970) The Secretary-Director of the Commission is hereby also authorized to approve such additional producing wells and injection wells at unorthodox locations within the boundaries of the Maljamar Cooperative Agreement Unit Area as may be necessary to complete an efficient production and injection pattern; provided said wells are drilled no closer than 330 feet to the outer boundary of said MCA Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided further, that the application therefor has been filed in accordance with Rule 701-B of the Commission Rules and Regulations, and provided further, that a copy of the application has been sent to all operators owning acreage offsetting the quarter-quarter section upon which the well is to be located, if any there be, and no such operator has objected within 20 days. The Secretary-Director may grant immediate approval of the application upon receipt of written waivers of objection from all such offset operators.

(3) That the allocation to the Participating Area and other committed leases within the MCA Unit Area and the reallocation to the respective proration units therein shall be made up following plan:

(a) The unit operator shall submit to the Commission for approval the nomination in total barrels daily and schedule of reallocation to the respective proration units. Said nomination and schedule shall be submitted to the Commission and a duplicate shall be supplied to the Hobbs District Office of the Commission not later than the twentieth day of each month preceding the next proration month.

(b) Each proration unit shall be assigned an acreage allowable in whatsoever amount it is capable of producing up to but not exceeding fifteen (15) barrels daily, unless the unit operator nominates a lesser amount per proration unit.

(c) Each proration unit capable of producing the acreage allowable but incapable of producing the acreage allowable plus the allowable assignable through the application of the void space formula hereinafter provided shall be assigned an allowable equal to that volume of oil shown on its production test.

(d) All proration units capable of producing said acreage allowable plus the allowable allocated through the application of the void space formula shall be assigned a proportionate part of the total void space allowable so that each said proration unit will share in the void space allocation in inverse proportion to the amount of reservoir space voided as reflected by its production tests in strict accordance with the following formula:

$$\frac{\text{Proration Unit Reciprocal Void Space Factor}}{\text{Summation of MCA Unit Reciprocal Void Space Factors}} \times \text{Void Space equals Number of Allowable Barrels}$$

The reciprocal void space factors to be determined from the attached Exhibit "B" being a table of "BARRELS OF RESERVOIR SPACE VOIDED IN PRODUCING ONE BARREL OF STOCK TANK OIL, AND THE RECIPROCAL FACTOR THEREOF, AT GIVEN GAS-OIL RATIOS AND RESERVOIR PRESSURES."

(e) A proration unit upon which is located a newly completed or reconditioned well shall be assigned an allowable in accordance with its acreage and void space allowable from the first day of production of new oil.

(f) The proration units within the MCA Unit Area shall have a top daily oil allowable equal to the Southeast New Mexico Waterflood Allowable Factor currently in effect or as modified by future orders of the Commission, subject to the acreage and void space allowable allocations. A proration unit must have either a producing well, an injection well or a shut-in well capable of production before it can receive an allowable assignment.

(g) Bottomhole pressure surveys and gas-oil ratio tests shall be taken and filed with the Commission in accordance with the Commission Rules and Regulations every six (6) months or at such periods as the Commission in its discretion may prescribe from time to time. All bottomhole pressures shall be computed to a common datum of sea level.

(h) In no event shall any well producing from horizons other than the Grayburg-San Andres formations be prorated under this plan of allocation.

(4) That the operator is hereby authorized to transfer the top unit allowable from any proration unit containing only an injection well, or a well shut-in for engineering reasons and approved by the Commission, to any well or wells assigned a top unit allowable under the void space formula and capable of making the transferred allowable or portion thereof. Where a well is incapable of producing its calculated void space allowable, the difference between its capability and that allowable assigned by the void space formula may likewise be transferred to any well or wells assigned a top unit allowable under the void space formula capable of making the transferred allowable or a portion thereof. Provided, however, that no allowable shall be transferred across the boundary of the Participating Area or across the boundary of any lease outside the Participating Area without notice and hearing.

(5) That an exception is hereby granted to the provisions of Rule 309-A of the Commission Rules and Regulations to permit the production of more than sixteen wells into a single tank battery. Operator shall notify the Commission of the location of any central tank battery at the time of its installation.

