Schaefer Oil Company
Application for NPDES Permit

Technical Report Oilfield Waters to
and Cawel Water

Discharge of Reclaimed Mount Poso Oilfield Waters to San Joaquin Hills Ranch and Cawelo Water District Reservoir C

Burton A. Ellison
Reg. Geologist #2791
October 14, 1991

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Burton A. Ellison
Reg. Geologist #2791
October 14, 1991

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Reg. *Geologist* #2791

(805) 831-4545
101 Starmount Lane
Bakersfield, CA 93309

October 14, 1991

Schaefer Oil Company Mount Poso Produced Water Discharge To San Joaquin Hills Ranch and Cawelo Reservoir "C"

INTRODUCTION

Schaefer Oil Company owns and operates producing oil wells in the Mount Poso Oil field, Kern County, California. Accompanying the crude oil production is a significant volume of a high quality fresh water which can be used for agricultural purposes. The purpose of this discussion is to demonstrate the feasibility of reclaiming this produced oil field water for such use.

Accompanying this report are the following exhibits:

Exhibit No 1; Schaefer Oil Company Facility and discharge points. Scale 1"=2000'

Exhibit No 2; Schaefer Oil Company, Schematic of Water Flow, Mount Poso Facility.

Exhibit No 3; Schaefer Oil Company, NPDES Permit Discharge Point Table. Locations by section-township and range as required by RWQCB.

Exhibit No 4; Type electric log (Geophysical Survey) illustrating area aquifers.

Exhibit No 5; Copies of BC Labs water analysis for Tables 1 and 2 of ISWP.

Exhibit No 6; San Joaquin Hills Ranch waterwell data

CONCLUSIONS

1. Schaefer Oil Company has applied for a NPDES Permit to discharge reclaimed Mount Poso Oilfield produced water to the San Joaquin Hills Ranch for agricultural use.

2. The reclaimed water has the following characteristics (average of eleven water analysis): Boron = 0.47 ppm; Cl = 97 ppm; EC = 998.5 umhod/cm; Oil and Grease = 8.9 ppm.

3. Maximum discharge to Cawelo Water District Reservoir C will be 1000 gallons per minute. After Discharge the Cawelo Water District Reservoir C will exhibit the following characteristics (worst case scenario): Boron = 0.306 ppm; Cl = 41 mg/l; EC = 230 umhos/cm; Oil and Grease = 6 mg/l.

4. Only one constituent of the listed constituents of Tables 1 & 2 of the Inland Surface Waters Plan (ISWP) was detected by analysis. That constituent was Mercury with an average concentration of 0.45 ug/l. Water quality objectives for Mercury are 2.4 ug/l and 12 ng/l.

5. The Formation outcropping at the surface in the discharge area is the Kern River Series. The Kern River Series is an aquitard.

6. The area's fresh water aquifers are confined aquifers with no communication to surface discharge. In general the aquifers start below 600 Feet. The principle source of Fresh water is the Basal Etchegoin Sand below 1500 feet below ground surface.

7. Discharge of Mt Poso reclaimed water to the San Joaquin Hills Ranch will not effect the water quality of the area's aquifers.

DISCUSSION

Location:

The Properties are located in a area of Kern County, California, approximately 25 miles North of Bakersfield (Exhibit No. 1, Topo Map). The source of the water is located in Sections 21, 22, 27, 28, 29, T.26S., R.28E., M.D.B.&M. The eighteen discharge points (Exhibit No. 3, page 6) are located in Sections 3,4,5,6,8 and 9 of T.27S., R.27E. and Sections 22, 27, 33, 34 and 35 of T.26S., R.27E. The source and discharge areas are connected by pipeline.

Topography:

The topography of the area is classified as moderately hilly, generally slopping to the Southwest at 6 degrees. Drainage is from a series of dry arroyos. The area receives approximately 5 inches of rain per year.

Ground Water Resources:

There are no significant groundwater resources above 600 feet below ground surface in the discharge area (refer at accompanying report). The source of the oil field water is the Vedder Formation (Miocene) lying about 1500' below ground surface. Their are no aquifers containing water above 750' in the source area. Depth to the principle aquifer is about 1500 feet in the discharge area. No contamination of groundwater resources is expected from the discharge of Schaefer water to the eighteen water discharge points.

Process Flow (Exhibit No. 2):

The flow of water to the discharge points is shown in Exhibit No 2. In summary, water produced with oil from oil wells is piped to five oil field production facilities. Oil and water are separated at these facilities. The water is piped to a Main Reservoir, then

put through a WEMCO unit to remove any excess oil and grease. From the WEMCO the water is transported by pipeline to sixteen discharge points. Two emergency discharge points are in the flow stream before WEMCO processing.

Water Analysis:

We located eleven produced oilfield water analysis from the facility's wells since 1940. The average of these eleven analysis is Boron = 0.47 ppm, Cl = 92.47 ppm, EC = 998.5 umhos/cm, Oil and grease = 8.9 ppm. Note that the average for all items measured is below the maximum acceptable levels for Boron (0.5ppm), Cl (175ppm), EC (1000umhos/cm), oil and grease (35ppm).

Discharge to Cawelo Reservoir "C"

From time to time, the water with the above described characteristics will be discharged into Cawelo Reservoir "C". The average flow of produced water will be 750 gal/min, with maximum flow of 1000 gal/min. Flow from sources other than the oilfield water into Reservoir "C" averages 22,300 gal/min, maximum flow is 53,900 gal/min and minimum flow is 2,200 gal/min.

One water analysis (Aug 8, 1991) of water flowing in Reservoir "C' from sources other than Schaefer water is Boron = 0.19 mg/L, Cl = 15.2 mg/L, EC = 230 umhos/cm, oil and grease = 6 mg/L.

Worst Case Scenario:

The worst case scenario of water quality in Reservoir "C' will occur when the Schaefer inflow is at maximum (1000 gal/min) and the Cawelo inflow is at minimum (2,200 gal/min). Under these conditions the water in Reservoir "C" will exhibit the following characteristics: Boron = 0.306 mg/L, Cl = 41 mg/L, EC < 500 umhos/cm, oil and grease = 6.8 mg/L. All of the above characteristics are well within acceptable limits for the constituents.

