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Mobil Oil Corporation

QUALITY CONTROL BOARD

3800 WEST ALAMEDA AVENUE, SUITE 700
BURBANK, CALIFORNIA 91505-4331

01

November 2, 1988

Mr. Rafat Shahid
Alameda County
Department of Environmental Health
470 27th Street, Room 324
Oakland, California 94612

MOBIL OIL CORPORATION
S/S #10-EYD
154 PARK STREET
ALAMEDA, CALIFORNIA

Dear Mr. Shahid:

Attached is the quarterly report for the subject location.

Based on the results of the monitoring program, Mobil will propose additional monitoring wells to define the extent of the contamination.

If you have any questions, contact Chris Mitchell at (818) 953-2519.

Sincerely,

Chris J. Mitchell
R. J. Edwards
Region Environmental Manager

CTM:ars
attachment
18900

cc: Mr. Peter Johnson
Regional Water Quality Con. Bd.
1111 Jackson Street, Room 6040
Oakland, California 94607

Mr. Wyman Hong
Alameda County
Flood Control Department
6997 Parkside Drive
Pleasanton, California 94566

§ 66630
(p. 1800.6)

ENVIRONMENTAL HEALTH

TITLE 22

(Register 64, No. 41—10-13-64)

- 187. *Chlorine trifluoride (T,C,F,R)
- 188. *Chloroacetaldehyde (T,C)
- 189. *alpha-Chloroacetophenone, Phenyl chloromethyl ketone (T)
- 190. *Chloroacetyl chloride (T,C,R)
- 191. Chlorobenzene (T,F)
- 192. para-Chlorobenzoyl peroxide (F,R)
- 193. *ortho-Chlorobenzylidene malonitrile, OCMB (T)
- 194. Chloroform, Trichloromethane (T)
- 195. *Chloropicrin, Chloropicrin, Trichloronitromethane (T)
- 196. *Chlorosulfonic acid (T,C,F,R)
- 197. Chloro-ortho-toluidine, 2-Amino-4-chlorotoluene (T)
- 198. Chromic acid, Chromium trioxide, Chromic anhydride (T,C,F)
- 199. Chromic chloride, Chromium trichloride (T)
- 200. Chromic fluoride, Chromium trifluoride (T)
- 201. Chromic hydroxide, Chromium hydroxide (T)
- 202. Chromic oxide, Chromium oxide (T)
- 203. Chromic sulfate, Chromium sulfate (T)
- 204. Chromium compounds (T,C,F)
- 205. *Chromyl chloride, Chlorochromic anhydride (T,C,F,R)
- 206. Cobalt (powder) (T,F)
- 207. Cobalt compounds (T)
- 208. Cobaltous bromide, Cobalt bromide (T)
- 209. Cobaltous chloride, Cobalt chloride (T)
- 210. Cobaltous nitrate, Cobalt nitrate (T,F)
- 211. Cobaltous resinates, Cobalt resinates (T,F)
- 212. Cobaltous sulfate, Cobalt sulfate (T)
- 213. Cocculus, Fishberry, Picrotoxin (T)
- 214. *Copper acetoarsenite, Paris green (T)
- 215. Copper acetylacrylate (T,R)
- 216. *Copper arsenate, Cupric arsenate (T)
- 217. *Copper arsenite, Cupric arsenite (T)
- 218. *Copper chloride, Cupric chloride (T)
- 219. *Copper chlorotetraazolate (T,R)
- 220. Copper compounds (T)
- 221. *Copper cyanide, Cupric cyanide (T)
- 222. *Copper nitrate, Cupric nitrate (T,F,R)
- 223. *Copper sulfate, Cupric sulfate, Blue vitriol (T)
- 224. *Coroson; ortho,ortho-Dimethyl-ortho-(3-chloro-4-methylcoumarin-7-yl) phosphata (T)
- 225. *Coumatralyl, FUMARIN, 3-[1-(2-Furyl)-3-oxobutyl]-(4-hydroxy-2H-1-benzopyran-2-one) (T)
- 226. *Coumatralyl, BAYER 25634, RACUMIN 57, 4-Hydroxy-3-(1,2,3,4-tetrahydro-1-naphthalenyl)-2H-1-benzopyran-2-one (T)
- 227. *Crimidine, CASTRUX, 2-Chloro-4-dimethylamino-6-methylpyrimidine (T)
- 228. *Crotonaldehyde, 3-Butenal (T)
- 229. Cumene, Isopropyl benzene (T,F)
- 230. Cumene hydroperoxide; alpha, alpha-Dimethylbenzyl hydroperoxide (T,F)

TITLE 22

ENVIRONMENTAL HEALTH

(Register 64, No. 41—10-13-64)

