DCN: TZ4-R10011-RN-01881

RCRA FACILITY ASSESSMENT PR/VSI REPORT APPENDICES

CHEMICAL PROCESSORS, INC.
EPA I.D. NO. WAD020257945

NORTHWEST PROCESSING, INC.
EPA I.D. NO. WAD980738512

SOL-PRO, INC.
EPA I.D. NO. WAD981769110

CHEMICAL PROCESSORS, PARCEL A
EPA I.D. NO. UNASSIGNED

Tacoma, Washington

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EPA Contract No. 68-W9-0008, WA R10011
SAIC Project No. 6-788-03-821

APPENDIX A

VSI PHOTO LOG

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VSI PHOTO LOG

Photo Number	Description
1	Chempro - Center portion of panoramic view of Parcel A, facing east (connects with Photos No. 2 and 3). December 18, 1989.
2	Chempro - South portion of panoramic view of Parcel A, facing east (connects with Photos No. 1 and 3). December 18, 1989.
3	Chempro - North portion of panoramic view of Parcel A, facing east (connects with Photos No. 1 and 2). December 18, 1989.
4	Chempro - South side of container storage pad (SWMU C-50), facing east. Note curbing around storage area and coating on concrete. Drums in center and right of photo are treatment chemicals; black drums to left are generated wastes. December 18, 1989.
5	Chempro - Center portion of container storage pad (SWMU C-50), facing east. December 18, 1989.
6	Chempro - North side of container storage pad (SWMU C-50), facing east. December 18, 1989.
7	Chempro - West process area loading/unloading pad and sump (SWMU C-47), facing north. Note sump in center of photo. December 18, 1989.
8	Chempro - Geomembrane liner underlying Chempro Parcel C containment pad. December 18, 1989.
9	Chempro - Oberlin filter press (SWMU C-44) and filtrate collection tank (SWMU C-45), facing east. December 18, 1989.
10	Chempro - Oberlin filter press (SWMU C-44)and filtrate collection tank (SWMU C-45), facing northeast. December 18, 1989.
11	Chempro - 200 series chemical milling waste tanks (SWMUS C-12 to C-14) on left and 50 series treatment tanks (SWMUs C-1 to C-5) on right, facing east. December 18, 1989.
12	Chempro - 50 series treatment tanks (SWMUs C-1 to C-5) and main sump facing east. December 18, 1989.
13	Chempro - 100 series waste acid storage tanks (SWMUs C-6 to C-11), facing east. Tanks are currently being refurbished and replaced. December 18, 1989.

14 Chempro - Waste acid storage tank 107, facing northeast-east. This tank was out of service at the time of the VSI. December 18, 1989.

15 Chempro - Acid area sump on left side of photo, facing south. Note concrete berm around acid tanks. December 18, 1989.

16 Chempro - Main sump, facing south. 600 series waste alkaline tanks (SWMUs C-26 to C-29) are on left of photo. December 18, 1989.

17 Chempro - Cement silo with alkaline waste storage tanks (SWMUs C-26 to C-29) in the background. December 18, 1989.

18 Chempro - Cement mixer stabilization unit (SWMU C-41) and feed tank (SWMU C-42), facing south. December 18, 1989.

19 Chempro - Cement mixer stabilization unit (SWMU C-41) with silo in the background, facing south. December 18, 1989.

20 Chempro - Containers of stabilized solids and sump, facing north. December 18, 1989.

21 Chempro - Containers of stabilized solids, facing south. December 18, 1989.

22 Chempro - Dangerous waste fuel storage tanks (SWMUs C-32 to C-39), facing west. December 18, 1989.

23 Chempro - View of stabilized solids container area with Northwest Processing tanks in the background, facing north. December 18, 1989.

24 Chempro - Stormwater storage tank S (SWMU C-56), facing south. Note area excavated during tank removal, now covered with plastic. December 18, 1989.

25 Chempro - Parcel B, showing stormwater storage, tank S (SWMU C-56), and container storage pad (SWMU C-50), facing southwest. December 18, 1989.

26 Chempro - View from southeast corner of containment pad showing dangerous waste fuel storage tanks (SWMUs C-32 to C-39) (connects with Photos No. 27 and 28), facing northwest. December 18, 1989.

27 Chempro - View from southeast corner of containment pad (connects with Photos No. 26 and 28), facing northwest. December 18, 1989.

28 Chempro - View from southeast corner of containment pad (connects with Photos No. 26 and 27), facing northwest. December 18, 1989.

29 Chempro - Stormwater storage tank S (SWMU C-56) and the Parcel B solidification/stabilization area (SWMU C-69), facing west. SWMU C-69 is covered with black plastic. December 18, 1989.

30 Chempro - Freeway Container, Inc., drain adjacent to maintenance shed. December 18, 1989.

31 Chempro - Freeway Container, Inc., product and waste solvent storage shed. December 18, 1989.

32 Chempro - Freeway Container, Inc., paint and paint waste storage shed (SWMU C-54). Note spillage on drums and floor. December 18, 1989.

33 Chempro - Freeway Container, Inc., paint and paint waste storage shed (SWMU C-54). Note spillage and open drum in foreground. December 18, 1989.

34 Chempro - Freeway Container, Inc., paint and paint waste storage shed (SWMU C-54). Note spilled paint on drums. December 18, 1989.

35 Chempro - Freeway Container, Inc., piles of excavated dirt (SWMU C-55) in northwest corner of Chempro property. This dirt originated in the vicinity of the Chempro Parcel C pad. Composition of white material in puddle is unknown. December 18, 1989.

36 Chempro - Freeway Container, Inc., storage shed for virgin fuel and oil on east side of Freeway Container, Inc. area. December 18, 1989.

37 Chempro - Parcel A, facing east. December 18, 1989.

38 Chempro - Parcel A, facing east. December 18, 1989.

39 Chempro - Container storage pad (SWMU C-50), facing northeast. December 18, 1989.

40 Chempro - Container storage pad (SWMU C-50), facing east. December 18, 1989.

41 Chempro - Stormwater storage tanks (SWMU C-56) on Parcel B. Note plastic covered area where other letter tanks were removed. December 18, 1989.

42 Chempro - The 900 series tanks (SWMUs C-37 to C-39) on the containment pad and Parcel B area where tank BB (SWMU C-68) was located, facing north. December 18, 1989.

43 Chempro - West process area loading/unloading pad (SWMU C-47), facing north. December 18, 1989.

44 Chempro - Southwest corner of containment pad, facing northeast showing 400 series waste sewer discharge tanks (SWMUs C-20 to C-23) and the air stripper (C-40). December 18, 1989.

45 Chempro - Sewer discharge tank 401 (SWMU C-20), Oberlin filter press (SWMU C-44), and air stripper (SWMU C-40), facing east. December 18, 1989.

46 Chempro - Sewer discharge tank 401 (SWMU C-20) and southwest corner of containment pad, facing south. December 18, 1989

47 Chempro - Waste acid storage tank 104 (SWMU C-9), facing south. December 18, 1989.

48 Chempro - Cement mixer stabilization unit (SWMU C-41) and feed tank (SWMU C-42), facing south. December 18, 1989.

49 Chempro - Laboratory drain collection tank (SWMU C-51), located on north side of lab building. December 18, 1989.

50 Northwest Processing - Truck loading/unloading area (SWMU N-32), facing west. Centrifuge building in background. December 19, 1989.

51 Northwest Processing - Truck loading/unloading area (SWMU N-32), facing west, wider view. Fractionation column (SWMU N-14) is on left and tank 17 (SWMU N-13) is on right of photo. December 19, 1989.

52 Northwest Processing - Alternate loading/unloading area, facing west showing 500-gallon portable tanks (SWMU N-35). Note drain on right side of photo to oily water sewer system. December 19, 1989.

53 Northwest Processing - Combined view of loading/unloading area (SWMU N-32) and temporary loading/unloading area (SWMU N-33), facing northwest. Tank Farm 2 is in background. December 19, 1989.

54 Northwest Processing - Tank farm and sump. December 19, 1989.

55 Northwest Processing - Tank farm and sump, facing northwest. December 19, 1989.

56 Northwest Processing - Fractionation system (SWMU N-14) and heat exchangers (lower left), facing west. December 19, 1989.

57 Northwest Processing - Tank 15 (SWMU N-15), facing west. December 19, 1989.

58 Northwest Processing - Waste oil processor/phase separator, tank 16 (SWMU N-12) facing north. December 19, 1989.

59 Northwest Processing - Centrifuge building area facing west (this building contains a thin film evaporator and centrifuges). Waste and clean antifreeze tanks are shown at right side of photo. December 19, 1989.

60 Northwest Processing - Satellite waste oil accumulation drum SWMU N-12) below the thin film evaporator. December 19, 1989.

61 Northwest Processing - Tank farm 1, facing west. December 19, 1989.

62 Northwest Processing - Intermediate and product storage tanks, facing northeast. December 19, 1989.

63 Northwest Processing - Stormwater collection tank, (SWMU N-18) (left) and process wastewater tank (SWMU N-19) (right). Note concrete berm. December 19, 1989.

64 Northwest Processing - Iso-tank and antifreeze storage. December 19, 1989.

65 Northwest Processing - Stormwater treatment system (SWMUs N-21 to N-26), facing east. Separator skim tank (SWMU N-23) is on right; final storage tank (SWMU N-25) on left. December 19, 1989.

66 Northwest Processing - API separator (SWMU N-21) and separator skim tank (SWMU N-23), facing east. December 19, 1989.

67 Northwest Processing - Process water discharge tank (SWMU N-26), facing east. Note vault for coalescing separator on left and sump tank on right. December 19, 1989.

68 Northwest Processing - Stormwater collection tank (SWMU N-18), facing east. December 19, 1989.

69 Northwest Processing - Area showing recent excavation near new pad construction. Stormwater storage tank (SWMU N-18) is in background. December 19, 1989.

70 Northwest Processing - Virgin product storage area and storm drain. December 19, 1989.

71 Northwest Processing - Furnace fuel tank (SWMU N-30). December 19, 1989.

72 Northwest Processing - Inside of virgin product storage area, facing north. December 19, 1989.

73 Northwest Processing - Drum accumulation area (SWMU N-28) against the wall of flammable storage shed. December 19, 1989.

74 Northwest Processing - Inside of solvent repackaging storage shed. Drain in photo center is plugged. December 19, 1989.

75 Northwest Processing - Miscellaneous empty drum storage area against north fence. December 19, 1989.

76 Northwest Processing - Tire pyrolysis unit (SWMU N-34), facing south. December 19, 1989.

77 Northwest Processing - Empty drums awaiting rinsing on west side of maintenance building. December 19, 1989.

78 Sol-Pro - Rail car loading rack (SWMU S-19) from the southeast; used for loading of recycled material destined for incineration. Note drums stored in this area as well. December 19, 1989.

79 Sol-Pro - Luwa unit (SWMU S-4), facing northwest. December 19, 1989.

80 Sol-Pro - Storage of triple-rinsed used drums next to railroad tracks, facing northwest. December 19, 1989.

81 Sol-Pro - Process pad showing diesel tank and Tank 901 (SWMU S-15), facing northeast. December 19, 1989.

82 Sol-Pro - Incoming waste area (SWMU S-2), facing west. Dirty solvent wash tanks 535 (SWMU S-2) and 536 (SWMU S-3) are in background. December 19, 1989.

83 Sol-Pro - Dirty solvent tanks 535 and 536 (SWMUs S-2 and S-3) with incoming waste area (SWMU S-2) in foreground, facing northwest. December 19, 1989.

84 Sol-Pro - Incoming waste area (SWMU S-2), facing southwest. December 19, 1989.

85 Sol-Pro - Horizontal evaporator (SWMU S-13), facing east. December 19, 1989.

86 Sol-Pro - Brighton still (SWMU S-9, red vessel in center) and Tanks D-1 and D-2 (SWMUs S-7 and S-8), facing northwest. December 19, 1989.

87 Sol-Pro - Fin-fan cooler, facing northeast; cools dried material from horizontal evaporator (SWMU S-13). December 19, 1989.

88 Sol-Pro - Brighton still pad, facing northwest. Note Tanks C-1 and C-2 (SWMUs S-10 and S-11) on right side of photo. December 19, 1989.

89 Sol-Pro - Moen pump hopper (SWMU S-12); this unit is being modified to grind dried solids into granules. December 19, 1989.

90 Sol-Pro - Brighton still pad, Tanks C-1 and C-2 (SWMUs S-10 and S-11), facing south. December 19, 1989.

91 Sol-Pro - Brighton still (SWMU S-9), tanks D-1 and D-2 (SWMUs S-10 and S-11), facing southeast. December 19, 1989.

92 Sol-Pro - Process area showing portion of Brighton still (on left), Tanks D-1, D-2, 535, and 536, facing southeast. December 19, 1989.

93 Sol-Pro - Drum crushing area (SWMU S-18), facing southeast. Drum rinsing areas (SWMU S-17) is on left side of photo, where dumpster is located. December 19, 1989.

94 Sol-Pro - Generated waste storage area (SWMU S-16), facing southwest. Note visqueen as containment. December 19, 1989.

95 Sol-Pro - Generated waste storage area (SWMU S-16) adjoining right side of Photo No. 94 above, facing southwest. December 19, 1989.

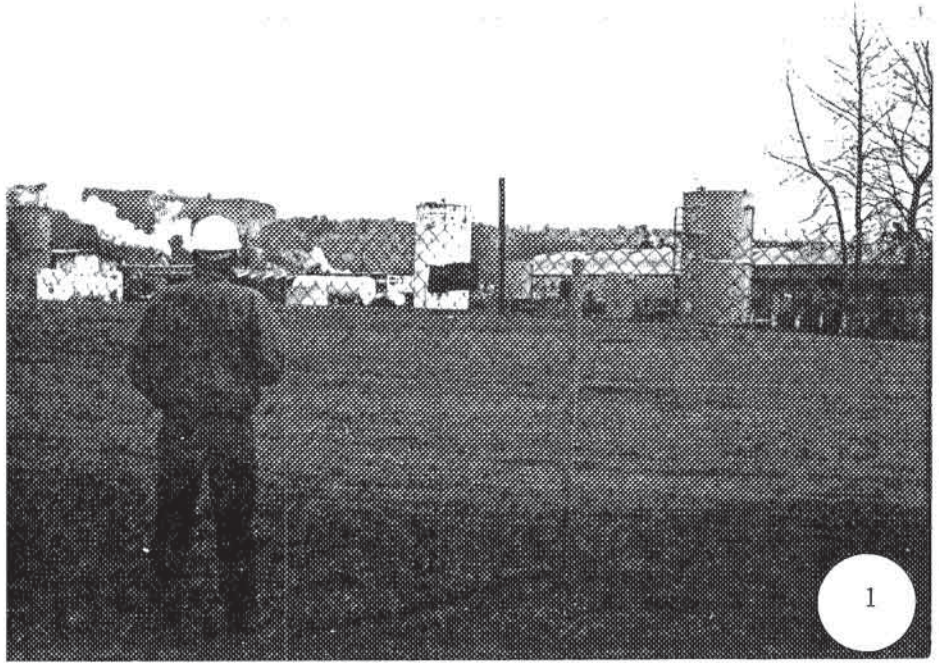
96 Sol-Pro - Rinsed plastic drum storage up against northwest fence. December 19, 1989.

97 Sol-Pro - Empty plastic drum storage area next to railroad tracks, facing southeast. December 19, 1989.

98 Sol-Pro - Process pad showing diesel tank and Tank 901 (SWMU S-15), facing northeast. December 19, 1989.

99 Sol-Pro - Process pad, facing northeast; incoming waste processing area (SWMU S-20) is shown on left side of photo. December 19, 1989.

100 Sol-Pro - Process pad facing northwest, showing Tank 901 (SWMU S-20) and 704 (SWMU S-1). December 19, 1989.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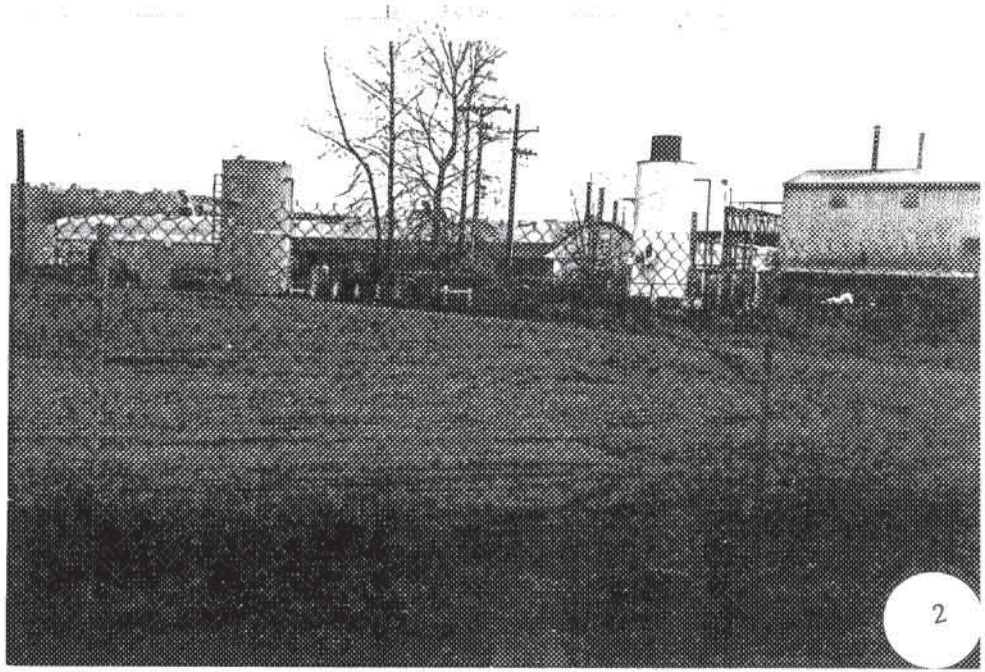
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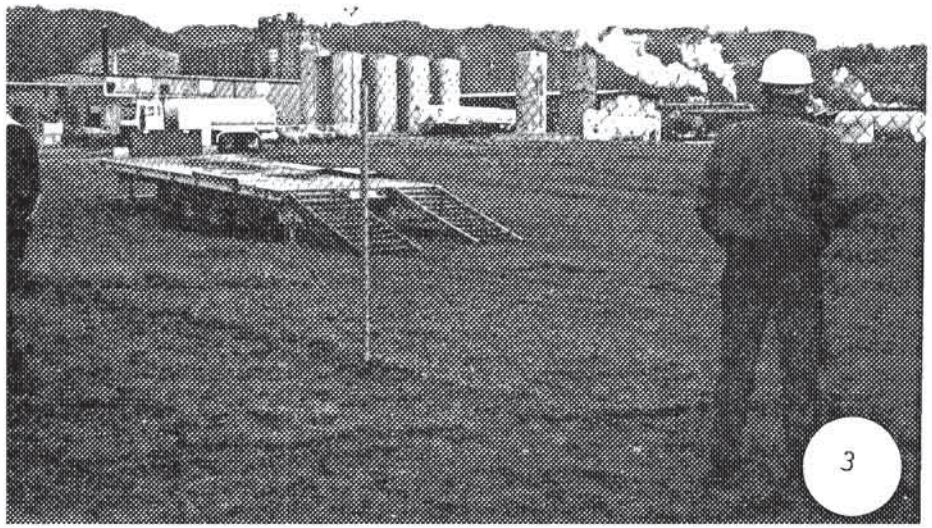
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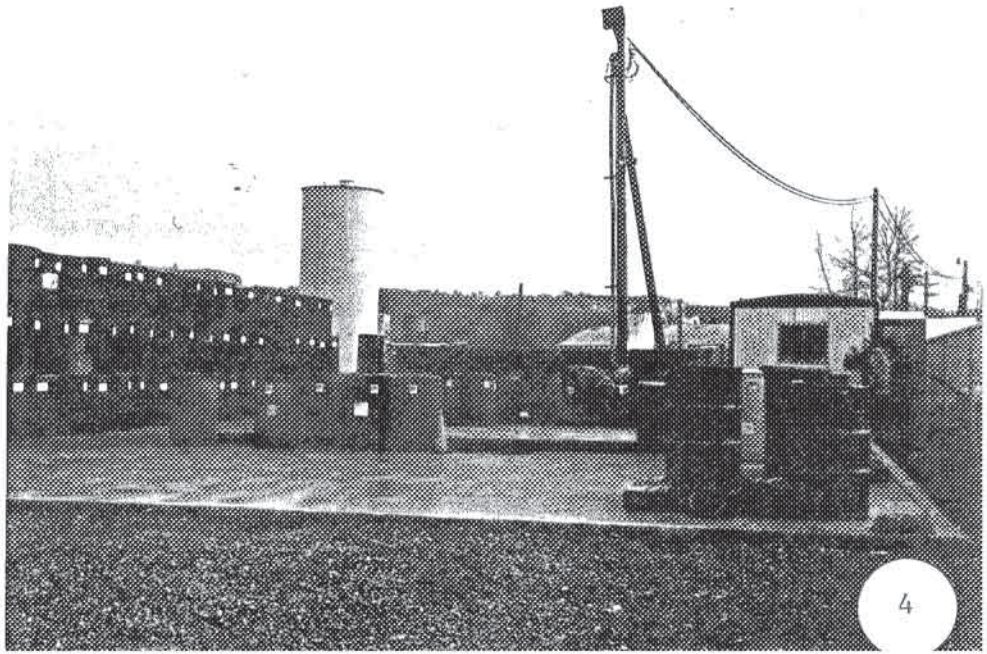
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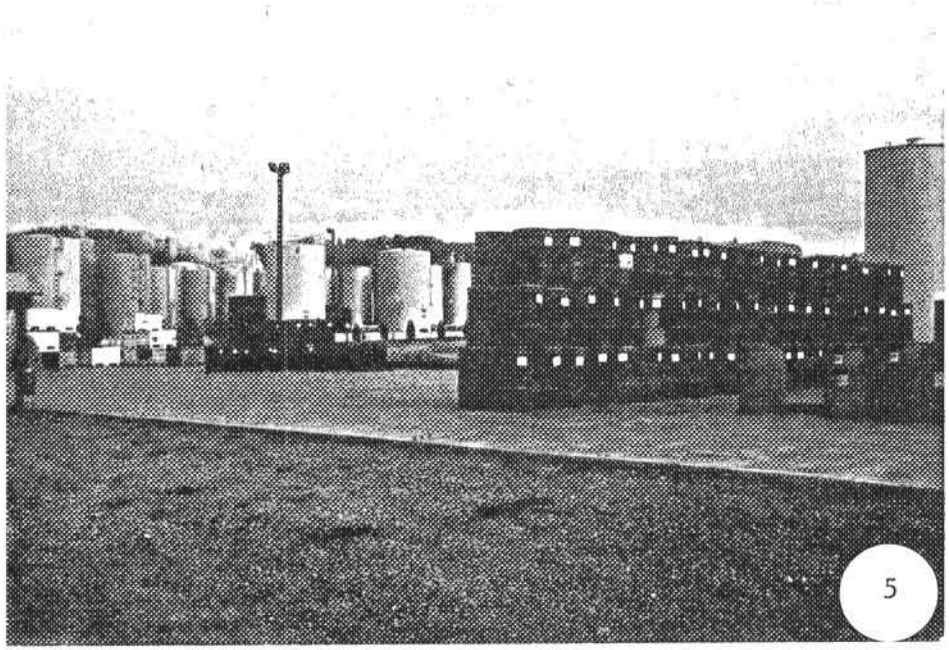
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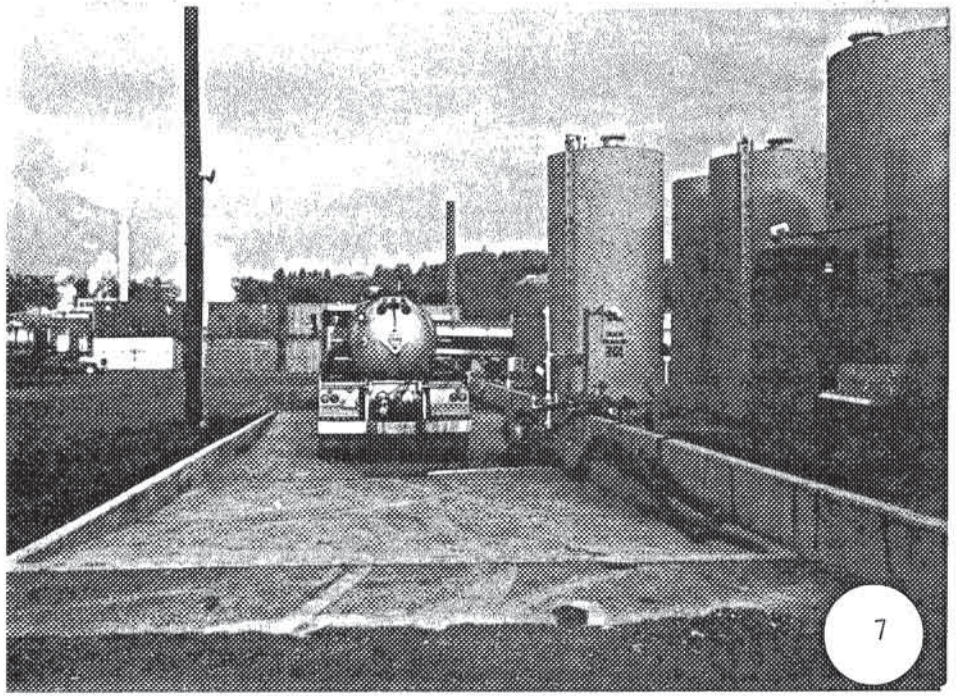
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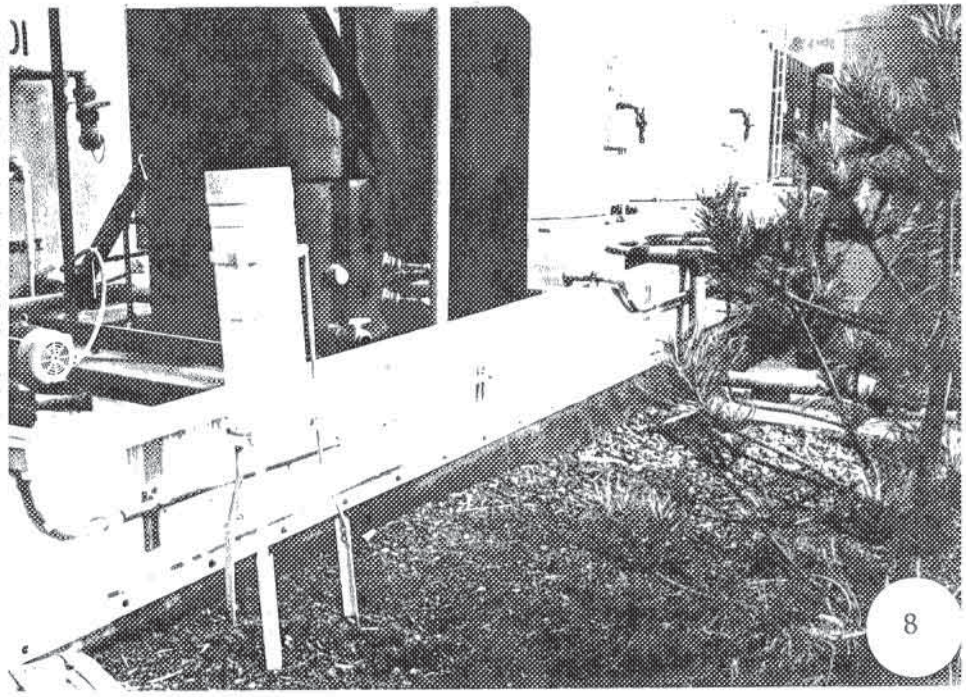
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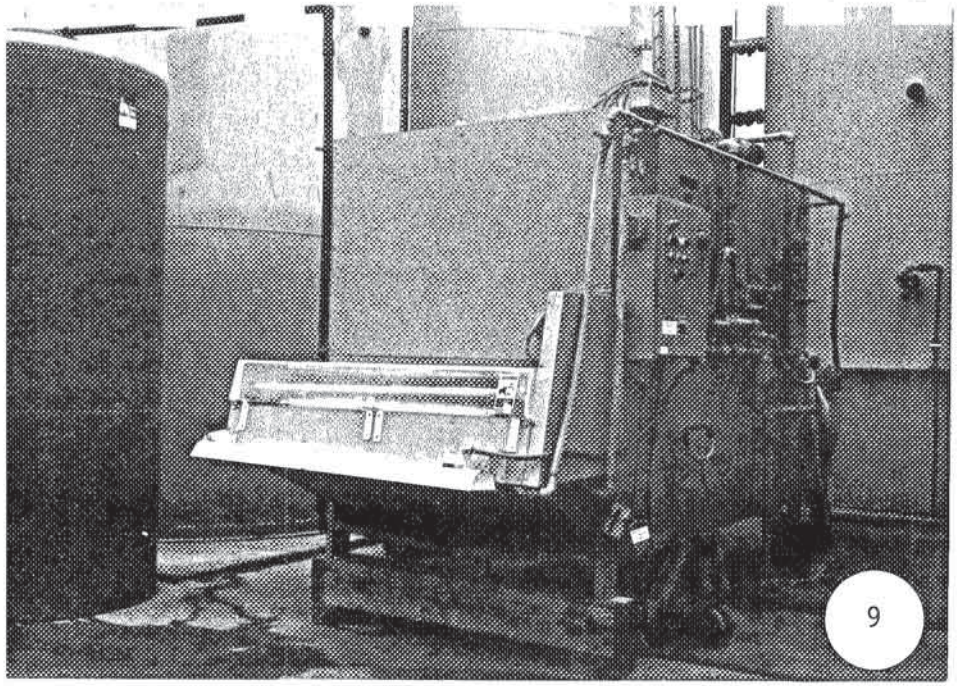

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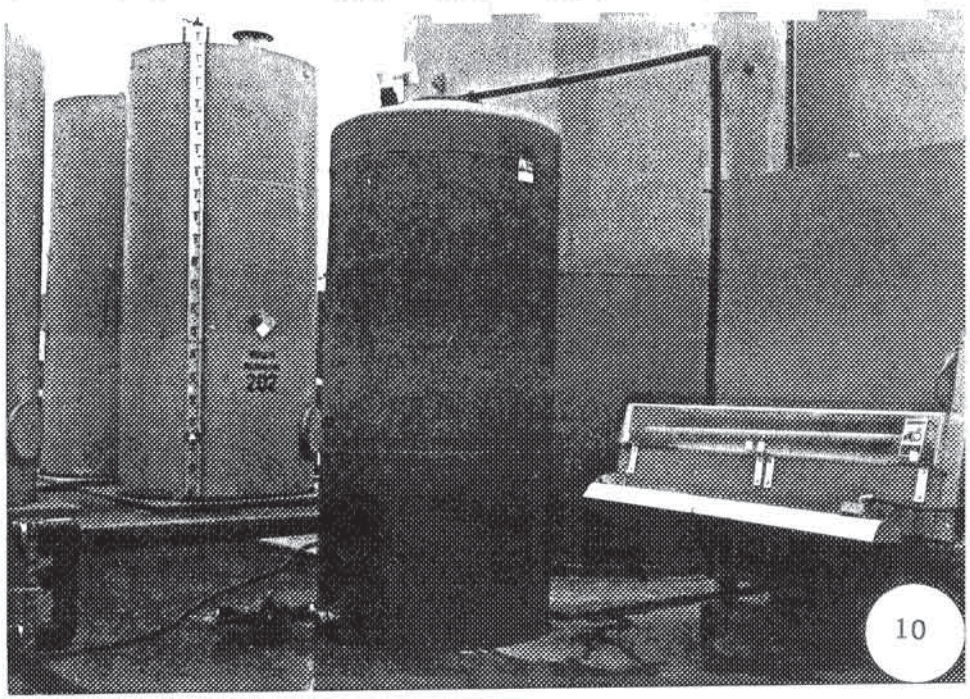

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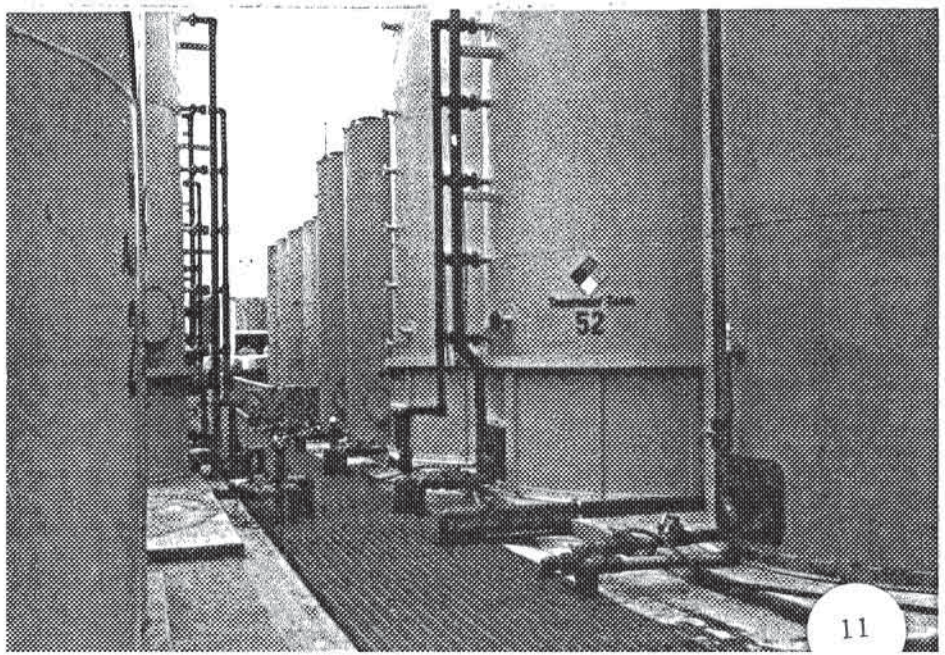

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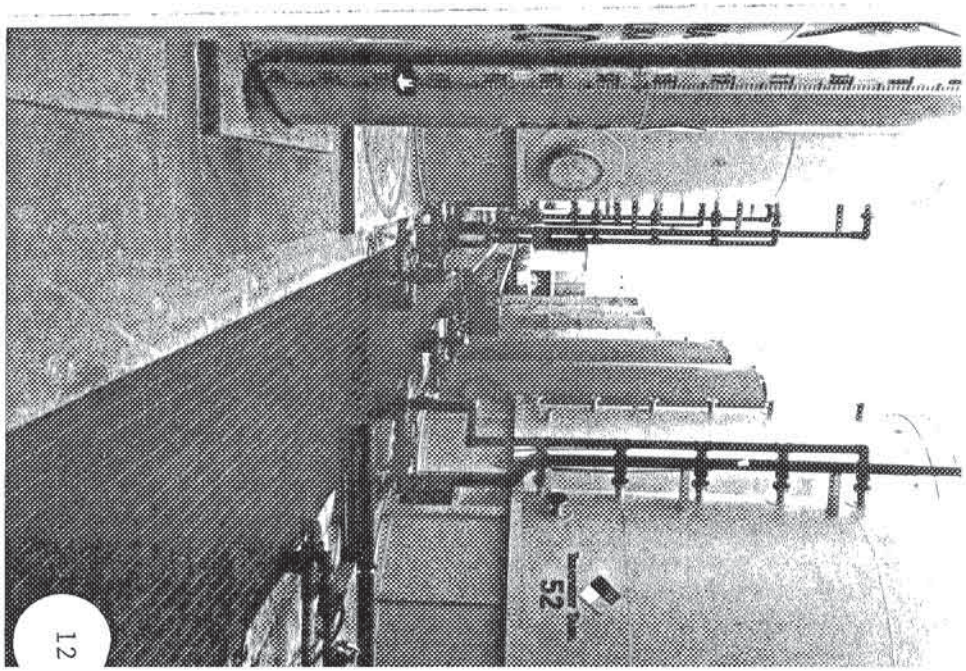