Inland Surface Waters Plan (ISWP)

On September 11, 1991 two samples of water discharged from the WEMCO Unit to the pipeline were collected by Mr. David Rittenhouse, an employee of BC Laboratories, Inc, 4200 Atlas CT., Bakersfield, California 93308. The first sample was collected at 11:40 A.M., the second sample at 12:40P.M. The water samples remained in the possession of BC Laboratories, Inc. at all times except for samples sent to other labs for special analysis. Exhibit 5 are copies of the BC Laboratories, Inc reports. The results are also reported on the accompanying NPDES Permit form (Application Form 2C)

The analysis of constituents listed on Table 1 of the ISWP report requirements indicate that only one constituent listed on Table 1 was detected. That constituents was Mercury and the reported value was 0.6 ug/l for sample 1 and 0.3 ug/l for sample 2. The one hour average concentration for Mercury was 0.45 ug/l. Water

quality objectives for the Protection of freshwater aquatic life is 2.4 ug/l (one hour average). The mercury concentration is well below the water quality objectives for this category.

The analysis of constituents listed on Table 2 of the ISWP requirements also indicate that only one constituent listed on Table 2 was detected. That constituent was also Mercury. The one hour average was 0.045 ng/l. The objective was 12 ng/l and the discharged water meets this requirement.

Discharge Information

Exhibit No 3 lists the proposed discharge points and reservoirs.

The Mt Poso water volume is not enough to satisfy ranch needs. The Mt Poso water will be used to supplement water supplied by existing wells.

All produced Mount Poso water will be discharged to Cawelo Water District Reservoir C on a as need basis. The District's water use requirements will be determined by future rainfall and Sierra Nevada snow melt and runoff. Therefore, it is possible that in some years of high rainfall no water will be discharged to Reservoir C. In drought periods possibly most of the Mt Poso produced water will be discharged to Reservoir C. In the average year it is estimated that 1000 gallons per minute (4.4 A.F./Day) will be discharged into Reservoir C for the six month period starting in April and ending in September. During this time ranch water needs will be filled by existing water wells and Mt Poso produced water.

If not preempted by Cawelo Water District demand the water will be distributed approximately as follows:

1. Reservoir E: From March through November (nine months), 1.45 A.F. per Day to furnish water for existing citrus orchards. From December through February (three months), 0.5 A.F. per Day for citrus.

2. Reservoir D: From March through November (nine months), 1.45 A.F. per Day to furnish water for existing citrus orchards. From December through February (three months), 0.5 A.F. per Day for citrus and all year, 0.2 A.F. per Day for Eucalyptus trees in Section 27, T.26S., R.27E.

3. Reservoir C: All year, 0.2 A.F. Per day for Eucalyptus trees in Section 27 and 34, T.26S., R.27E. Possibly, if the owner elects to plant citrus in Section 33, T.26S., R.27E. 1.65 A.F. per day (total) March through November and 0.76 A.F. per day (total) December through February.

4. Reservoir B: With discharge to Cawelo Water District Reservoir C, Reservoir B will accept 4.4 A.F. per Day. If no water is discharged to Cawelo Reservoir C, the possibility exists for discharge up 1.76 A.F. per day as

per Reservoirs E & D for citrus and 4.4 A.F. per Day for dry farming such as wheat, Alfalfa and/or Nut Crops.

5. Reservoir B-1: Discharge of 4.4 A.F. per Day with Discharge to Cawelo Water District C. Possibility to use Reservoir as an alternate to Reservoir B.

6. Reservoir A: Discharge of 2.6 A.F. per Day (average over time period) during periods of low water use with the excess water being diverted to the overflow basin in Section 34, T. 26S., R.27E.

7. Reservoirs 1 & 2: Up to 2.6 A.F. per day (average for time period) for the following crops (considerable Reservoirs 1 & 2 as interchangeable): Alfalfa, citrus, winter wheat and catfish.

8. Animal Watering Troughs will use approximately 500 gallon water per day each as required.

It is obvious that the Mt Poso water cannot fill all the San Joaquin Hills Ranch water needs. In reality, the Mt Poso water can only supplement the water from existing waterwells. The owner desires flexibility for water movement to the various reservoirs on his ranch to serve the special needs.

Exhibit No. 3
Location of Discharge Points by Section, T&R

Outfall Number	Section	Township	Range	Receiving Water Name
1	29	T.26S.	R.28E.	Little Creek at WEMCO Unit
2	9	T.27S.	R.27E.	Reservoir 1
3	9	T.27S.	R.27E.	Reservoir 2
4	3	T.27S.	R.27E.	Reservoir A
5	33	T.26S.	R.27E.	Reservoir B
6	33	T.26S.	R.27E.	Reservoir B-1
7	27	T.26S.	R.27E.	Reservoir C
8	27	T.26S.	R.27E.	Reservoir D
9	22	T.26S.	R.27E.	Reservoir E
10	6	T.27S.	R.27E.	Cawelo Water District, Reservoir C
11	28	T.26S.	R.28E.	Emergency discharge to Little Creek
12	28	T.26S.	R.28E.	Emergency discharge to Little Creek
13	34	T.26S.	R.27E.	Overflow basin
AW	33	T.26S.	R.28E	Animal Watering
AW	31	T.26S.	R.28E.	" "
AW	35	T.26S.	R.27E.	" "
AW	4	T.27S.	R.27E.	" "
AW	8	T.27S.	R.27E.	" "

Study of Subsurface Aquifers
San Joaquin Hills Ranch
Kern County, California

Burton A. Ellison
Reg. Geologist #2791

INTRODUCTION

Schaefer Oil Company has applied to the RWQCB for a NPDES Permit to discharge reclaimed produced oilfield fresh water from its Mount Poso Oil producing facility to eight surface reservoirs and the Cawelo Water District Reservoir C. Small amounts of water will be discharged to five animal watering troughs along the pipeline route. Most of the discharged water either will be used for crop watering or discharged to Cawelo Water District Reservoir C.