(6) That no well in the MCA Unit Area that is within the Participating Area and is closer than 1000 feet to the boundary thereof or that is outside the Participating Area and is closer than 1000 feet to the Participating Area or to another lease shall produce in excess of two times the top unit allowable for the MCA Unit Area. The Secretary-Director may, upon application filed in due form, approve production in excess of two times the top unit allowable if all offset operators have been notified of the application and no objection has been received within ten days. The Secretary-Director may grant immediate approval of such application upon receipt of written waivers of objection from all such offset operators.

(7) That all previous orders pertaining to the MCA Unit are hereby superseded insofar as they are inconsistent with this order.

(8) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

APPENDIX C

WELL LOG

WELL NAME WILLIAM MITCHELL "B" NO. 20 FIELD BAISH-MALJAMAR-PEARSALLATE 9/22/80

LOCATION EST. GRD 3963' KB 3975' PROPOSED T.D. 4200'

LOCATION (SURFACE) 660' FSL & 1980' FEL OF SECTION 18 T-17S R-32E

COUNTY LEA STATE NM SPACING

GEOLOGICAL ESTIMATES

<u>ZONE</u>	<u>TOP</u>	<u>CONTENT</u> (O=Oil, G=Gas, W=Water)
WATER SS.	70'-150'	FRESH WATER
RUSTLER ANHY.	700'	-
SALADO SALT	810'	-
BASE SALT	1870'	-
YATES SS.	2030'	O,W,G
SEVEN RIVERS DOLO.	2390'	O,W,G
QUEEN SS.	2990'	O,W,G
GRAYBURG DOLO.	3390'	O,W,G
SAN ANDRES DOLO.	3770'	O,W,G

WELL SURVEYS - (List types by code numbers as follows: Directional and/or Deviation (1); Deflection (2); Caliper (3); Temperature (4); Electrical (5); Radioactive (6); Geolograph (7) Photoclinometer (8); Mudlogging (9); Other (10) and name of that type)

<u>DEPTH POINTS</u>	<u>TYPE</u>	<u>HOLE SIZE</u>	<u>REMARKS</u>
0'-4200'	(7) Geolograph	17-1/2" & 7-7/8"	One every 250' to base of salt. One every 500' thereafter.
0'-4200'	(1) Deviation	17-1/2" & 7-7/8"	
2000'-4200'	(5) DLL-GR	7-7/8"	2" & 5" Scales
2000'-4200'	(6) FDC-CNL-GR-CAL	7-7/8"	2" & 5" Scales
2000'-4200'	(6) PDC(GR-COLLAR)	5-1/2" Casing	Depth Control
0'-4200'	(4) Temperature	5-1/2" Casing	Determine top of cement if necessary

CONOCO TO FURNISH WATER, CONTRACTOR TO FURNISH FUEL.

APPENDIX D
SPILL REPORTING PROCEDURES GUIDE

NAME: WILLIAM MITCHELL "B" NO. 20

COUNTY: LEA

ION: 660' EST & 1980' FEL
Sec. 18, T-17S, R-32E.

STATE: NM

EST. KB: 3975'

EST. GL: 3963'

DEPTH	FORMATION TOPS & TYPE PLEISTOCENE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE (IN)	CASING		(PPG) FRACTURE GRADIENT	(PPG) FORMATION PRESSURE GRADIENT	MUD	
					SIZE (IN)	DEPTH (FT)			(PPG) WEIGHT	TYPE
	WATER SS	70'-150'	GEOLOGRAPH DEVIATION 0'-TD							
	RUSTLER ANHY.	700'		17-1/2	54.5# K-55 STC 13-3/8	750'		8.3- 8.5	8.5- 9.0	SPU
1000	SALADO SALT	810'								
		Possible water flows encountered 810'-4200'								
2000	BASE SALT	1870'								
	YATES SS.	2030'								
	SEVEN RIVERS DOLO.	2390'								
3000	QUEEN SS.	2990'								
	GRAYBURG DOLO.	3390'	DLL-GR FDC-CNL-GR-CAL 2000'-4200' 2" & 5"							
	SAN ANDRES DOLO.	3770'	PDC (GR-COLLAR) 2000'-4200'		15.5# K-55 STC					
4000	TD - 4200'		Temperature 0'-4200'	7-7/8	5-1/2	4200'	12-13	8.5- 10.5	9.0- 11.0	S-11 Gr-1