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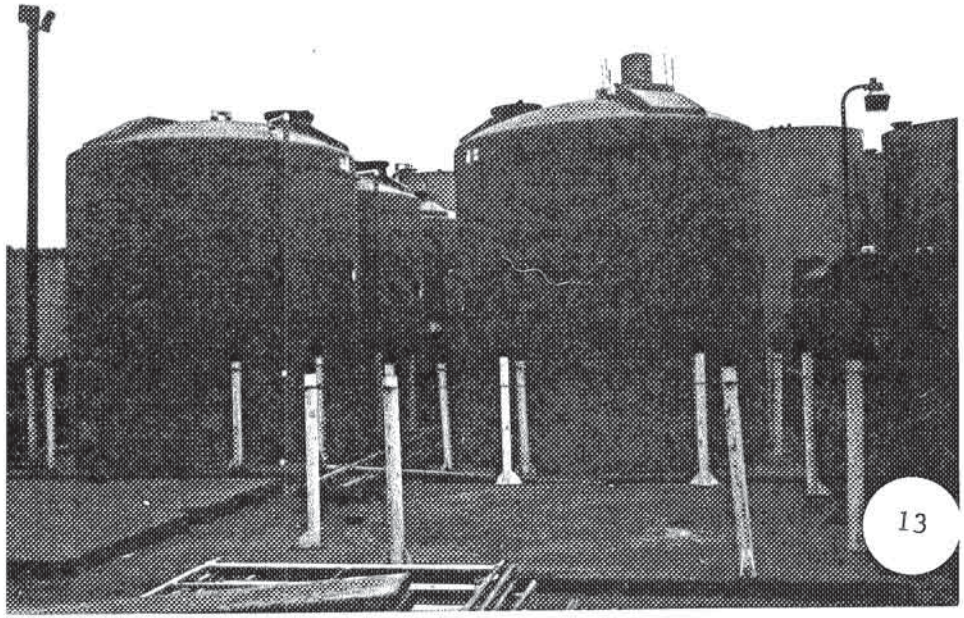
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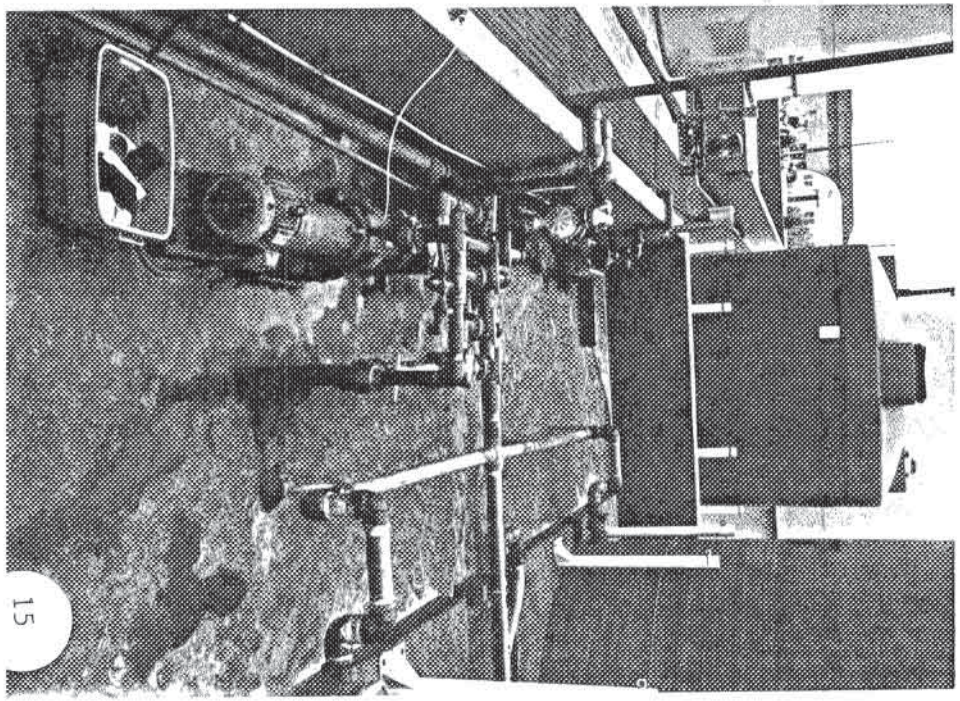
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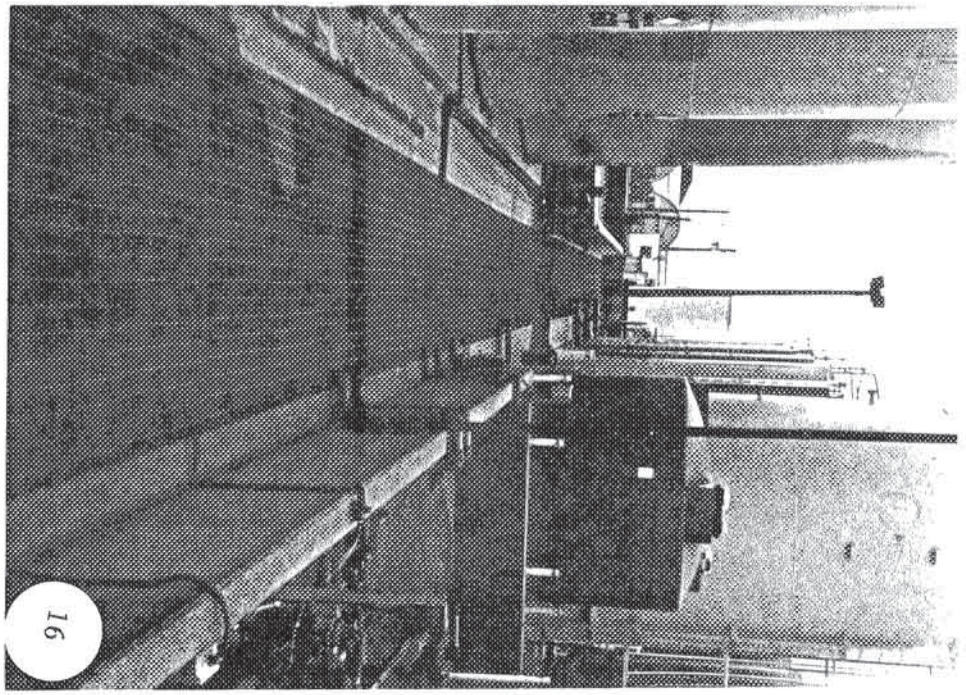
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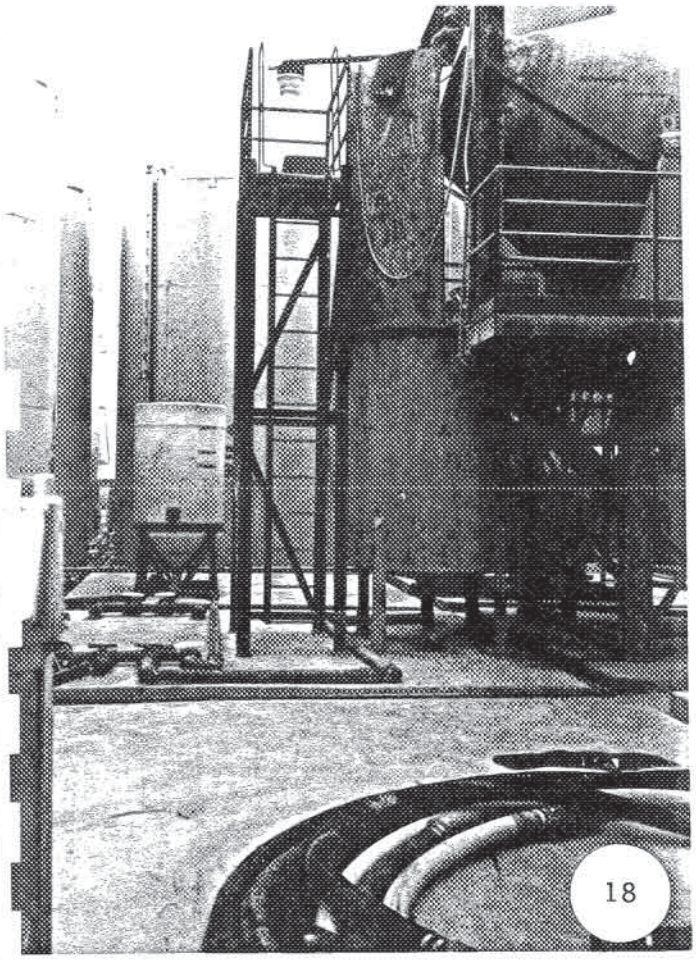
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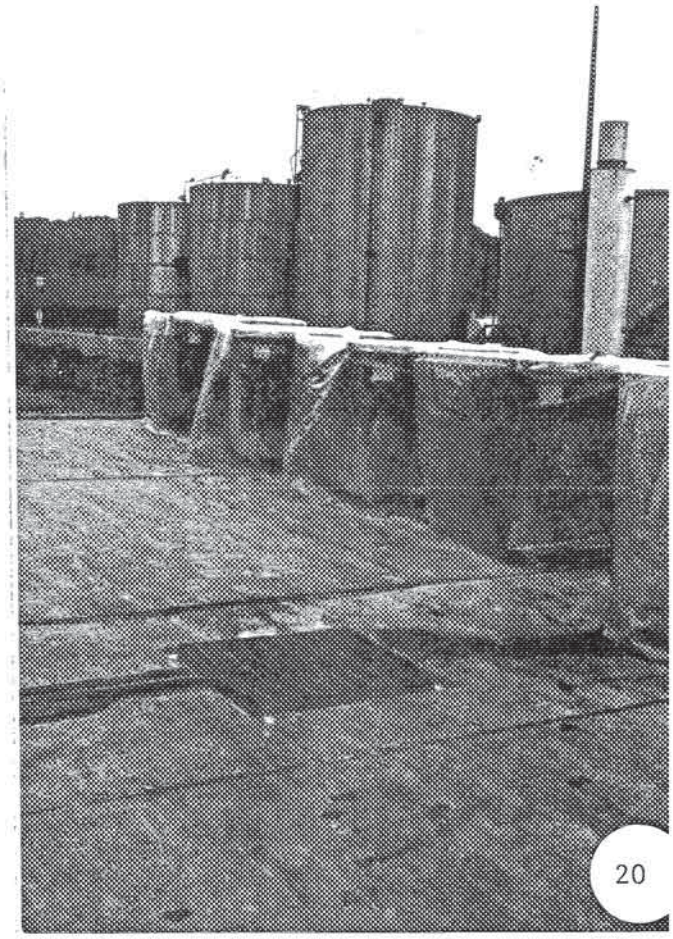
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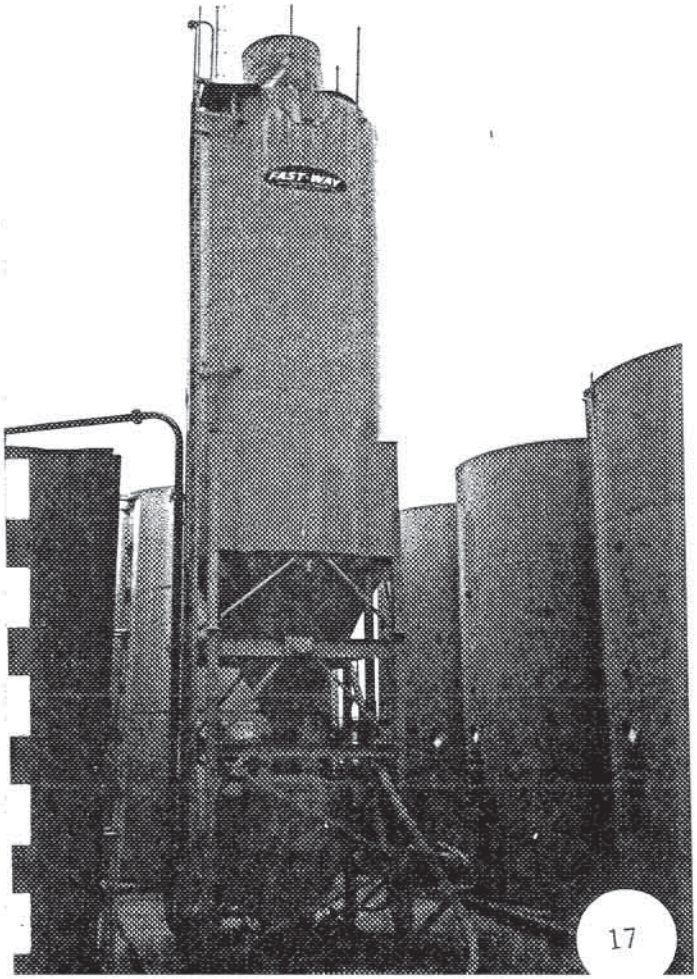
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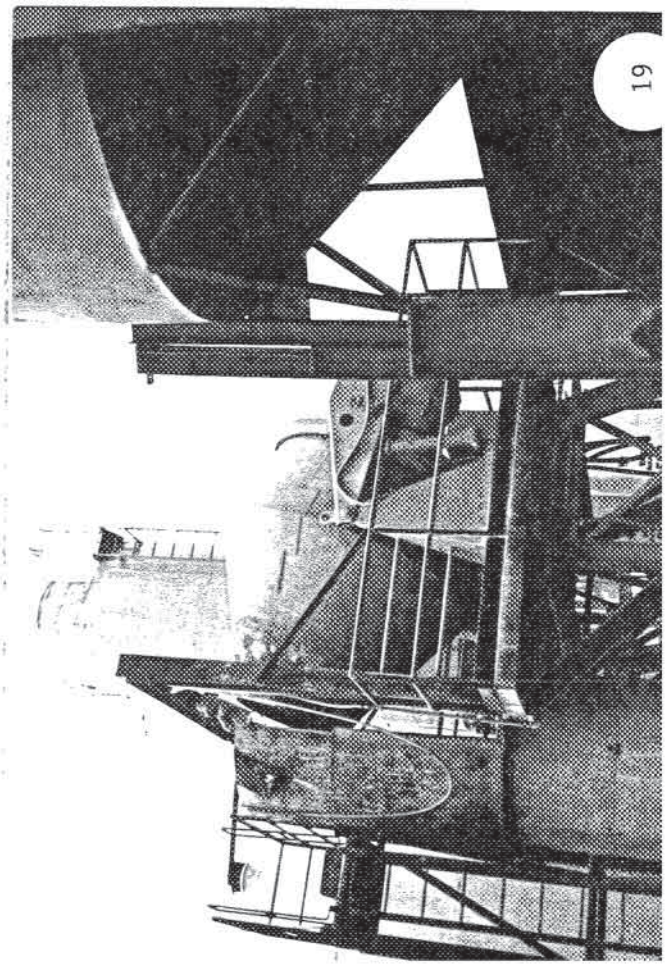
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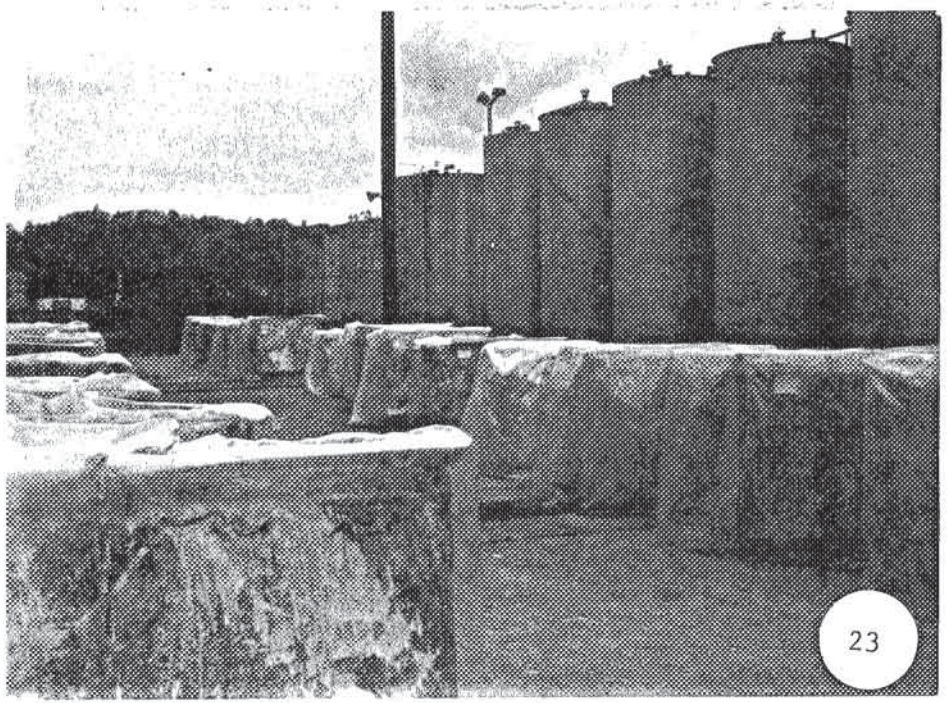
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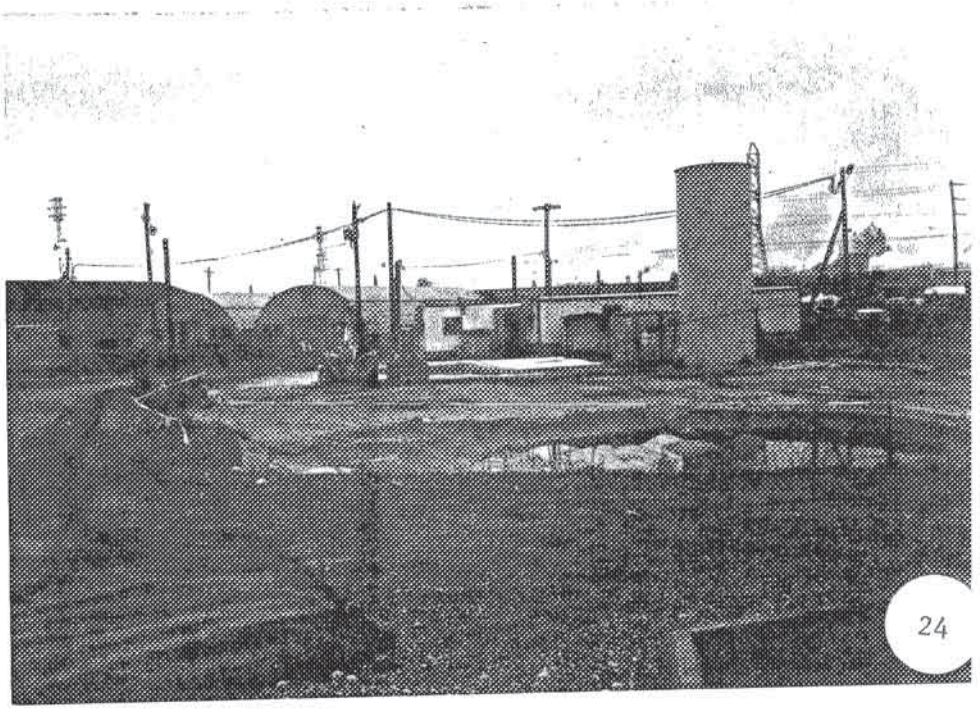
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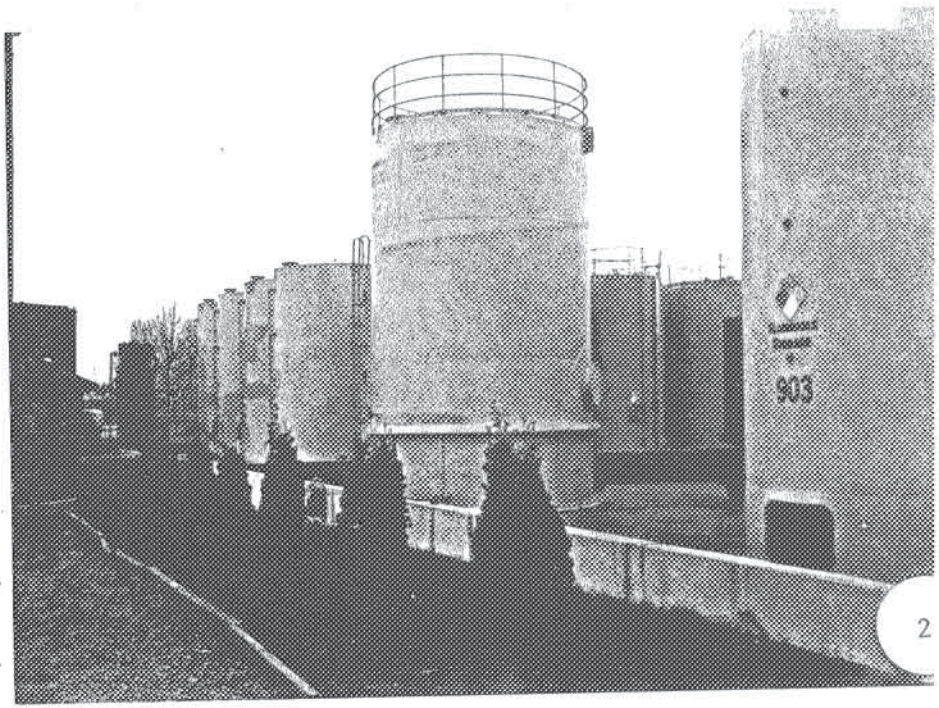
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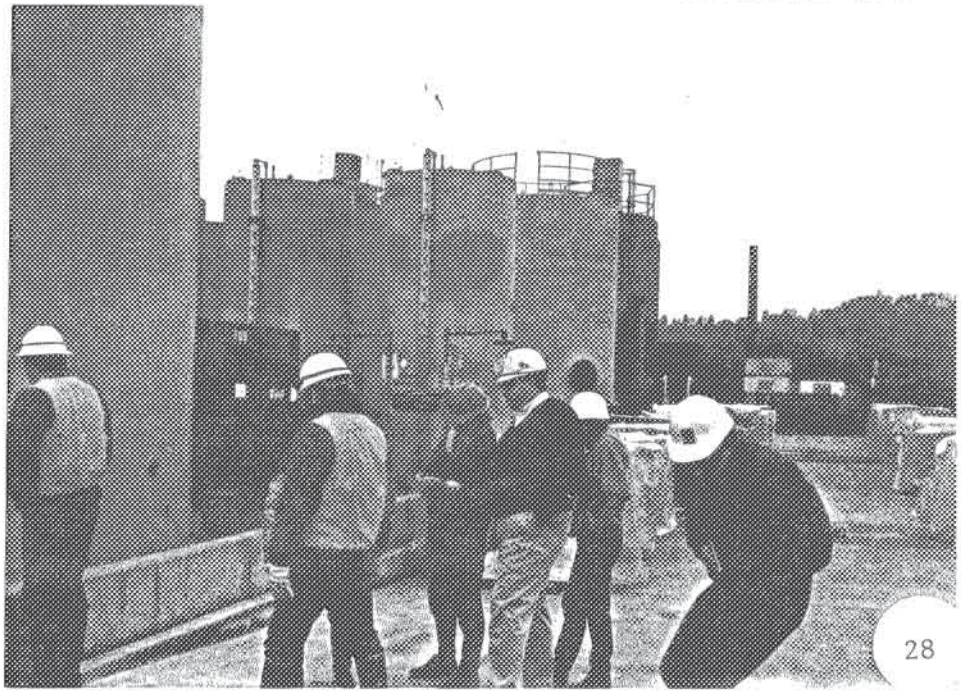
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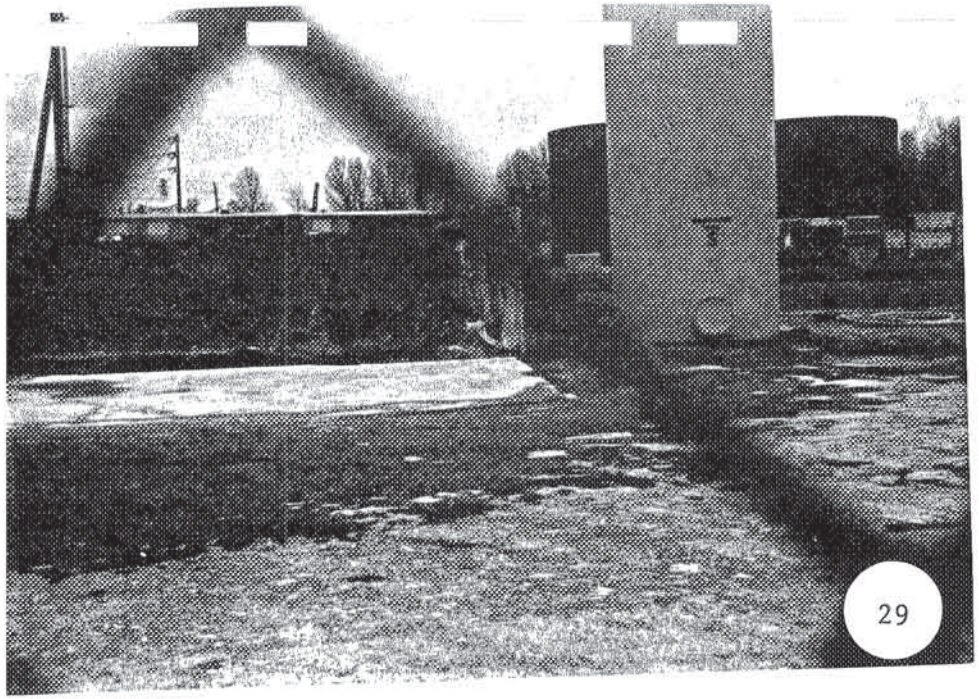
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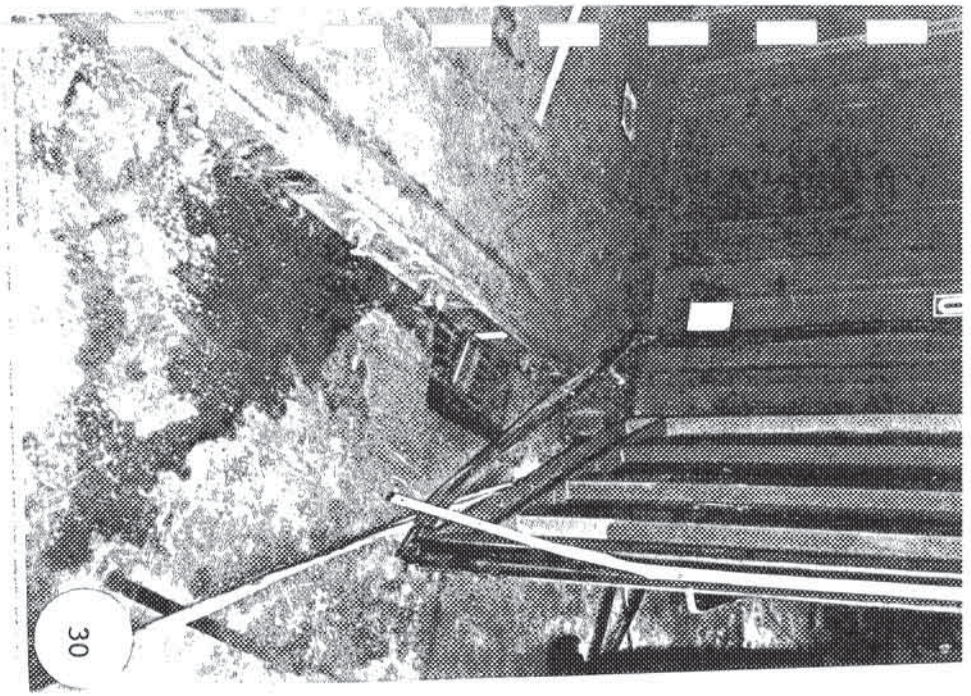
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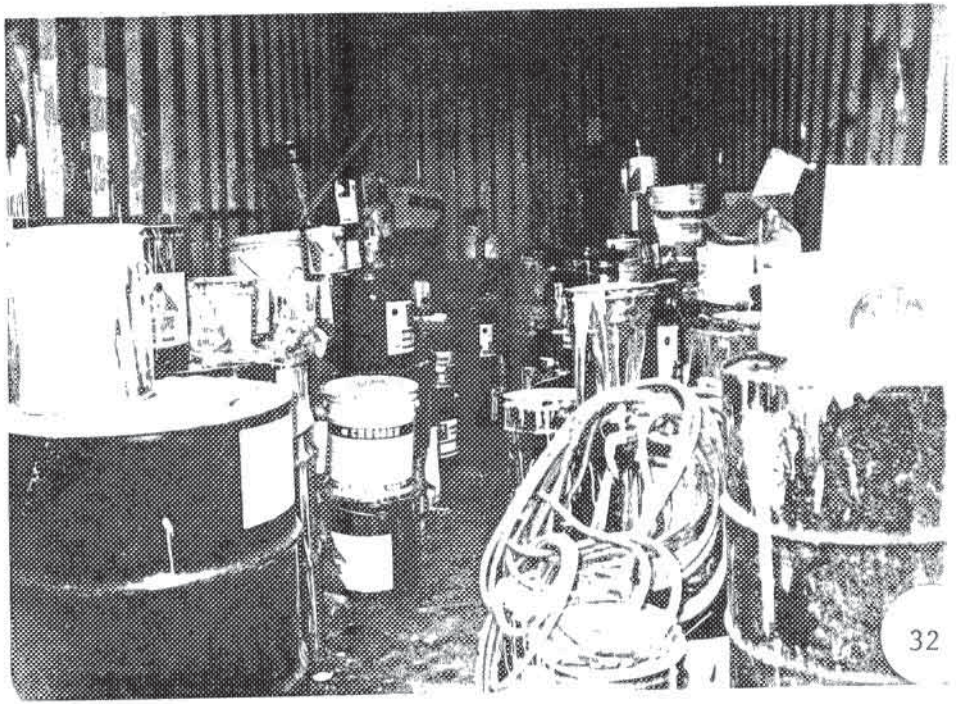
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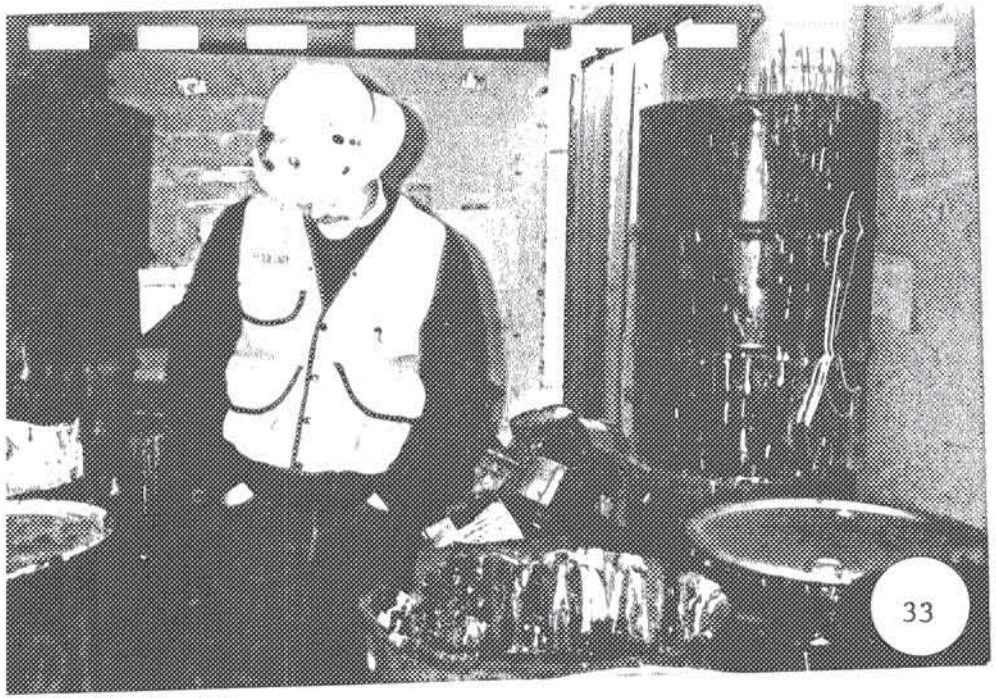
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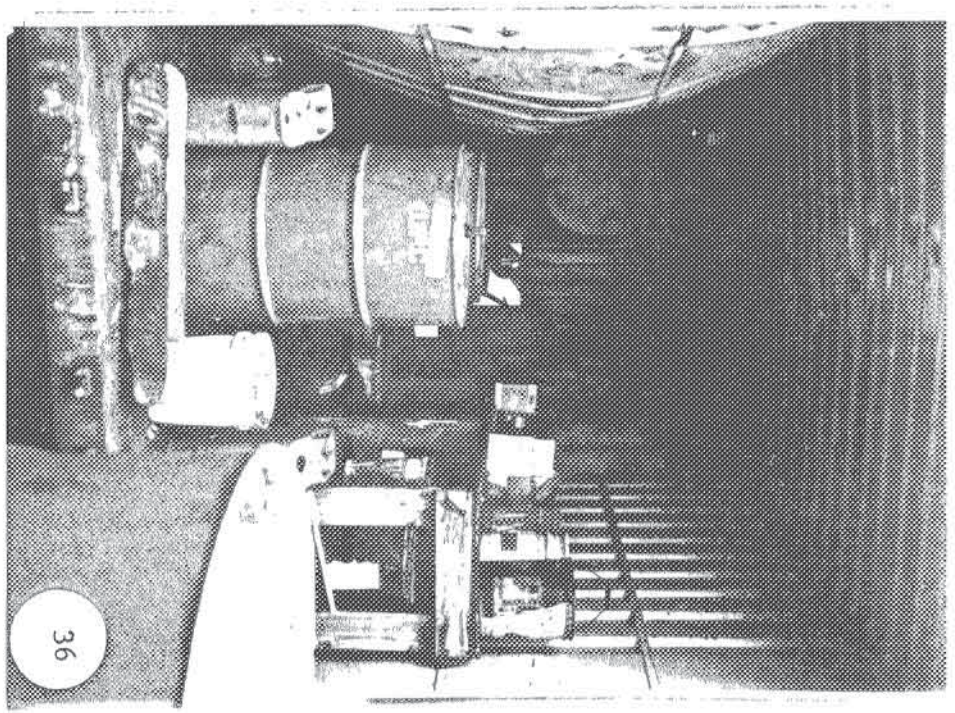
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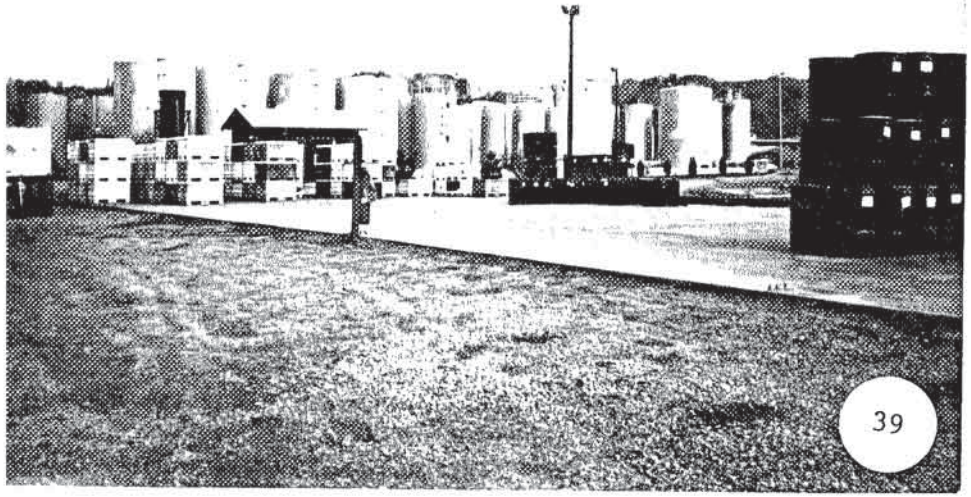
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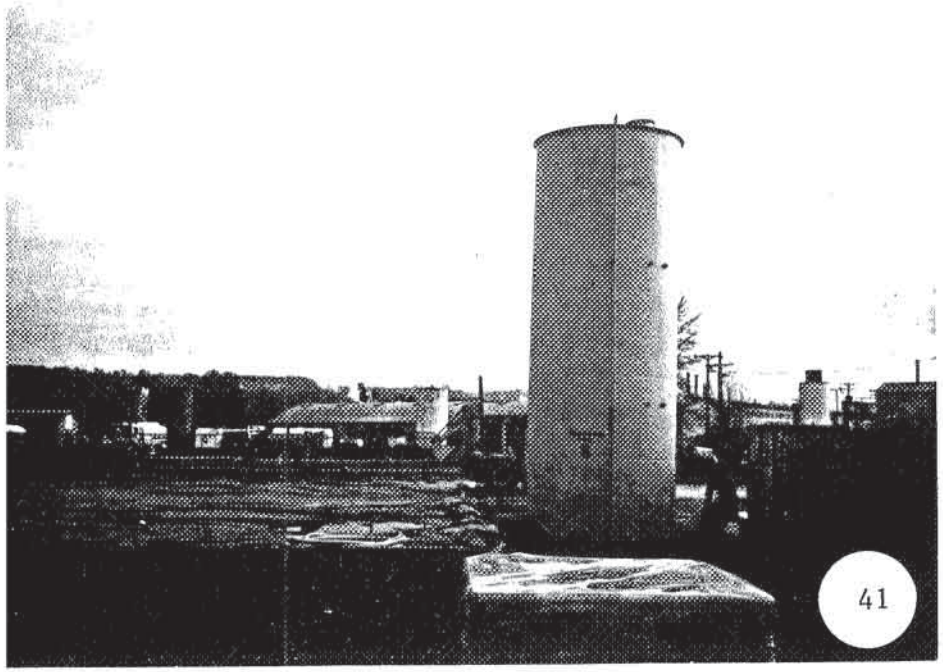
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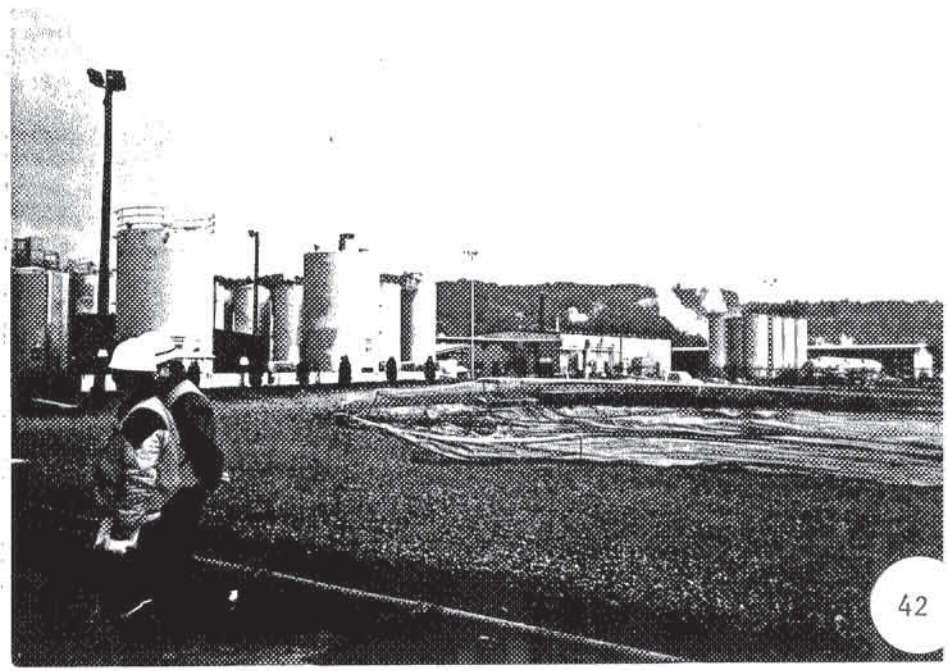
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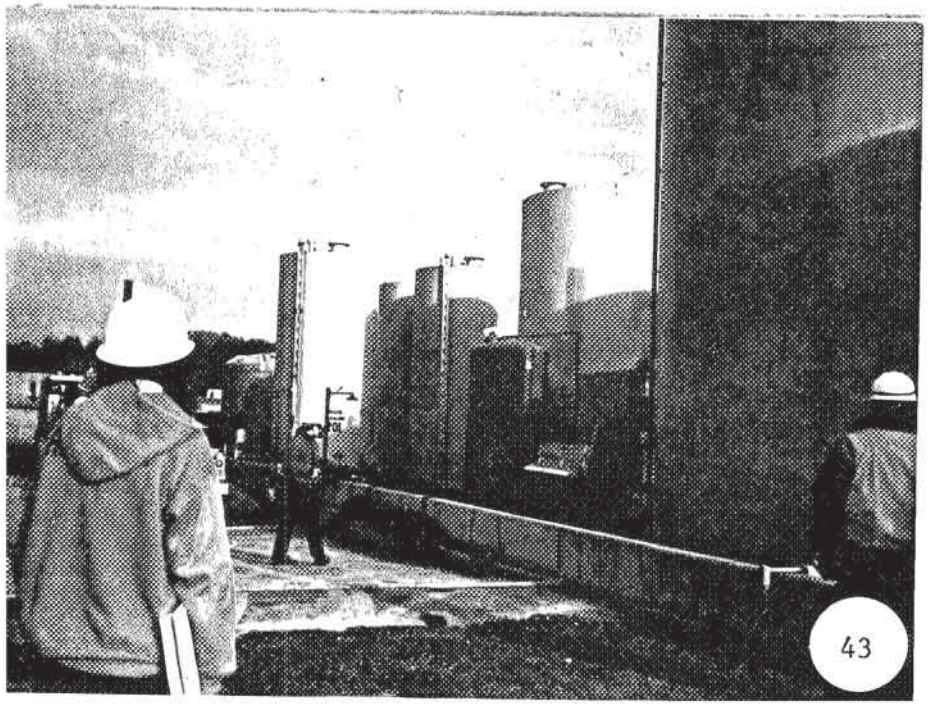
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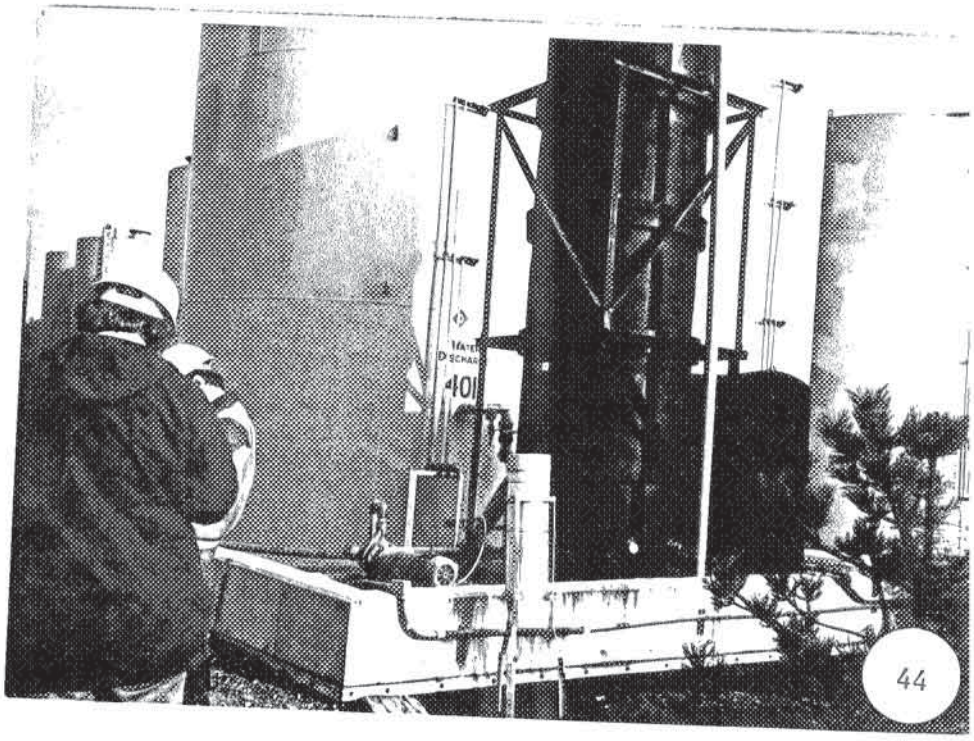
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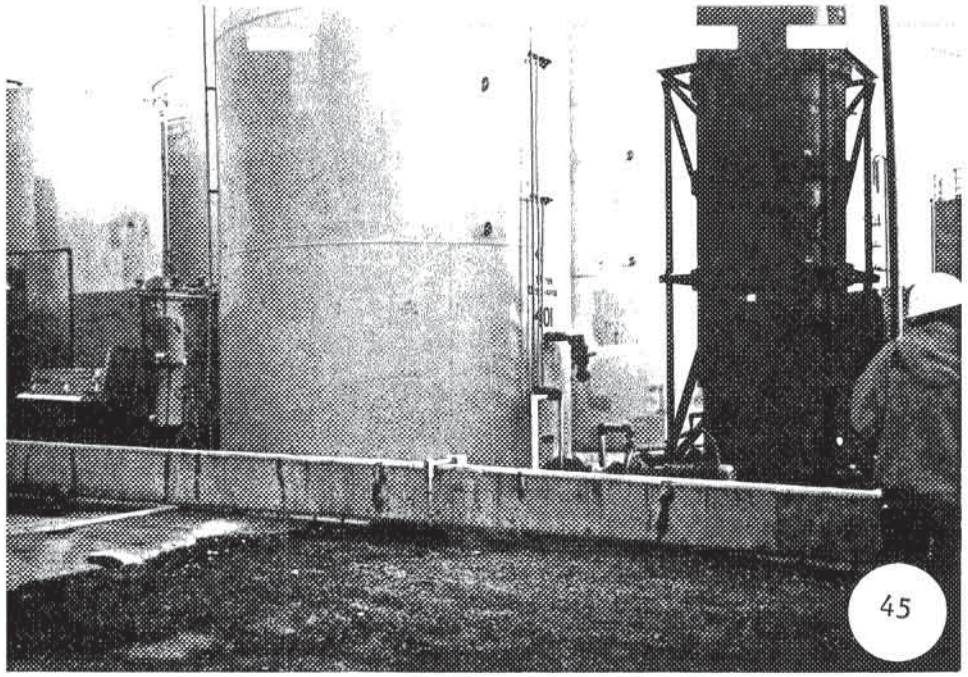
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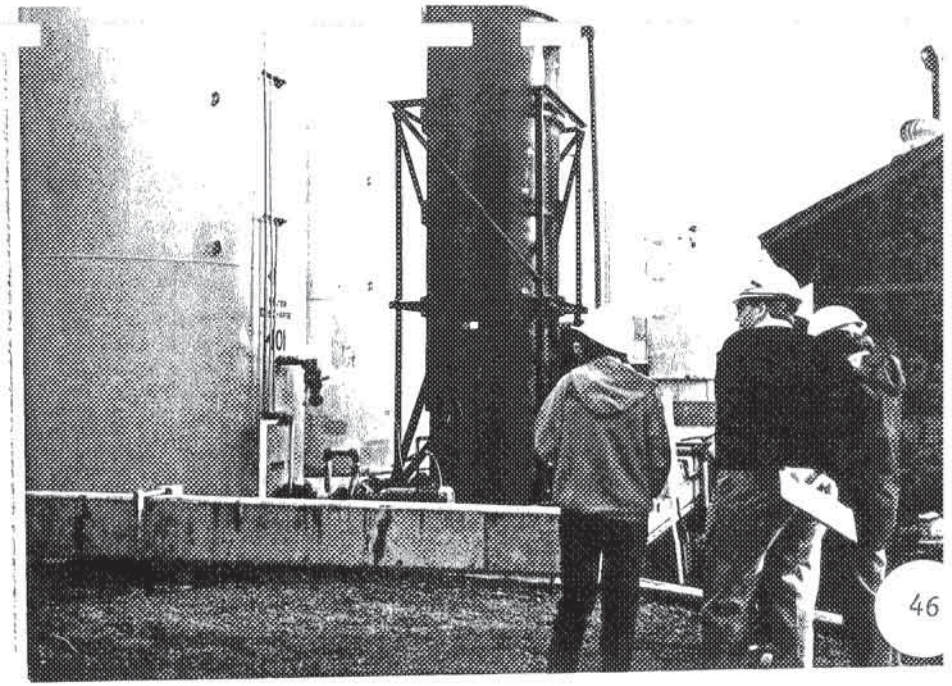
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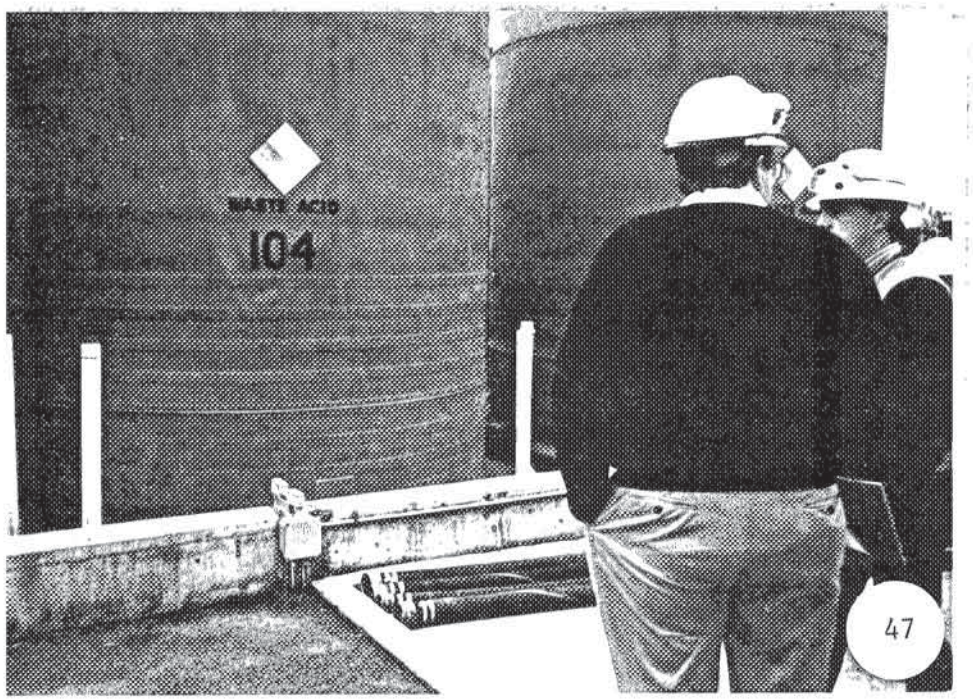
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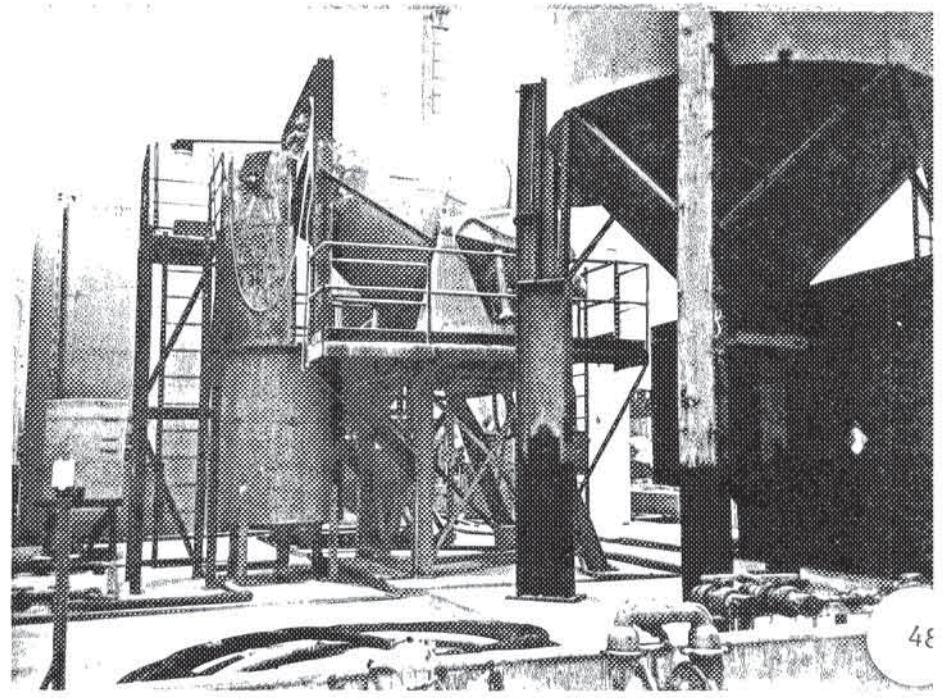
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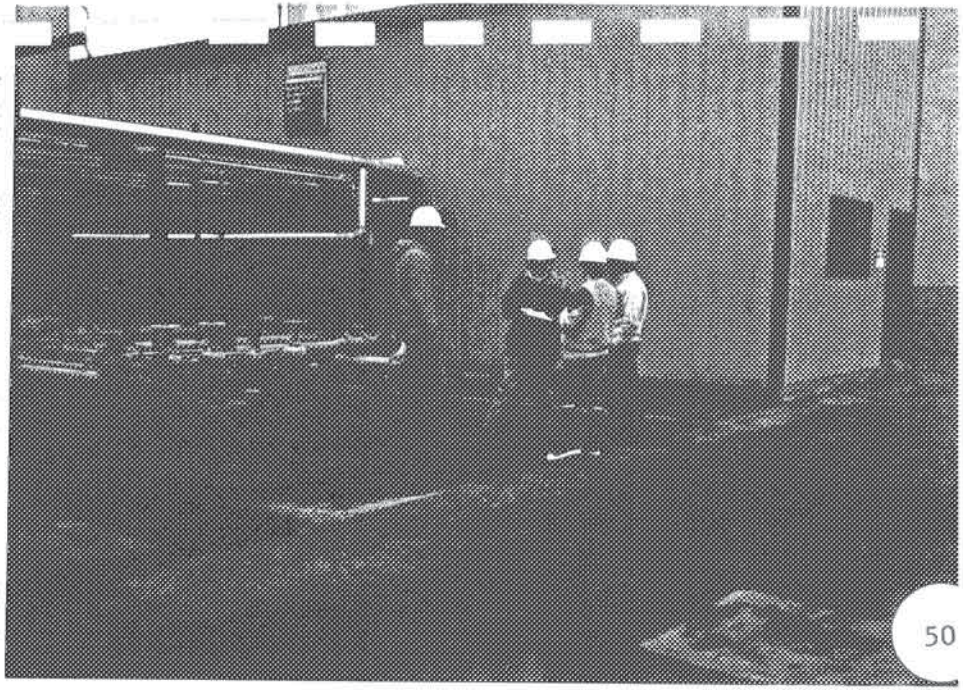