The Regional water Quality Control Board has requested by letter dated September 25, 1991 that Schaefer Oil Company provide the Board with a "A report based on available geologic information concerning the presence and areal continuity of aquitards between the reservoirs and ground water." The Board has also required that Schaefer Oil provide the locations of all irrigation and domestic wells within 1/4 mile of each discharge location.

DISCUSSION

The best available sources of geologic information are the following:

1. Geophysical surveys in wells drilled exploring for both oil and water. The most common of these geophysical surveys is the Electric log. Electric logs can provide valuable information concerning lithology, aquifer fluid content and salinity, Aquitards, and subsurface geologic structure.

2. USGS topographic and surface geology maps.

3. State of California, Division of oil and Gas publications describing the geology of the areas oil fields.

All of the above geological information was used in the preparation of this report.

General Geology

The area of interest is located on a homocline that dips to the southwest at seven degrees, Basement is composed of grano-diorites of the Sierra Nevada Batholith complex. In general, subsurface geologic formations thin to the Northeast and thicken to the Southwest.

The sediments were deposited in continental environments, inland seas and fresh water lakes. The source of the sediments is the weathered grano-diorites of the Sierra Nevada, located east of the area of interest. Sedimentary material, derived from the weathering of the Sierra Nevada Batholith, was transported to the area via rivers and distributed by natural geological process in the then existing ancient lakes and seas.

The surface outcropping formation is the Kern River Series (Pleistocene). The Kern River Series is made up of alternating bed of gray-green silts and clays. Hydraulic Conductivity (Permeability) is low $1x10^{-11}$ to $4.7x10^{-9}$ M/sec as defined by Davis (1969).

The outcropping Kern River Series is an Aquitard (actually a series of Aquitards) approximately 900 feet thick.

Unconformably underlying the Kern River Series Aquitards is the Etchegoin formation (Pliocene) also approximately 900 feet in thickness. The Etchegoin is series of clay, silt and sand beds with interbedded aquifers and aquitards. The Basal Etchegoin Sand is oil bearing at the Poso Creek Oilfield to the South and East of the report area.

The actual formational boundary between the Kern River Series and the Etchegoin Formation is subject to geological interpretation and, as a result, most authors combine the two formations into a unit called Kern River-Upper Etchegoin undifferentiated. We will follow this nomenclature in this report.

Water Resources

The surface outcropping of the alternating clays and silts of the Kern River Series-Upper Etchegoin form an impermeable barrier (aquitard) that separates the surface runoff and/or discharge from the aquifers beneath the area.

Thin sand lenses, with apparent low permeability, are found within the Unit, commonly starting 600 feet below ground surface. These minor aquifers are confined within the Kern River Series with no connection to surface waters. The thin sand lenses are developed locally and have very limited aerial extent. Less than 6% of the Kern River Series can be considered possible aquifers.. Also, these potential aquifers are most common in the lower portion of the formation below 800 feet drilled depth.

Based on the above discussion the Upper Portion of the Kern River Series-Upper Etchegoin Formation has, at best, only insignificant volumes of water available for domestic or agricultural purposes.

The primary source of fresh potable water for the area are Basal Etchegoin sand lenses (aquifers) occurring 1500 feet below ground surface. The Basal Etchegoin Sand, the most significant aquifer, occurs 1800 feet below ground surface. The Basal Etchegoin is a confined aquifer. The sand does not outcrop and it is totally

isolated from surface discharge by the aquitards of the Kern River Series-Upper Etchegoin Undifferentiated.

The average depth of the six San Joaquin Hills Ranch Waterwells is 1910 feet. The six wells have 16 inch protection strings to a average depth of 905 feet. Water entry is (on average) from perforations that are found 905 feet to 1910 feet below ground surface.

There is an waterwell located at Reservoir E with no available data.

The two San Joaquin Hills Ranch in Section 9, T.27S., R.27E., Waterwell #5345 and Waterwell #5340 are deep wells. Waterwell #5345, located at Reservoir 1 is 1920 feet deep. Waterwell #5340, located at Reservoir 2, is 1975' deep. The upper 800 feet of #5340 is blank and the top 900 feet of #5345 is blank, confirming the barren nature of the shallow measures for water.

There is no data on file with Kern county or the Division of Oil and Gas for the McCourry domestic waterwell in Section 8, T.27S., R.27E.

Effect of Mt. Poso water Discharge upon the area's aquifers

The following conclusions form the basis for the calculations below.