- 231. Cupriethylene diamine (T)
- 232. *Cyanide salts (T)
- 233. *Cyanosulfonic acid, Malonic nitrile (T)
- 234. *Cyanogen (T,F,R)
- 235. *Cyanogen bromide, Bromine cyanide (T)
- 236. Cyanuric triazide (T,R)
- 237. Cycloheptane (T,F)
- 238. Cyclohexane (T,F)
- 239. Cyclohexanone peroxide (F)
- 240. *Cyclohexenyltrichlorosilane (T,C,R)
- 241. *Cycloheximide, ACTHDIONE (T)
- 242. *Cyclohexyltrichlorosilane (T,C,R)
- 243. Cyclopentane (T,F)
- 244. Cyclopentane (T,F)
- 245. Cyclopentanol (F)
- 246. Cyclopentene (T,F)
- 247. DDT; 1,1,1-Trichloro-2,2-bis(chlorophenyl) ethane (T)
- 248. *DDVP, Dichlorvos, VAPONA, Dimethyl dichlorovinyl phosphate (T)
- 249. *Decaborane (T,F,R)
- 250. DECALIN, Decahydronaphthalene (T)
- 251. *Deineton, SYSTOX (T)
- 252. *Deineton-S-methyl sulfone, METAISOSYSTOX-SULFON, S-[2-(ethyl-sulfonyl) ethyl] O,O-dimethyl phosphorothioate (T)
- 253. Diazodinitrophenol, DDNP, 2-Diazo-4,6-dinitrobenzene-1-oxide (T,R)
- 254. *Diborane, Diboron hexahydride (T,R)
- 255. *1,2-Dibromo-3-chloropropane, DBCP, FUMAZONE, NEMAGON (T)
- 256. n-Dibutyl ether, Butyl ether (and isomers) (T,F)
- 257. Dichlorobenzene (ortho, meta, para) (T)
- 258. *2,3-Dichlorobenzidine and salts, DCB (T)
- 259. 1,2-Dichloroethylene; 1,2-Dichloroethane (T,F)
- 260. Dichloroethyl ether, Dichloroether (T,F)
- 261. Dichlorotocyanuric acid, Dichloro-S-triazine-2,4,6-trione (T,F)
- 262. Dichloromethane, Methylene chloride (T)
- 263. *2,4-Dichlorophenoxyacetic acid; 2,4-D (T)
- 264. 1,2-Dichloropropane, Propylene dichloride (T,F)
- 265. 1,3-Dichloropropylene; 1,3-Dichloropropene (T,F)
- 266. Dicumyl peroxide (F,T)
- 267. *Dieldrin; 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8a-octahydro-1,4-endo, exo-8,8-dimethanonaphthalene (T)
- 268. *Diethylaluminum chloride, Aluminum diethyl monochloride, DEAC (F,R)
- 269. Diethylamine (T,F)
- 270. *Diethyl chlorovinyl phosphate, Compound 1836 (T)
- 271. *Diethyldichlorosilane (T,C,F,R)
- 272. Diethylene glycol dinitrate (T,R)
- 273. Diethylene triamine (T)
- 274. *O,O-Diethyl-S-(isopropylthiomethyl) phosphorodithioate (T)
- 275. *Diethylzinc, Zinc ethyl (C,F,R)
- 276. *Difluorophosphoric acid (T,C,R)
- 277. *Diglycidyl ether, bis(2,3-Epoxypropyl) ether (T)
- 278. Diisopropylbenzene hydroperoxide (T,F)

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(p. 1800.7)

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(p. 1800.8)

ENVIRONMENTAL HEALTH

TITLE 22

(Register 64, No. 41—10-13-64)

- 279. Diisopropyl peroxydicarbonate, Isopropyl percarbonate (T,C,F,R)
- 280. *Dimetox, HANANE, PEXTOX 14, Tetramethylphosphorodiamidic fluoride (T)
- 281. Dimethylamine, DMA (T,F)
- 282. *Dimethylaminoazobenzene, Methyl yellow (T)
- 283. *Dimethyldichlorosilane, Dichlorodimethylsilane (T,C,F,R)
- 284. 2,3-Dimethylhexane-2,3-Dihydroperoxide (F)
- 285. *1,1-Dimethylhydrazine, UDMH (T,F)
- 286. *Dimethyl sulfide, Methyl sulfide (T)
- 287. *Dimethyl sulfide, Methyl sulfide (T,F,R)
- 288. 2,4-Dinitroaniline (T)
- 289. *Dinitrobenzene (ortho, meta, para) (T,R)
- 290. Dinitrochlorobenzene, 1-Chloro-2,4-dinitrobenzene (T,R)
- 291. *4,6-Dinitro-ortho-cresol, DNPC, SINOX, EGOTOL 30 (T)
- 292. *Dinitrophenol(2,3-2,4-2,6-isomers) (T,R)
- 293. 2,4-Dinitrophenylhydrazine (T,F,R)
- 294. Dinitrotoluene (2,4-3,4-3,5-isomers) (T,F,R)
- 295. *DINOSEB; 2,4-Dinitro-6-sec-butylphenol (T)
- 296. 1,4-Dioxane; 1,4-Diethylene dioxide (T,F,R)
- 297. *Dioxathion, DELNAV 5, S-1,4-dioxane-2,3-diyl bis(O,O-diethyl phosphorodithioate) (T)
- 298. Dipentaerythritol hexantrate (R)
- 299. *Diphenyl, Biphenyl, Phenylbenzene (T)
- 300. Diphenylamine, DPA, N-Phenylaniline (T)
- 301. *Diphenylamine chloroarsine, Phenarsazine chloride (T)
- 302. *Diphenyldichlorosilane (T,C,R)
- 303. Dipicrylamine, Hexanitrodiphenyl amine (T,R)
- 304. Dipropyl ether (T,F)
- 305. *Disulfoton, Di-SYSTON; O,O-Diethyl S-[2-(ethylthio) ethyl] phosphorodithioate (T)
- 306. *Dodecyltrichlorosilane (T,C,R)
- 307. *DOWCO-139, ZECTRAN, Mexacarbate, 4-(Dimethylamino)-3,5-dimethylphenyl methylcarbamate (T)
- 308. *DYPONATE, Fonofos, O-Ethyl-S-phenylethyl phosphonodithioate (T)
- 310. *Endosulfan, THIODAN; 6,7,8,9,10-Hexachloro-1,5,8a,8,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide (T)
- 311. *Endothal, 7-Oxabicyclo [2.2.1] heptane-2,3-dicarboxylic acid (T)
- 312. *Endothion, EXOTHION, S-[5-Methoxy-4-oxo-4H-pyran-2-yl]-methyl] O,O-dimethyl phosphorothioate (T)
- 313. *Endrin; 1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8a-octahydro-1,4-endo-endo-5,8-dimethanonaphthalene (T)
- 314. Epichlorohydrin, Chloropropylene oxide (T,F)
- 315. *EPN; O-Ethyl O-para-nitrophenyl phenylphosphonothioate (T)
- 316. *Ethion, NIALATE, O,O,O',O'-Tetraethyl-S,S-methylenediphosphorodithioate (T)
- 317. Ethyl acetate (T,F)
- 318. Ethyl alcohol, Ethanol (T,F)
- 319. Ethylamine, Aminothane (T,F)