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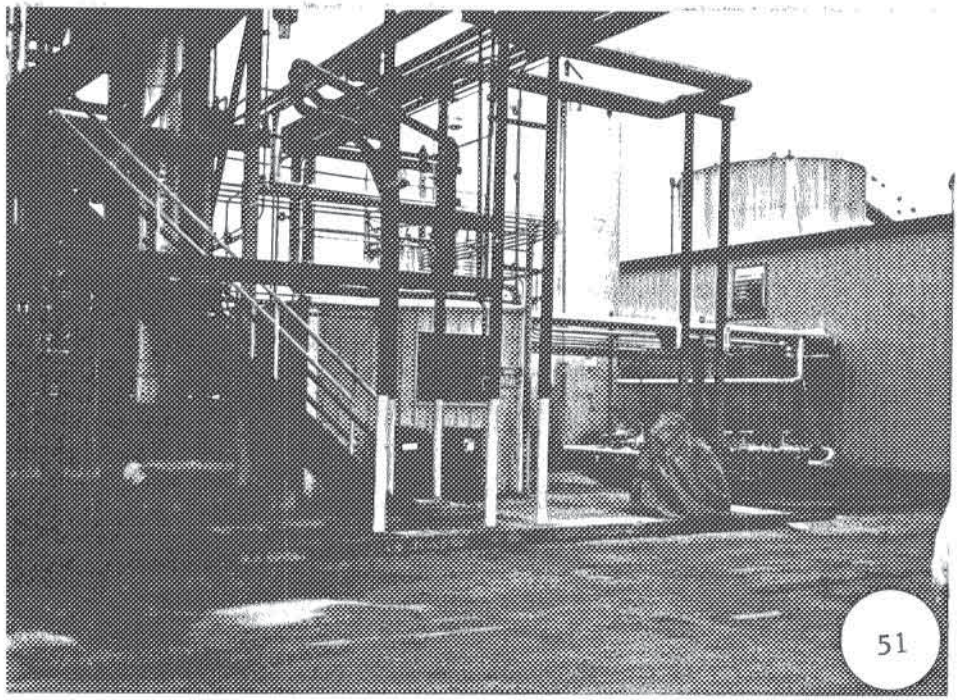

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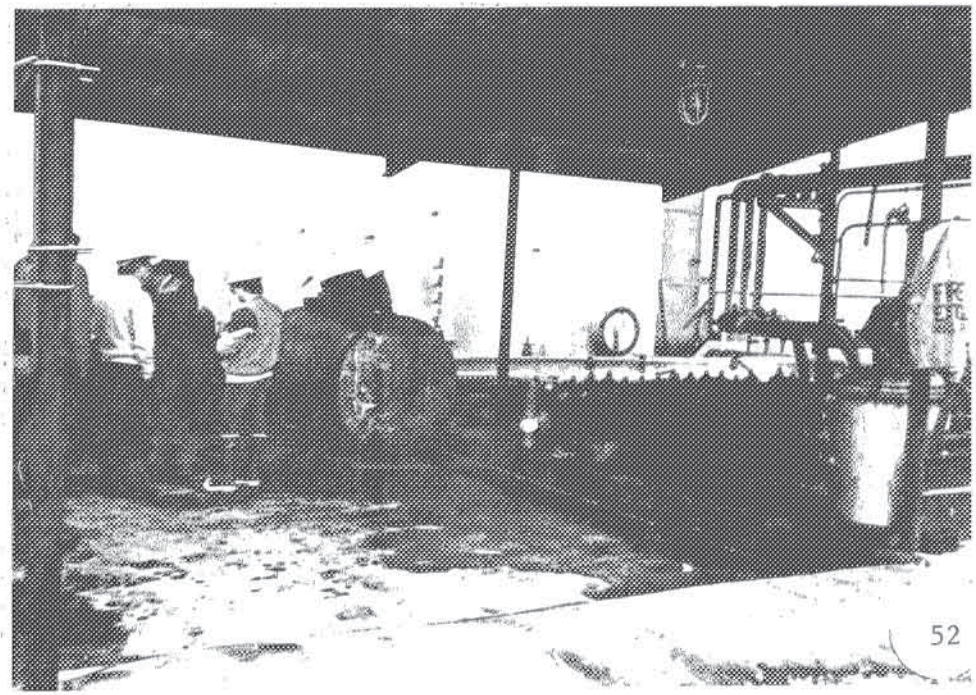

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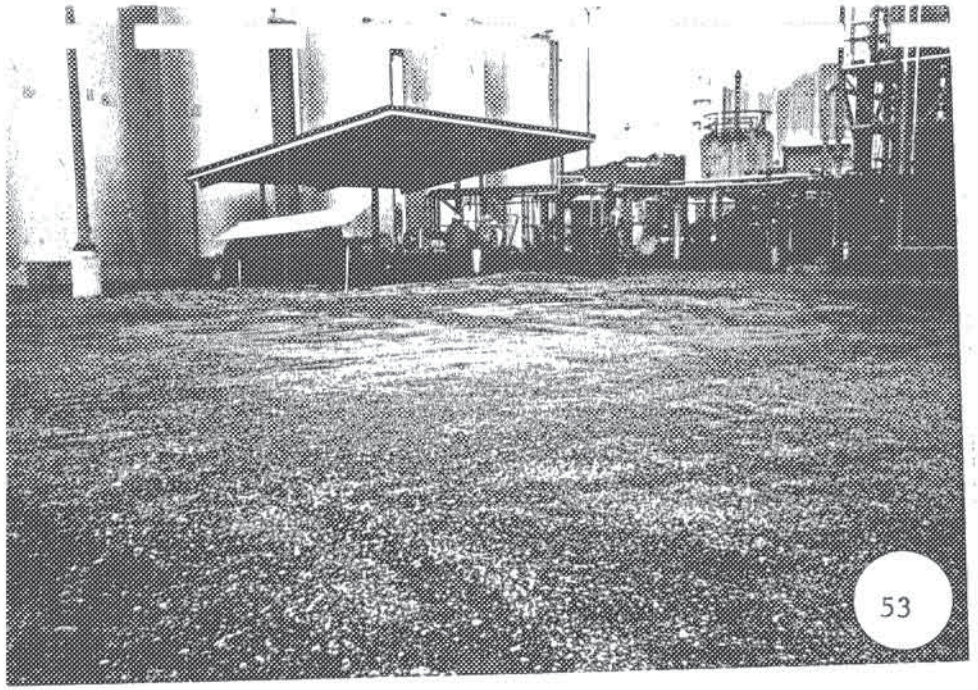

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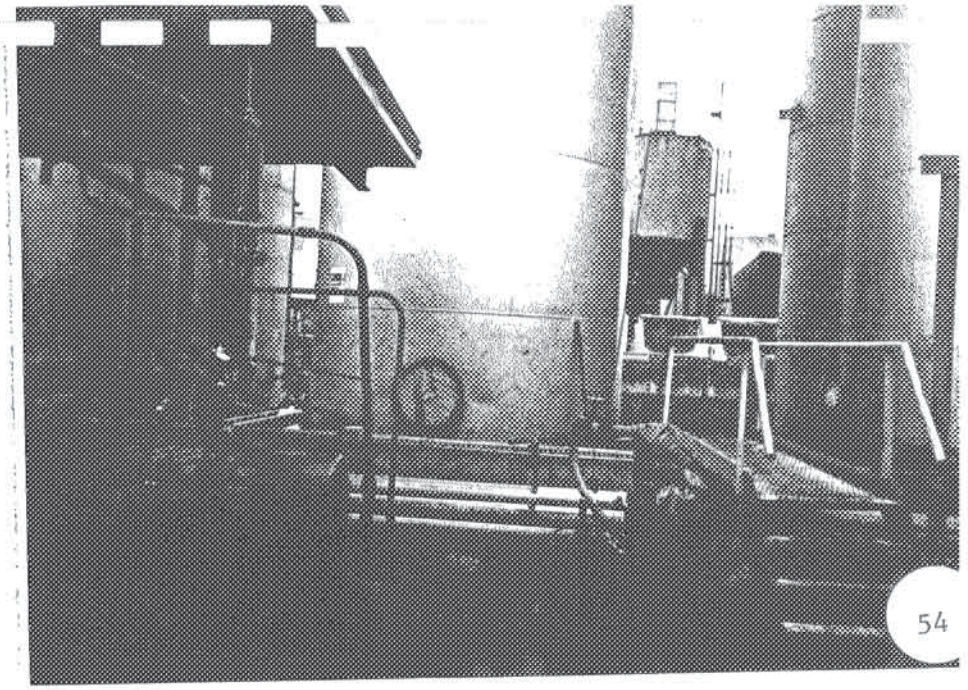

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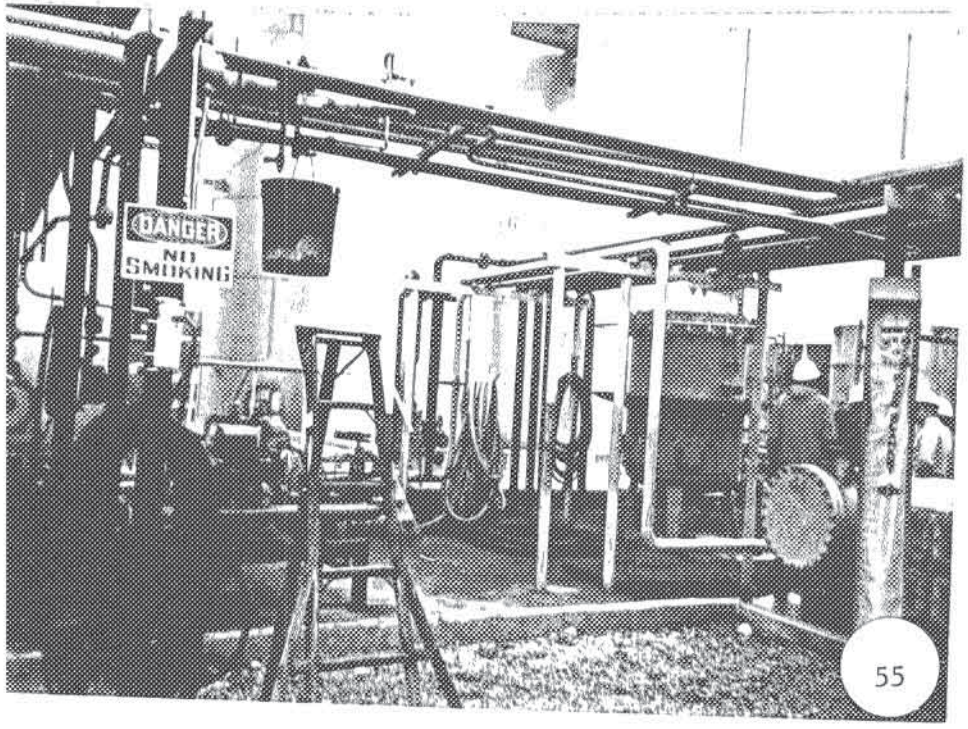

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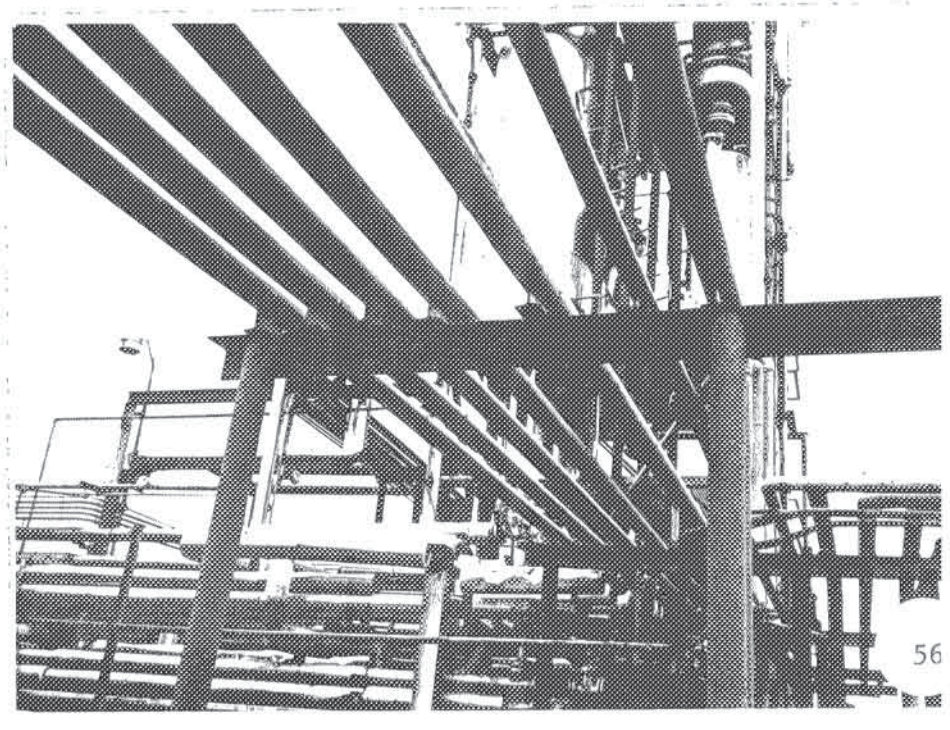

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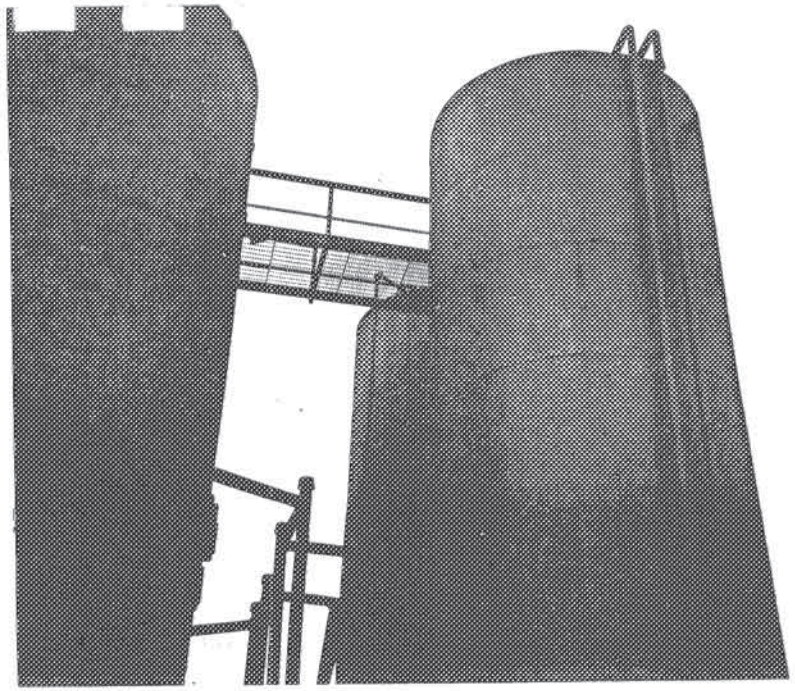

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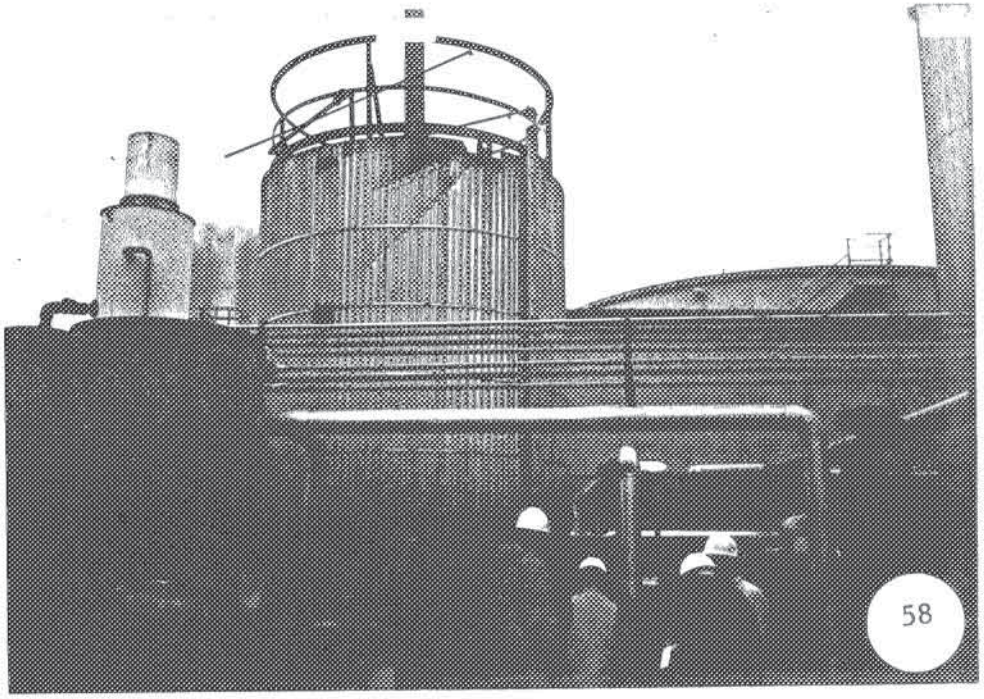