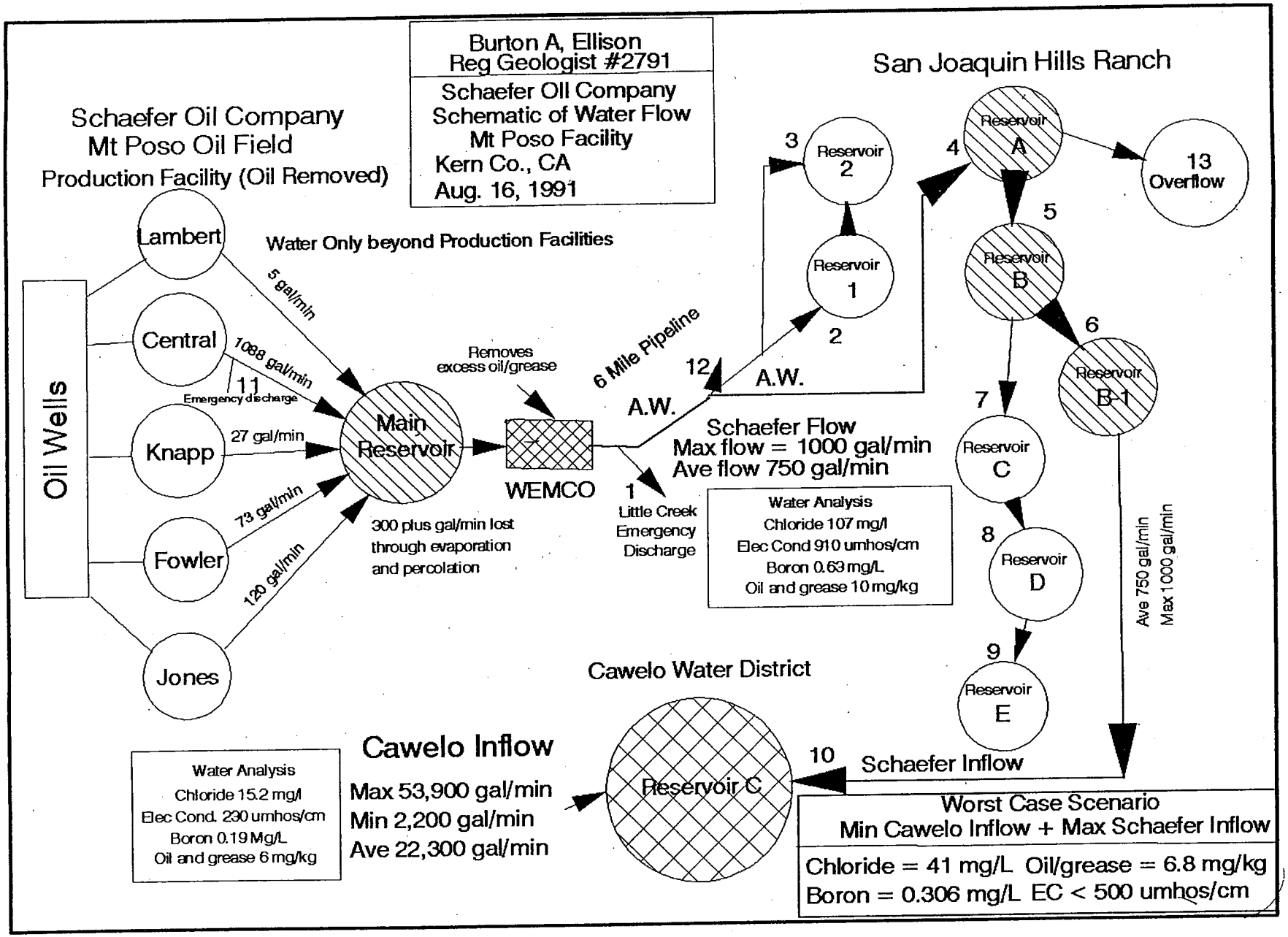
1. The first possible aquifer is near 600 feet below ground surface.
2. All aquifers in the area are confined aquifers and are not in communication with the ground surface.
3. The average depth of the San Joaquin Hills Ranch Reservoirs discharge reservoirs is 10 feet.

Based on the known existing conditions, I estimate that the rate of water movement from a discharge reservoir into the Kern River Series has a range of 1/8 inch (minimum) to 5.64 inches (maximum) per year. The actual value is estimated to be nearly 1/8 inch per year for most of the sediments down to 600 (and below).
The Mt Poso water would reach the 600 foot depth in about 58,000 years. Because the expected life of the project is less than 50 years there is no possibility of any Mt Poso entering into the area's aquifers.

CONCLUSIONS

Based on my study of aquitards and aquifers of the San Joaquin Hills Ranch, I cannot conceive of any viable scenario that could conclude that discharge of Schaefer's Mt Poso waters onto the surface of the San Joaquin Hills Ranch would contaminate the primary aquifers in the area.

Exhibit No. 2


Burton A, Ellison
Reg Geologist #2791
Schaefer Oil Company
Schematic of Water Flow
Mt Poso Facility
Kern Co., CA
Aug. 16, 1991
Schaefer Oil Company
Mt Poso Oil Field
Production Facility (Oil Removed)
San Joaquin Hills Ranch
Water Only beyond Production Facilities
Oil Wells
Lambert
Central
Knapp
Fowler
Jones
5 gal/min
1088 gal/min
27 gal/min
73 gal/min
120 gal/min
11
Emergency discharge
Main Reservoir
300 plus gal/min lost through evaporation and percolation
Removes excess oil/grease
WEMCO
6 Mile Pipeline
A.W.
12
A.W.
1
Little Creek Emergency Discharge
Schaefer Flow
Max flow = 1000 gal/min
Ave flow 750 gal/min
Water Analysis
Chloride 107 mg/l
Elec Cond 910 umhos/cm
Boron 0.63 mg/L
Oil and grease 10 mg/kg
3
Reservoir 2
Reservoir 1
2
4
Reservoir A
13
Overflow
5
Reservoir B
6
Reservoir B-1
7
Reservoir C
8
Reservoir D
9
Reservoir E
Ave 750 gal/min
Max 1000 gal/min
Cawelo Water District
Reservoir C
10
Schaefer Inflow
Cawelo Inflow
Max 53,900 gal/min
Min 2,200 gal/min
Ave 22,300 gal/min
Water Analysis
Chloride 15.2 mg/l
Elec Cond. 290 umhos/cm
Boron 0.19 Mg/L
Oil and grease 6 mg/kg
Worst Case Scenario
Min Cawelo Inflow + Max Schaefer Inflow
Chloride = 41 mg/L Oil/grease = 6.8 mg/kg
Boron = 0.306 mg/L EC < 500 umhos/cm

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date Reported: 09/26/91
Date Received: 09/11/91
Laboratory No.: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

WATER ANALYSIS

Constituents	Results	Units	D.L.R.	Method
Total Suspended Solids using 0.45 micron paper	None Detected	mg/kg	0.5	EPA-160.2
Hexavalent Chromium	None Detected	µg/L	10.	SW-7196
Total Arsenic	None Detected	µg/L	2.	SW-7060
Total Cadmium	None Detected	µg/L	5.	SW-6010
Total Copper	None Detected	µg/L	10.	SW-6010
Total Lead	None Detected	µg/L	5.	SW-7421
Total Mercury	0.6	µg/L	0.2	EPA-245.1
Total Nickel	None Detected	µg/L	50.	SW-6010
Total Selenium	None Detected	µg/L	2.	SW-7740
Total Silver	None Detected	µg/L	10.	SW-6010
Total Zinc	None Detected	µg/L	10.	SW-6010
Phenols	None Detected	µg/L	2.	EPA-420.2
Ammonia as NH3	0.78	mg/L	0.02	EPA-350.1
Non-Volatile Organic Carbon	5.0	mg/L	1.0	SW-9060
Biochemical Oxygen Demand	10.1	mg O/L	0.30	EPA-405.1
Chemical Oxygen Demand	28.8	mg O/L	4.0	EPA-410.2

D.L.R. = Detection Limit for Reporting purposes.