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

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KEI-P87-097B-1

October 27, 1988

Mobil Oil Corporation
P. O. Box 127
Richmond, CA 94807

Attention: Mr. Moody Younger

Re: Quarterly Report
Mobil S/S #10-EYD
1541 Park Avenue
Alameda, California

Dear Mr. Younger:

This report presents the results of the first period of monitoring and sampling of the existing wells by Kaprealian Engineering, Inc. (KEI) at the referenced site per our proposal dated March 4, 1988. This report covers the work performed by KEI from July through October, 1988.

BACKGROUND

KEI's field activities at the site began in September, 1987, when three underground gasoline storage tanks and one waste oil tank were removed from the site. KEI collected native soil and ground water samples. Eight soil samples from the fuel tank pit had total petroleum hydrocarbon (TPH) as gasoline levels ranging from <1.0 to 3200 ppm. The waste oil sample had non-detectable levels of TPH as diesel and 150 ppm total oil and grease (TOG). The ground water sample had 6.3 ppm benzene. All analyses were performed by HAZCAT Mobile Organics Lab.

To investigate the degree and extent of ground water contamination, KEI installed three monitoring wells in February, 1988. Water samples collected from the three wells had benzene levels of <0.5 ppb for MW-2 and MW-3 and 2000 ppb from MW-1. Analyses were performed by HAZCAT Mobile Organics Lab. Based on these results, KEI proposed a six month program of monthly monitoring and quarterly sampling.

FIELD ACTIVITIES

The three wells were monitored three times and sampled once during the period. During monitoring, the wells were checked for depth to water, using an electronic sounder, odor, and visual presence of floating product. Monitoring data are summarized in Table 1. No floating product was noted in any of the wells during the period.

TITLE 22 ENVIRONMENTAL HEALTH
 (Register 24, No. 41—10-12-84)

§ 66680
 (p. 1800.9)