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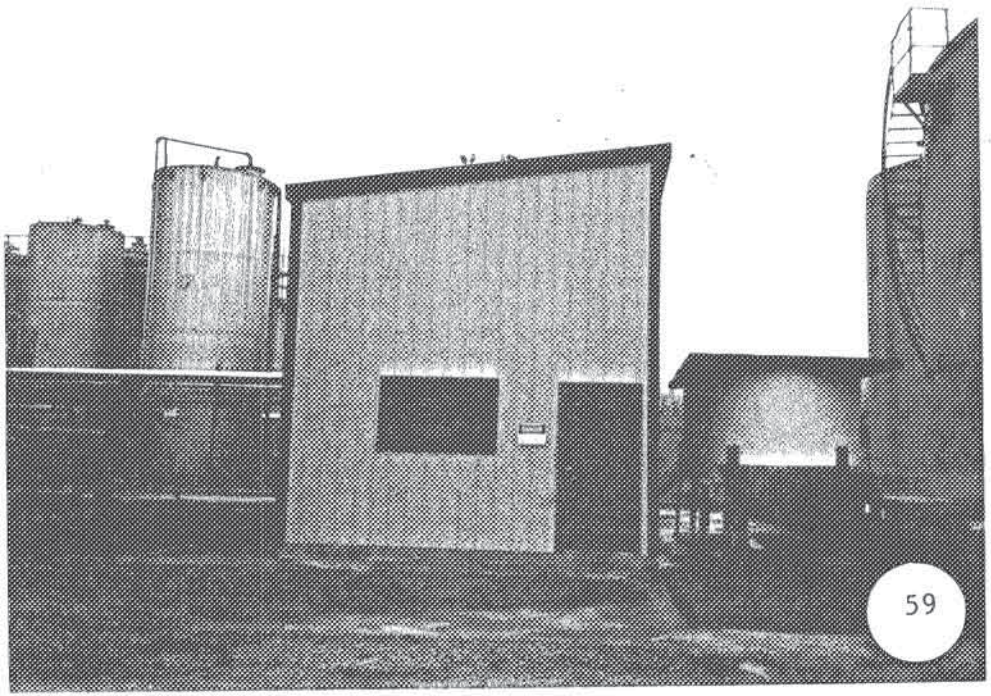

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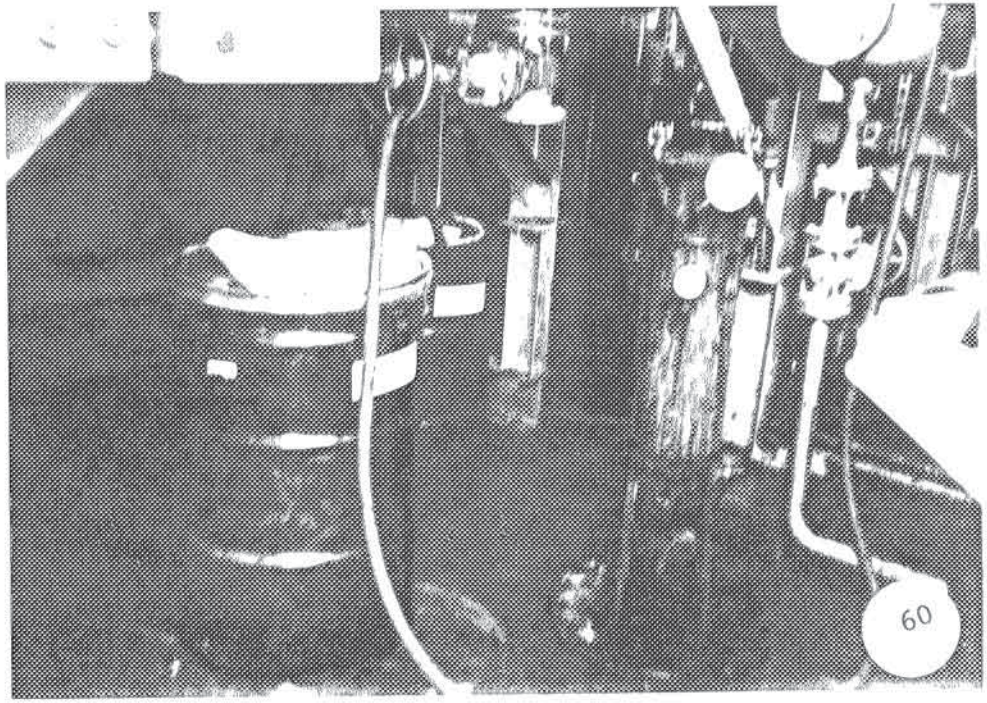

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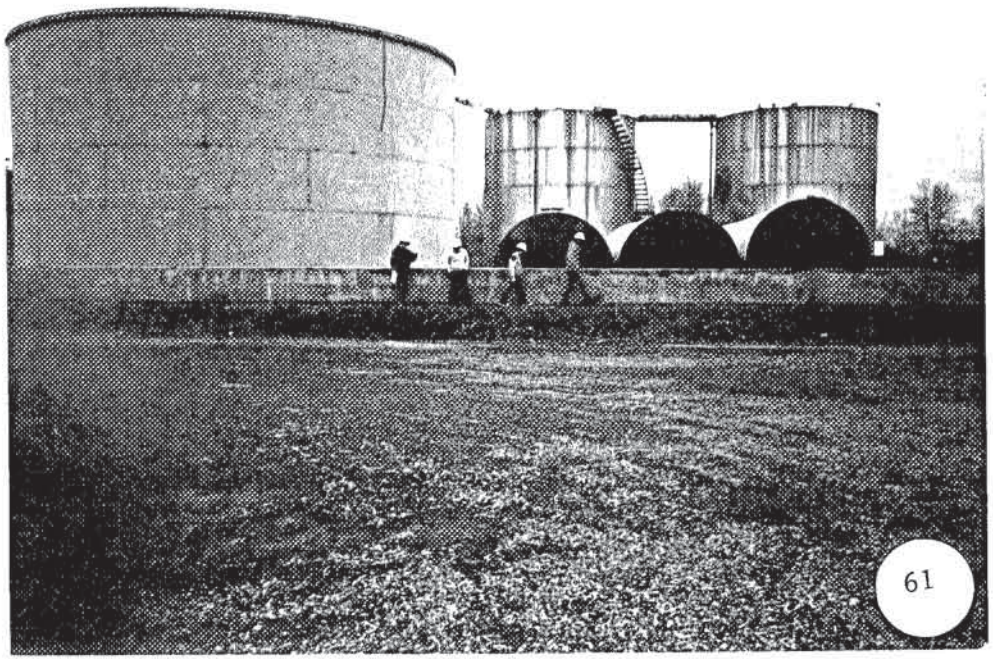
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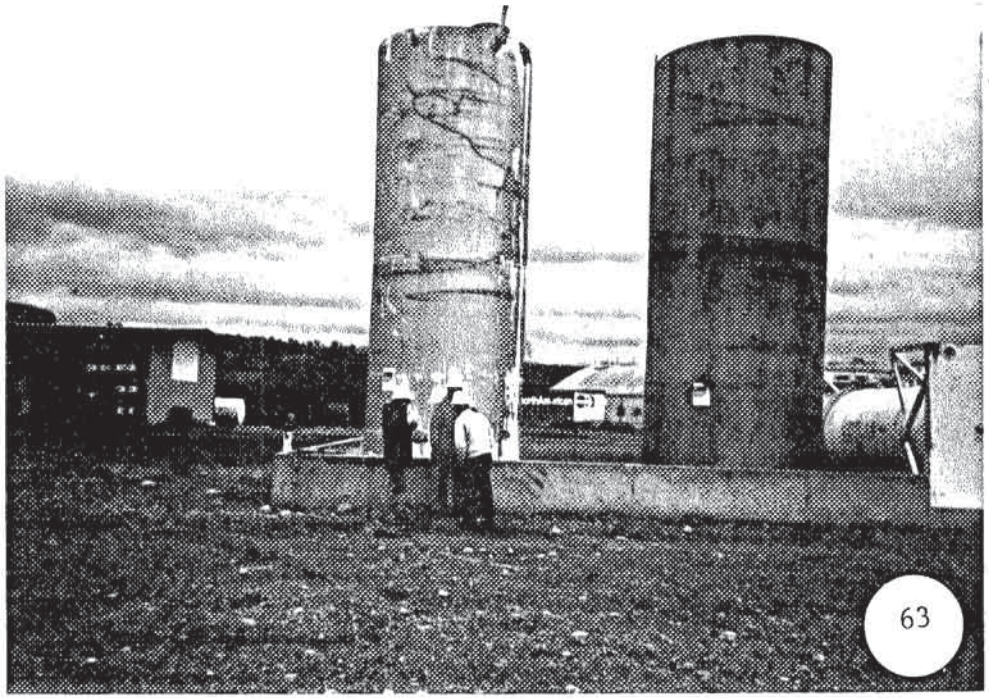
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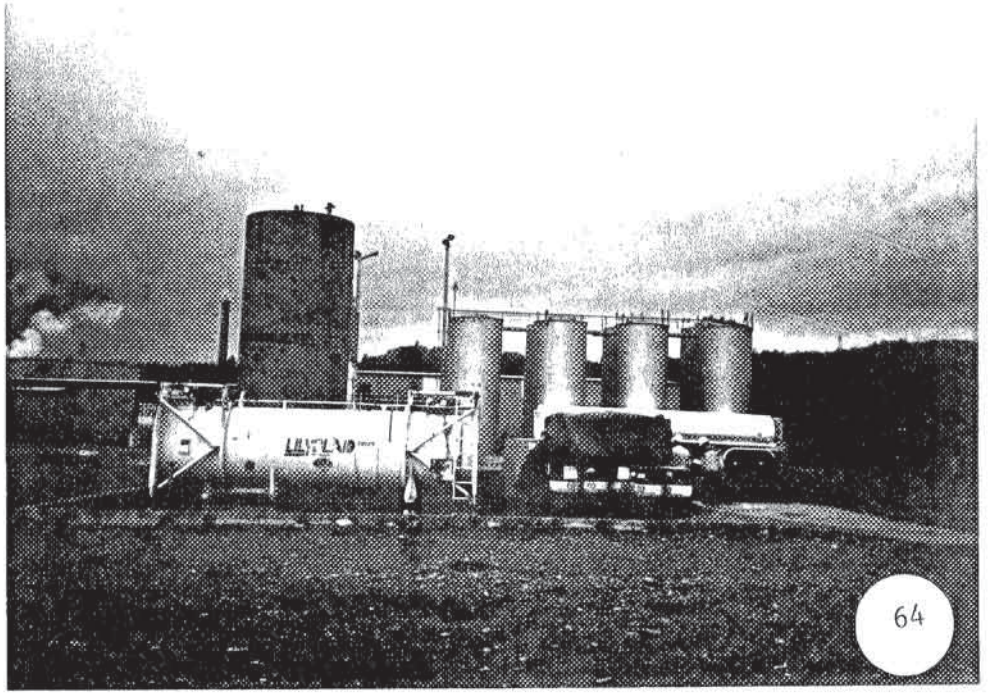
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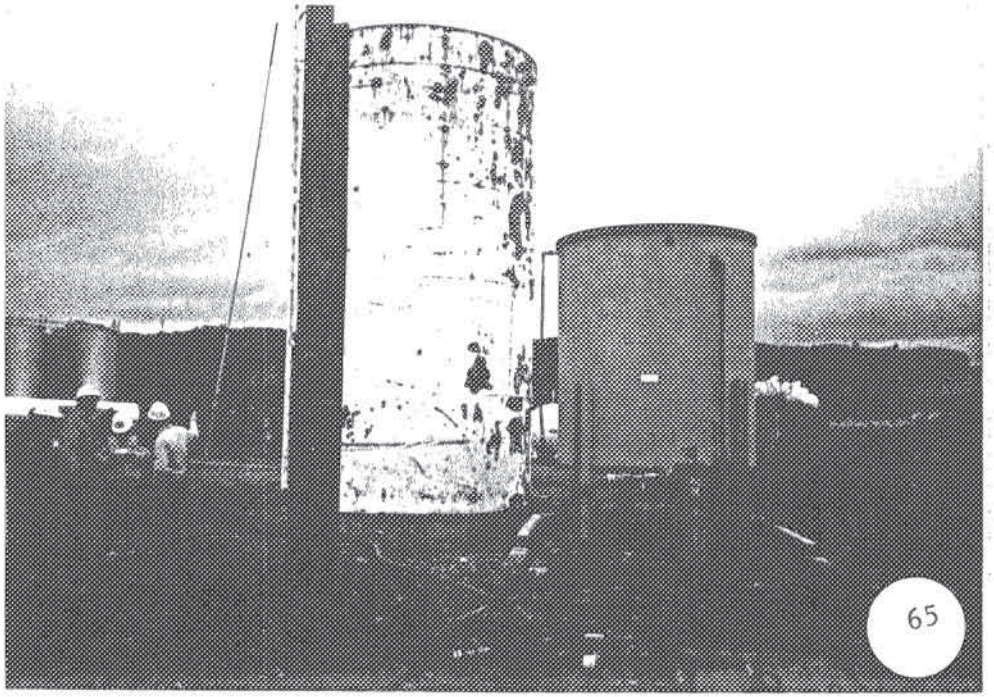
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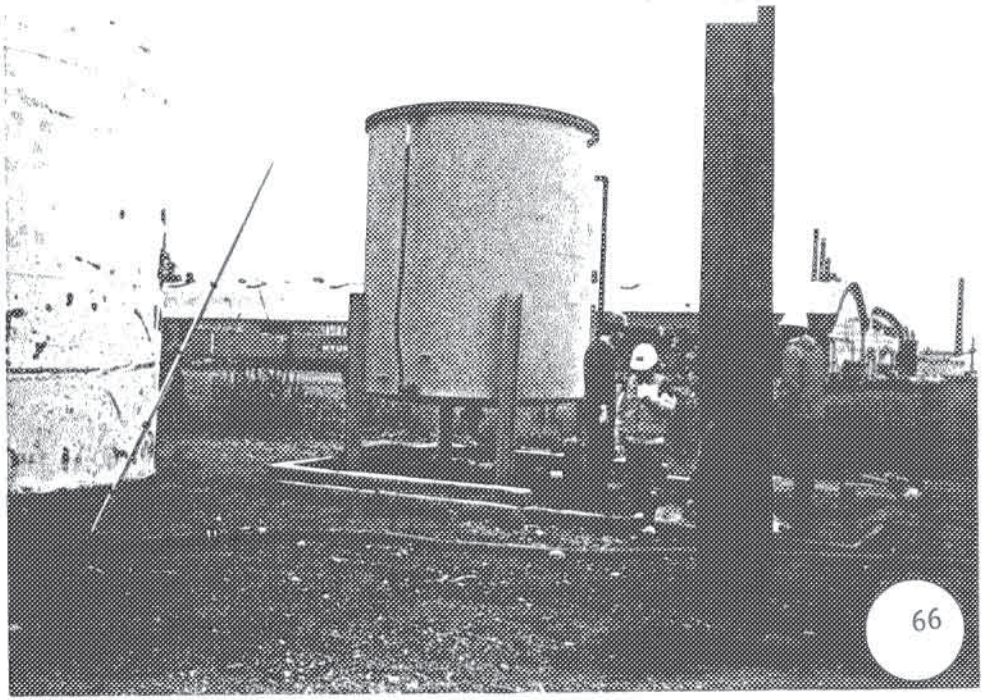
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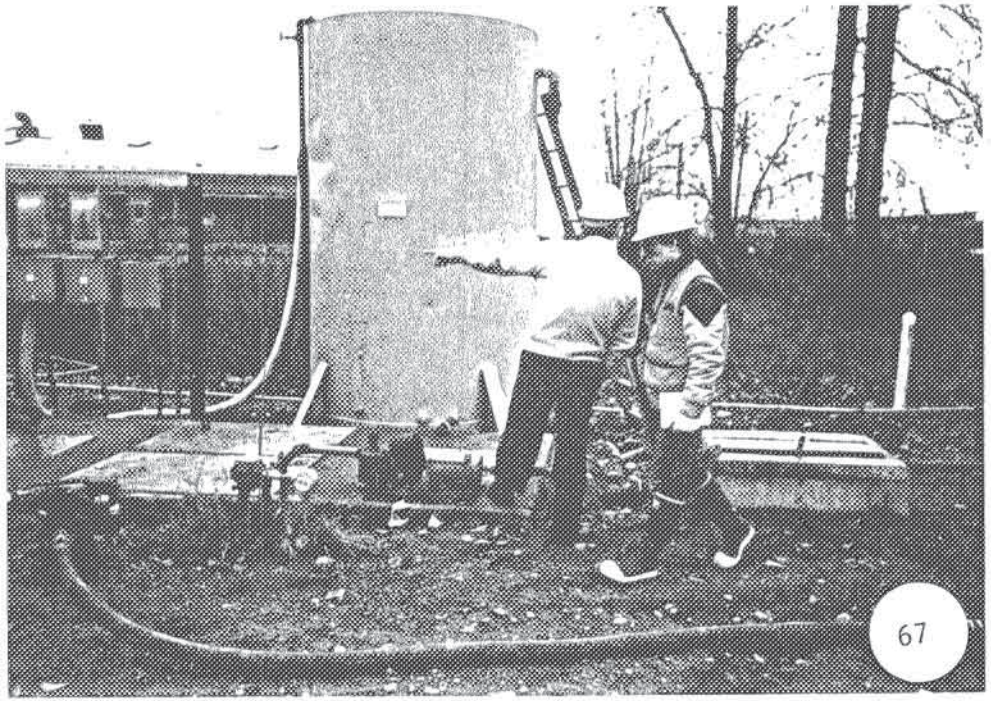
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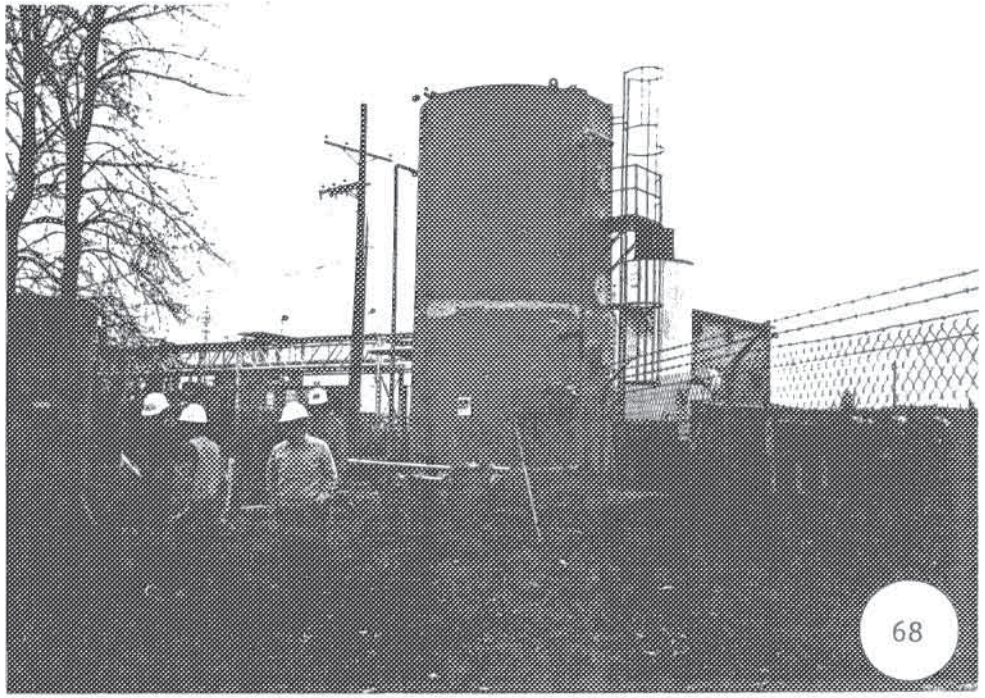
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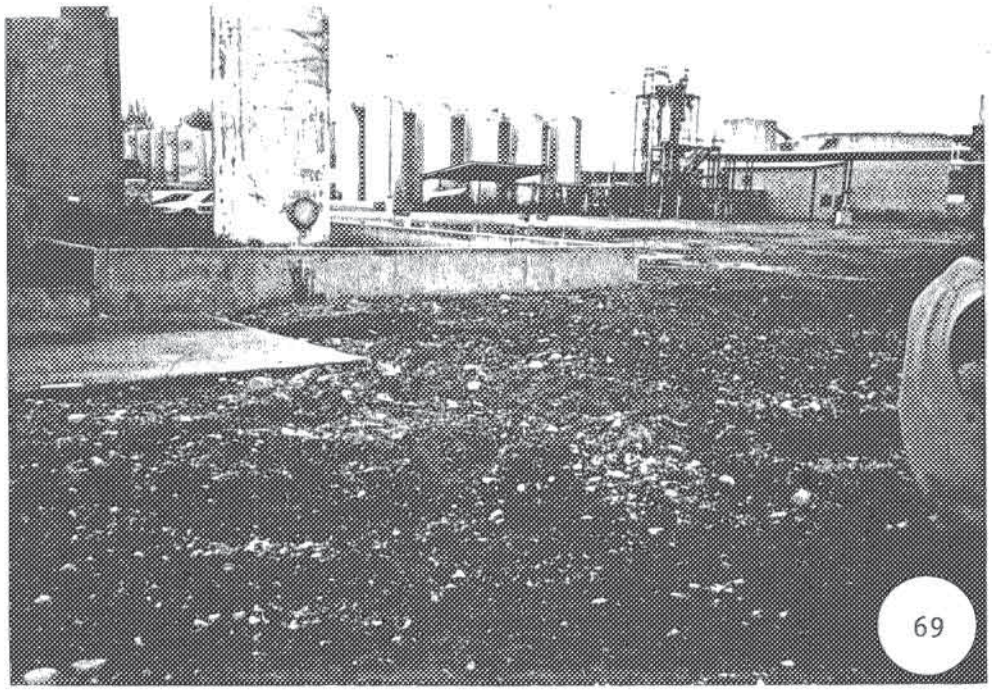
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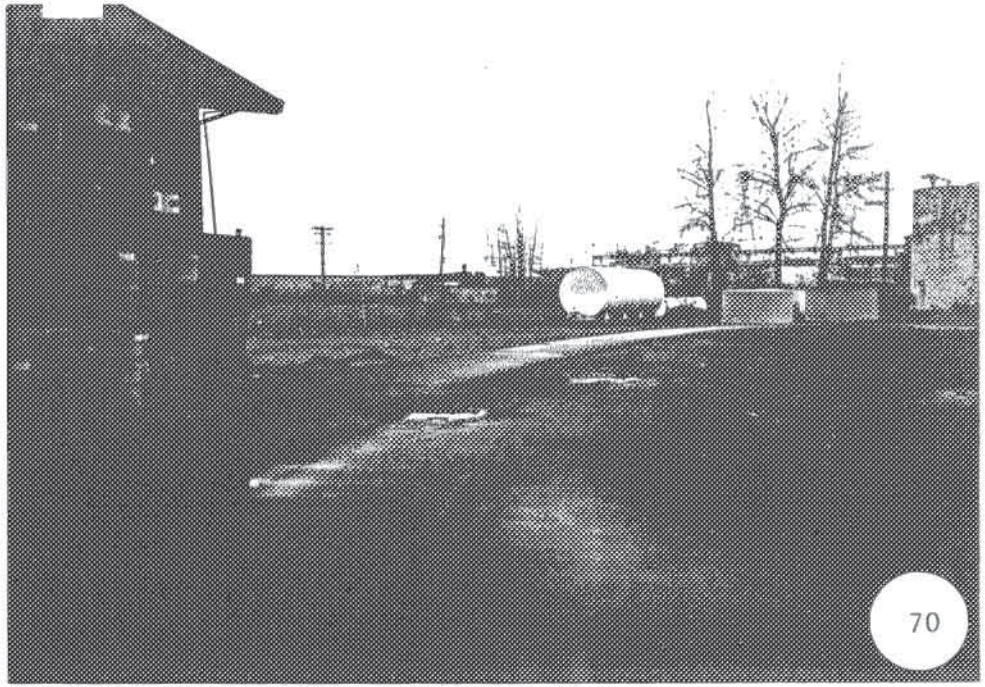
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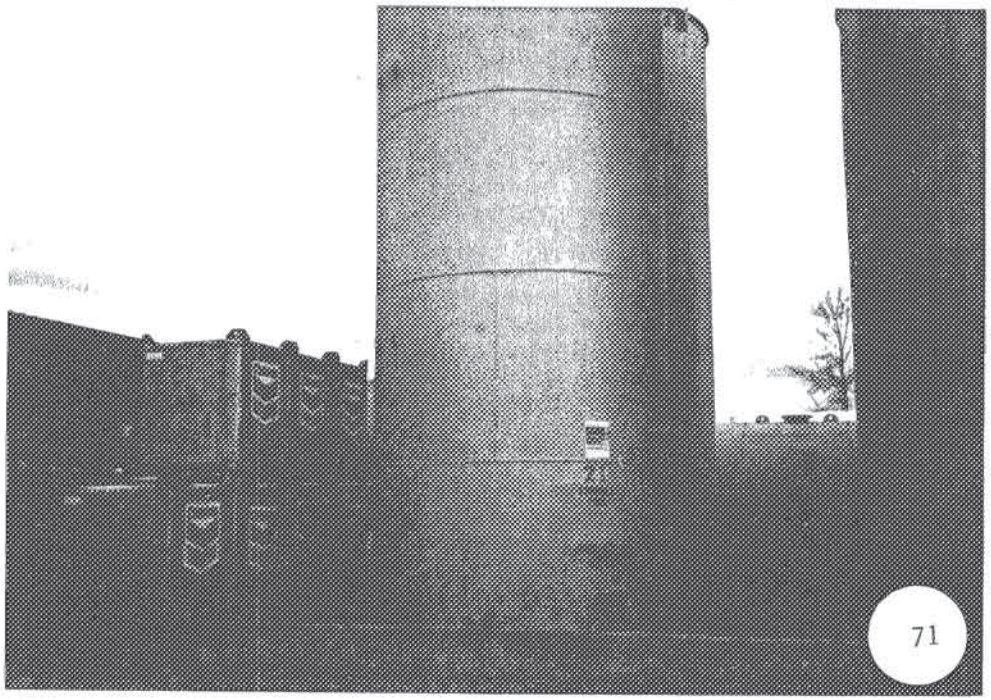
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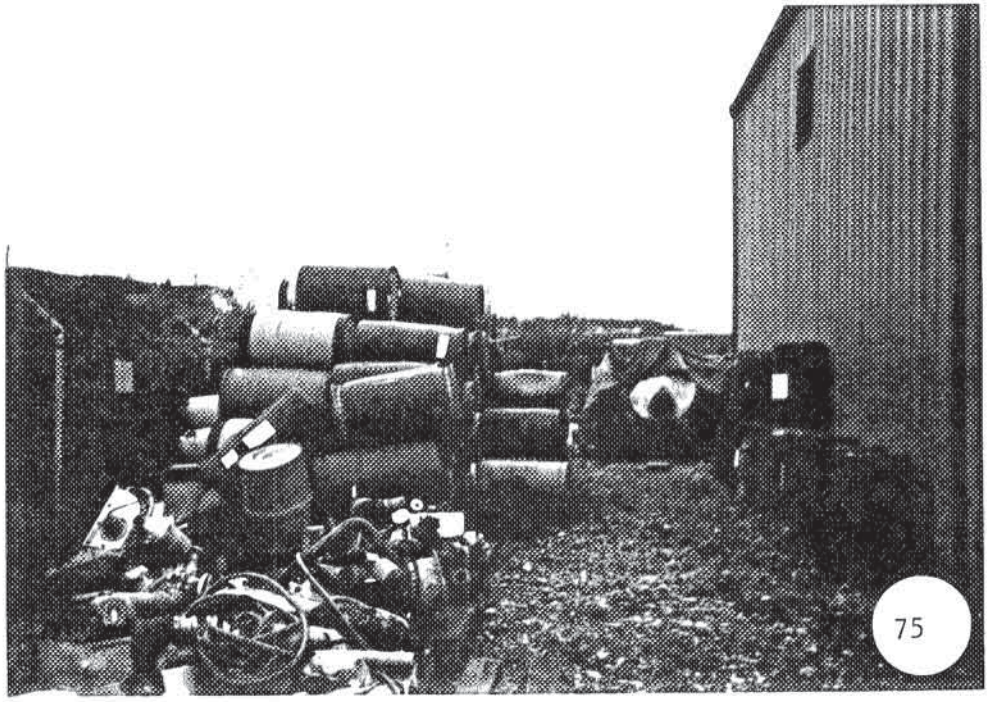

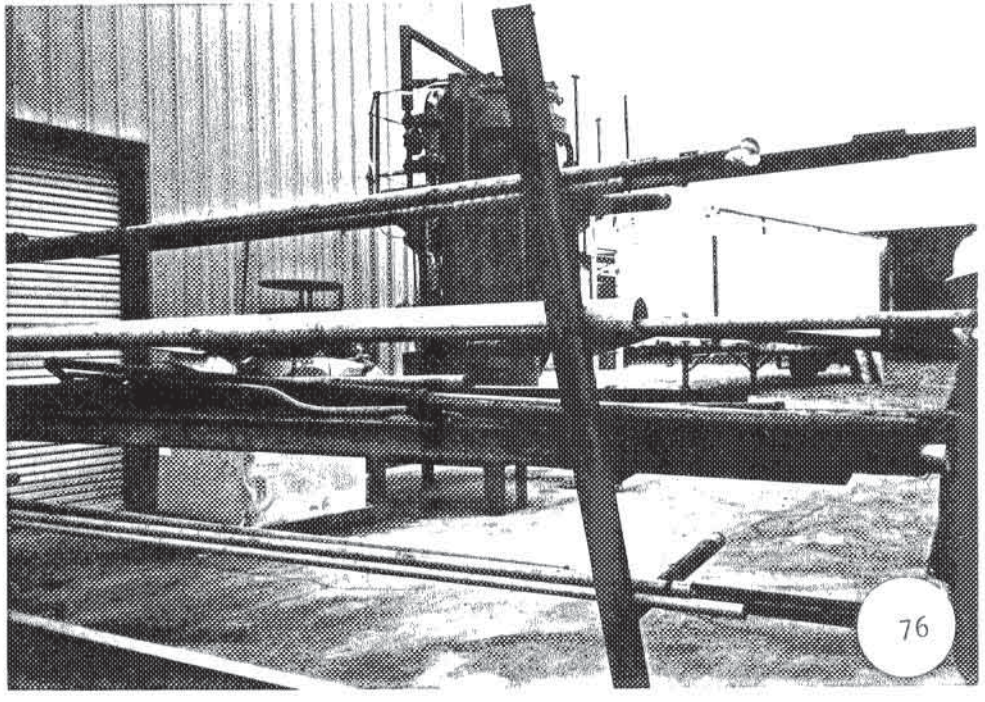

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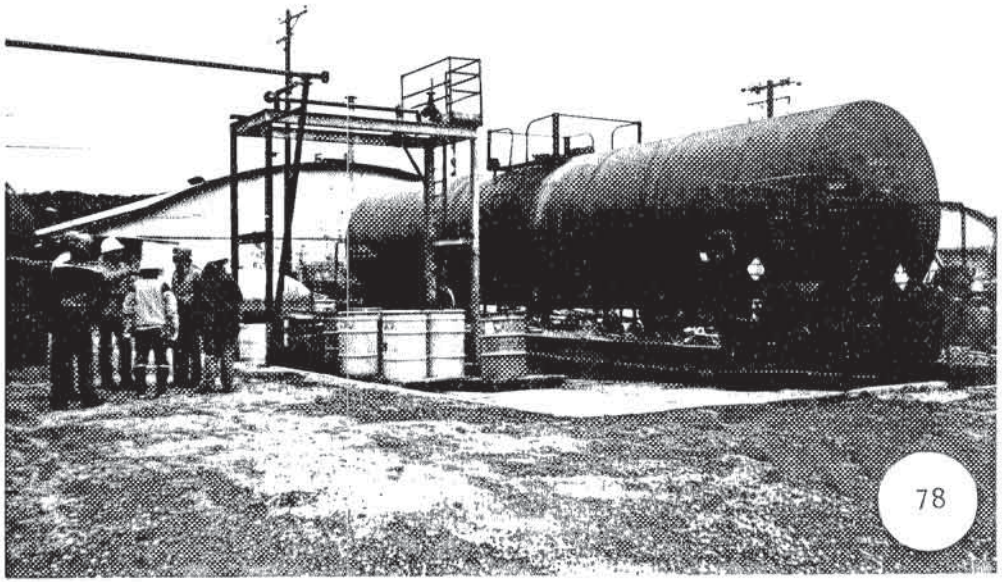

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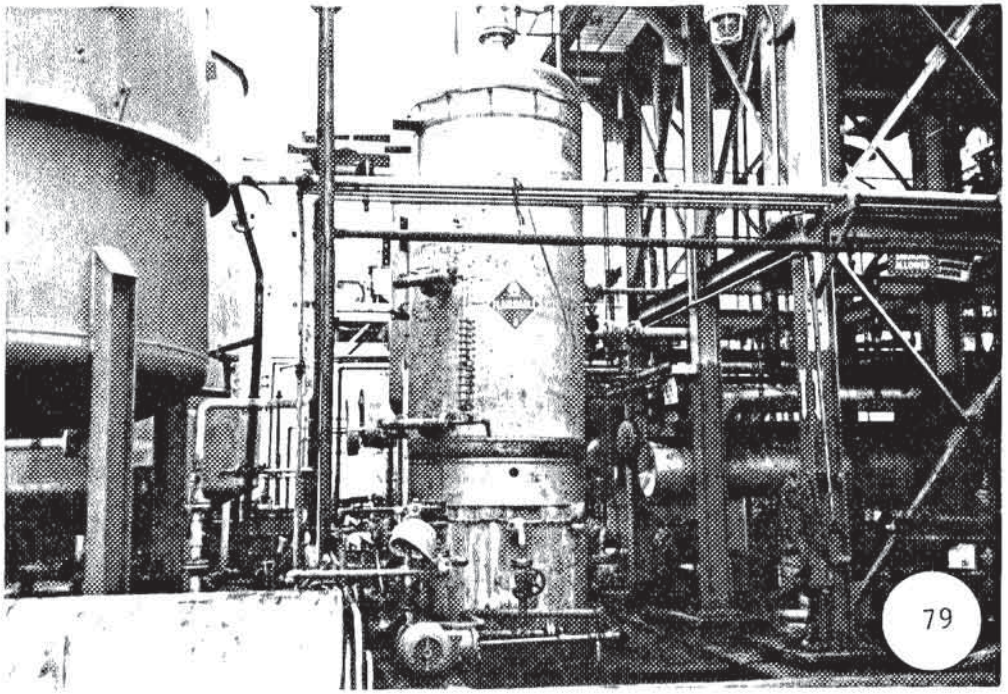