REFERENCES:
EPA = "Methods for Chemical Analysis of Water and Wastes", EPA-600, 14-79-020.
SW = "Test Methods for Evaluating Solid Wastes Physical/Chemical Methods", SW 846, September, 1986.

M. Atencio
Department Supervisor

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.

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Volatile Organic Analysis

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/20/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Test Method: EPA Method 8240

Sample Matrix: Waste Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
09/11/91	09/11/91	09/20/91

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.5
Bromodichloromethane	None Detected	µg/L	0.5
Bromoform	None Detected	µg/L	0.5
Bromomethane	None Detected	µg/L	0.5
Carbon tetrachloride	None Detected	µg/L	0.5
Chlorobenzene	None Detected	µg/L	0.5
Chloroethane	None Detected	µg/L	0.5
2-Chloroethylvinyl ether	None Detected	µg/L	5.
Chloroform	None Detected	µg/L	0.5
Chloromethane	None Detected	µg/L	0.5
Dibromochloromethane	None Detected	µg/L	0.5
1,2-Dichlorobenzene	None Detected	µg/L	0.5
1,3-Dichlorobenzene	None Detected	µg/L	0.5
1,4-Dichlorobenzene	None Detected	µg/L	0.5
1,1-Dichloroethane	None Detected	µg/L	0.5
1,2-Dichloroethane	None Detected	µg/L	0.5
1,1-Dichloroethene	None Detected	µg/L	0.5
trans-1,2-Dichloroethene	None Detected	µg/L	0.5
1,2-Dichloropropane	None Detected	µg/L	0.5
cis-1,3-Dichloropropene	None Detected	µg/L	0.5
trans-1,3-Dichloropropene	None Detected	µg/L	0.5
Ethyl Benzene	None Detected	µg/L	0.5

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

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4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

Volatile Organic Analysis
(8240)

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/20/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Methylene Chloride	None Detected	µg/L	5.
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.5
Tetrachloroethene	None Detected	µg/L	0.5
Toluene	None Detected	µg/L	0.5
1,1,1-Trichloroethane	None Detected	µg/L	0.5
1,1,2-Trichloroethane	None Detected	µg/L	0.5
Trichloroethene	None Detected	µg/L	0.5
Trichlorofluoromethane	None Detected	µg/L	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	None Detected	µg/L	0.5
Vinyl Chloride	None Detected	µg/L	0.5
m-Xylene	None Detected	µg/L	0.5
o-Xylene	None Detected	µg/L	0.5
p-Xylene	None Detected	µg/L	0.5

Comments:

California D.O.H.S. Cert. #1186

Department Supervisor

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM
BC LABORATORIES, INC.
J. J. EGLIN, REG. CHEM. ENGR.
4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

Organochlorine Pesticides and PCB's

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/19/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Test Method: EPA Method 8080 Sample Matrix: Waste Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
09/11/91	09/11/91	09/19/91

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Aldrin	None Detected	µg/L	0.5
alpha-BHC	None Detected	µg/L	5.
beta-BHC	None Detected	µg/L	5.
delta-BHC	None Detected	µg/L	1.
gamma-BHC	None Detected	µg/L	2.
Chlordane	None Detected	µg/L	10.
4,4'-DDD	None Detected	µg/L	0.5
4,4'-DDE	None Detected	µg/L	0.2
4,4'-DDT	None Detected	µg/L	0.5
Dieldrin	None Detected	µg/L	0.5
Endosulfan I	None Detected	µg/L	0.5
Endosulfan II	None Detected	µg/L	1.
Endosulfan Sulfate	None Detected	µg/L	0.5
Endrin	None Detected	µg/L	1.
Endrin Aldehyde	None Detected	µg/L	0.5
Heptachlor	None Detected	µg/L	0.2
Heptachlor Epoxide	None Detected	µg/L	0.5
Methoxychlor	None Detected	µg/L	1.
Toxaphene	None Detected	µg/L	100.

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/19/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
PCB-1016	None Detected	µg/L	100.
PCB-1221	None Detected	µg/L	100.
PCB-1232	None Detected	µg/L	100.
PCB-1242	None Detected	µg/L	100.
PCB-1248	None Detected	µg/L	100.
PCB-1254	None Detected	µg/L	100.
PCB-1260	None Detected	µg/L	100.
Total PCB's (Summation)	None Detected		100.

Comments:

California D.O.H.S. Cert. #1186

Department Supervisor

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

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J. J. EGLIN, REG. CHEM. ENGR.

4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-191

Base Neutrals and Acids (Continued)

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/16/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
2,4-Dinitrophenol	None Detected	µg/L	2.
2-Methyl-4,6-dinitrophenol	None Detected	µg/L	2.
2-Methylphenol	None Detected	µg/L	2.
4-Methylphenol	None Detected	µg/L	2.
2-Nitrophenol	None Detected	µg/L	2.
4-Nitrophenol	None Detected	µg/L	2.
Pentachlorophenol	None Detected	µg/L	2.
Phenol	None Detected	µg/L	2.
2,4,5-Trichlorophenol	None Detected	µg/L	2.
2,4,6-Trichlorophenol	None Detected	µg/L	2.
Benzidene	None Detected	µg/L	2.
Endosulfan I	None Detected	µg/L	2.
Endosulfan II	None Detected	µg/L	2.
Endrin	None Detected	µg/L	2.
Hexachlorocyclopentadiene	None Detected	µg/L	2.
2-Naphthylamine	None Detected	µg/L	2.
N-Nitrosodimethylamine	None Detected	µg/L	2.
N-Nitrosodiphenylamine	None Detected	µg/L	2.