- 320. Ethylbenzene, Phenylethane (T,F)
- 321. Ethyl butyrate, Ethyl butanoate (F)
- 322. Ethyl chloride, Chloroethane (T,F)
- 323. *Ethyl chloroformate, Ethyl chloroformate (T,C,F,R)
- 324. *Ethyl dichloroarsine, Dichloroethylarsine (T,R)
- 325. *Ethyl dichlorosilane (T,C,F,R)
- 326. *Ethylene cyanohydrin, beta-Hydroxypropionitrile (T,R)
- 327. Ethylene diamine (T)
- 328. Ethylene dibromide; 1,2-Dibromoethane (T)
- 329. Ethylene dichloride; 1,2-Dichloroethane (T,F)
- 330. *Ethyleneimine, Aziridine, EI (T,F,R)
- 331. Ethylene oxide, Epoxyethane (T,F,R)
- 332. Ethyl ether, Diethyl ether (F,R)
- 333. Ethyl formate (T,F)
- 334. *Ethyl mercaptan, Ethanethiol (T,F,R)
- 335. Ethyl nitrate (F,R)
- 336. Ethyl nitrile (F,R)
- 337. *Ethylphenyl dichlorosilane (T,C,R)
- 338. Ethyl propionate (F)
- 339. *Ethyltrichlorosilane (T,R)
- 340. *Fensulfothion, BAYER 25141, DASANIT, O,O-Diethyl-O-[4-(methylsulfinyl)phenyl] phosphorothioate (T)
- 341. *Ferric arsenate (T)
- 342. Ferric chloride, Iron (III) chloride (T,C)
- 343. *Ferrous arsenate, Iron arsenate (T)
- 344. *Fluoboric acid, Fluoroboric acid (T,C)
- 345. Fluoride salts (T)
- 346. Fluorine (T,C,R)
- 347. *Fluoroacetanilide, AFL 1082 (T)
- 348. *Fluoroacetic acid and salts, Compound 1090 (T)
- 349. *Fluorosulfonic acid, Fluorosulfonic acid (T,C,R)
- 350. Formaldehyde, Methanal (T,F)
- 351. Formic acid, Methanoic acid (T,C)
- 352. Fulminate of mercury, Mercuric cyanate (T,R)
- 353. *FURADAN, NIA 10,242, Carbofuran, 2,3-Dihydro-2,2-dimethyl-7-benzofuranymethylcarbamate (T)
- 354. Furan, Fufuran (T,F,R)
- 355. Gasoline (F)
- 356. *GB, O-Isopropyl methyl phosphoryl fluoride (T)
- 357. Glutaraldehyde (T)
- 358. Glycerol monolactate trinitrate (R)
- 359. Glycol dinitrate, Ethylene glycol dinitrate (R)
- 360. Gold fulminate, Gold cyanate (R)
- 361. Guanidine nitrate (F,R)
- 362. Guanyl nitrosaminoquanylidene hydrazine (R)
- 363. *Guthion; O,O-Dimethyl-S-4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl phosphorodithioate (T)
- 364. Hafnium (F,T,R)
- 365. *Heptachlor; 1,4,5,6,7,8,8-Heptachlor-3a,4,7,7a-tetrahydro-4,7-methanoindene (T)

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 (p. 1800.10)

- 366. n-Heptane (and isomers) (T,F)
- 367. 1-Heptene (and isomers) (T,F)
- 368. *Hexadecyltrichlorosilane (T,C,R)
- 369. Hexaethyl tetraphosphate, HETP (T)
- 370. Hexafluorophosphoric acid (T,C)
- 371. Hexamethylenediamine; 1,6-Diaminohexane (T)
- 372. n-Hexane (and isomers) (T,F)
- 373. 1-Hexene (and isomers) (T,F)
- 374. n-Hexylamine, 1-Aminohexane (and isomers) (T,F)
- 375. *Hexyltrichlorosilane (T,C,R)
- 376. *Hydrazine, Diamine (T,F)
- 377. Hydrazine azide (T,R)
- 378. Hydrazoic acid, Hydrogen azide (T,R)
- 379. *Hydrolic acid, Hydrogen iodide (T,C,R)
- 380. *Hydrobromic acid, Hydrogen bromide (T,C,R)
- 381. *Hydrochloric acid, Hydrogen chloride, Muriatic Acid (T,C,R)
- 382. *Hydrocyanic acid, Hydrogen cyanide (T,F,R)
- 383. *Hydrofluoric acid, Hydrogen fluoride (T,C,R)
- 384. *Hydrofluosilicic acid, Fluosilicic acid (T,C)
- 385. Hydrogen peroxide (T,C,F,R)
- 386. *Hydrogen selenide (T,F)
- 387. *Hydrogen sulfide (T,F)
- 388. *Hypochlorite compounds (T,C,F,H)
- 389. Iodine (T)
- 390. Iodine compounds (T)
- 391. Iodine monochloride (T,C,R)
- 392. Isocane; 2,2,4-Trimethylpentane (T,F)
- 393. Isocetene (mixture of isomers) (F)
- 394. Isopentane, 2-Methylbutane (F)
- 395. Isoprene, 2-Methyl-1,3-butadiene (T,F,R)
- 396. Isopropanol, Isopropyl alcohol, 2-Propanol (T,F)
- 397. Isopropyl acetate (T,F)
- 399. Isopropylamine, 2-Aminopropane (T,F)
- 400. Isopropyl chloride, 2-Chloropropane (F)
- 401. Isopropyl ether, Diisopropyl ether (F,R)
- 402. Isopropyl mercaptan, 2-Propanethiol (T,F)
- 404. *meta-Isopropylphenyl-N-methylcarbamate, Ac 5,727 (T)
- 405A. *Kepone; 1,1a,3,3a,4,5,5a,5b,6-Decachlorooctahydro-1,2,4-metheno-2H-cyclobuta (cd) pentalen-2-one, Chlorecone (T)
- 405B. Lauroyl peroxide, Di-n-dodecyl peroxide (T,C,F,R)
- 406. Lead compounds (T)
- 407. Lead acetate (T)
- 408. *Lead arsenate, Lead orthoarsenate (T)
- 409. *Lead arsenite (T)
- 410. Lead azide (T,R)

TITLE 22
 (Register 24, No. 41—10-12-84)

TITLE 22 ENVIRONMENTAL HEALTH
 (Register 24, No. 41—10-12-84)

§ 66680
 (p. 1800.11)