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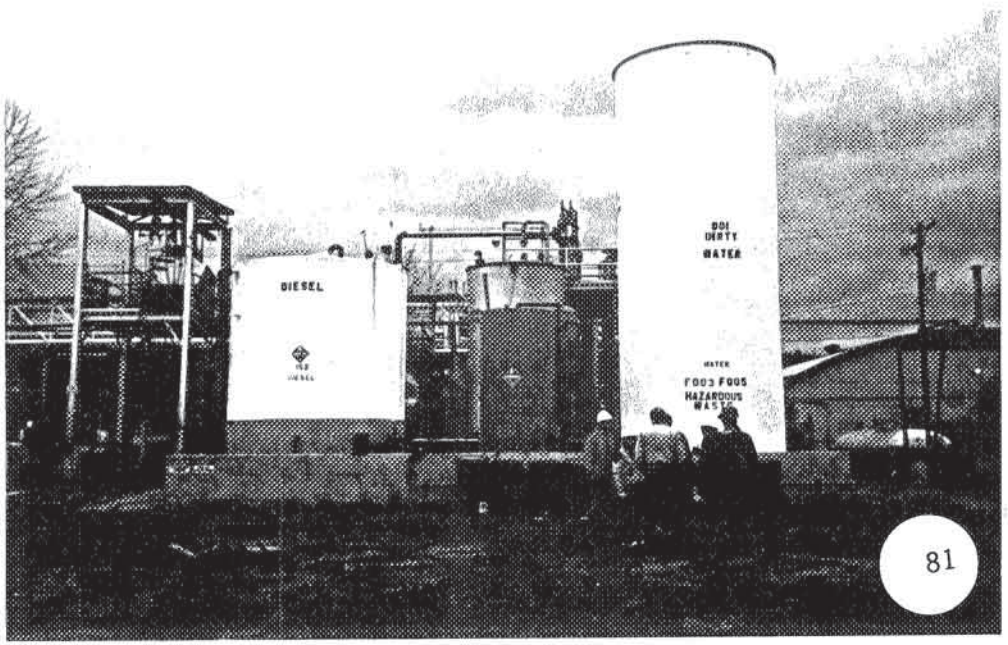
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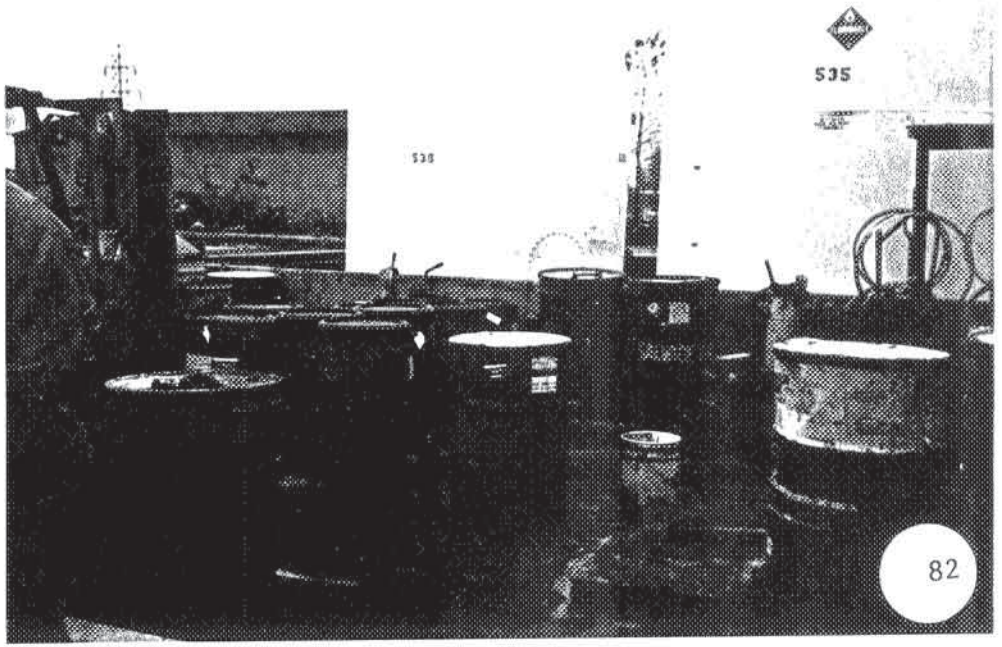
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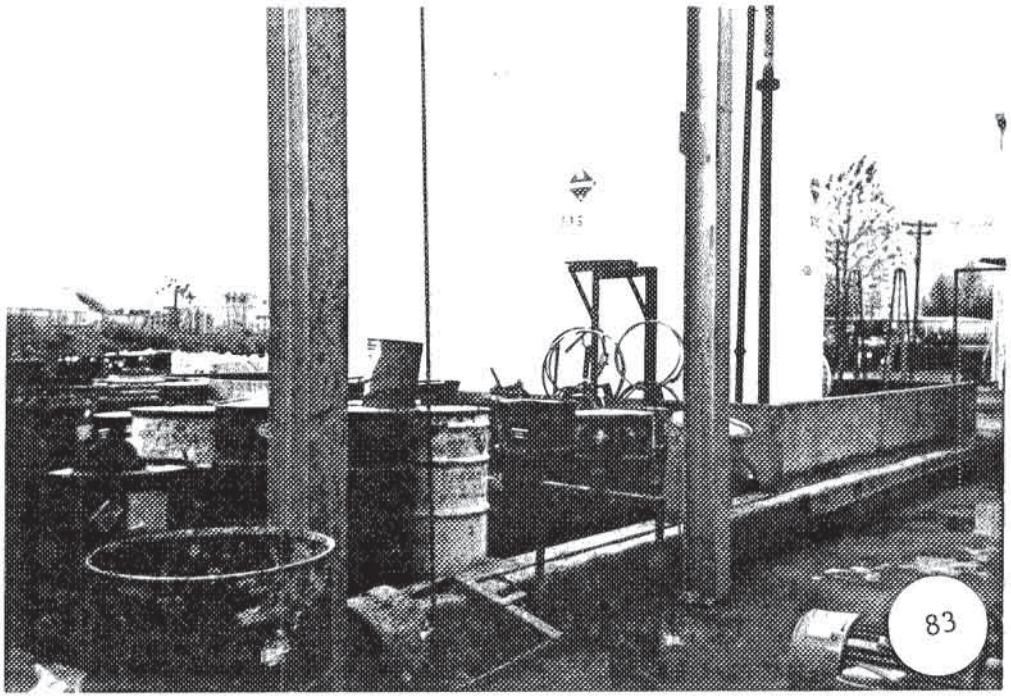
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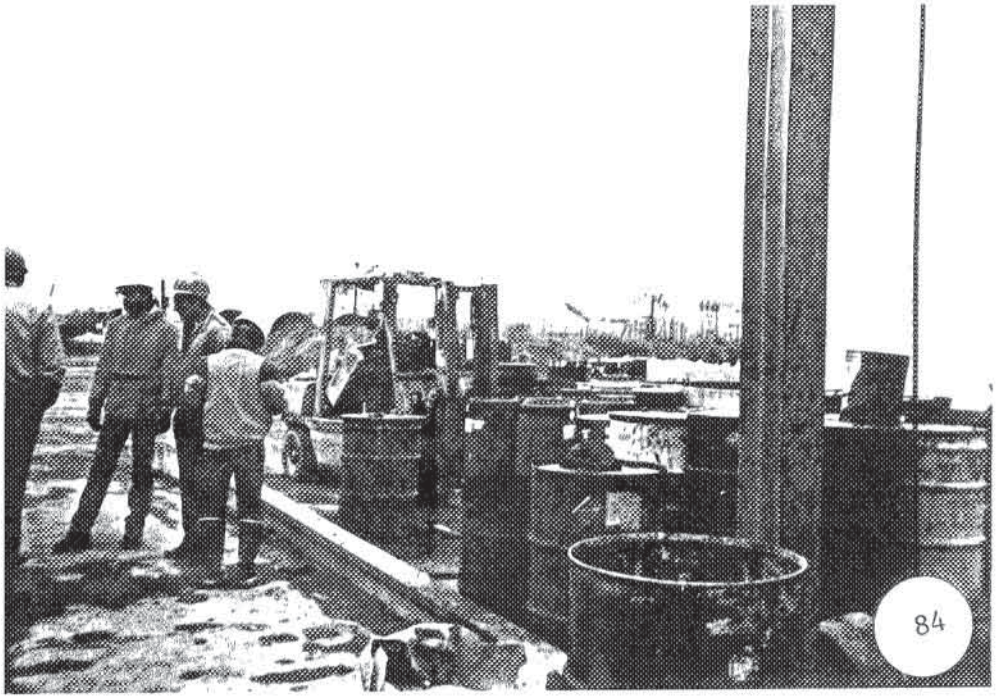
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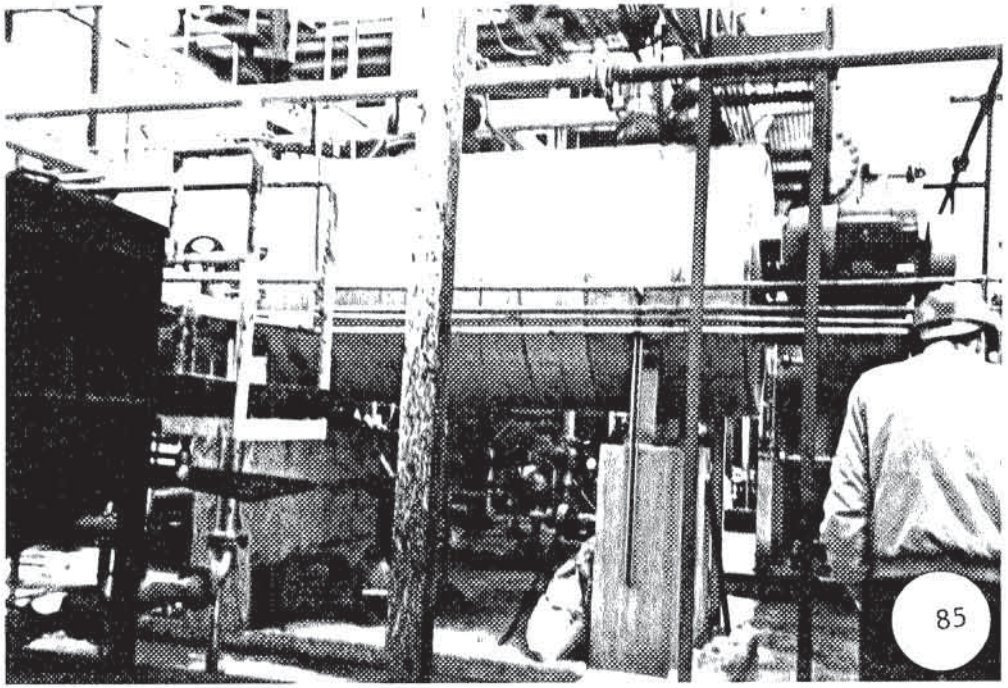

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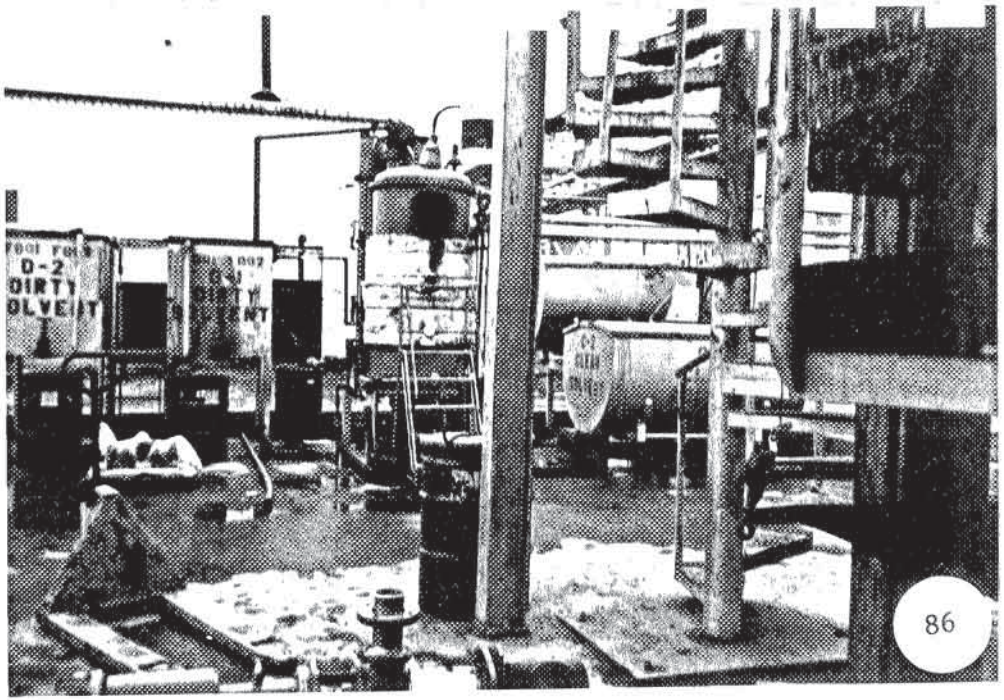

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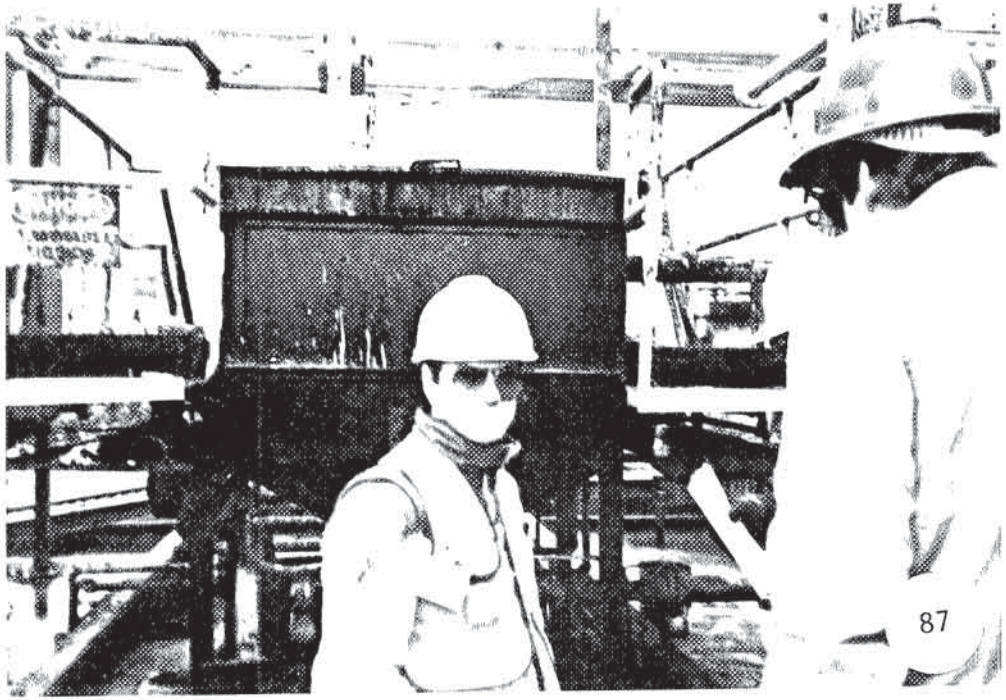

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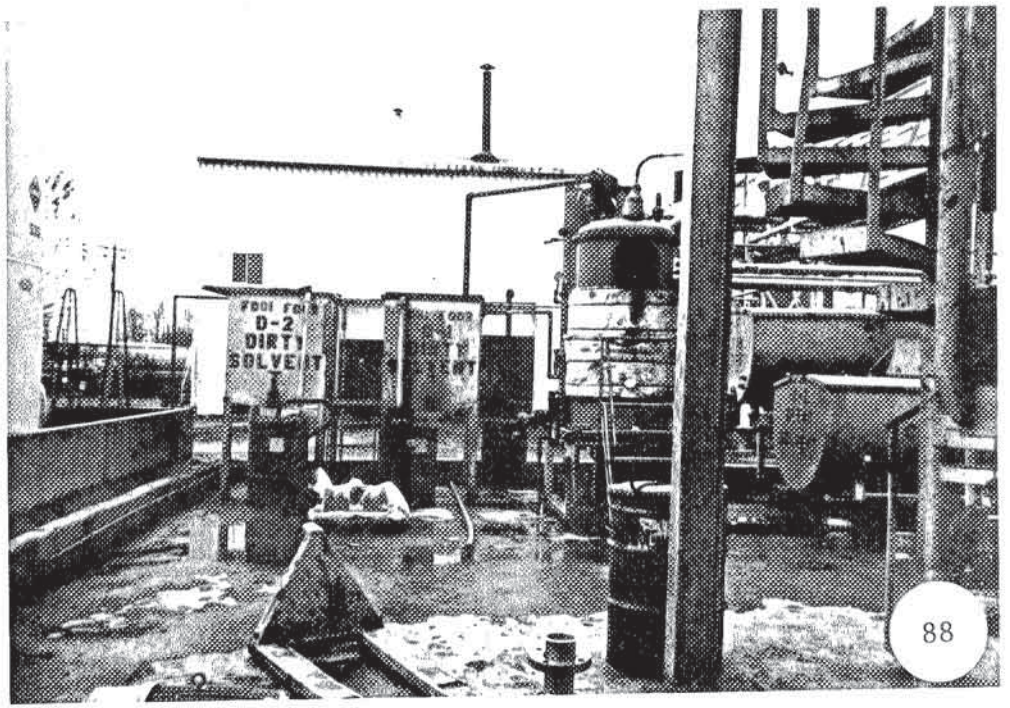

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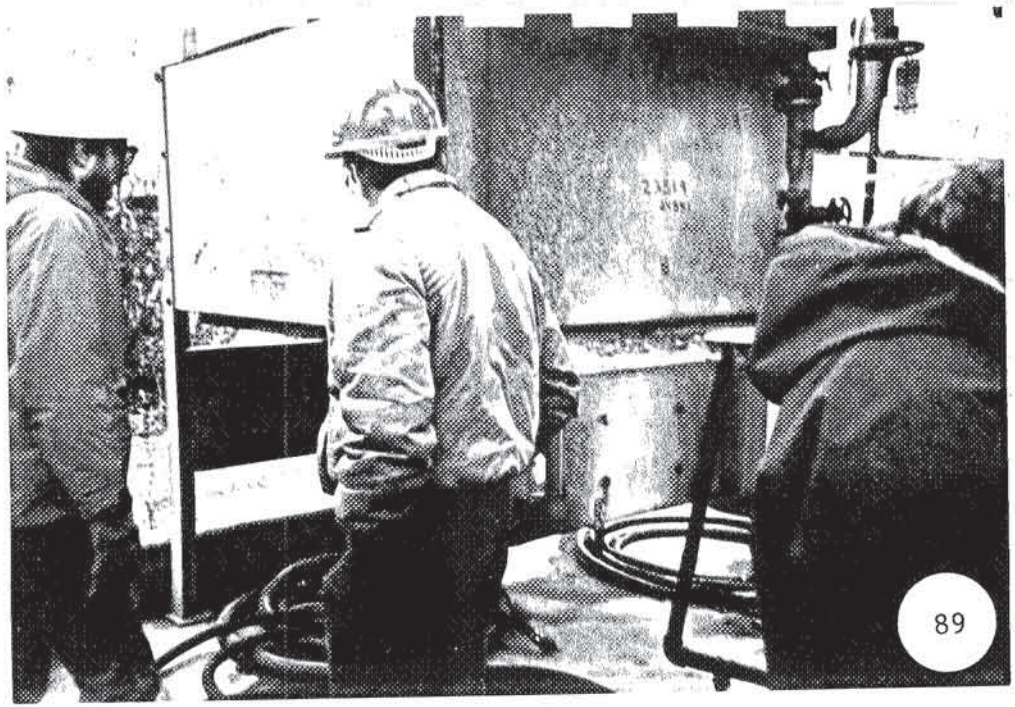

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C-1
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SOLVENT
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CLEAN
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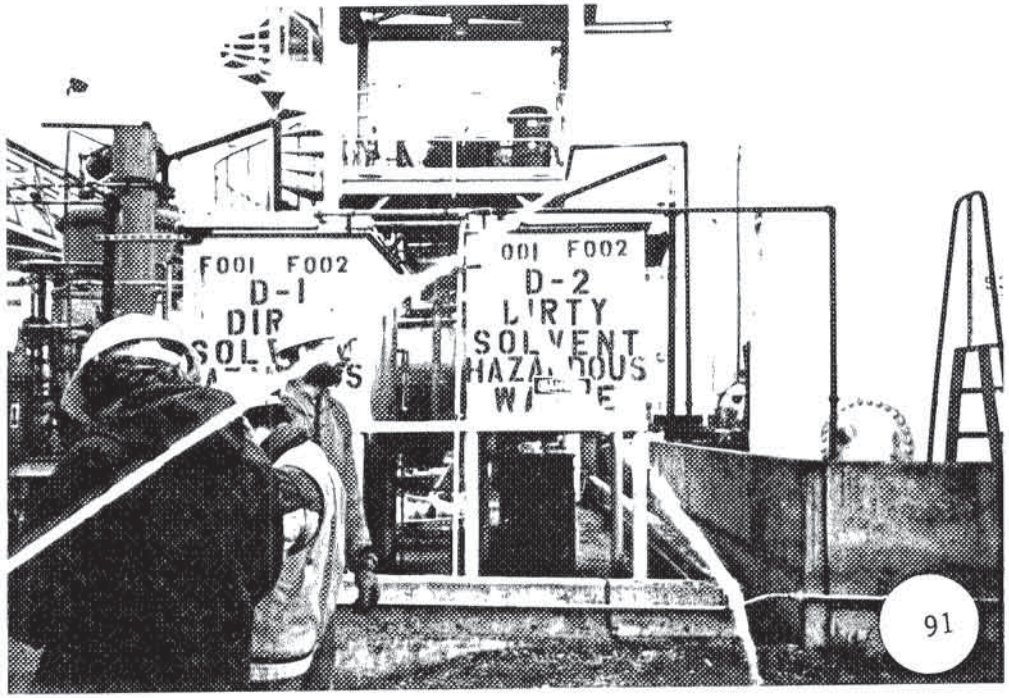
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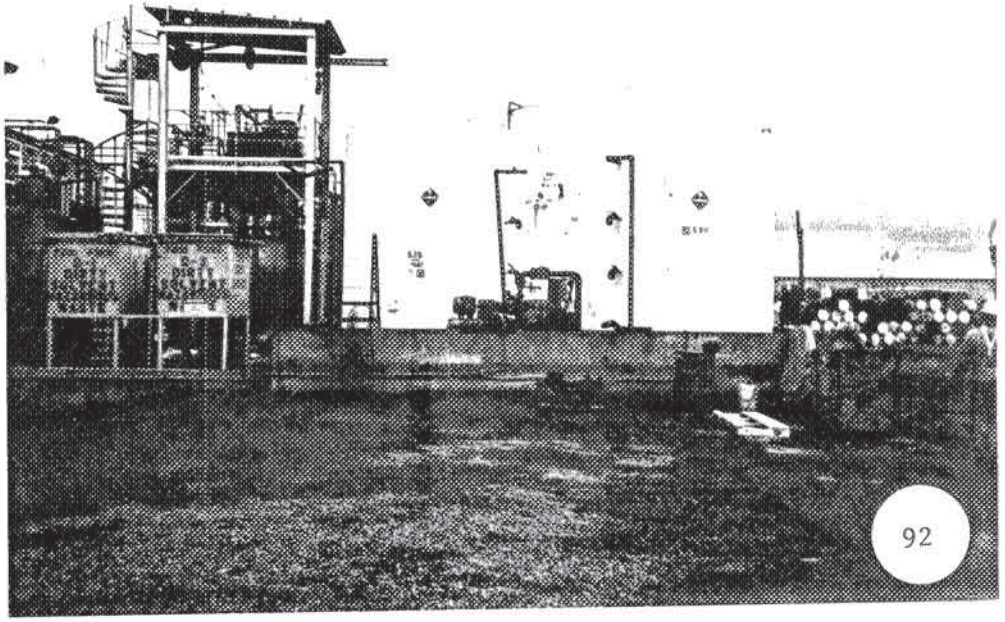

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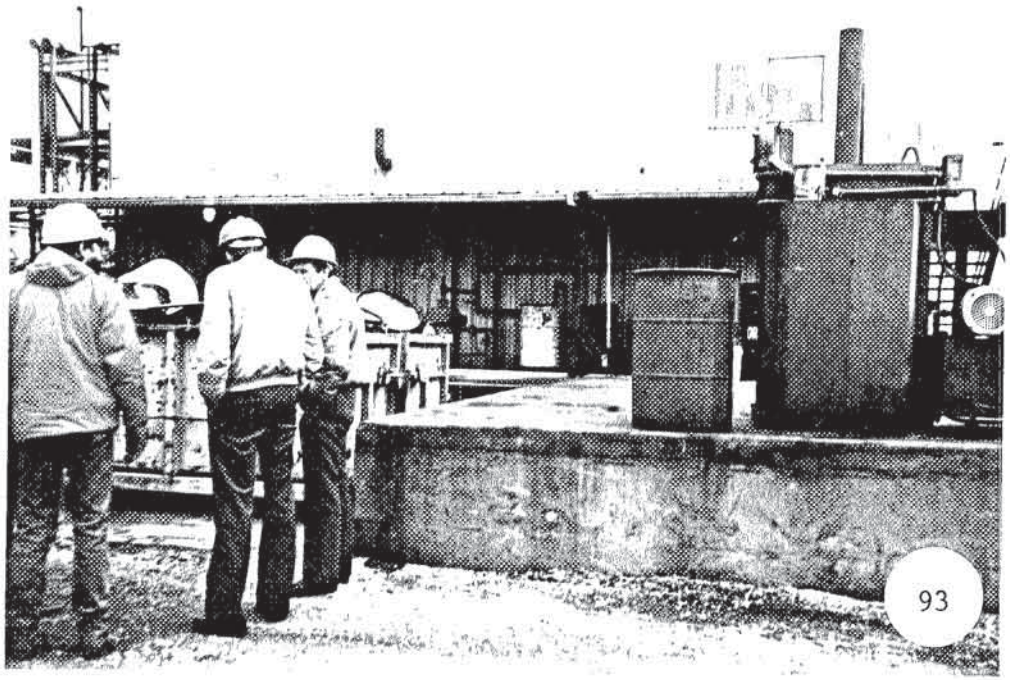
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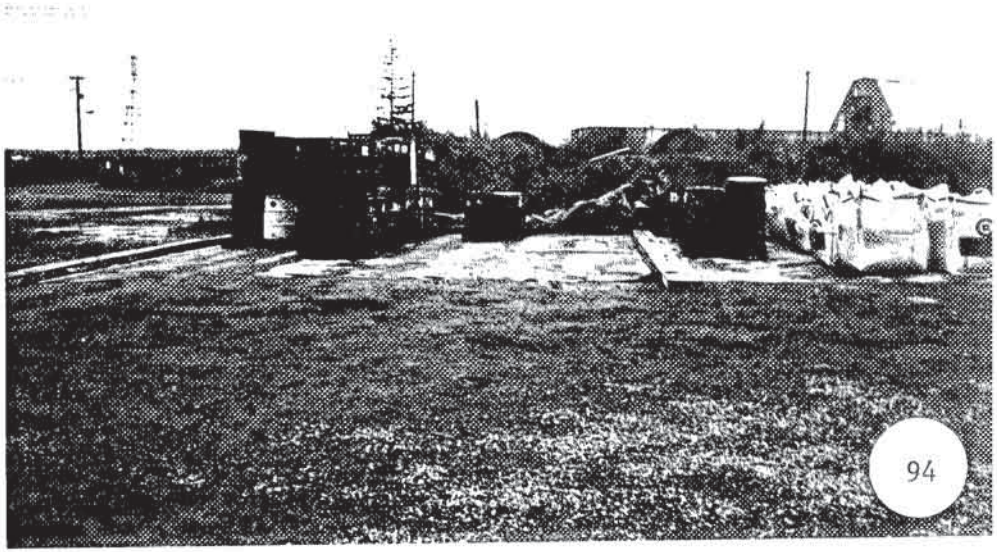
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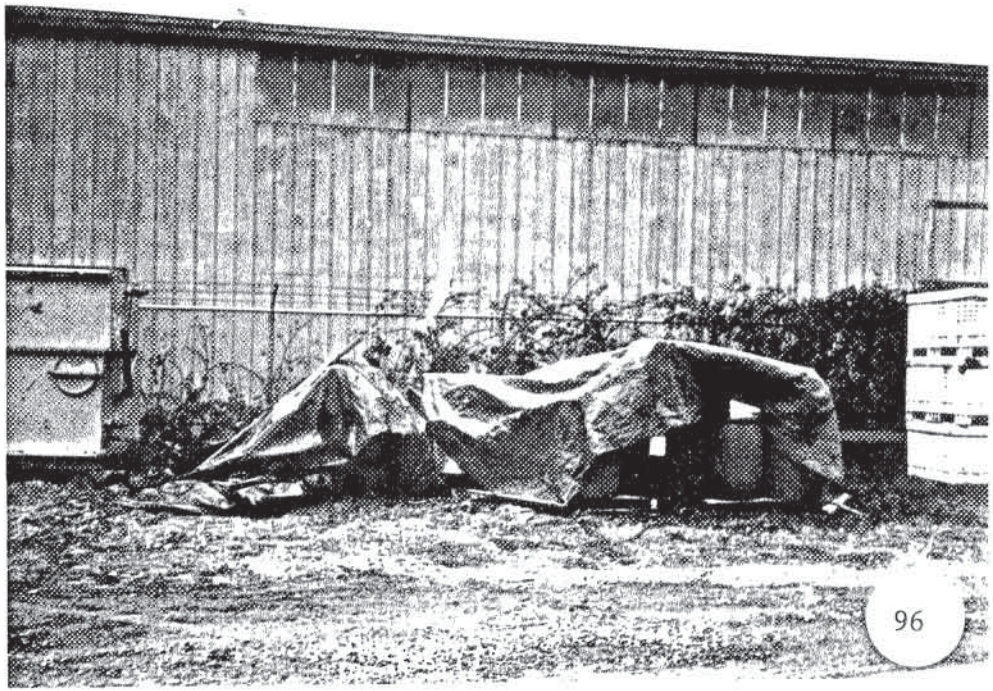
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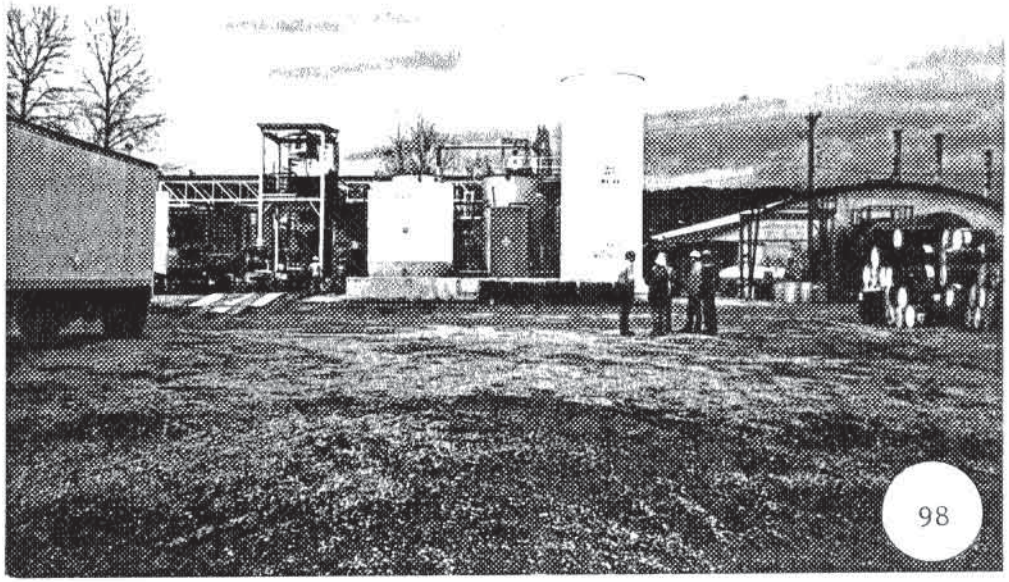
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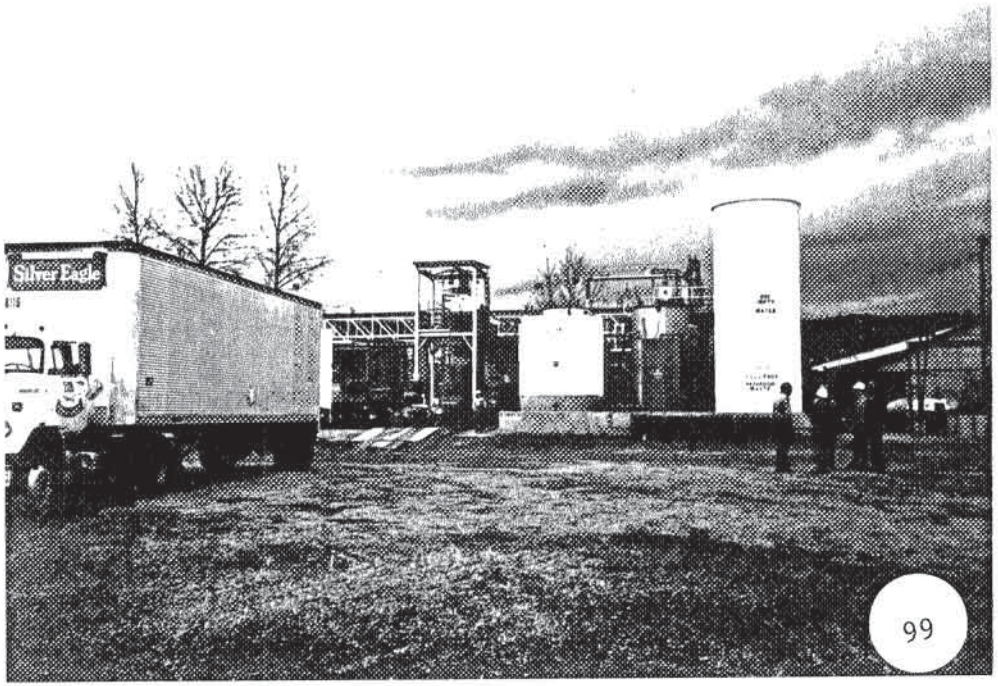

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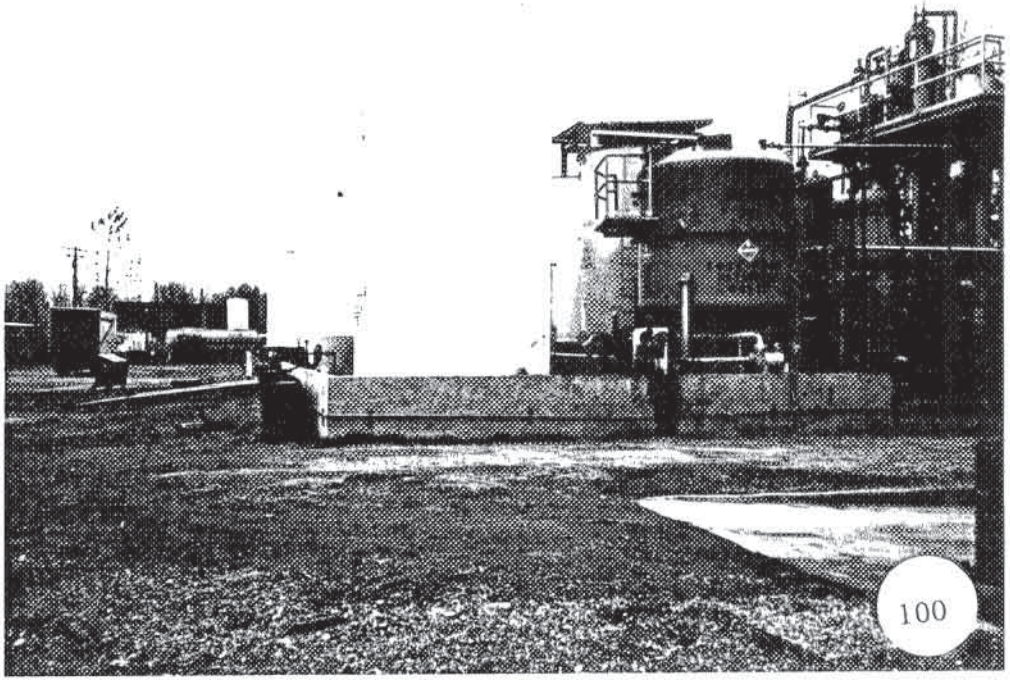
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APPENDIX B

VSI FIELD NOTES

JNational
43-571
Made in USA

Chempro 9:30 am 12/18 Overcast

→ Parcel A - 1976
Heavy metal/aqueous liquids - acid/bases →
Neut/prec/stabilization)
container storage
Storing alternate fuel/waste oils
Tank cleaning in past → in container storage
will be separate area (in Part B) - stopped
2-3 mns ago - Field service group —

Parcel A started April A ←
Waste oil reclamation at that time -
wound down in 1985 - oil storage - ceased
activity ←→

Wing tanks - storage + trt unit of aqueous liqu
→ neutralization/precip/sedimentation -
→ Sludges slurried and pumped into sludge tank
Batch treat
Supernatants to POTW from discharge tan
Composite sample - analysis to sewer
authority ←
Hose hookup - transfer line —

→ decants off supernatant ag
Sludges to Thun Field + Tacoma Municip
CF ~~waste~~ to CSST →
→ all authorized through Ecology - Jim
Hinman - composite sample ~~to~~ to stack
to authority -

NW Processing / Glenn Tegen
but locked out in Dec 1986
In 1985 - lease ended - received verbal auth/
1987 - Removal of tanks
When first landban, sampled all tanks -
then locked out -
Through state request got back in → then
went back in and removed - order in 1987
sometime (May 1987?) ←
→ Soil excavated + went to CSSI ← secure
burial -
→ Parcel A - reverted back to owner - documented
waiting for Ecology's o
- still contamination on site -
After excavation, liner put down, + capped - no
contam. from below will contaminate new
fill ⇒
Asphalt with [concrete sealed at edge] around wing tanks + waste oil tanks —
Parcel B - late 1979 -
→ Sludge settling tank ← BB ← slurry with decant valves -
→ + 6 tanks A-F effluent - series of analyses
per discharge - knee full, tested ← w
Parcel C - 1986, operating 1987

→ If not meet effluent, would polish w/ ferrous
chloride, ~~to~~ sulfide - in Big Boy ← decant valves
could release to sewer ←

→ was paved on asphalt with asphalt berm ← hot tar sealant
BB tank was earthen / asphalt poured around -

berms may have been designed for volume

→ Parcel had had filter drum (not successful)
then decon'd + stored on parcel B for surpl
May have operated for some time on Parcel B —
(uncertain) ←

Filter press (plate pneumatic press) now
operates on parcel C -

Went through unit closure Parcel B - all
decon + removed from site - still have
solidification bin - dump stabilized mater.