Comments:

California D.O.H.S. Cert. #1186

Department Supervisor

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SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/16/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Dibenzofuran	None Detected	µg/L	2.
Di-n-butyl phthalate	None Detected	µg/L	2.
1,3-Dichlorobenzene	None Detected	µg/L	2.
1,2-Dichlorobenzene	None Detected	µg/L	2.
1,4-Dichlorobenzene	None Detected	µg/L	2.
3,3-Dichlorobenzidine	None Detected	µg/L	2.
Dieldrin	None Detected	µg/L	2.
Diethyl phthalate	None Detected	µg/L	2.
Dimethyl phthalate	None Detected	µg/L	2.
2,4-Dinitrotoluene	None Detected	µg/L	2.
2,6-Dinitrotoluene	None Detected	µg/L	2.
Di-n-octylphthalate	None Detected	µg/L	2.
1,2-Diphenylhydrazine	None Detected	µg/L	2.
Endosulfan sulfate	None Detected	µg/L	2.
Endrin aldehyde	None Detected	µg/L	2.
Fluoranthene	None Detected	µg/L	2.
Fluorene	None Detected	µg/L	2.
Heptachlor	None Detected	µg/L	2.
Heptachlor epoxide	None Detected	µg/L	2.
Hexachlorobenzene	None Detected	µg/L	2.
Hexachlorobutadiene	None Detected	µg/L	2.
Hexachloroethane	None Detected	µg/L	2.
Ideno (1,2,3-cd) pyrene	None Detected	µg/L	2.
Isophorone	None Detected	µg/L	2.
2-Methylnaphthalene	None Detected	µg/L	2.
Naphthalene	None Detected	µg/L	2.
2-Nitroaniline	None Detected	µg/L	2.
3-Nitroaniline	None Detected	µg/L	2.
4-Nitroaniline	None Detected	µg/L	2.
Nitrobenzene	None Detected	µg/L	2.
N-Nitrosodi-n-propylamine	None Detected	µg/L	2.
Phenanthrene	None Detected	µg/L	2.
Pyrene	None Detected	µg/L	2.
1,2,4-Trichlorobenzene	None Detected	µg/L	2.
4-Chloro-3-methylphenol	None Detected	µg/L	2.
2-Chlorophenol	None Detected	µg/L	2.
2,4-Dichlorophenol	None Detected	µg/L	2.
2,4-Dimethylphenol	None Detected	µg/L	2.

ENVIRONMENTAL
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BC LABORATORIES, INC.

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Base Neutral and Acid Extractables
Organic Analysis

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/16/91
Lab #: 10156-1

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #1, 9/11/91 @ 11:40AM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Test Method: EPA Method 8270 Sample Matrix: Waste Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
09/11/91	09/11/91	09/16/91

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Acenaphthene	None Detected	µg/L	2.
Acenaphthylene	None Detected	µg/L	2.
Aldrin	None Detected	µg/L	2.
Aniline	None Detected	µg/L	2.
Anthracene	None Detected	µg/L	2.
Benzo (a) anthracene	None Detected	µg/L	2.
Benzo (b) fluoranthene	None Detected	µg/L	2.
Benzo (k) fluoranthene	None Detected	µg/L	2.
Benzo (a) pyrene	None Detected	µg/L	2.
Benzo (ghi) perylene	None Detected	µg/L	2.
Benzoic Acid	None Detected	µg/L	2.
Benzyl Alcohol	None Detected	µg/L	2.
Butyl Benzyl phthalate	None Detected	µg/L	2.
alpha-BHC	None Detected	µg/L	2.
beta-BHC	None Detected	µg/L	2.
delta-BHC	None Detected	µg/L	2.
gamma-BHC	None Detected	µg/L	2.
bis(2-chloroethyl)ether	None Detected	µg/L	2.
bis(2-chloroethoxy)methane	None Detected	µg/L	2.
bis(2-ethylhexyl)phthalate	None Detected	µg/L	2.
bis(2-chloroisopropyl)ether	None Detected	µg/L	2.
4-Bromophenyl phenyl ether	None Detected	µg/L	2.
4-Chloroaniline	None Detected	µg/L	2.
2-Chloronaphthalene	None Detected	µg/L	2.
4-Chlorophenyl phenyl ether	None Detected	µg/L	2.
Crysene	None Detected	µg/L	2.
4,4-DDD'	None Detected	µg/L	2.
4,4-DDE'	None Detected	µg/L	2.
4,4-DDT'	None Detected	µg/L	2.
Dibenzo (a,h) anthracene	None Detected	µg/L	2.

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SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date Reported: 09/26/91
Date Received: 09/11/91
Laboratory No.: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

WATER ANALYSIS

Constituents	Results	Units	D.L.R.	Method
Total Suspended Solids using 0.45 micron paper	None Detected	mg/kg	0.5	EPA-160.2
Hexavalent Chromium	None Detected	µg/L	10.	SW-7196
Total Arsenic	None Detected	µg/L	2.	SW-7060
Total Cadmium	None Detected	µg/L	5.	SW-6010
Total Copper	None Detected	µg/L	10.	SW-6010
Total Lead	None Detected	µg/L	5.	SW-7421
Total Mercury	0.3	µg/L	0.2	EPA-245.1
Total Nickel	None Detected	µg/L	50.	SW-6010
Total Selenium	None Detected	µg/L	2.	SW-7740
Total Silver	None Detected	µg/L	10.	SW-6010
Total Zinc	None Detected	µg/L	10.	SW-6010
Phenols	None Detected	µg/L	2.	EPA-420.2
Ammonia as NH3	0.79	mg/L	0.02	EPA-350.1
Non-Volatile Organic Carbon	4.4	mg/L	1.0	SW-9060
Biochemical Oxygen Demand	11.9	mg O/L	0.30	EPA-405.1
Chemical Oxygen Demand	24.4	mg O/L	4.0	EPA-410.2

D.L.R. = Detection Limit for Reporting purposes.