- 411. Lead carbonate (T)
- 412. Lead chloride (T,R)
- 413. *Lead cyanide (T)
- 414. Lead 2,4-dinitrosorcinato (T,R)
- 415. Lead mononitrosorcinato (T,R)
- 416. Lead nitrate (T,F)
- 417. Lead oxide (T)
- 418. Lead stypnate, Lead trinitrosorcinato (T,R)
- 419. *Lewisite, beta-Chlorovinyl dichloroarsine (T)
- 420. *Lithium (C,F,R)
- 421. *Lithium aluminum hydride, LAH (C,F,R)
- 422. *Lithium amide (C,F,R)
- 423. *Lithium ferrosilicon (F,R)
- 424. *Lithium hydride (C,F,R)
- 425. *Lithium hypochlorite (T,C,F,R)
- 426. Lithium peroxide (C,F,R)
- 427. Lithium silicon (F,R)
- 428. *London purple, Mixture of arsenic trioxide, aniline, lime, and ferrous oxide (T)
- 429. *Magnesium (F,R)
- 430. *Magnesium arsenate (T)
- 431. *Magnesium arsenite (T)
- 432. *Magnesium chlorate (F,R)
- 433. Magnesium nitrate (F,R)
- 434. Magnesium perchlorate (T,F,R)
- 435. Magnesium peroxide, Magnesium dioxide (F)
- 436. *Maleic anhydride (T)
- 437. Manganese (powder) (F)
- 438. Manganese acetate (T)
- 439. *Manganese arsenate, Manganous arsenate (T)
- 440. Manganese bromide, Manganous bromide (T)
- 441. Manganese chloride, Manganous chloride (T)
- 442. Manganese methylecyclopentadienyl tricarbonyl (T)
- 443. Manganese nitrate, Manganous nitrate (T,F)
- 444. Mannitol hexanitrate, Nitromannite (R)
- 445. *MECARBAM; O,O-Diethyl S-(N-ethoxycarbonyl N-methylcarbamoyl-methyl) phosphorodithioate (T)
- 446. *Medinolers acetate, 2-tert-Butyl-2-methyl-4,6-dinitrophenyl acetate (T)
- 447. para-Menthane hydroperoxide, Paramenthane hydroperoxide (F)
- 448. Mercuric acetate, Mercury acetate (T)
- 449. Mercuric ammonium chloride, Mercury ammonium chloride (T)
- 450. Mercuric benzoate, Mercury benzoate (T)
- 451. Mercuric bromide, Mercury bromide (T)
- 452. *Mercuric chloride, Mercury chloride (T)
- 453. *Mercuric cyanide, Mercury cyanide (T)
- 454. Mercuric iodide, Mercury iodide (T)
- 455. Mercuric nitrate, Mercury nitrate (T,F)
- 456. Mercuric oleate, Mercury oleate (T)

However, the ground water in MW-1 had a strong odor during the October monitoring.

Water samples were taken from the wells on October 12, 1988. Prior to sampling, the wells were purged at least five well volumes using an acrylic surface bailer. Samples were then collected using a clean Teflon bailer. Samples were decanted into clean VOA vials which were sealed with Teflon-lined screw caps and stored on ice until delivery to a state certified laboratory.

LABORATORY ANALYSES

The water samples were analyzed at Sequoia Analytical Laboratory in Redwood City for TPH as gasoline, benzene, toluene, xylene and ethylbenzene (BTX&E) concentrations using EPA methods 5030, 8020 and 8015. Well MW-3, adjacent to the waste oil tank, was not analyzed for waste oil constituents because non-detectable levels were found in the first sampling in February, 1988. The results of the analyses are summarized in Table 2. Copies of the analytical results and chain of custody forms are attached to this report.

DISCUSSIONS AND RECOMMENDATIONS

The analytical results show non-detectable levels of TPH as gasoline and BTX&E in wells MW-2 and MW-3, unchanged from the previous sampling in February, 1988. Well MW-1 has 180 ppb benzene and 14,000 ppb TPH as gasoline, which represents a decrease in the levels found in the February, 1988 sampling (benzene of 2,000 ppb and TPH of 95,000 ppb).

Based on the persistent elevated level of benzene found in MW-1, KEI recommends continued monitoring, sampling, and analysis of the existing wells. KEI also recommends installation of additional monitoring wells to continue investigation of the extent of ground water contamination, per the Regional Water Quality Control Board guidelines.

A copy of this report should be sent to Mr. Wyman Hong of the Alameda County Flood Control District, to the Alameda County Department of Health, and to the Regional Water Quality Control Board, San Francisco Bay Region.