Tank 5 - rainwater c

Parking area
- lots of tankers - w/o
[loaded tankers / some drums /] - sometimes —
→ any loaded tankers overnight stay on
loading area →

→ No truck cleaning -
→ Some one comes in + washes power units on
weekends →
Will wash out own waste streams - waste in truck
loading / unloading - no tanker cleaning ←

→ Freeway Container
→ Repair + storage -
→ Containers / sheet metal works
- Leased since 1985?? ← no other activities -
before then -

Parcel C

Generator Profile -

do spot check - fingerprint testing -
→ pH, s.g., Cr^{+6}, CN, sulfide, chelates phenol -

All loads scheduled thru Transportation / directed to unloading pad - get sample
- material spot checked while manifest checked
- Do compatability test
- Scheduled for batch treatment in 50 series
  Into base/paint booth/lower pH w/waste acid
  reduce Cr^{+6} - neut 8.5-8.0 prec heavy metals to hydroxide sludges - settles 24 hrs
- AA unit on supernatant -
- Discharge series are 400 series - composite when full, discharge on batch basis 8-hr period discharge
  Sludges from 50's

F006 - 700 series to await stabilization batch basis · Portland cement mixer 48 hrs to set up - TCLP sample sent to staging area, broken up, lined dump truck to CSSI

Flow rate, pH, colm, clarity - sign out lock out system -

Have stripper for Methylene chloride -
Sludges through filter press - filtrate reprocessed, filter cake to CSSI or goes out for incineration.

Air stripper - air blows VOAs off - through corre
Napth, tolum, 1,1-TCE - 2.13 ppb - in winter 3-4 ppb? high - also pass thru or stripper -

501, 502 - Isolation tanks - materials w/chelates, EDTA - do trial trtmt in lab, then can isolate - may ~~cut~~ there until treatability.

Mostly bulk -
Stored drums - generated waste + some storage -
- all sumps are blind - no underground lines
~~in~~ storage tanks on site - never have -

- under entire HDPE under all tanks not under container storage -
Coatings on all concrete surfaces.

- Have done some storage of Fuels · consolidate for Georgetown - alternate fuels - waste oil Storage, solvent contaminated water -

Any questions on hydrogen through Susan Donath

Equipment on Parcel C · all started at same time
300 series brought over from Parcel B - inspected, ultrasonic testing - all new containment

Venting - 800 + 900 series have pressure vents - 3" + others not vented per Fire Code

Started inspection

Parcel A - oil tanks on back side - boiler tank
→ berm

Photos 1-3 Parcel A - Panorama C-R-L

→ Parcel B - asphalt - 6 inch high curbs on south + west side →

1st + 2nd shift operating

Container storage area - raw material in segregated berm area -
- products for treatment

→ Sumps pumped out - inspected every day -
- weekly record keeping -

Collection system for
Hose out to these three sumps - into S or into
→ Cl in high berm - sumps 1
→ tested before discharge

Coating is chipped + cracked -

Black drums - stained 3 high - batch of stabilized material that Failed TCLP - awaiting shredding + retreatment.

tanks for Field services - freshwater for Pressure washers -

Bins - rinse truck sludges into for dewater also filter cake to go to CSS & For stabilization

no curbs on west half of container storage

- Parcel B -
- Oberlin Filter Press was on Parcel B -
→ Now only tanks remains - using for rainwater collection - still in asphalt area -
- Large containers used for tipping small stabilized ~~solidified~~ material - backhoe used to breakup material - goes to CSS ↓ →
- (Kathryn - photos) →

Photo Truck unloading west side - note sump in unloading area.

Photo Geomembrane - liner.

PSAPCA - do annual monitoring of air strippers Res. Triangle ~~Inst~~ did recent study For PSAPCA (Robert monitor here)

Doing tank integrity to be certified for new tank reqs - probably could submit these

Concrete doesn't look coated -
All aboveground piping -

400 series hookup by hose to sewer discharge line - check once an hour 8-hr discharge -

Baker tank used to transfer contents for testing

Yard outside berm is unpaved -

Filter press - fed from 300 series
Poly filtrate tank

→ All new tanks via ester coating, blind flanges for testing - (new + modifications.

No1
50
700
900

Lime ~~silo~~ product storage
→ all being upgraded -

Sumps in ~~truck unloading~~ into containment + truck unloading have stone hard liners -

Large sump in containment area has red coating

Little if any corrosion evident in concrete anywhere in containment area -

All PVC piping -
Tanks generally in good condition -
Acids + alternate fuels separately bermed for compatability -

Photo (2) Concrete not been recoated -
waste acid tanks -

→ Some corrosion in north truck area - (not much

Photo Sump in acid area (S)
Photo Collection sump looking south -

All night lighted -
Monitoring well for membrane - with pump in and sometimes pumped -

Photo Cement silo - has baghouse to drop back into si

Stabilization unit.
From 700 tanks - fill from feed tank (poly) to mixer - fill containers, stabilized TCLP

Photo Feed tank - west
Photo Mix tank

Big gray tank is extra silo - anticipate using for fly ash -

Photo Stabilized solid containers N
Photo " " " S
Photo Process areas - looking west

mixture → Baker tank in 902
1-2 mins → Baker tank in for 702 - 801 scheduled
maybe 3 mins. next →

Photo N view over containers to show proximity of N W processing.

Photo From SE corner of containment to Parcel B
Photo " " " " to container storage -

3 photos L to R from SE corner of containment area -

Lab - drains to carboys for trtmt - nothing goes direct to sewer - this is a sump -
carboy - in containment area, in second drum -

Freeway Container - Dale Billings -

- Chempro has inspected

Store containers empty + repair - dents/holes wind/H_2O tight -
- Major repairs not done -
- Also do → fiberglass repair/ fiberboard -
→ Some trailers put together -
→ Chassis repairs (wheels) + brake work - (unknown as Best 90 offs)
- No engine maintenance - all dry work
- Sheet metal work -
- Some fiber glass
Yard paved →

- Barrels of solvent taken by Lilyblad

- Trucks sanded + relettered → no major spray painting
→ Paint touch up only → waste paints/outdated go to Lilyblad -

- Drains in the
- Oil collected in back - goes to Lilyblad -
- Safety-Kleen sink - only one in main area -
- Drains in floor? Where do they go?

- ~~Deep~~ Drains in container area are a mess
-
Photo Drains
Photo Product storage -

Photos Waste paints pH 6.5
Photos Drums - waste thinner paints -
Photo in area of dust pipes - whitish mud, tires
old Westinghouse engine - some liquid discoloration.

Photo Trailer on east side fuel tank + gear
oil - gear oil outside -

No storm drains in yard -
Dumpster -

- 300 series tanks will likely not be used -
- Part B doesn't reflect tank mods going on.
→ Section D will be updated within the month -
→ Visual inspection done on some -
→ Storehard was put in all but drum storage -
- No soil sampling around sumps -

Inspection ended 12:40
Out briefing

12/18 0930

① Intro

② Process discussion (facility active since 1976)

- Neut
- precip
- stabil
- cont. stor.
- storage of all. fuels & waste oil
- some tank cleaning in past - ceased 2-3 months ago

Parcel A

took over from previous recycle - ceased 1985

Chemco installed Wiley tanks

heavy duty treatments of aqueous sol.

sludges were pumped, supernatant discharged to Tor Municipal sewer

on batch process

sludges pumped to holding tank when to Chem Waste Management

Chem Municipal landfill (sampling done to meet existing standards

closure started in 1985

denied access Dec. 1986

state allowed access in May 1987

Northeast Processing - Glen Tegan Process

using Parker & waste oil tank

- sand was excavated during closure
  Chem Waste Management at Arlington
  liner - filled - capped
  current status - reverted back to order
  waiting for Ecology approval of ?

Parcel B
  late 77 became active
  initially sludge settling tank & A-T → BB

Parcel 86
Parcel B stored end beginning of 87
  supernatant
  release to Tacoma Municipal sewr
  if didn't meet standards - had a flocculating
  polishing treatment - in Big Bag

All latter tanks were on asphalt - B.B also
  on place when concrete & asphalt

- Letter tank system recently contained
  at 110%
- Asphalt coating with hot tar and

Filter press - drum type - on Parcel A
  stored on Parcel B after decontaminating
  - perhaps in operation

Lane active Filter Press on Parcel C
frame & plate model

Parcel B - unit closure - except for solidific/stabiliz
Tank S (used for wastewater / NON RCRA waste)

Resource Rec / Chempro subsidiary
- trucks, empty
- occasionally they store loaded trucks

Freeway Container - Container repair & storage, sheet metal work
Lane leased since late 85
NO activities on prop prior to '85

Parcel C
- have spot check lab on site
- meter on loading / unloading pad while waste comp. checked
- scheduled for treatment in 50 series tank
- supernatant to 400 series
- sludges go to 700 series
  - cement mixer - sample for TCLP
  - shipped to Chem Securities
- supernatant discharged on batch basis
- sludge would go to incineration if

stripper unit at SW corner
- corrugated filter
- tested for 5 compounds
- air discharge goes straight out

500 series - isolation for chelated materials

~~waste~~

container waste for generated waste & ultimately Part B storage

All sumps are blind
Processing area has a HDPE liner

800 & 900 series - Alternate fuel - solvent contaminated water

(69) Tanks were gone in 1967

~~Tanks~~
boring upgradient was to see what was ~~going~~ coming on to the site

of hydrogeologist ops than Chemrad - Agra

300 series brought over from Parcel B

800 and 900 series tanks are pressure vessels

Site Tour

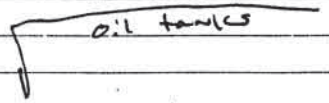


Photo Log

9, 10 Parcel A

Parcel B

(1 & 2nd right)

11 - raw material storage

12 - pad

(all rainwater collected in sump)

Stabalized sludge (4/29/89)

waste from tank clean out

bins from filter press & trench clean out

Parcel B

- Oberlin filter press - there for 1½ yrs
  ↳ moved to new site 1986
- Tank S used for collection of wastewater

(12) Parcel B - looking towards Tank S

(13) Parcel B looking towards 900 series

(14) 201 - waste alkaline

(15) 40- water discharge

(16) Air stripper

300 series - may be closed out have ongoing investigation costs

~~(17) alkaline unloading pad~~

Big Bay - removed 4/89
all of Parcel B equipment removed in spring of 89

50- series batch treatment

- Modifications prior to certification
  better interior coating
  changes in flanges

(17) waste aged tanks [in separate berm and containment area

(15) cement mixer (& silo)
also in an extra storage tank

900 series - alternate fuel storage
Baker tanks or replacement for 902

300 tanks moved over in April 1986

- Big bay only LST not on asphalt

Lab

all drains ~~go~~ are collected in garbage
(1a) white plastic located behind
the office

(2yrs) Dale Billings - Freeway Containers

. store empty containers - do repairs to
make them waterproof + usable elsewhere

. do not do major repairs

. chassis repairs - including brake work
. no engine maintenance

resurface - sand down, paint touch up
no paint booth

waste picked up

Safety Kleen solvent supplier

waste oil goes to [illegible]

RC at least 4 to 5 yrs

paint storage & waste
picked up by Clayton

storage done in two sheds - unused

also have Sol-Pro pick up -

piles of lime sludge (from Paragon)
disposed of with waste tires
nursery generators, metal scraps,
wood, & other debris

North west of property

Pacific Nuclear Packaging
Store scrap equip.
55 gal drums

east side - another storage
car - paints/oils/

Section D of Part B may not
be up to date due to Tank upgrade
program

National
43-571
Made in USA

Prep. notes for VSI 12/18/89

X (1) Do tanks 100-104 exist? NO

(2) Wastes handled: sbop oil emulsion solids, waste lube oils, waste gas/diesel blends, "other petrol/chem wastes"
- get detail

(3) Where is drum crushing facility → Not here/never had NW cooperage does this

(4) where + how are drums triple rinsed (w/solvent) - what happens to rinsate?

(5) oil/water/solids Separation
Heat + demulsifiers → solids separation → solids → dried → off site
→ pure oil → fractionator
→ pHC vapors
→ water → WWT System

X where are solids stored

(6) What is fractionation unit dedicated to waste oils?

(7) What is " " " " "lighter fractions"

X (8) Frac. system handle halogenated + non halogenated HC
- is this a 3rd unit from above?
"halogen content of stream concentrated + separated from non-halog. fraction - how? recovered halogs sent off-site - where stored?

X (9) Solvent recycle - dried solids
drum water
unsalable blended solvents
sludges, bottoms
chlorinated + non-chlorinated - how is this diff. from halogenated hydrocarbons?

X (10) How are products recovered from solvent recycle?

X (11) Stored, clean solvent recycled used in plant boiler - non-chlorinated - where stored, how fed to boiler?

X Chlorinated shipped off-site for incineration - where stored? why are blends (non-chlor + chlor) not salable?

(12) WW Trtmt System - Floc/clarif. / bio oxidation
produces metal hydroxide sludge - how cleaned out, how often
how many tanks - what all goes to it -
is it batch or continuous discharge

(13) Part B shows "still production wastes" K061, K062
what do they do with this?
Metal treating wastes = F006-F012 - what do they do with this?
Activated carbon regen wastes (dry cleaning?) or other source? - Proposed only

(14) When was facility operated as Poligen? (Lilly blvd)
,000 gal ✓ - slop oil emulsion solids (filtered?)
,000 gal ✓ used mineral spirits - parts cleaners (storage only)
✓ API separator sludge? what did they do? - stopped didn't work
???? Oil water separator?
60,000 gal - "haz. waste feedstock (Part A)

(15) "solids removal, settling, dehydration, gas/fuel oil splitter"
(16) - waste light ends burned in plant boiler - same ones?
(17) Solids to a dryer - where? - has not been done yet
(18) Pyrolysis listed for F001, 2, 3, 5 - where, how?
(19) Poligen lists - centrifuge, decant, filter, blend, distill, drying, solvent recovery, pyrolysis.
( ) How is lab used - where to chems. go?

( ) NPDES permit?? - NO! application in 1983 - still no NPDES

( ) Sump in flammables storage shed - to what is it connected? → drawing will give us its current
( ) ✓ Sump in truck maintenance

(24) Tire retort - reclaim petroleum from old tires drums + pipes - how + when did this operate was it in the "mutnce" bldg.?

(25) ✓ Poligen - notes 2 centrifuge systems in 1988
✗ Thin film still, Washex solvent still system -

(26) How + for what have portable tanks been used by Poligen + NWP

- Inspection start 8:30 12/19/89
- Steve Drury - VP of Operations | Glenn Tegen - owner | Pre:
- Rick Renaud
- Dave Poliuka
- Barb Morson

- They have proprietary units - he will let us know w they are + these photos will be confidential -
→ Warehousing on virgin products (for clients) - won't wan
→ sumps/pictures — most client back east -

- In legal proceedings with dept. right now - (ask Ri
→ Site inspection by Sept. 15 -
→ Steve - late August 1988 + after transition

- NWP - started ?? 1987 ? early -
- Compliance order - they are under but not sure it's signed

→ Waste oil/gas/diesel - generated barge cleaning/dram
- Recycle antifreeze
- New products -
→ Do not currently do waste solvent -
- Fuels - gas/diesel - dirty tanks - water + dirt →
pipeline transmix
tank vessels receive
- Currently NW Processing does not regulated waste -
- Only one load out of Alaska is only regulated waste
→ Where products come from, need to be manifested, shipped on manifest - Characteristic waste →
→ Have accepted products that have been manifested as waste

Glenn Tegen owner

Aerial Photos - 1962 -
two ponds - one on west with lime being dumped in wheat is now Chempro
Pond on east - pumping station pumped H_2O to ditch -

About 1974 -
PS 0.1 was owned by 2 principals that owned Chempro -
Don Olive owned all this property -
2 large tanks + oil pond pre-exist on Parcel A
1970 Aero Oil leased from Don Olive
1975-1976 - Chempro -
1975 - the two big tanks were bought by Tegen - leased 2 acres from Don Olive - moved two tanks to NW part of property + leased for No. 2 diesel - never put products in them

1981 - waste oil put in horizontal tanks -
three smaller tanks ~~next to~~ west of two large tanks for mineral spirits, lube oil Storage - says product only -
- also dismantled + cleaned tanks from other tank farms - they were not cleaned at this property
Made application to dept.
Pond to east had lime in it - cleaned out + took to Cosky/CSSI (Jim Oberlander) - brought in 2 ft fill on east area.

1981 - early - purchased from Don Olive -
1st piece doesn't include Parcel A - second piece to east parch. From Lindahl Cedar Homes -
3rd triangle (south) - purchase 1981 - Purchased Parcel A in 1987 - sale + lease back to Chempro - (because had interim status)

Hor. tanks were cut up/cleaned sent to General Metal in 1982? about -
- because take up too much space -
- some good hydraulic oil
- small fill stand on south side -
- had spare fill stand -
-
- Aero would steam clean

Wing tanks on Parcel A - came from SST processor Boeing - when SST program shut down - maybe around 1978?
Other three vertical tanks, bunding, boiler room were there in 1975 -

- Called Poligen in 1981 -
1983 - Pads went down - Fractionation unit fabricated 5/5.
1985 - Processing started -
1986 - lube oil tank farm/marine oil - 0 virgin
1 one boiler feed tank in 6 tank farm on SE corner.

1986 - "empty" drums along back fence
bring products in from Europe + major oil cos.
pump drums into trucks + deliver products

sold empty drums to drum cleaning co. in Canada -
- new drums + new products ("always")
9/1986 - pad to south of 8 tanks → pad with Cuwa etc - built but never operated -

1986 - waste oils in the 10 tanks on west side in for fractionation.

CP 14: - Slop oil emulsion solids - brought in -
→ brought in drums / Aero Services
→ Filter - SWECO - screen / vibrator -
heated + vibrated -
→ solids → didn't work - so
- located on edge of pad w/ fractionation unit to N. - house
No longer present - started in early 1986 -
didn't work very well -
skid typ 1 → Heat exchangers - Hairpin head exchangers
solids will plug up system -
→ when would'nt process went to Pet. Reclaiming + process - phase separation -
Recycle → d
Today - most solids go out w/ waste water -
Says they're not getting SOES -
refineries in 1983 contract to take wastes -
didn't work through his system - never exercised covenants
- Used mineral spirits being stored for -
→ Solpro Lilyblad Post Rd - 20,000 -
-

one tank west side -
Base oil - virgin oil for making lubricants -
→ refinery
- Dirty solvent - in N. end tank
- Mixed gas + diesel - running at Solpro / Lilyblad Post

(16) Waste light ends were burned in plant boiler
Burned non-regulated waste fuel in boiler now
→ meets stat. of spec. fuel - got mixtures separate naphtha for blend
diesel cut for No. 2 Fuel - do not burn waste oil - take same material they sell to burn in plant boiler - this is tested spec. fuel -
(17) Pyrolysis - pilot process for tires ??
→ strictly pilot program - capacity - 10 tires / day ??
→ Need help from state to make it work financially -

Distillation process needs clean feedstock - tires ??
oil / carbon / steel - separate preprocess oil / fract
- Flammables to gas
- oil → oil
Carbon + steel -
Value of products doesn't pay off for ten years
Works well
Active in 1986
- Sits outside bldg -
- May try to modify tanks plant for API separator sludges -

Prop. Centrifuge - step past vibrators
→ currently in operation -
came on-line in early 1988 -
→ centrifuges - in past, flammable solids / sludge
slurry ←
- solids from waste oil - don't form - decanter centrifuge, let settle + decant - most stay suspended - in oil -
→ disposed mostly -

Centrifuges - used for dewatering - solids go to water base -

(25) Washer not used - installed prior to Sept Ecology inspection

Prop Thin Film - used to recovering glycol -
Prpp. Used antifreeze is nonregulated (S. Drury)
↳ not RCRA topic -

(17) Were going to modify pyrolysis to uses as a dryer -

(18) Don't currently rinsing -
Drain drums into process → at times ←
↳
Show us to Drum decanting - junk cleaned out - go into process (reclaimable oil -

Tanker truck - pumped into feed tanks - no UG tanks. →

Need list of all materials they shouldn't shipping -

(1) Legal description of property (original) w/ maps.
(2) Legal description map 1975 - For original lease
(3) 1979 air photo blueprint
(4) 1983 Drum + Tank Storage Blueprints -
(5) Property description blueprint

(6) Dehydration System - blueprints -
(7) Topo map from 1983 - showing Fill for new expansion
(8) Polygon - showing Containment dike, o/w separator

- Hook into Lincoln Ave Sanitary 36" sewer
- Piping - sewer, storm water in

(9) Hydraulic - oily + sanitary system - Not an As Built
(10) Piping plan -
(11) All as-builts.
(12) Tank Farm details
(13) P+ID's ~~are not~~ in Part B
(14) As built for 612 TΔ 0.1 / Water Separator Drwg 17-13
(15) Entire submittal from counsel -
(16) Well Monitoring / NWP + ChemPro.
- have series of o/w separator.
- discharging all storm water to City of Tacoma -
↳ City is willing to accept process area storm water but not general property -

- Have no design detail for warehouses or sump capacities -

(17) Unnumbered drawing of process flow labelled Figure 3 -
(18) SPCC Plan dated Nov 16, 1988 - (separate from Part B submittal. →
(19) Will send another copy of Part B - Weston did the Part B -

We went through drawings + data from lawyer + SPCC + made requests for data -

P+IDs may be modified from what we have → they will get us update P+IDs + request proprietary info (CBI) ←

SWMU 5 (+2 - do not have pretrmt program approved
- 1 + 2 do not exist -
present -
steel tank ← Biotower is being use for stormwater storage.
T-loc/clar Tank is not present
Tank 15 - Do have w.w collection tank - in tank -
capacity + id - already supplied.

SWMU 6. Active Container Storage
- do store solid waste in drums -
- Virgin product -
- Drum waste - have one satellite + one
accumulation area - will have to upgrade -
- Incoming drummed wastes - September inspection.
"hopefully historical.

3 products currently marketed in PHCs
- Naphtha
turned in oiler - ← Diesel/fuel oil - not transportation
fuels by tax definitions
- Waste oil - may or may not meet spec
(173-303-515) - not mingled →

Plant boilers. they have 2 -
Hot oil → was brought into ? by PSAPCA - they have data -
Steam
Second boiler started in Fall 1988 -
Currently spec fuel only burned -

- Virgin drum products. mixed, reclaimed, resold as
spec fuel → this is not gray to them - is
gray to some regulators -

SWMU 20. Don't know anything.
SWMU 21. Info on waste oil pond - they will review with counsel
- disagreement with Chemtro -
- documents in SW files - re cleanup →
- all operational history - they have nothing.
SWMU 27. Waste piles - reference to 1951 oblique photo -
there was excavation of material on east portion
of site which was hauled off-site and.
- if this refers to anything else - we will let them kn

Area 3 → suspect 'pile' of drums - now remove
Drum Storage - sheeted + curbed - packaging of virgin
solvents -
SWMU 31. Truck wash (maint. wk shop -
shop / no steam cleaning
change out
SWMU 32 Tank Storage Area SE corner - may refer to 1983 photo
which is removed waste oil tank or bio tanks or
storage tanks -

~~Nonhalogenated~~
- Nonhalogenated solvents have been stored but
not recycled -
To best of knowledge Have never stored halogenated solvents -

→ 12 hrs / day - shut down on weekends -

started tour 11:30 am

Lab - Quality control testing - some R&D test on spec
Metal sent out but have an XRF -
- No chemist.
- He does R+D stuff -
→ tests chlorine, PCBs —
- Samples stored for 3 mos - Dispose into plant unless reg + that's the reg. waste down in accum. area —
Drums connected to sanitary sewer —

weekly
Have portable sump pumps for spills -
to pump into jumbo 500 gal portable tanks
2 air diaphragm pumps

Tank gauges - mostly
→ no auto overflow control
- tanks gauged twice a day — daily worksheet

Tank inspection sheet -
- reported + proper mixture -

Loading pad - into pipe valves -
sump - is not blind - goes to biotower -

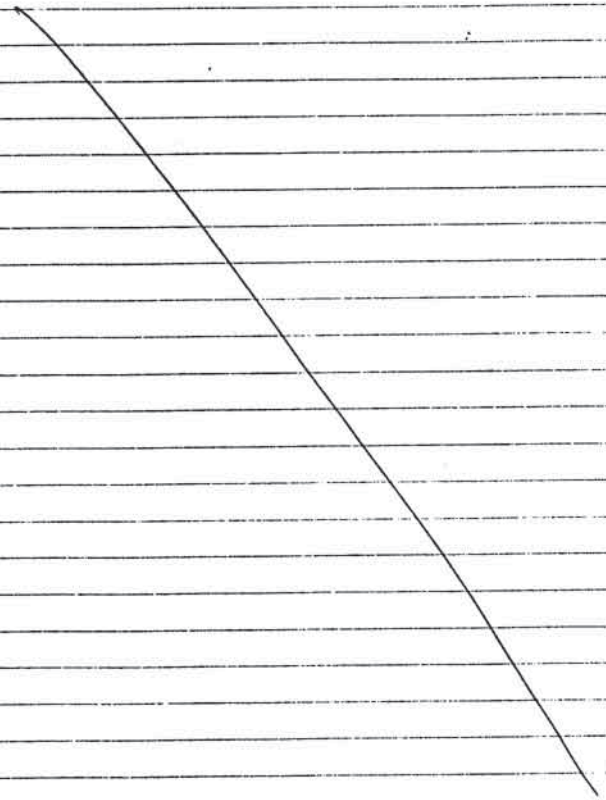
Pipe rack - has sump underneath → into biotower
- have inspection sheets for sumps + separator
→ to tanks on west side or large tanks —
do sometimes sump product

Receiving materials tested before unloading -
→ H_2O, ress, process reactors →
have checklist for truck unloading -

Receiving area for vac trucks - go into vent pipe manifold - no sump in this area - small drain 4 ins deep 10 ft long - 1 ft wide.
Jumbo tanks —
Small can waste oil marked as MEK - this is standard for R+D —
Flex hoses —

review → All tanks hard piped to area with blind sump — pumped every day - roof with shed →
Few tank transfers →
Filter - product going out - change out - not too often - don't get plug gel - filters disposed - cartridges probably go in garbage -

Tank farm has open sump is normally valved off.
- build up of rainwater then discharge or drum -
Blinded when not active.
Pumps - in active area (little potential for leaked



Inactive portions of washer solvent recovery system -

Tank 15 - is process ww tank
Tanks 6-15 in single containment with sump described above -

Part of tank on N side - outside containment never been used -

→ Fractionation system ←
Heat exchangers -
→ Pads in downturn elbow sump - in area of heat exchangers
tank - external tank gauge -
Waste oil processing - heat process for phase separation - insulated lots of mess around bottom - water goes to ww tank - oil to centrifuge
Have pan for draining filter from waste oil tank

draw off bottom when set on start centrifuge

Pandown tank for waste oil to east of waste oil tank - receiving tank from here - Tank 17
Run on semi

Centrifuge Room
Centrifuges are proprietary - any pictures they want to have considered
→ This is Film evap. in bldg - using for antifreeze recycling -
Drum ~~Sump~~ in bldg. to outside valved sump - with cover -

Bldg w/cent & TF Evap is curbed - was it constructed that way?

2 centrifuges in theory

Prop. Decanter | bowl + disk

Water from centrifuges goes to tank 15.

Feed rates very slow -

add deemulsifying chems

Epoxy coated concrete floor

this bldg is most recent construction

Started early 1988 →

Get heavy oils off decanter centrifuge to drum - let settle - until full then it becomes waste

→ Waste oil drum photo -

→ We may want to request photos of centrifuges & TFE for submittal as CBI

Outside bldg to N is waste antifreeze tank metal on legs - tank about 5-10K capacity

Also product antifreeze from recycling operation →

Haven't run any waste oil in levels

3 large tanks

2-50s
1-100K] Feedstock storage
gravel with concrete containment

→ 3 tanks in big tank area - lying down - empty? rusted -

Valve pit in this area is a mess

- No clear evidence of leakage from 3 product tank -

some oil staining on gravel, but no clear source

Cooling tower used to run out on ground - automatic makeup - blowdown to collection - no corrosion control →

Plugged yard drains marked by flags -

Tanks 6-14 - intermediate + product -

Water mgt. system

(in area where Solpro's pilot -)

Stormwater collection Tank - in containment area where Solpro's Aut was -

Process Waste Water Tank

↳ Brought over in jumbos - supplementary to Tank 15 -

2 ft high concrete berm -

No hardpiping to either of these tanks -

Horizontal iso tank - rarely used - if sell lots from Lilyblad - sometimes use this tank

Waste antifreeze in drums
Some empties -] about 40 drums all together

area drains to API separator -

Water mgt. area

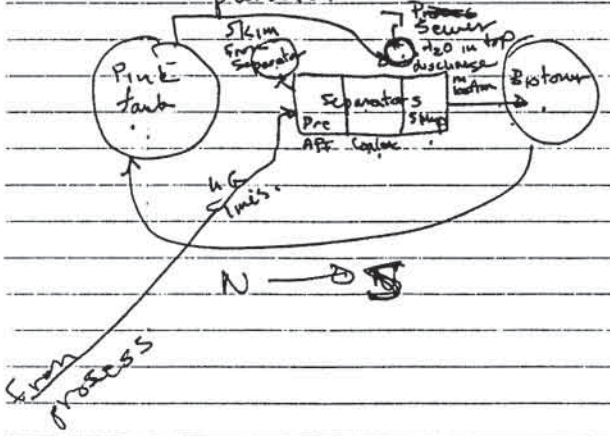
Biotower is southernmost

Preseparator/API - goes to second vault w/ coalescing pads to third box to biotower - as fills transfer to punk tank - for city approval to discharge

Have separator skim tank - separate then oil back to process - ~~drawing~~ have line back to tank Farm - but likely be using jumbos —

→ underground line

— Process water discharge tank have oil/H_2O separator



from process

be will be getting drawings

Removed pile of dirt east of Solpro to Kitsap Co LF - pile hdd HCs - was from construction of Solpro pad -

Warehouse - virgin product storage - asphalt - sealed sump on south end -

→ Tankage west of warehouse - virgin fuel

Tank Farm 3 — Boiler fuel is in tank 21 - on NE corner of tank containment area → one sump in middle

Condensate/hot oil emergency vaco system ← on east side of office

boilers are inside bldg

2 sumps inside warehouse - plugged - H_2O on east side amt in sumps —

- little evidence of spillage in bldg -

→ North side of office bldg - one drum haz. waste 5 drums "non-regulated waste"

Solvent pkging bldg has sump - plugged sump.

have metal packing material in distillation units to east of solvent blending bldg.