REFERENCES:
EPA = "Methods for Chemical Analysis of Water and Wastes", EPA-600, 14-79-020.
SW = "Test Methods for Evaluating Solid Wastes Physical/Chemical Methods", SW 846, September, 1986.

M. Atencio
Department Supervisor

ENVIRONMENTAL
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J. J. EGLIN, REG. CHEM. ENGR.

4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

Volatile Organic Analysis

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/20/91
Lab #: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Test Method: EPA Method 8240

Sample Matrix: Waste Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
09/11/91	09/11/91	09/19/91

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.5
Bromodichloromethane	None Detected	µg/L	0.5
Bromoform	None Detected	µg/L	0.5
Bromomethane	None Detected	µg/L	0.5
Carbon tetrachloride	None Detected	µg/L	0.5
Chlorobenzene	None Detected	µg/L	0.5
Chloroethane	None Detected	µg/L	0.5
2-Chloroethylvinyl ether	None Detected	µg/L	5.
Chloroform	None Detected	µg/L	0.5
Chloromethane	None Detected	µg/L	0.5
Dibromochloromethane	None Detected	µg/L	0.5
1,2-Dichlorobenzene	None Detected	µg/L	0.5
1,3-Dichlorobenzene	None Detected	µg/L	0.5
1,4-Dichlorobenzene	None Detected	µg/L	0.5
1,1-Dichloroethane	None Detected	µg/L	0.5
1,2-Dichloroethane	None Detected	µg/L	0.5
1,1-Dichloroethene	None Detected	µg/L	0.5
trans-1,2-Dichloroethene	None Detected	µg/L	0.5
1,2-Dichloropropane	None Detected	µg/L	0.5
cis-1,3-Dichloropropene	None Detected	µg/L	0.5
trans-1,3-Dichloropropene	None Detected	µg/L	0.5
Ethyl Benzene	None Detected	µg/L	0.5

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4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/16/91
Lab #: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
2,4-Dinitrophenol	None Detected	µg/L	3.
2-Methyl-4,6-dinitrophenol	None Detected	µg/L	3.
2-Methylphenol	None Detected	µg/L	3.
4-Methylphenol	None Detected	µg/L	3.
2-Nitrophenol	None Detected	µg/L	3.
4-Nitrophenol	None Detected	µg/L	3.
Pentachlorophenol	None Detected	µg/L	3.
Phenol	None Detected	µg/L	3.
2,4,5-Trichlorophenol	None Detected	µg/L	3.
2,4,6-Trichlorophenol	None Detected	µg/L	3.
Benzidene	None Detected	µg/L	3.
Endosulfan I	None Detected	µg/L	3.
Endosulfan II	None Detected	µg/L	3.
Endrin	None Detected	µg/L	3.
Hexachlorocyclopentadiene	None Detected	µg/L	3.
2-Naphthylamine	None Detected	µg/L	3.
N-Nitrosodimethylamine	None Detected	µg/L	3.
N-Nitrosodiphenylamine	None Detected	µg/L	3.

Comments:

California D.O.H.S. Cert. #1186

Department Supervisor

ENVIRONMENTAL
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PETROLEUM

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J. J. EGLIN, REG. CHEM. ENGR.

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SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/16/91
Lab #: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Dibenzofuran	None Detected	µg/L	3.
Di-n-butyl phthalate	None Detected	µg/L	3.
1,3-Dichlorobenzene	None Detected	µg/L	3.
1,2-Dichlorobenzene	None Detected	µg/L	3.
1,4-Dichlorobenzene	None Detected	µg/L	3.
3,3-Dichlorobenzidine	None Detected	µg/L	3.
Dieldrin	None Detected	µg/L	3.
Diethyl phthalate	None Detected	µg/L	3.
Dimethyl phthalate	None Detected	µg/L	3.
2,4-Dinitrotoluene	None Detected	µg/L	3.
2,6-Dinitrotoluene	None Detected	µg/L	3.
Di-n-octylphthalate	None Detected	µg/L	3.
1,2-Diphenylhydrazine	None Detected	µg/L	3.
Endosulfan sulfate	None Detected	µg/L	3.
Endrin aldehyde	None Detected	µg/L	3.
Fluoranthene	None Detected	µg/L	3.
Fluorene	None Detected	µg/L	3.
Heptachlor	None Detected	µg/L	3.
Heptachlor epoxide	None Detected	µg/L	3.
Hexachlorobenzene	None Detected	µg/L	3.
Hexachlorobutadiene	None Detected	µg/L	3.
Hexachloroethane	None Detected	µg/L	3.
Ideno (1,2,3-cd) pyrene	None Detected	µg/L	3.
Isophorone	None Detected	µg/L	3.
2-Methylnaphthalene	None Detected	µg/L	3.
Naphthalene	None Detected	µg/L	3.
2-Nitroaniline	None Detected	µg/L	3.
3-Nitroaniline	None Detected	µg/L	3.
4-Nitroaniline	None Detected	µg/L	3.
Nitrobenzene	None Detected	µg/L	3.
N-Nitrosodi-n-propylamine	None Detected	µg/L	3.
Phenanthrene	None Detected	µg/L	3.
Pyrene	None Detected	µg/L	3.
1,2,4-Trichlorobenzene	None Detected	µg/L	3.
4-Chloro-3-methylphenol	None Detected	µg/L	3.
2-Chlorophenol	None Detected	µg/L	3.
2,4-Dichlorophenol	None Detected	µg/L	3.
2,4-Dimethylphenol	None Detected	µg/L	3.