§ 66680
(p. 1800.12)

ENVIRONMENTAL HEALTH

TITLE 22

(Register 64, No. 41—10-13-84)

- 457. Mercuric oxide (red and yellow) (T,F)
- 458. Mercuric oxycyanide (T,R)
- 459. Mercuric-potassium iodide, Mayer's reagent (T)
- 460. Mercuric salicylate, Salicylated mercury (T)
- 461. Mercuric sulfide, Mercuric dioxysulfide (T)
- 462. Mercuric sulfate, Mercury sulfite (T)
- 463. Mercuric thiocyanide, Mercury thiocyanate (T)
- 464. Mercuriol, Mercury nucleate (T)
- 465. Mercurous bromide (T)
- 466. Mercurous gluconate (T)
- 467. Mercurous iodide (T)
- 468. Mercurous nitrate (T,R)
- 469. Mercurous oxide (T)
- 470. Mercurous sulfide, Mercury bisulfate (T)
- 471. Mercury (T)
- 472. Mercury compounds (T)
- 473. Metal carbonyls (T)
- 474. Metal hydrides (F,R)
- 475. Metal powders (F,F)
- 476. Metal powders (T,F)
- 477A. *Methomyl, LANNATE, S-Methyl-N-((methyl-carbamoyl)oxy)thioacetimidate (T)
- 477B. *Methoxychlor; 1,1,1-Trichloro-2,2-bis(p-methoxyphenyl)ethane, CHEMFLOR, MAILATE (T)
- 478. *Methoxyethylmercuric chloride, AGALLOL, ABETAN (T)
- 479. Methyl acetate (T,F)
- 480. Methyl acetone (Mixture of acetone, methyl acetate, and methyl alcohol) (T,F)
- 481. Methyl alcohol, Methanol (T,F)
- 482. *Methylaluminum sesquibromide (F,R)
- 483. *Methylaluminum sesquichloride (F,R)
- 484. Methylamine, Amlsomethane (T,F)
- 485. N-Methylamine (T)
- 486. *Methyl bromide, Bromomethane (T)
- 487. 2-Methyl-1-butene (F)
- 488. 3-Methyl-1-butene (F)
- 489. Methyl butyl ether (and isomers) (T,F)
- 490. Methyl butyrate (and isomers) (T,F)
- 491. Methyl chloride, Chloromethane (T,F)
- 492. *Methyl chloroformate, Methyl chlorocarbonate (T,F,R)
- 493. *Methyl chloromethyl ether, CMME (T,F)
- 494. Methylcyclohexane (T,F)
- 495. *Methyldichloroarsine (T)
- 496. *Methyldichlorosilane (T,F,R)
- 497. *4,4-Methylene bis(2-chloroaniline), MOCA (T)
- 498. Methyl ethyl ether (T,F)
- 499. Methyl ethyl ketone, 2-Butanone (T,F)
- 500. Methyl ethyl ketone peroxide (T,F)
- 501. Methyl formate (T,F)
- 502. *Methyl hydrazine, Monomethyl hydrazine, MMH (T,F)

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ENVIRONMENTAL HEALTH

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- 503. *Methyl isocyanate (T,F)
- 504. Methyl isopropenyl ketone, 3-Methyl-3-butene-2-one (T,F)
- 505. *Methylmagnesium bromide (C,F,R)
- 506. *Methylmagnesium chloride (C,F,R)
- 507. *Methylmagnesium iodide (C,F,R)
- 508. Methyl mercaptan, Methanethiol (T,F)
- 509. Methyl methacrylate (monomer) (T,F)
- 510. *Methyl parathion; O,O-Dimethyl-O-para-nitrophenylphosphorothioate (T)
- 511. Methyl propionate (F)
- 512. *Methyltrichlorosilane (T,C,F,R)
- 513. Methyl valerate, Methyl pentanoate (and isomers) (F)
- 514. Methyl vinyl ketone, 3-Butene-2-one (T,F)
- 515A. *Mevinphos, PHOSDRIN, 2-Carbomethoxy-1-methylvinyl dimethyl phosphite (T)
- 515B. *Mixer; 1,1a,2,2,3,3a,4,5,5,5a,5b,6-Dodecachlorooctahydro-1,3,4-metheno-1H-cyclobuta (cd) pentalene, Decchlorans (T)
- 516. *MOCAP, O-Ethyl-S,S-dipropyl phosphorodithioate (T)
- 517. Molybdenum (powder) (F)
- 518. Molybdenum trioxide, Molybdenum anhydride (T)
- 519. Molybdic acid and salts (T)
- 520. Monochloroacetic acid, Chloroacetic acid, MCA (T,C)
- 521. Monochloroacetone, Chloroacetone, 1-Chloro-2-propanone (T)
- 522. Monofluorophosphoric acid (T,C)
- 523. Naphtha (of petroleum or coal tar origin), Petroleum ether, Petroleum naphtha (T,F)
- 524. Naphthalene (T,S)
- 525. *alpha-Naphthylamine, 1-NA (T)
- 526. *beta-Naphthylamine, 2-NA (T)
- 527. Naphesane; 2,2-Dimethylbutane (T,F)
- 528. Nickel (powder) (T,F)
- 529. Nickel acetate (T)
- 530. Nickel antimonide (T)
- 531. *Nickel arsenate, Nickelous arsenate (T)
- 532. *Nickel carbonyl, Nickel tetracarbonyl (T)
- 533. Nickel chloride, Nickelous chloride (T)
- 534. *Nickel cyanide (T)
- 535. Nickel nitrate, Nickelous nitrate (T,F,R)
- 536. Nickel selenide (T)
- 537. Nickel sulfate (T)
- 538. Nicotine, beta-pyridyl-alpha-N-methyl pyrrolidine (T)
- 539. Nicotine salts (T)
- 540. Nitric acid (T,C,F)
- 541. Nitroaniline, Nitraniline (ortho, meta, para) (T,R)
- 542. *Nitrobenzol, Nitrobenzene (T)
- 543. *4-Nitrophenyl, 4-NBP (T)
- 544. Nitro carbo nitrate (F,R)
- 545. Nitrocellulose, Cellulose nitrate, Cuncotton, Pyroxylin, Collodion, Pyroxylin (nitrocellulose) in ether and alcohol (F,R)