Poly drums north of solvent blending - EMPTY -

Trucks entrance used for storage only - boxes & sign present -

Pyrolysis unit →

Have a question how solvent recovery batch still – don't use –

Sump in shop maint area → plugged – dry operations:

→ Spent filters (much stored here) –

Drum unloading – N end of manifolds

Paved with asphalt – sealed sump in bottom –

→ Call Steve Drury if questions – then Glenn Tegen –

Steve Drury U.P / operations

Parcel A - post closure permit for GW monitoring

Proprietary units - can hold photographs if needed

- Do a lot of storage of virgin solvent - sensitive
  (are sumps in the area) - somewhat sensitive

- under compliance order signed 12/15/89 with Dept. of Ecology
- (Glen Tegan joined discussion)
- Steve Drury - seen with NP since 8/88

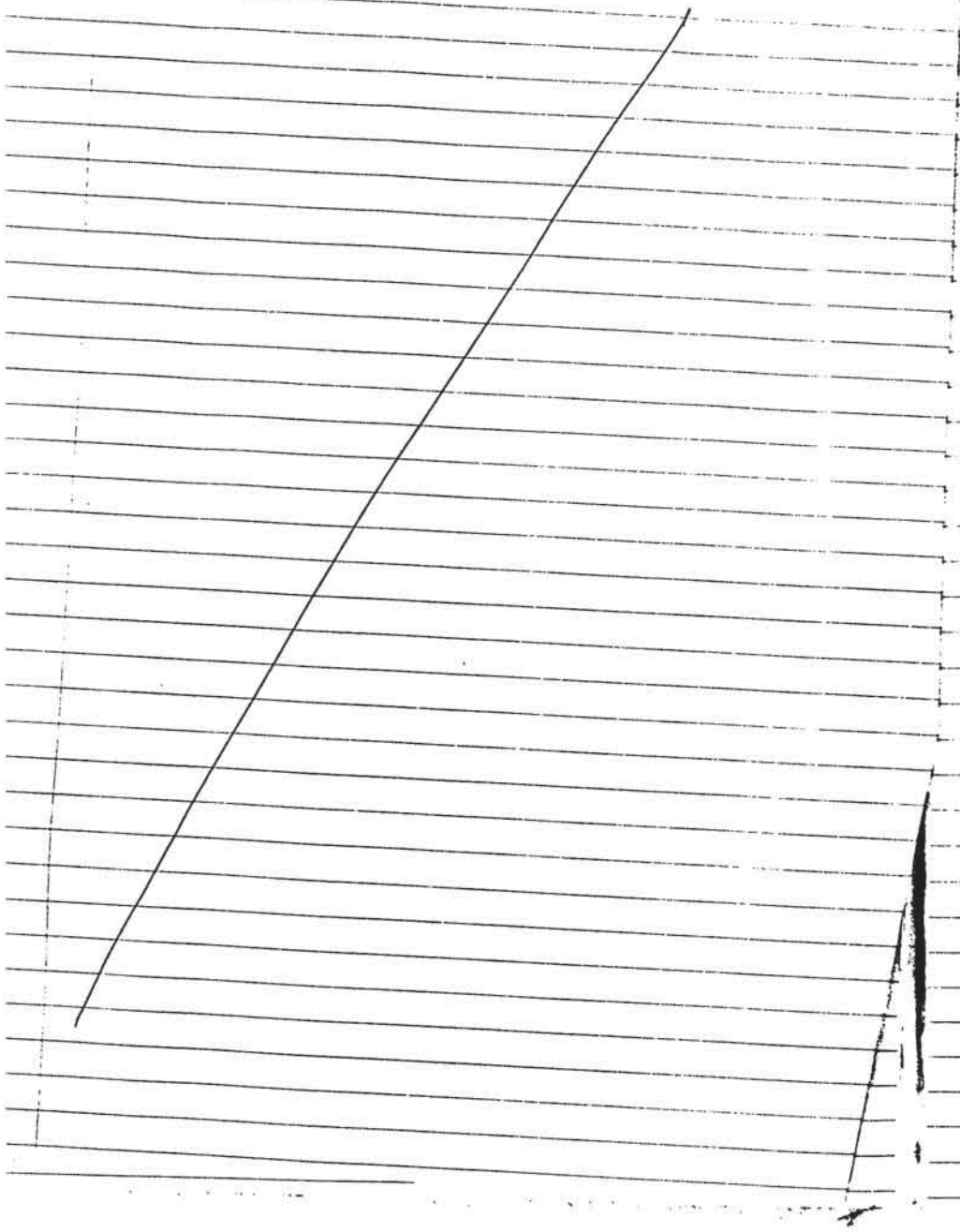
had site inspection 9/89 by Ecology

primary
- waste oil, gasoline fractionation
- antifreeze
- virgin product storage
- no solvent treatment

Waste oil from barge cleaning

gasoline - dirty tanks pipe line transmixes,

Currently do not except regulated waste
- did receive one load of P.I. from Alaska, shipped out untreated



in the past have accepted ~~or~~ manifested - ~~no~~ petroleum wastes products which were manifested as exempts
↳ do no ignitability

Teyen has owned

Parcel A 67 photo showing two ponds
74 photo showing oil pond

1975 - GT bought two tanks and but on property leased (2 a) from Olin - used for product storage of solvents & ~~one~~ lube oil

81 purchased leased property from Olin

bought in 81 due to uncertain status operating permit

all having tanks were cleaned & sold to G.M. - 82 - tank cleaning did not occur on property

wing tank - moved on Parcel A from Boeing 1978

1985 - started processing used oil
- plant ~~clean~~ Completed 1985 -

Tank farm to the used for storage of lube oil & other virgin products

86 photo shows dismantling of Chempro facility and start of Sol-Pro facility (Never used)

filtering of slop oil emulsion solids - from customers - Sweco - vibrating screed - Leaf unit - located started early 1986 - system malfunctioned due to plugging of heat exchanger - took product to Troy -

taking solids - get into W.W - no longer having slop oil emulsion solids.

API separator solids - also didn't work so also went to Troy

Used Mineral Spirits - stored only on Sol facility

60,000 Lagardon Feed ~~test~~ medium in Plant - feed stock
base oil - refinery
waste gas & diesel - fractionating system
dirty solvent

waste light ends - in plant boiler
- burning non regulated fuel

Pyrolysis - pilot - program for processing tires
10 tires/day, as wished to
recovery i.e. for fractionation $ energy - 1986
· may wish to convert to API
separator sludge in future

Two centrifuges (see PA) came into operation
early 1988 - replace vibrating screens
shipped out as a slurry - for incineration
very little actual solids in the stream
solids go into liquid - as a dewatering
process.

Washex still - system - has been installed
awaiting DOE settlement for start up

Thin film - for recovering glycol
(they consider glycol to
be non-hazardous)

No solids drying on site as yet
- would need to get DOE status
clarified before initiation

do not have or never had a drum
crushing unit - may desire in future
(so included in Part B)

- drum crushing - they drain - residue is removed - drums are transferred to Northwest Coverage
Residue is recycled into process

Waste oil comes in tankers - pumped into feed tanks - a continuous process

Provide with a list of info requests

First lease 1975 (no survey) before 1980 purchase from Don Olin

- have flow of fractionation unit (they do not consider it a sump)

have drawing of City of Tacoma (inter... sewer discharge - discharg into Lincoln stre...

'83 drawing showing fill sequence

- drawing showing oil/w separator

map showing hydraulic system (no as-bu...

have a number of OWS all in series

All storm water to City of Tacoma exc-(rain water in paved areas only)

NPDES permit Never has been executed by Ecology

drawings to wit show details of sumps

. drawing of API separator
each sump also has a grease neck
sep.

P&ID - submitted on a C.B.I (they will
tell Ecology what is CBI)

Sump locations are shown in new drawing (
note warehouse drains un connected, change
in s.w drains)

• will get OWS as-builts
. agree no detailed engineering drawings
. provide waste input data on ~~[illegible]~~
ad[illegible] of layer)
. release controls
- vents, 2° containment
. Inspection schedule - will discuss
w plant foreperson if needed.

. All water from City of Tacoma

. do have accumulation & designated a
↳ acknowledges that ~~[illegible]~~
will need update

have used non-regulated waste (def -
they say it is a spec fuel)

Products currently marketed —

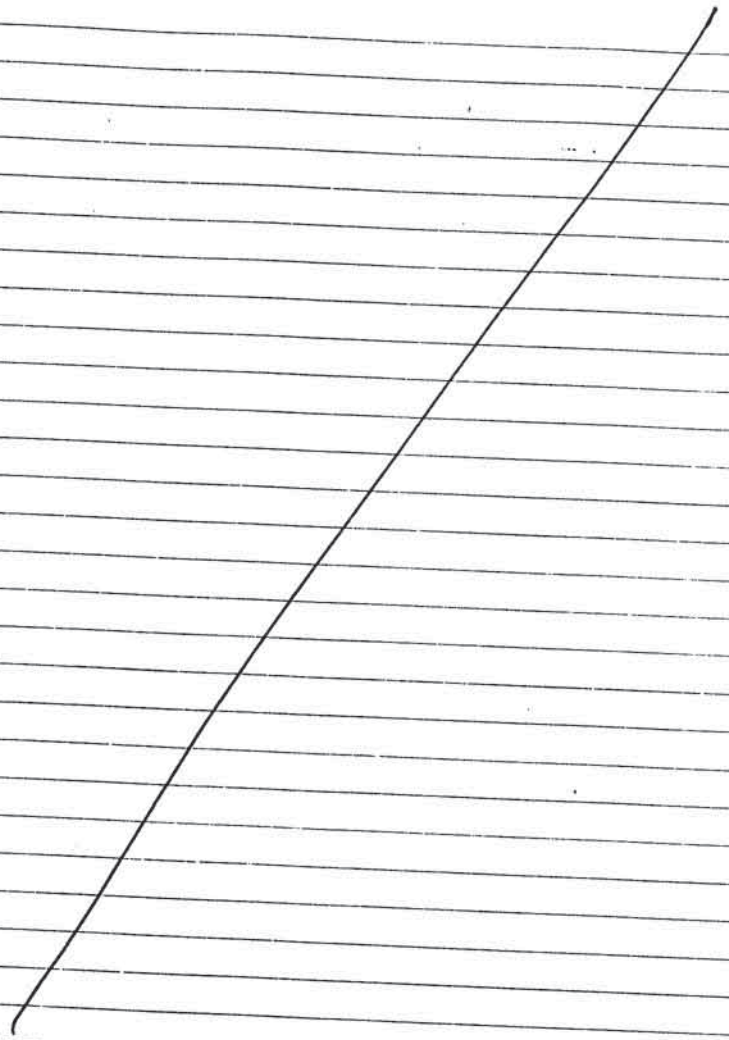
① ~~Naptha~~ } two products
② ~~fuel or~~ waste oil
③ ~~dark~~ diesel (173-303-519)
waste ON-site fuel burned in boiler
to due analytical work

① Naptha
② Dark diesel fuel
③ Waste - 173-303-519

chemical products inadvertently mix
They claim that their in-put product
- they will provide explanation of their current & history practices at burning ~~waste~~ petro in boiler

Boiler - recent boiler put into service in fall/88 —

NP Makes all operational info on waste oil pond up to come from other parties



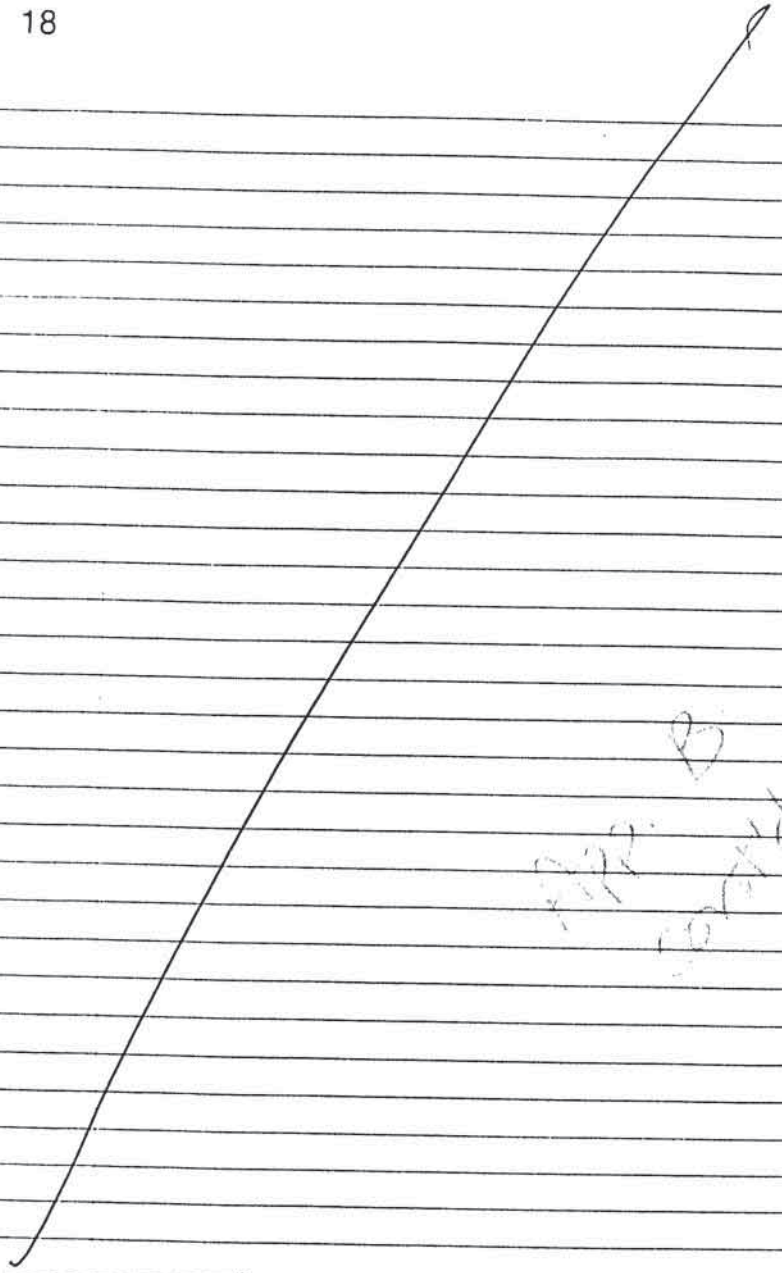
former waste pile may be excaved dirt
- will require elarification

utems (25-28), NWP will provide
narratime.

states "to the best of their knowledge"
no halogenated solvents have been
stored on site. Reference on halogenated
solvent in Part B refer to future
practices

see drawing submitted for designation of
blind sumps.

Part B was done when NWP and ~~Part~~ Part
A had the same EPA ID #



Plant Tour

lab qc & some background work
to check off/on spec sheet

Check for
· chlorination
· PCB's

NON-reg Waste Sump – back to
reg Waste Sump → go to acc
Area (Reg.

drains connected to sanitary sew.

portable drums used

Every Coord: tanks do no auto l/c alarms
tanks gauged twice/day or more oft
of value

running / 1/2 Shift / 5 days

Steve Drury - follow-up for info -
quest. from WWP w.h come them - Carl

12/19 Sol-Pro
@ 1410

[illegible] out by [illegible]
in by flatbed [illegible] [illegible] & [illegible]

(3) Lawa unit from S

(4) unloading pad from W

(5) used triple rinsed drum storage from

(6) Process Area, Tank 901 from SE
(7)
Tank 901 used for [illegible]
process waste and contam storm [illegible]

<(6) diesel fuel used in boiler>

no [illegible] H_2O used in boiler

(8) drum processing 55/gal waste storage
area (a) taken from west

(9)(10) a, b area fire

(11) sludge [redacted] or sludge dryer
distillation unit - horizontal
process generated from
customer waste (12)

(14) Brighton unit

Moen pump hopper - out of service
a couple of days

(15) FW-FW cooler ↑R
↑P

IT (16) ~~EW~~ EW
Brighton Sill pmp from
IT

(17) (5G) (5G) from (6)

(18) drum crushing, triple rinsed
(balls to fence)

(17) (18) temporary storage area

(19) rinsed plastic drum storage

(20) empty plastic drum storage
parallel to rr. tracks

(21) (22) process pad from ↓

(23) (24) process pad viewed from

Made in USA

Sulpro Prep

- operate under 24-hour rule -
- is it batch process?
- what about their hydrogen data for submittal
- Solvent recycling - color. + not chlorinated -
- Drum crushing operation
- what is fuel for boiler
- use draw water for boiler makeup?
- where is generated waste storage area?

Started 2:10

Not much comes in in RR
→ Tank trucks, flatbeds w/ drums - batch operation + continuous - have both -

Have own
Get 2,500-5,000 gal trucks -
Get
Unload to tank 704 - recycle thru LLWA
WW + still bottoms to rail car -
8 RR cars dedicated to waste
One RR fill - 24 hrs waste less than day -
Drums also go to Brighton -
→ Drums brought to pad by entrance - or to west side →

Drums on east side - triple rinse
used for waste/product or toss
17H drums used for waste only
Empty drums used to put product back in -
Wash solvent from many generators
3 sumps for stormwater - straight to Blair not sewered -
Have 20,000 gal stormwater tank - if contam. pumped to 901 for ship out & goes to Syste
→ if rainwater is okay, then goes to valley sewer

→ Diesel fuel used in boiler
Draw water not used in boiler -

(11) Sludge dryer (fac. E)
horizontal distillation unit
treats incoming customer sludge &
Sol-Pro process generated sludge

(12) Brighton unit (fac. NW)
Tanks D1, D2

(13) Fin-Fan Cooler (fac NE)

(14) Brighton Still & dirty
solvent tanks (fac. NW)

(15) Brighton Still & clean solvent
tanks (fac S)

(16) Brighton Still & dirty
solvent tanks (fac SC)

(17) Process area (fac SE) dirty solvent
Tanks, 535, 536

(18) Drum crushing area - triple rinser
(fac. SE)

(19)

(20) Temporary storage area (fac SW)
Storage of
- process generated waste
- recycled solvent
- dried solids

(21) Same as above - slightly to the W
from (20)

(22) Storage of rinsed plastic drums
against NW fence - see site plan

(23) Storage of empty plastic drums
Next to railroad tracks (fac SE)

(24) Process area (fac. NE)
showing tank 501, diesel tank &
unloading area

(25) same as above - 24

(26) Process pad (fac. NW)

(27) Same as above - 26

meeting
-
-
-

Discuss response to information needs letter

(1) facility operating on 24 hr. rule

. burner fuel consists of cross contaminated wastes → Cistrox & bottoms from LUWA
. they provide lab service and shipping prep.

(3) no planned closures on site

(4) Boundaries
They plan to move their private rail spur to the west soon

(5) sewer
Storm sewer - all exist. - see map

- gw wells put in ~12/88 by Hart Crowser [given data for 12/89; S.P. has existing earlier data they couldn't find

SWMU

	capacity
901	
704 -	4000 gal
705 -	5200 gal
706 -	5200 gal
diesel-	10,000 gal
Brighton	d_1 d_2 C_1 C_2
	5000 / 5000 / 6000 / 6000 gal
535	10,000 gal
536	10,000 gal

. Facility started up approx 1 yr ago

. Info in Part B applic. on composition of wastes accepted is accurate

. S.P. says that during the freeze of last winter only cooling water lines broke, power outage caused pumps to freeze

- No spills from process units & piping

. Sol-Pro is leasing both process area & office space; they plan to purchase process area property soon.

APPENDIX C

MAXIMUM CONCENTRATIONS OF SELECTED CONTAMINANTS IN SOIL AT CHEMPRO PARCEL A AND CHEMPRO PROPER

Appendix C Soil Data Explanatory Notes

1. All soil concentration values are reported in units of µg/kg.

2. Sample locations are identified by the boring or monitoring well numbers used in the investigation reports for Parcel A and Chempro Proper.

3. Borings SEA-1 through SEA-32 and wells CTMW-1 through CTMW-6 were installed as part of the Phase I Hydrogeologic Investigation at Parcel A. Borings CTP-1 through CTP-15 were installed during the Phase II Investigation at Parcel A. Borings CB-1 through CB-9 and wells CTMW-7 through CTMW-15 were installed during the Phase I and Phase II Hydrogeologic Investigations at Chempro Proper.

4. All soil borings and monitoring well locations are depicted in Figure 19 of this report.

COMPOUND	SEA-1	SEA-2	SEA-3	SEA-4	SEA-5	SEA-6	SEA-7	SEA-8	SEA-9	SEA-10	SEA-11	SEA-12	SEA-13	SEA-14
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-	-	-	-	-	-	3760	122000
Acetone	-	-	-	-	-	-	-	-	-	-	-	-	-	112000
Dichloroethenes	-	-	-	-	-	-	-	-	-	-	-	-	-	48900
2-butanone	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	19100
Tetrachloroethene	1200	1800	680	-	-	-	-	2300	630	-	-	-	-	79500
1,1,1-trichloroethane	690	-	380	-	-	-	-	8200	560	-	-	-	-	87400
Benzene	-	-	-	-	1000	-	-	-	-	-	-	-	-	6600
Toluene	9900	-	7100	-	2100	660	550	32800	2500	-	7900	-	530	77600
Chlorobenzene	-	-	-	-	-	1000	-	-		-	-	-	-	-
Ethylbenzene	1500	-	4500	-	4800	7700	3100	9500	610	-	2600	-	1670	23300
Xylenes	1800	2900	36000	-	30600	25100	28000	49000	9800	-	37600	890	8330	126000
Oil & Grease(mg/kg)	34000	25500	33600	15	20200	13900	24100	51700	26100	15	20600	22	11300	58100
Napthalene	7700	-	20700	-	7300	8600	6700	10100	7800	-	7100	-	25400	56600
2-methylnapthalene	20000	2900	53100	-	24400	29000	17000	33100	33400	-	16000	330	56400	21400
Acenapthene	-	770	1900	-	1200	1100	1100	690	1000	-	-	-	680	4800
Dibenzofuran	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	1400	2200	5100	-	2500	2400	1000	2310	1600	-	800	-	660	19600
Hexachlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	5200	4200	7800	-	6500	5700	3600	5450	6400	-	3600	-	2200	94600
Anthracene	960	520	1800	-	930	590	330	430	360	-	290	-	240	17900
Fluoranthene	-	700	750	-	-	-	-	1340	-	-	-	-	-	28200
Pyrene	1000	1200	2200	-	1700	1200	950	2710	-	-	-	-	-	16500
Benzo(a)anthracene	600		1100	-	-	590	-	620	460	-	-	-	-	970
Chrysene	760	1400	1000	-	380	700	-	1090	710	-	-	-	-	12200
Benzo(b&k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	4700
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	3500
Indeno(1,2,3cd)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	2600
Benzo(ghi)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	3000
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzyl phthalate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ehtylhexyl) phthalate	1800	2500	3800	-	2300	1100	2300	3010	2400	-	2000	-	1100	33200
Chromium(mg/kg)	60	23	7.8	7.9	478	5.8	6	11	9	5	6	4	5	344
Lead(mg/kg)	587	72	250	-	101	32	12	310	20	-	17	-	-	909

COMPOUND	SEA-15	SEA-16	SEA-17	SEA-18	SEA-19	SEA-20	SEA-21	SEA-22	SEA-23	SEA-24	SEA-25	SEA-26	SEA-27	SEA-28	SEA-29	SEA-30
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-	2200	-	-	-	-	-	-	-	-
Acetone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethenes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-butanone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	750	-	-	-	-	-	-	-	-	-
1,1,1-trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	1300	2100	-	2500	-	-	-	-	-	-	-	-	-
Xylenes	-	600	880	6200	840	-	5500	-	-	13000	4900	-	-	-	1520	910
Oil & Grease(mg/kg)	**13**	**10**	**87**	**647**	**51**	**9**	**1980**	**24**	**3400**	**48100**	**7820**	**49**	**27**	**37**	**5740**	**481**
Napthalene	-	-	-	10300	-	-	-	-	-	6800	4000	-	-	-	-	-
2-methylnapthalene	-	-	-	12800	-	-	-	-	-	32600	18000	-	-	-	-	-
Acenapthene	-	-	-	-	-	-	-	-	-	1700	490	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-	-	-	3600	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-	7800	2900	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-	-	-	2600	-	-	-	-	-	-
Fluoranthene	-	-	-	-	-	-	-	-	-	1400	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-	-	-	4000	940	-	-	-	910	-
Benzo(a)anthracene	-	-	-	-	-	-	-	-	-	950		-	-	-	800	-
Chrysene	-	-	-	-	-	-	-	-	-	1700	470	-	-	-	2400	-
Benzo(b&k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300	-
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300	-
Indeno(1,2,3cd)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	540	-
Benzo(ghi)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	1700	-	-	-	-	1200	-
Butylbenzyl phthalate	-	-	-	-	-	-	5600	-	-	13200	-	-	-	-	14200	-
Di-n-butylphthalate	-	-	-	-	-	-	-	-	-	1000	-	-	-	-	840	-
Bis(2-ehtylhexyl) phthalate	670	-	-	1600	-	-	4800	-	-	130000	1000	-	-	-	82100	3100
Chromium(mg/kg)	6	5	21	43	11	7	72	27	8.7	80	189	4	34	7	28	29
Lead(mg/kg)	-	-	-	233	29	-	3570	-	110	1040	67	-	-	25	347	189

COMPOUND	SEA-31	SEA-32	CTMW-1	CTMW-2	CTMW-3	CTMW-4	CTMW-5	CTMW-6	CTP-1	CTP-2	CTP-3	CTP-4	CTP-5	CTP-6	CTP-7	CTP-8
Vinyl chloride	-	-	-	-	-	-	-	-	1300	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-	-	-	-	-	8	-	-	11	21
Acetone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethenes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-butanone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-	510	-	-	-	-	-	100
Tetrachloroethene	-	-	-	-	-	-	-	-	-	510	-	-	-	-	-	200
1,1,1-trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Benzene	-	-	-	-	-	-	-	-	-	1000	-	-	-	-	950	77
Toluene	-	-	-	-	-	-	-	-	9300	1000	490	-	-	-	17000	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	170	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	6400	1200	880	-	-	280	9500	120
Xylenes	-	-	-	-	-	670	-	840	40000	13000	-	-	3100	600	59000	4300
Oil & Grease(mg/kg)	36	16	804	46	4580	121	615	7320	-	-	-	-	-	-	-	-
Napthalene	-	-	9100	-	2900	-	-	1700	45000	22000	20000	-	5100	1400	30000	13000
2-methylnapthalene	-	-	40000	-	23500	-	-	2000	140000	76000	49000	-	14000	3300	84000	52000
Acenapthene	-	-	1900	-	1100	-	-	-	5500	3600	2900	-	660	360	5100	1800
Dibenzofuran	-	-	-	-	-	-	-	-	6200	-	-	-	-	230	8700	3700
Fluorene	-	-	4300	-	1900	-	-	-	14000	6100	8700	-	1300	790	11000	3800
Hexachlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12000
Phenanthrene	-	-	17800	-	4400	-	-	300	44000	21000	26000	-	7100	1600	22000	-
Anthracene	-	-	4800	-	250	-	-	-	9600	4300	5100	-	-	290	5800	2300
Fluoranthene	-	-	-	-	-	-	-	4100	-	1900	2300	-	-	170	-	1800
Pyrene	-	-	2300	-	-	-	-	2700	8100	4200	4700	-	-	250	5500	2300
Benzo(a)anthracene	-	-	-	-	-	-	-	800	4100	2500	2100	-	-	83	-	980
Chrysene	-	-	1600	-	-	-	-	2100	7100	3700	3700	-	-	120	-	1400
Benzo(b&k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-	1200	2300	-	-	-	-	-
Indeno(1,2,3cd)pyrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-octyl phthalate	-	-	-	-	-	-	-	21000	-	4100	-	140	-	-	-	-
Butylbenzyl phthalate	-	-	-	-	-	-	-	17000	-	2800	-	900	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-	2900	-	-	-	150	-	62	-	-
Bis(2-ehtylhexyl) phthalate	-	-	4800	-	-	-	-	66000	15000	18000	-	2000	4800	280	22000	4300
Chromium(mg/kg)	25	21	51	13	14	93	24	284	24	51	386	213	360	30	268	38
Lead(mg/kg)	14	-	78	14	19	82	178	6720	408	1110	136	-	13	13	41	129

COMPOUND	CTP-9	CTP-10	CTP-11	CTP-12	CTP-13	CTP-14	CTP-15	CB-1	CB-2	CB-3	CB-4	CB-5	CB-6	CB-7	CB-8	CB-9
Vinyl chloride	-	-	-	-	-	-	-	-	15	-	8.9	-	-	-	-	-
Methylene Chloride	4	61	16	6	15	46	4	-	-	-	-	-	-	-	-	-
Acetone	-	-	56000	-	-	-	-	-	10	-	-	7	12	14	-	33
Dichloroethenes	-	-	1300	-	-	-	-	-	99	-	100	-	20	-	-	-
2-butanone	-	-	-	-	-	-	-	-	970	-	-	-	-	-	-	-
Trichloroethene	-	-	1300	-	-	-	-	1.8	4.9	-	9.9	-	-	-	-	-
Tetrachloroethene	-	-	580	-	-	-	-	-	-	1.1	2	-	-	-	-	-
1,1,1-trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	3300	140	16000	-	370	11000	1800	-	-	-	-	-	2.7	6.6	220	150
Toluene	46000	6100	94000	5300	-	95000	-	-	-	-	-	-	13	2.4	180	1100
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64
Ethylbenzene	21000	4800	32000	5600	-	35000	-	-	-	-	-	-	39	2	1100	1300
Xylenes	160000	73000	200000	36000	2000	240000	5500	-	-	-	-	-	28	5.6	7000	2400
Oil & Grease(mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Napthalene	47000	16000	310000	42000	12000	90000	32000	-	-	-	-	-	350	-	12000	780
2-methylnapthalene	140000	58000	620000	91000	34000	150000	51000	-	-	-	-	-	300	-	39000	1100
Acenapthene	6200	2300	35000	4300	1500	9500	3000	-	-	-	-	-	-	-	1300	370
Dibenzofuran	6500	-	-	4700	2200	8100	2500	-	-	-	-	-	-	-	1900	-
Fluorene	21000	6900	100000	13000	4000	27000	8900	-	-	-	-	-	-	-	4900	600
Hexachlorobenzene	-	16000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	47000	16000	220000	28000	12000	53000	18000	-	-	-	-	-	870	-	17000	1700
Anthracene	15000	7000	52000	18000	1500	10200	2700	-	-	-	-	-	76	-	12000	-
Fluoranthene	4900	1600	-	1900	-	5900	1700	-	-	-	-	-	230	-	1600	890
Pyrene	7200	2800	53000	4400	1200	13000	4000	-	-	-	-	-	690	-	2700	1900
Benzo(a)anthracene	5600	1700	-	2100	660	5300	1600	-	-	-	-	-	140	-	950	330
Chrysene	5500	-	-	2200	1100	9200	2100	-	-	-	-	-	300	-	1400	810
Benzo(b&k)fluoranthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330	530
Benzo(a)pyrene	2300	-	-	1000	-	3300	870	-	-	-	-	-	170	-	530	330
Indeno(1,2,3cd)pyrene	6300	-	-	-	-	2300	-	-	-	-	-	-	-	-	-	280
Benzo(ghi)perylene	6000	-	-	-	-	3700	410	-	-	-	-	-	-	-	-	510
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	-	-	-	190	-	-	100000
Butylbenzyl phthalate	-	-	-	-	-	-	-	-	-	260	-	-	5800	-	-	44000
Di-n-butylphthalate	900	-	-	-	-	27000	260	-	77	-	-	4100	700	80	-	8000
Bis(2-ehtylhexyl) phthalate	3500	1700	110000	3200	1800	16000	1300	110	-	460	-	170	7200	74	-	240000
Chromium(mg/kg)	26	1380	1515	275	156	27	28	89.3	25.7	33	26.4	34.4	32	31	28.2	258
Lead(mg/kg)	18	33	9750	21	87	16	24	22.6	6.3	33	17.1	15.2	171	-	19.2	3430

COMPOUND	CTMW-7	CTMW-8	CTMW-9	CTMW-10	CTMW-11	CTMW-12	CTMW-13	CTMW-14	CTMW-15
Vinyl chloride	-	-	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-	-	-
Acetone	-	-	-	-	-	-	110	7	7.8
Dichloroethenes	-	-	-	-	-	-	14	-	-
2-butanone	-	-	-	-	-	-	57	-	-
Trichloroethene	-	-	-	-	-	-	25	-	-
Tetrachloroethene	120	-	-	-	-	-	2000	-	-
1,1,1-trichloroethane	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	15	-	-
Toluene	190	-	-	-	-	-	91	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-
Ethylbenzene	100	-	-	-	-	-	29	-	-
Xylenes	520	-	-	-	-	-	46	-	-
Oil & Grease(mg/kg)	-	-	-	-	-	-	-	-	-
Napthalene	-	-	-	-	-	-	-	-	-
2-methylnapthalene	-	-	-	-	-	-	-	-	-
Acenapthene	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	120	-	-
Hexachlorobenzene	-	-	-	-	-	-	460	-	-
Phenanthrene	-	-	-	-	-	-	430	61	-
Anthracene	-	-	-	-	-	-	-	-	-
Fluoranthene	-	-	-	-	-	-	210	-	-
Pyrene	-	-	-	-	-	-	420	-	-
Benzo(a)anthracene	-	-	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	540	-	-
Benzo(b&k)fluoranthene	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	110	-	-
Indeno(1,2,3cd)pyrene	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	-	-	-	-	-	-	280	-	-
Di-n-octyl phthalate	-	-	-	-	-	-	79000	-	-
Butylbenzyl phthalate	32000	-	-	-	-	-	1300	-	-
Di-n-butylphthalate	-	-	-	-	-	-	580	-	-
Bis(2-ehtylhexyl) phthalate	230000	-	-	-	-	-	260000	-	-
Chromium(mg/kg)	27	-	9	7	16	8	33.8	29	13.3
Lead(mg/kg)	380	-	1	1.4	4.4	1.2	2180	8	14.8

APPENDIX D

GROUND WATER MONITORING RESULTS FOR CHEMPRO PARCEL A, CHEMPRO PROPER, SOL-PRO, AND NORTHWEST PROCESSING

Table D-1

VOLATILE ORGANIC COMPOUNDS
QUARTERLY SAMPLING BY CHEMPRO PERSONNEL
UPPER SATURATED ZONE

Sampling dates	June 1988	September 1988	September 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989
Sample Number	CT-688-8	CT-0988-8	CT-0988-8	CT-0988-8	CT-0589-9	CT-688-2	CT-0988-2	CT-0589-2	CT-688-1	CT-0988-1	CT-0589-1	CT-688-4	CT-0988-4	CT-0589-6
Well Name	CTMW-6	CTMW-6 Vial 1	CTMW-6 Rerun	CTMW-6 Rerun 2-Vial 2	CTMW-6	CTMW-8	CTMW-8	CTMW-8	CTMW-10	CTMW-10	CTMW-10	CTMW-11	CTMW-11	CTMW-11
Conc/Dil:	1:1	1:100	1:500	1:5	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Volatile Organic Compounds (ppb)														
Acetone	87	-	-	130	71	130	33	64	8.2	-	17	270000	210	84
Benzene	9.7*	-	-	12*	10*	-	2.2	-	2.2	(1.1M)	2	-	-	-
Ethylbenzene	9.1	-	-	7.3	8.5	-	-	-	2.8	(0.8M)	9.6	-	(0.7J)	-
Methylene Chloride	(9.3B)	(380008K)	(9200B)	(85B)	6	(2.7B)	(1.3B)	-	(9.0B)	(23B)	-	(2.2B)	(4.3B)	4.9
Styrene	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	41	89	-	36	49	2.9	2.4	2.2	1.6	-	5.1	0.8	2.4	1.2
2-Butanone	20	-	-	17	19	4.9	-	-	-	-	7.7	13	13	-
Xylenes, total	28	(62M)	-	23	31	(1.2J)	(2.9M)	-	16	-	55	-	(3.3M)	-
Vinyl Chloride	30*	(63M)	-	61*	58*	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone	80	-	-	150	62	-	-	-	-	-	-	-	-	-
2-Hexanone	14	-	-	-	16	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-	5	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	(4.3J)	6.4*	-	-	-	-	-	-	-	(0.7J)	-
Chloroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	2.1	-	-	-	-	-	-	(0.4J)	-	-	-	-	-	-
Cis-1,2-Dichloroethene	4.1	-	-	8.7	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	8.7	-	-	-	-	-	-	-	-	-
Carbon Disulfide	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-
Oil & Grease (ppm)	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-1
(CONT.)

BASE/NEUTRAL/ACIDS
QUARTERLY SAMPLING BY CHEMPRO PERSONNEL
ALLUVIAL AQUIFER

Sampling dates	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989
Sample Number	CT-688-7	CT-0988-7	CT-0589-8	CT-688-3	CT-0988-3	CT-0589-3	CT-688-5	CT-0988-5	CT-0589-4
Well Name	CTMW-7	CTMW-7	CTMW-7	CTMW-9	CTMW-9	CTMW-9	CTMW-12	CTMW-12	CTMW-12
Conc/Dil:	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Base/Neutrals/Acids (ppb)									
	no data	no data	no data	no data	no data	no data	no data	no data	no data
Phenol	"	"	"	"	"	"	"	"	"
Napthalene	"	"	"	"	"	"	"	"	"
2-Methylnapthalene	"	"	"	"	"	"	"	"	"
Acenaphthene	"	"	"	"	"	"	"	"	"
Fluorene	"	"	"	"	"	"	"	"	"
Phenanthrene	"	"	"	"	"	"	"	"	"
Anthracene	"	"	"	"	"	"	"	"	"
Benzo(a)Anthracene	"	"	"	"	"	"	"	"	"
Fluoranthene	"	"	"	"	"	"	"	"	"
Pyrene	"	"	"	"	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	"	"	"	"	"	"	"	"	"
Butylbenzylphthalate	"	"	"	"	"	"	"	"	"
Chrysene	"	"	"	"	"	"	"	"	"
Di-n-octyl Phthalate	"	"	"	"	"	"	"	"	"
Di-n-butylphthalate	"	"	"	"	"	"	"	"	"
Diethylphthalate	"	"	"	"	"	"	"	"	"
2-Methylphenol	"	"	"	"	"	"	"	"	"
4-Methylphenol	"	"	"	"	"	"	"	"	"
2,4-Dimethylphenol	"	"	"	"	"	"	"	"	"
1,2-Dichlorobenzene	"	"	"	"	"	"	"	"	"
Dibenzofuran	"	"	"	"	"	"	"	"	"

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-1
(CONT.)