ENVIRONMENTAL
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Base Neutral and Acid Extractables
Organic Analysis

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/16/91
Lab #: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Test Method: EPA Method 8270

Sample Matrix: Waste Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
09/11/91	09/11/91	09/16/91

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Acenaphthene	None Detected	µg/L	3.
Acenaphthylene	None Detected	µg/L	3.
Aldrin	None Detected	µg/L	3.
Aniline	None Detected	µg/L	3.
Anthracene	None Detected	µg/L	3.
Benzo (a) anthracene	None Detected	µg/L	3.
Benzo (b) fluoranthene	None Detected	µg/L	3.
Benzo (k) fluoranthene	None Detected	µg/L	3.
Benzo (a) pyrene	None Detected	µg/L	3.
Benzo (ghi) perylene	None Detected	µg/L	3.
Benzoic Acid	None Detected	µg/L	3.
Benzyl Alcohol	None Detected	µg/L	3.
Butyl Benzyl phthalate	None Detected	µg/L	3.
alpha-BHC	None Detected	µg/L	3.
beta-BHC	None Detected	µg/L	3.
delta-BHC	None Detected	µg/L	3.
gamma-BHC	None Detected	µg/L	3.
bis(2-chloroethyl)ether	None Detected	µg/L	3.
bis(2-chloroethoxy)methane	None Detected	µg/L	3.
bis(2-ethylhexyl)phthalate	None Detected	µg/L	3.
bis(2-chloroisopropyl)ether	None Detected	µg/L	3.
4-Bromophenyl phenyl ether	None Detected	µg/L	3.
4-Chloroaniline	None Detected	µg/L	3.
2-Chloronaphthalene	None Detected	µg/L	3.
4-Chlorophenyl phenyl ether	None Detected	µg/L	3.
Crysene	None Detected	µg/L	3.
4,4-DDD'	None Detected	µg/L	3.
4,4-DDE'	None Detected	µg/L	3.
4,4-DDT'	None Detected	µg/L	3.
Dibenzo (a,h) anthracene	None Detected	µg/L	3.

ENVIRONMENTAL
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SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/19/91
Lab #: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
PCB-1016	None Detected	µg/L	100.
PCB-1221	None Detected	µg/L	100.
PCB-1232	None Detected	µg/L	100.
PCB-1242	None Detected	µg/L	100.
PCB-1248	None Detected	µg/L	100.
PCB-1254	None Detected	µg/L	100.
PCB-1260	None Detected	µg/L	100.
Total PCB's (Summation)	None Detected		100.

Comments:

California D.O.H.S. Cert. #1186

Department Supervisor

ENVIRONMENTAL
CHEMICAL ANALYSIS
PETROLEUM

BC LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 ATLAS CT., BAKERSFIELD, CALIFORNIA 93308 PHONE (805) 327-4911 FAX (805) 327-1918

Organochlorine Pesticides and PCB's

SCHAEFER OIL CO
28808 CLIFFSIDE DRIVE
MALIBU, CA 90265
Attn.: JIM SCHAEFER 213-457-4212

Date of Report: 09/19/91
Lab #: 10156-2

Sample Description: WATER TREATMENT FACILITY - WEMCO DISCHARGE: SAMPLE #2, 9/11/91 @ 12:40PM SAMPLE COLLECTED BY DAVID RITTENHOUSE OF B C LABORATORIES, INC.

Test Method: EPA Method 8080

Sample Matrix: Waste Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
09/11/91	09/11/91	09/19/91

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Aldrin	None Detected	µg/L	0.5
alpha-BHC	None Detected	µg/L	5.
beta-BHC	None Detected	µg/L	5.
delta-BHC	None Detected	µg/L	1.
gamma-BHC	None Detected	µg/L	2.
Chlordane	None Detected	µg/L	10.
4,4'-DDD	None Detected	µg/L	0.5
4,4'-DDE	None Detected	µg/L	0.2
4,4'-DDT	None Detected	µg/L	0.5
Dieldrin	None Detected	µg/L	0.5
Endosulfan I	None Detected	µg/L	0.5
Endosulfan II	None Detected	µg/L	1.
Endosulfan Sulfate	None Detected	µg/L	0.5
Endrin	None Detected	µg/L	1.
Endrin Aldehyde	None Detected	µg/L	0.5
Heptachlor	None Detected	µg/L	0.2
Heptachlor Epoxide	None Detected	µg/L	0.5
Methoxychlor	None Detected	µg/L	1.
Toxaphene	None Detected	µg/L	100.

Exhibit No 6
San Joaquin Hills Ranch Waterwell Data

Well Number	Operator	County	Legal Description	Section	T.	R.	/4 Sec.	Ground Elev	Completed Drilling	Total Depth Feet	Prod Casing Inches	Csg Top Feet	Casing Depth Feet	Casing Size Inches	Liner Top Feet	Depth Liner Shoe	Casing Perforations	Liner Perforations	Depth Pump Feet
Well 5340	SCHAEFER	Kern	Approximately 1800' South and 1000' West of NE Corner of Section 9	9	27S	27E	NE	860	Jul 13, 1976	1975	16	0	800	14	0	1975	None	Liner perforated 1975'-800'(1175')	780
Well 5345	SCHAEFER	Kern	Approximately 1700' North and 500' East of SW Corner of Section 9.	9	27S	27E	SW	820	Jun 10, 1982	1920	16	0	900	14	0	1920	None	842'-1920' (1078')	860
Well 5346	SCHAEFER	Kern	Approsimately 900' North and 700' West of SW Corner of Section 33	33	26S.	27W.	SW	940	Sep 3, 1982	1950	16	0	1051	14	0	1950	None	1950'-819' (1131')	840
Well 5347	SCHAEFER	Kern	Approximately 200' South and 2000' West of NE corner of Section 3	3	27S	27E	NE	880	Jul 12, 1987	1820	16	0	900	14	0	1820	None	Liner believed perforated 1015'-1010' (5') and 1023'-1018' (5')	980
Well 5348	SCHAEFER	Kern	Approximately 1300' North and 600' East of SW Corner of Section 27	27	26S	27E	SW	930	May 5, 1977	1893	16	0	893	14	0	1893	None	Perforations believed to be 939'-934' (5')	840
Well 5349	SCHAEFER	Kern	Approximately 1000' South and 2100' East of NW Corner of Section 27	27	26S	27e	NW	905	May 17, 1982	1900	16	0	890	14	0	1900	None	Unknown	960