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(p. 1800.13)

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ENVIRONMENTAL HEALTH

TITLE 22

(p. 1800.14)

(Register 64, No. 41—10-13-84)

- 546. Nitrochlorobenzene, Chloronitrobenzene (ortho,meta,para) (T)
- 547. Nitrogen mustard (T,C)
- 548. Nitrogen tetroxide, Nitrogen dioxide (T,F)
- 549. Nitroglycerin, Trinitroglycerin (T,F,R)
- 550. Nitrohydrochloric acid, Aqua regia (T,C,F)
- 551. *Nitrophenol (ortho, meta, para) (T)
- 552. *N-Nitrosodimethylamine, Dimethyl nitrosamine (T)
- 553. Nitrosoguanidine (R)
- 554. Nitrostarch, Starch nitrate (F,R)
- 555. Nitroxyol, Nitroxylene, Dimethylnitrobenzene (2,4-2,4-2,6-isomers) (T)
- 556. 1-Nonene, 1-Nonylene (and isomers) (T,F)
- 557. *Nonyltrichlorosilane (T,R)
- 558. *Octadecyltrichlorosilane (T,R)
- 559. n-Octane (and isomers) (T,F)
- 560. 1-Octene, 1-Carylene (T,F)
- 561. *Octyltrichlorosilane (T,R)
- 562. *Oleum, Fuming sulfuric acid (T,C,R)
- 563. Osmium compounds (T)
- 564. Oxalic acid (T)
- 565. *Oxygen difluoride (T,C,R)
- 566. *Para-oxon, MINTACOL, O,O-Diethyl-O-para-nitrophenyl phosphite (T)
- 567. *Parathion; O,O-Diethyl-O-para-nitrophenyl phosphorothioate (T)
- 570A. *Pentaborane (T,F,R)
- 570B. Pentachlorophenol, PCP, DOWICIDE 7 (T)
- 571. Pentaerythritol tetranitrate, Pentaerythritol tetranitrate (R)
- 572. n-Pentane (and isomers) (T,F)
- 573. 2-Pentaneone, Methyl propyl ketone (and isomers) (T,F)
- 574. Peracetic acid, Peroxyacetic acid (T,C,F,R)
- 575. Perchloric acid (T,C,F,R)
- 576. Perchloroethylene, Tetrachloroethylene (T)
- 577. *Perchloromethyl mercaptan, Trichloromethylsulfenyl chloride (T)
- 578. Perchloryl fluoride (T,C,F)
- 580. Phenol, Carboic acid (T,C)
- 581. *Phenyldichloroarsine (T,J)
- 582. Phenylenediamine, Diaminobenzene (ortho,meta,para) (T)
- 583. Phenylhydrazine hydrochloride (T)
- 584. *Phenylphenol, Orthozenol, DOWICIDE 1 (T)
- 585. *Phenyltrichlorosilane (T,R)
- 586. *Phorate, THIMET, O,O-Diethyl-S-[(Ethylthio) methyl] phosphorodithioate (T)
- 587. *Phosolan, CYOLAN, 2-(Diethoxyphosphinylimino)-1,2-dithiolane (T)
- 588. *Phosgene, Carbonyl chloride (T,R)
- 589. *Phosphankton, DIMECRON, 2-Chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphite (T)
- 590. *Phosphine, Hydrogen phosphide (T,F)
- 591. Phosphoric acid (C)
- 592. Phosphoric anhydride, Phosphorus pentoxide (C,F)

LIMITATIONS

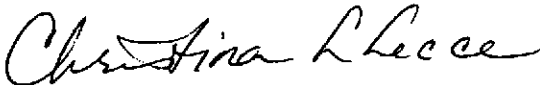
Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants. Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

The results of this study are based on the data obtained from the field and laboratory investigations. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

If you have any questions regarding this report, please do not hesitate to call me at (415) 676-9100 or (707)746-6915.