VOLATILE ORGANIC COMPOUNDS
QUARTERLY SAMPLING BY CHEMPRO PERSONNEL
ALLUVIAL AQUIFER

Sampling dates	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989
Sample Number	CT-688-7	CT-0988-7	CT-0589-8	CT-688-3	CT-0988-3	CT-0589-3	CT-688-5	CT-0988-5	CT-0589-4
Well Name	CTMW-7	CTMW-7	CTMW-7	CTMW-9	CTMW-9	CTMW-9	CTMW-12	CTMW-12	CTMW-12
Conc/Dil:	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Volatile Organic Compounds (ppb)									
Acetone	-	-	-	11	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-
Methylene Chloride	(5.4B)	(4.4B)	(0.8JB)	(2.1B)	(19B)	-	(1.7B)	(7.9B)	(0.5JB)
Styrene	-	-	-	-	-	-	-	-	-
Toluene	-	1	(0.4M)	-	-	-	-	(0.6M)	(0.2MB)
2-Butanone	-	-	-	-	-	-	-	-	-
Xylenes, total	-	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone	-	-	-	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	-	-	-	-
Chloroform	3.6	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-
Cis-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-	-	-	-
Carbon Disulfide	-	-	-	-	-	-	-	-	-
Oil & Grease (ppm)	nt	nt	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-1
(CONT.)

BASE/NEUTRAL/ACIDS
QUARTERLY SAMPLING BY CHEMPRO PERSONNEL
UPPER SATURATED ZONE

Sampling dates	June 1988	September 1988	September 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989
Sample Number	CT-688-8	CT-0988-8	CT-0988-8	CT-0988-8	CT-0589-9	CT-688-2	CT-0988-2	CT-0589-2	CT-688-1	CT-0988-1	CT-0589-1	CT-688-4	CT-0988-4	CT-0589-6
Well Name	CTMW-6	CTMW-6 Vial 1	CTMW-6 Rerun	CTMW-6 Rerun 2-Vial 2	CTMW-6	CTMW-8	CTMW-8	CTMW-8	CTMW-10	CTMW-10	CTMW-10	CTMW-11	CTMW-11	CTMW-11
Conc/Dil:	1:1	1:100	1:500	1:5	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Base/Neutrals/Acids (ppb)														
Phenol	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	32
Napthalene	"	"	"	"	"	"	"	"	"	"	"	"	"	no data
2-Methylnapthalene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Acenaphthene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Fluorene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Phenanthrene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Anthracene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Benzo(a)Anthracene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Fluoranthene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Pyrene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Butylbenzylphthalate	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Chrysene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Di-n-octyl Phthalate	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Di-n-butylphthalate	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Diethylphthalate	"	"	"	"	"	"	"	"	"	"	"	"	"	"
2-Methylphenol	"	"	"	"	"	"	"	"	"	"	12000	"	"	"
4-Methylphenol	"	"	"	"	"	"	"	"	"	"	no data	"	"	"
2,4-Dimethylphenol	"	"	"	"	"	"	"	"	"	"	"	"	"	"
1,2-Dichlorobenzene	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Dibenzofuran	"	"	"	"	"	"	"	"	"	"	"	"	"	"

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M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
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Table D-1
(CONT.)

VOLATILE ORGANIC COMPOUNDS
QUARTERLY SAMPLING BY CHEMPRO PERSONNEL
ALLUVIAL AQUIFER

Sampling dates	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989
Sample Number	CT-688-7	CT-0988-7	CT-0589-8	CT-688-3	CT-0988-3	CT-0589-3	CT-688-5	CT-0988-5	CT-0589-4
Well Name	CTMW-7	CTMW-7	CTMW-7	CTMW-9	CTMW-9	CTMW-9	CTMW-12	CTMW-12	CTMW-12
Conc/Dil:	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Volatile Organic Compounds (ppb)									
Acetone	-	-	-	11	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-
Methylene Chloride	(5.4B)	(4.4B)	(0.8JB)	(2.1B)	(19B)	-	(1.7B)	(7.9B)	(0.5JB)
Styrene	-	-	-	-	-	-	-	-	-
Toluene	-	1	(0.4M)	-	-	-	-	(0.6M)	(0.2MB)
2-Butanone	-	-	-	-	-	-	-	-	-
Xylenes, total	-	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone	-	-	-	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	-	-	-	-
Chloroform	3.6	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-
Cis-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-	-	-	-
Carbon Disulfide	-	-	-	-	-	-	-	-	-
Oil & Grease (ppm)	nt	nt	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-1
(CONT.)

BASE/NEUTRAL/ACIDS
QUARTERLY SAMPLING BY CHEMPRO PERSONNEL
ALLUVIAL AQUIFER

Sampling dates	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989	June 1988	September 1988	May 19 1989
Sample Number	CT-688-7	CT-0988-7	CT-0589-8	CT-688-3	CT-0988-3	CT-0589-3	CT-688-5	CT-0988-5	CT-0589-4
Well Name	CTMW-7	CTMW-7	CTMW-7	CTMW-9	CTMW-9	CTMW-9	CTMW-12	CTMW-12	CTMW-12
Conc/Dil:	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Base/Neutrals/Acids (ppb)									
	no data	no data	no data	no data	no data	no data	no data	no data	no data
Phenol	"	"	"	"	"	"	"	"	"
Napthalene	"	"	"	"	"	"	"	"	"
2-Methylnapthalene	"	"	"	"	"	"	"	"	"
Acenaphthene	"	"	"	"	"	"	"	"	"
Fluorene	"	"	"	"	"	"	"	"	"
Phenanthrene	"	"	"	"	"	"	"	"	"
Anthracene	"	"	"	"	"	"	"	"	"
Benzo(a)Anthracene	"	"	"	"	"	"	"	"	"
Fluoranthene	"	"	"	"	"	"	"	"	"
Pyrene	"	"	"	"	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	"	"	"	"	"	"	"	"	"
Butylbenzylphthalate	"	"	"	"	"	"	"	"	"
Chrysene	"	"	"	"	"	"	"	"	"
Di-n-octyl Phthalate	"	"	"	"	"	"	"	"	"
Di-n-butylphthalate	"	"	"	"	"	"	"	"	"
Diethylphthalate	"	"	"	"	"	"	"	"	"
2-Methylphenol	"	"	"	"	"	"	"	"	"
4-Methylphenol	"	"	"	"	"	"	"	"	"
2,4-Dimethylphenol	"	"	"	"	"	"	"	"	"
1,2-Dichlorobenzene	"	"	"	"	"	"	"	"	"
Dibenzofuran	"	"	"	"	"	"	"	"	"

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-2

VOLATILE ORGANIC COMPOUNDS AND TOTAL METALS

	Northwest Processing Monitoring Wells							Chempro Monitoring Wells				Sol-Pro Monitoring Wells		
Sampling dates	April 26 1989	April 26 1989	April 26 1989	May 11 1989	May 11 1989	May 11 1989	May 11 1989	March 6 1986	March 6 1986	March 6 1986	March 6 1986	March 1986	March 1986	March 1986
Well Name	A-1	A-2	A-3	L-1	L-2	L-3	L-4	MW-1	MW-2	MW-3	MW-4	Well #1	Well #2	Well #3
Volatile Organic Compounds (ppb)														
Methylene chloride	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	nt	nt	nt
1,1,1-Trichloroethylen	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	nt	nt	nt
Tetrachloroethylene	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	nt	nt	nt
Acetone	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	210	84	-
Ethanol	nt	nt	<10000	nt	nt	nt	<10000	nt	nt	nt	nt	-	-	-
Isopropanol	nt	nt	<10000	nt	nt	nt	<10000	nt	nt	nt	nt	(0.7J)	-	-
Methanol	nt	nt	<10000	nt	nt	nt	<10000	nt	nt	nt	nt	(4.3B)	4.9	(5.4B)
Methyl ethyl ketone	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	-	-	-
Methyl isobutyl ketone	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	2.4	1.2	-
Toluene	nt	nt	<50	nt	nt	nt	<50	nt	nt	nt	nt	13	-	-
Xylenes	nt	nt	<50	nt	nt	nt	60	nt	nt	nt	nt	(3.3M)	-	-
Oil & Grease (ppm)	nt	nt	<5	nt	nt	nt	12.1	nt	nt	nt	nt	nt	nt	nt
Total Metals (ppb)														
Arsenic	nt	nt	<100	nt	nt	nt	400	nt	nt	nt	nt	nt	nt	nt
Cadmium	nt	nt	nt	nt	nt	nt	nt	<2	<2	<2	<2	nt	nt	nt
Chromium	nt	nt	<100	nt	nt	nt	<100	<5	<5	<5	<5	nt	nt	nt
Hexavalent Chromium	nt	nt	nt	nt	nt	nt	nt	<5	<5	<5	<5	nt	nt	nt
Lead	nt	nt	<100	nt	nt	nt	<100	20	<10	10	20	nt	nt	nt
Nitrate as N	nt	nt	nt	nt	nt	nt	nt	100	26000	290	<50	nt	nt	nt
Zinc	nt	nt	<100	nt	nt	nt	<100	71	16	19	240	nt	nt	nt

nt = not tested

- = Below or inferred to be below Method Detection Limit

B = Analyte found in blank and sample. Indicates possible/probable blank contamination

M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters

J = Estimated value when result is less than specified detection limit

K = Laboratory-estimated concentration, value exceeded calibration curve

* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)

nt = not tested

( ) = omitted in report, found in laboratory data report

TABLE D-3

BASE/NEUTRAL/ACIDS (ppb)
CHEMPRO MONITORING WELLS

Sampling dates	June 4-8 1987	Nov 24 1987	June 4-8 1987	Nov 24 1987	Nov 24 1987	June 4-8 1987	June 4-8 1987	June 4-8 1987	Nov 24 1987	June 4-8 1987
Sample Number	CT-6-87-6	CT-1187-5	CT-6-87-1	CT-1187-1	CT-1187-2	CT-6-87-5	CT-6-87-3	CT-6-87-2	CT-1187-3	CT-6-87-7
Well Name	CTMW-1	CTMW-1	CTMW-2	CTMW-2	CTMW-2 DUPLICATE	CTMW-3	CTMW-4	CTMW-5	CTMW-5	CTMW-6
Phenol	-	-	-	-	-	-	9.9	-	-	43
Napthalene	55	20	-	-	-	7.7	41	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	-	-	-	-
2-Methylnapthalene	70	43	-	-	-	37	32	-	-	25
Acenaphthene	4.1	-	-	-	-	5.9	12	-	-	-
Fluorene	3.6	-	-	-	-	2.6	3.5	-	-	-
Phenanthrene	4.4	-	-	-	-	2.2	(1.7)	-	-	-
Anthracene	1.4	-	-	-	-	-	-	-	-	-
Benzo(a)Anthracene	-	-	-	-	-	-	-	-	-	-
Fluoranthene	-	-	-	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	5.4	-	-	-	-	(3.9U)	4.8	(3.9U)	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-	-	-	-
Di-n-octyl Phthalate	-	-	-	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	15	-	-	54
4-Methylphenol	-	-	-	-	-	-	41	-	-	540
2,4-Dimethylphenol	-	-	-	-	-	-	20	-	-	60
1,2-Dichlorobenzene	4.6	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	(1.6U)	3	-	-	-
Benzo(a)Pyrene	-	-	-	-	-	-	-	-	-	-

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

TABLE D-3
(cont.)
BASE/NEUTRAL/ACIDS (ppb)
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989
Sample Number	CT-12387-I	CT-589-11	CT-589-13	CT-12387-H	CT-589-8	CT-12787-E	CT-12287-F	CT-589-5	CT-12287-C	CT-589-7
Well Name	CTMW-6	CTMW-6	CTMW-6 DUPLICATE	CTMW-7	CTMW-7	CTMW-8	CTMW-8-DUP	CTMW-8	CTMW-9	CTMW-9
Phenol	14	-	-	-	-	-	-	13	-	-
Napthalene	(4.7M)	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	-	-	-	-
2-Methylnapthalene	11.9	10	4.5	-	-	(0.6J)	-	-	-	-
Acenaphthene	-	(1.3M)	-	-	-	1.9	1.7	-	-	-
Fluorene	-	1.9	1.2	-	-	-	-	-	-	-
Phenanthrene	(7.2M)	6.3	3.7	-	-	-	-	-	-	-
Anthracene	(3.5M)	1.9	1.1	-	-	-	-	-	-	-
Benzo(a)Anthracene	-	(0.7M)	-	-	-	-	-	-	-	-
Fluoranthene	-	(0.9J)	-	-	-	-	-	-	-	-
Pyrene	-	1.8	1.3	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	(110)	11	6.5	(3.5E)	7.9	(8.1E)	(9E)	9	(5.3E)	25
Butylbenzylphthalate	-	-	-	(0.9J)	-	-	-	-	-	-
Chrysene	-	1.5	-	-	-	-	-	-	-	-
Di-n-octyl Phthalate	-	2.3	1.5	-	1.4	26	(0.3M)	-	(1.1J)	1.2
Di-n-butylphthalate	-	-	-	-	-	1.1	-	-	-	-
Diethylphthalate	14.2	-	-	-	-	-	-	-	-	-
2-Methylphenol	52	15	8.4	-	-	-	-	-	-	-
4-Methylphenol	370	51	31	-	-	-	-	-	-	-
2,4-Dimethylphenol	59	16	8.9	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	nt	-	-	-	-	-	-
Dibenzofuran	-	(1.1M)	-	nt	-	-	-	-	-	-
Benzo(a)Pyrene	-	-	-	-	-	-	-	-	-	-

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

TABLE D-3
(cont.)
BASE/NEUTRAL/ACIDS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	May 31-June 1 1989 DUPLICATE	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CT-12287-G	CT-589-14	CT-12287-A	CT-589-3	CT-12287-B	CT-589-4	CT-589-1	CT-589-2	CTMW-13-A	CTMW-13-B
Well Name	CTMW-10	CTMW-10	CTMW-11	CTMW-11	CTMW-12	CTMW-12	CTMW-13	CTMW-13	CTMW-13	CTMW-13
Phenol	-	-	220	51	-	-	-	-	-	-
Napthalene	5.3	12	-	-	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	-	-	-	7.2	13	-	-
2-Methylnapthalene	15	29	-	-	-	-	-	-	-	-
Acenaphthene	23	7.9	-	-	-	-	-	-	-	-
Fluorene	14	17	-	-	-	-	-	-	-	-
Phenanthrene	15	28	-	-	-	-	-	-	-	-
Anthracene	5	37	-	-	-	-	-	-	-	-
Benzo(a)Anthracene	(1.2J)	(2.1M)	-	-	-	-	-	-	-	-
Fluoranthene	5.9	4.3	-	-	-	-	-	-	-	-
Pyrene	5.5	7.7	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	(3.5E)	4.7	(11E)	24	(20E)	-	11	19	-	-
Butylbenzylphthalate	(1.7J)	-	-	-	-	-	2.3	2	-	-
Chrysene	1.2	4.9	-	-	-	-	-	-	-	-
Di-n-octyl Phthalate	(0.3M)	-	3	2.5	-	-	-	1.5	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-	1.1	-	-
Diethylphthalate	-	-	-	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-	(1.6M)	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	8.3	(20M)	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	7.5	-	-	-	-	7.2	13	-	-
Benzo(a)Pyrene	-	(0.8M)	-	-	-	-	-	-	nt	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

TABLE D-3
(CONT.)
BASE/NEUTRAL/ACIDS
CHEMPRO MONITORING WELLS

Sampling dates	May 2-May 16 1989	May 2-May 16 1989	May 31-June 1 1989	May 31-June 1 1989	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CTMW-14-C	CTMW-14-D	CT-589-9	CT-589-10	CTMW-15-A	CTMW-15-B
Well Name	CTMW-14	CTMW-14	CTMW-14	CTMW-15	CTMW-15	CTMW-15
Phenol	-	-	-	-	-	-
Napthalene	-	-	-	-	-	-
Hexachlorobutadiene	-		-			
2-Methylnapthalene	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-
Phenanthrene	1.6	-	-	-	-	-
Anthracene	(0.8J)	-	-	-	-	-
Benzo(a)Anthracene	-	-	-	-	-	-
Fluoranthene	1.3	-	(0.4J)	-	-	-
Pyrene	3.1	-	(0.6J)	-	-	-
Bis(2-ethylhexyl)phthalate	15	-	3.6	-	-	-
Butylbenzylphthalate	1.3	-	1.3	-	-	-
Chrysene	(1.3M)	-	-	-	-	-
Di-n-octyl Phthalate	-	-	3.8	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Benzo(a)Pyrene	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-4

DISSOLVED METALS
CHEMPRO MONITORING WELLS

Sampling dates	June 4-8 1987	Nov 24 1987	June 4-8 1987	Nov 24 1987	Nov 24 1987	June 4-8 1987	June 4-8 1987	June 4-8 1987	Nov 24 1987	June 4-8 1987
Sample Number	CT-6-87-6	CT-1187-5	CT-6-87-1	CT-1187-1	CT-1187-2	CT-6-87-5	CT-6-87-3	CT-6-87-2	CT-1187-3	CT-6-87-7
Well Name	CTMW-1	CTMW-1	CTMW-2	CTMW-2	CTMW-2 DUPLICATE	CTMW-3	CTMW-4	CTMW-5	CTMW-5	CTMW-6
Dissolved Metals (mg/L)										
Barium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Beryllium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Cadmium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Chromium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Lead	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Mercury	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Silver	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Arsenic	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Selenium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Copper	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Nickel	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Zinc	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Thallium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested

Table D-4
(CONT.)

DISSOLVED METALS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989
Sample Number	CT-12387-I	CT-589-11	CT-589-13	CT-12387-H	CT-589-8	CT-122787-E	CT-12287-F	CT-589-5	CT-12287-C	CT-589-7
Well Name	CTMW-6	CTMW-6	CTMW-6 DUPLICATE	CTMW-7	CTMW-7	CTMW-8	CTMW-8-DUP	CTMW-8	CTMW-9	CTMW-9
Dissolved Metals (mg/L)										
Barium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Beryllium	nt	-	-	nt	-	nt	nt	-	nt	-
Cadmium	nt	-	-	nt	-	nt	nt	-	nt	-
Chromium	nt	13	14	nt	5	nt	nt	-	nt	-
Lead	nt	13	-	nt	-	nt	nt	-	nt	-
Mercury	nt	-	-	nt	-	nt	nt	-	nt	-
Silver	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Arsenic	nt	32	10	nt	-	nt	nt	-	nt	-
Selenium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Copper	nt	14	25	nt	15	nt	nt	-	nt	-
Nickel	nt	180	157	nt	-	nt	nt	-	nt	-
Zinc	nt	15	15	nt	-	nt	nt	-	nt	-
Thallium	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested

Table D-4
(CONT.)

DISSOLVED METALS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	May 31-June 1 1989	May 2-May 16 1989
Sample Number	CT-12287-G	CT-589-14	CT-12287-A	CT-589-3	CT-12287-B	CT-589-4	CT-589-1	CT-589-2	CTMW-13-A
Well Name	CTMW-10	CTMW-10	CTMW-11	CTMW-11	CTMW-12	CTMW-12	CTMW-13	CTMW-13	CTMW-13
Dissolved Metals (mg/L)									
Barium	nt	nt	nt	nt	nt	nt	nt	nt	nt
Beryllium	nt	-	nt	-	nt	-	-	-	-
Cadmium	nt	-	nt	-	nt	-	-	-	-
Chromium	nt	-	nt	-	nt	6	-	-	-
Lead	nt	5	nt	3	nt	-	3	2	-
Mercury	nt	-	nt	-	nt	-	-	-	-
Silver	nt	nt	nt	nt	nt	nt	nt	nt	nt
Arsenic	nt	8	nt	-	nt	-	20	19	25
Selenium	nt	nt	nt	nt	nt	nt	nt	nt	nt
Copper	nt	11	nt	-	nt	-	12	12	-
Nickel	nt	-	nt	-	nt	-	320	330	-
Zinc	nt	-	nt	-	nt	-	190	190	-
Thallium	nt	nt	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested

Table D-4
(CONT.)

DISSOLVED METALS
CHEMPRO MONITORING WELLS

Sampling dates	May 2-May 16 1989	May 2-May 16 1989	May 31-June 1 1989	May 31-June 1 1989	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CTMW-14-C	CTMW-14-D	CT-589-9	CT-589-10	CTMW-15-A	CTMW-15-B
Well Name	CTMW-14	CTMW-14	CTMW-14	CTMW-15	CTMW-15	CTMW-15
Dissolved Metals (mg/L)						
Barium	nt	nt	nt	nt	nt	nt
Beryllium	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-
Chromium	-	-	-	-	-	-
Lead	-	-	-	-	-	-
Mercury	-	-	-	-	-	-
Silver	nt	nt	nt	nt	nt	nt
Arsenic	-	14	9	-	-	-
Selenium	nt	nt	nt	nt	nt	nt
Copper	-	-	21	15	-	-
Nickel	-	-	-	-	-	-
Zinc	-	-	-	-	-	-
Thallium	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested

Table D-5

TOTAL METALS
CHEMPRO MONITORING WELLS

Sampling dates	June 4-8 1987	Nov 24 1987	June 4-8 1987	Nov 24 1987	Nov 24 1987	June 4-8 1987	June 4-8 1987	June 4-8 1987	Nov 24 1987	June 4-8 1987
Sample Number	CT-6-87-6	CT-1187-5	CT-6-87-1	CT-1187-1	CT-1187-2	CT-6-87-5	CT-6-87-3	CT-6-87-2	CT-1187-3	CT-6-87-7
Well Name	CTMW-1	CTMW-1	CTMW-2	CTMW-2	CTMW-2 DUPLICATE	CTMW-3	CTMW-4	CTMW-5	CTMW-5	CTMW-6
Total Metals (ug/L)										
Barium	121	nt	62	nt	nt	106	-	290	nt	918
Beryllium	nt	-	nt	-	-	nt	nt	nt	-	nt
Cadmium	-	-	-	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-	-	-	12
Lead	-	-	-	7	4	-	-	-	2	114*
Mercury	-	-	-	-	-	-	-	-	-	-
Silver	-	-	-	-	-	-	-	-	-	-
Arsenic	-	24	3.4	9	6	-	-	6.6	8	15
Selenium	-	-	-	-	-	-	-	-	-	-
Copper	-	-	-	-	-	-	-	-	-	-
Nickel	250	240	-	-	-	-	-	-	-	110
Zinc	39	-	37	-	-	23	26	20	-	61
Thallium	-	-	-	-	-	-	-	-	-	-

- = Below or inferred to be below Method Detection Limit
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nt = not tested

Table D-5
(CONT.)

TOTAL METALS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989
Sample Number	CT-12387-I	CT-589-11	DUPLICATE	CT-12387-H	CT-589-8	CT-122787-E	CT-12287-F	CT-589-5	CT-12287-C	CT-589-7
Well Name	CTMW-6	CTMW-6	CTMW-6	CTMW-7	CTMW-7	CTMW-8	CTMW-8-DUP	CTMW-8	CTMW-9	CTMW-9
Total Metals (ug/L)										
Barium	nt	-	-	nt	-	nt	nt	-	nt	-
Beryllium	nt	-	-	nt	-	nt	nt	-	nt	-
Cadmium	nt	3	-	nt	3	nt	nt	-	nt	-
Chromium	nt	21	20	nt	9	nt	nt	-	nt	-
Lead	nt	172*	151*	nt	-	nt	nt	14	nt	-
Mercury	nt	-	-	nt	-	nt	nt	-	nt	-
Silver	nt	-	-	nt	-	nt	nt	-	nt	-
Arsenic	nt	35	36	nt	-	nt	nt	-	nt	-
Selenium	nt	-	-	nt	-	nt	nt	-	nt	-
Copper	nt	26	28	nt	-	nt	nt	-	nt	38
Nickel	nt	200	200	nt	-	nt	nt	-	nt	-
Zinc	nt	370	360	nt	-	nt	nt	-	nt	-
Thallium	nt	-	-	nt	-	nt	nt	-	nt	-

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nt = not tested

Table D-5
(CONT.)

TOTAL METALS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	May 31-June 1 1989 DUPLICATE	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CT-12287-G	CT-589-14	CT-12287-A	CT-589-3	CT-12287-B	CT-589-4	CT-589-1	CT-589-2	CTMW-13-A	CTMW-13-B
Well Name	CTMW-10	CTMW-10	CTMW-11	CTMW-11	CTMW-12	CTMW-12	CTMW-13	CTMW-13	CTMW-13	CTMW-13
Total Metals (ug/L)										
Barium	nt	-	nt	nt	nt	nt	nt	-	nt	nt
Beryllium	nt	-	nt	-	nt	-	-	-	-	-
Cadmium	nt	-	nt	-	nt	-	-	-	31*	35*
Chromium	nt	6	nt	-	nt	7	-	-	30	34
Lead	nt	22	nt	-	nt	5	36	33	1760*	2060*
Mercury	nt	-	nt	-	nt	-	-	-	1.6	1.5
Silver	nt	-	nt	nt	nt	nt	nt	-	nt	nt
Arsenic	nt	12	nt	-	nt	-	16	16	28	26
Selenium	nt	-	nt	nt	nt	nt	nt	-	nt	nt
Copper	nt	16	nt	-	nt	21	15	15	462	565
Nickel	nt	-	nt	-	nt	-	320	319	509	562
Zinc	nt	13	nt	-	nt	15	262	244	2940	3590
Thallium	nt	-	nt	nt	nt	nt	nt	-	-	-

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nt = not tested

Table D-5
(CONT.)

TOTAL METALS
CHEMPRO MONITORING WELLS

Sampling dates	May 2-May 16 1989	May 2-May 16 1989	May 31-June 1 1989	May 31-June 1 1989	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CTMW-14-C	CTMW-14-D	CT-589-9	CT-589-10	CTMW-15-A	CTMW-15-B
Well Name	CTMW-14	CTMW-14	CTMW-14	CTMW-15	CTMW-15	CTMW-15
Total Metals (ug/L)						
Barium	nt	nt	nt	nt	-	-
Beryllium	11	9	-	-	6	6
Cadmium	15*	13*	-	-	6	6
Chromium	660*	460*	6	8	206*	237*
Lead	640*	500*	10	6	44	68*
Mercury	0.6	0.8	-	-	-	-
Silver	-	-	nt	nt	-	-
Arsenic	92*	92*	8	-	24	37
Selenium	-	-	nt	nt	-	-
Copper	1180*	940	19	24	400	530
Nickel	510	390	-	-	180	200
Zinc	1580	1250	28	29	400	550
Thallium	-	-	nt	nt	-	-

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nt = not tested

Table D-6

VOLATILE ORGANIC COMPOUNDS
CHEMPRO MONITORING WELLS (ppb)

Sampling dates	June 4-8 1987	Nov 24 1987	June 4-8 1987	Nov 24 1987	Nov 24 1987	June 4-8 1987	June 4-8 1987	June 4-8 1987	Nov 24 1987	June 4-8 1987
Sample Number	CT-6-87-6	CT-1187-5	CT-6-87-1	CT-1187-1	CT-1187-2	CT-6-87-5	CT-6-87-3	CT-6-87-2	CT-1187-3	CT-6-87-7
Well Name	CTMW-1	CTMW-1	CTMW-2	CTMW-2	CTMW-2 DUPLICATE	CTMW-3	CTMW-4	CTMW-5	CTMW-5	CTMW-6
Acetone	-	-	-	-	-	-	210	-	-	390
Benzene	210*	140*	14*	11*	10*	2.1	38*	(2U)	5	12*
Ethylbenzene	(2U)	-	-	-	-	-	(11U)	-	-	18
Methylene Chloride	56	-	(3U)	-	-	-	-	(3U)	-	-
Styrene	-	-	-	-	-	-	-	-	-	-
Toluene	3.3	-	2.1	-	-	-	21	6.3	-	56
2-Butanone	61	-	-	-	-	-	-	-	-	-
Xylenes, total	52	66	5.1	-	-	4.5	17	3	4.8	47
Vinyl Chloride	19*	-	-	-	-	-	-	-	-	23*
4-Methyl-2-Pentanone	5.3	-	-	-	-	-	-	-	-	300
2-Hexanone	76	-	-	-	-	-	-	-	-	25
Chloroform	(3U)	-	(3U)	-	-	-	-	-	-	-
1,1-Dichloroethane	-	33	(2U)	2.2	-	-	12	8.1	5.3	-
1,1-Dichloroethene	30*	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	9
Trichloroethene	8*	-	-	-	-	-	-	-	-	5.1*
Chloroethane	14	-	-	-	-	-	57	-	-	-
Trans-1,2-Dichloroethene	48	35	-	-	-	-	-	-	-	(5U)
Cis-1,2-Dichloroethene	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
1,2-Dichloroethene	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Carbon Disulfide	-	-	-	-	-	-	-	-	-	-
Oil & Grease (ppm)	8.4	nt	0.6	nt	nt	6	9.6	18.4	-	-

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-6
(CONT.)
VOLATILE ORGANIC COMPOUNDS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989
Sample Number	CT-12387-I	CT-589-11	CT-589-13	CT-12387-H	CT-589-8	CT-12787-E	CT-12287-F	CT-589-5	CT-12287-C	CT-589-7
Well Name	CTMW-6	CTMW-6	CTMW-6 DUPLICATE	CTMW-7	CTMW-7	CTMW-8	CTMW-8-DUP	CTMW-8	CTMW-9	CTMW-9
Acetone	160	68	40	13	-	29	21	140	(5J)	-
Benzene	8.2*	10*	11*	-	-	2.1	2.1	0.8	-	-
Ethylbenzene	6.9	6.4	7.3	-	-	(0.5J)	(0.5J)	-	-	-
Methylene Chloride	(1.0JB)	(2.8B)	6.2	-	(0.8JB)	(0.6JB)	-	(0.9JB)	-	(0.9JB)
Styrene	4.5	4.2	5.7	-	-	-	-	-	-	-
Toluene	35	45	49	-	(0.4M)	1.7	1.6	2.6	-	-
2-Butanone	49	(22B)	13	-	-	-	-	-	-	-
Xylenes, total	21	23	30	-	-	4.8	4.4	(0.7M)	-	-
Vinyl Chloride	12*	30*	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone	270000	-	-	-	-	-	-	-	-	-
2-Hexanone	38	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	(0.4J)	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-
Trichloroethene	(0.6J)	1	1	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	nt	2.7	2.8	nt	-	nt	nt	-	nt	-
Cis-1,2-Dichloroethene	nt	2.6	2.4	nt	-	nt	nt	-	nt	-
1,2-Dichloroethene	4.4	-	-	nt	-	-	-	-	-	-
Carbon Disulfide	(0.9J)	-	-	-	-	-	-	-	-	-
Oil & Grease (ppm)	nt	nt	-	nt	nt	nt	nt	nt	nt	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
nt = not tested
( ) = omitted in report, found in laboratory data report

Table D-6
(CONT.)
VOLATILE ORGANIC COMPOUNDS
CHEMPRO MONITORING WELLS

Sampling dates	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	December 2-3 1987	May 31-June 1 1989	May 31-June 1 1989	May 31-June 1 1989 DUPLICATE	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CT-12287-G	CT-589-14	CT-12287-A	CT-589-3	CT-12287-B	CT-589-4	CT-589-1	CT-589-2	CTMW-13-A	CTMW-13-B
Well Name	CTMW-10	CTMW-10	CTMW-11	CTMW-11	CTMW-12	CTMW-12	CTMW-13	CTMW-13	CTMW-13	CTMW-13
Acetone	7.2	-	140	190	-	-	7.4	-	-	-
Benzene	3.3	2.3	-	0.6	-	-	1.9	1.7	1.8	1.7
Ethylbenzene	(2.3)	3.4	-	-	-	-	(1J)	1	1.9	1.7
Methylene Chloride	-	(0.5MB)	(0.8B)	(0.7JB)	-	(0.5JB)	(2.1B)	(0.7JB)	(1.1JB)	(2.6JB)
Styrene	-	-	-	-	-	-	1.1	1.2	1.9	1.6
Toluene	1.2	1.3	1.1	1.6	-	(0.2MB)	9	8.7	10	9.2
2-Butanone	14	-	11	12	-	-	-	-	-	-
Xylenes, total	11	24	-	(0.5J)	-	-	1.8	1.6	(3.1M)	(2.7M)
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone	-	-	-	-	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	5.8	5.6	-	-
Trichloroethene	-	-	-	-	-	-	6*	5.9*	-	-
Chloroethane	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	nt	-	nt	-	-	-	(0.4J)	(0.4J)	nt	-
Cis-1,2-Dichloroethene	nt	-	nt	-	-	-	1.2	1.2	nt	-
1,2-Dichloroethene	-	-	-	-	-	-	-	-	1.8	1.8
Carbon Disulfide	-	-	-	-	-	-	-	-	-	-
Oil & Grease (ppm)	nt	nt	nt	nt	nt	nt	-	nt	nt	nt

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B = Analyte found in blank and sample. Indicates possible/probable blank contamination
M = Estimated value of analyte found and confirmed by analyst, but with low spectral match parameters
J = Estimated value when result is less than specified detection limit
K = Laboratory-estimated concentration, value exceeded calibration curve
U = Analyte found at a level below indicated minimum detection limit
* = Exceeds maximum contaminant level (MCL) Primary Drinking Water Standards (50 FR 46936, 11/13/85)
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( ) = omitted in report, found in laboratory data report

Table D-6
(CONT.)
VOLATILE ORGANIC COMPOUNDS
CHEMPRO MONITORING WELLS

Sampling dates	May 2-May 16 1989	May 2-May 16 1989	May 31-June 1 1989	May 31-June 1 1989	May 2-May 16 1989	May 2-May 16 1989
Sample Number	CTMW-14-C	CTMW-14-D	CT-589-9	CT-589-10	CTMW-15-A	CTMW-15-B
Well Name	CTMW-14	CTMW-14	CTMW-14	CTMW-15	CTMW-15	CTMW-15
Acetone	-	-	5.2	-	-	-
Benzene	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-
Methylene Chloride	(2.6B)	(1.2B)	(0.6JB)	(0.5JB)	16	6.8
Styrene	-	-	-	-	-	-
Toluene	(0.4JB)	(0.2MB)	(0.6M)	(0.1M)	-	-
2-Butanone	-	-	5.4	-	-	-
Xylenes, total	(0.5J)	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
4-Methyl-2-Pentanone	-	-	-	-	-	-
2-Hexanone	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-
Cis-1,2-Dichloroethene	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-
Carbon Disulfide	-	-	-	-	-	-
Oil & Grease (ppm)	nt	nt	nt	nt	-	nt

- = Below or inferred to be below Method Detection Limit
B = Analyte found in blank and sample. Indicates possible/probable blank contamination
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