Sincerely,

Kaprealian Engineering, Inc.



for Jean Semansky
Geologist



Gary S. Johnson
Registered Geologist

License #4315
Exp. date 6/30/90

Attachment: Tables 1 and 2
Location Map
Location Plan
Laboratory analyses
Chain of custody form

TITLE 22

ENVIRONMENTAL HEALTH

(Register 64, No. 41—70-12-04)

§ 66680

(p. 1800.15)

593. Phosphorus (amorphous, red) (T,F,R)
 594. *Phosphorus (white or yellow) (T,F,R)
 595. *Phosphorus oxybromide, Phosphoryl bromide (T,C,R)
 596. *Phosphorus oxychloride, Phosphoryl chloride (T,C,R)
 597. *Phosphorus pentachloride, Phosphoric chloride (T,C,F,R)
 598. *Phosphorus pentasulfide, Phosphoric sulfide (T,C,F,R)
 599. *Phosphorus sesquisulfide, Tetraphosphorus trisulfide (T,C,F,R)
 600. *Phosphorus tribromide (T,C,R)
 601. *Phosphorus trichloride (T,C,R)
 602. Picramide, Trinitroaniline (T,R)
 603. Picric acid, Trinitrophenol (T,R)
 604. Picryl chloride, 2-Chloro-1,3,5-trinitrobenzene (T,R)
 605. *Platinum compounds (T)
 606. *Polychlorinated biphenyls, PCB, Askarel, AROCLOR, CHLOREX-TOL, INERTEEN, PYRANOL (T)
 607. Polyvinyl nitrate (F,R)
 608. POTASAN; O,O-Diethyl-O-(4-methylumbelliferone) phosphorothioate (T)
 609. *Potassium (C,F,R)
 610. *Potassium arsenate (T)
 611. *Potassium arsenite (T)
 612. *Potassium bifluoride, Potassium acid fluoride (T,C)
 613. *Potassium binoxalate, Potassium acid oxalate (T)
 614. *Potassium bromate (T,F)
 615. *Potassium cyanide (T)
 616. *Potassium dichloroisocyanurate (T,F)
 617. *Potassium dichromate, Potassium bichromate (T,C,F)
 618. *Potassium fluoride (T)
 619. *Potassium hydride (C,F,R)
 620. *Potassium hydroxide, Caustic potash (T,C)
 621. *Potassium nitrate, Saltpeter (F,R)
 622. *Potassium nitrite (F,R)
 623. *Potassium oxalate (T)
 624. *Potassium perchlorate (T,F,R)
 625. *Potassium permanganate (T,C,F)
 626. *Potassium peroxide (C,F,R)
 627. *Potassium sulfide (T,F)
 628. *Propargyl bromide, 3-Bromo-1-propyne (T,F)
 629. *beta-Propiolactone, BPL (T)
 630. *Propionaldehyde, Propanal (T,F)
 631. *Propionic acid, Propanoic acid (T,C,F)
 632. n-Propyl acetate (T,F)
 633. n-Propyl alcohol, 1-Propanol (T,F)
 634. n-Propylamine (and isomers) (T,F)
 635. *Propyleneimine, 2-Methylaziridine (T,F)
 636. Propylene oxide (T,F)
 637. n-Propyl formate (T,F)
 638. n-Propyl mercaptan, 1-Propanethiol (T,F)

§ 66680

ENVIRONMENTAL HEALTH

(p. 1800.16)

640. *n-Propyltrichlorosilane (T,C,F,R)
 641. *Prothoate, FOSITION, FAC; O,O-Diethyl-S-carboethoxyethyl phosphorodithioate (T)
 642. Pyridine (T,F)
 643. *Pyrosulfuryl chloride, Disulfuryl chloride (T,C,R)
 644. *Quinone; 1,4-Benzoquinone (T)
 645. Raney nickel (F)
 646. *Schradan, Octamethyl pyrophosphoramide, OMPA (T)
 647A. *Selenium (T)
 647B. *Selenium compounds (T)
 648. *Selenium fluoride (T)
 649. *Selenous acid, Selenious acid and salts (T)
 650. *Silicon tetrachloride, Silicon chloride (T,C,R)
 651. *Silver acetylides (T,R)
 652. Silver azide (T,R)
 653. Silver compounds (T)
 654. Silver nitrate (T)
 655. Silver stypnate, Silver trinitroresorcinate (T,R)
 656. Silver tetrazene (T,R)
 657. *Sodium (C,F,R)
 658. Sodium aluminate (C)
 659. *Sodium aluminum hydride (C,F,R)
 660. *Sodium amide, Sodamide (C,F,R)
 661. *Sodium arsenate (T)
 662. *Sodium arsenite (T)
 663. Sodium azide (T,R)
 664. *Sodium bifluoride, Sodium acid fluoride (T,C)
 665. Sodium bromate (T,F)
 666. *Sodium cacodylate, Sodium dimethylarsenate (T)
 667. Sodium carbonate peroxide (F)
 668. Sodium chlorate (T,F)
 669. Sodium chloride (T,F)
 670. Sodium chromate (T,C)
 671. *Sodium cyanide (T)
 672. Sodium dichloroisocyanurate (F)
 673. Sodium dichromate, Sodium bichromate (T,C,F)
 674. Sodium fluoride (T)
 675. *Sodium hydride (T,C,F,R)
 676. Sodium hydrosulfite, Sodium hyposulfite (F)
 677. Sodium hydroxide, Caustic soda, Lye (T,C)
 678. *Sodium hypochlorite (T,F,R)
 679. *Sodium methylate, Sodium methoxide (C,F,R)
 680. Sodium molybdate (T)
 681. Sodium nitrate, Soda niter (T,F,R)
 682. Sodium nitrite (T,F,R)
 683. Sodium oxide, Sodium monoxide (T,C)
 684. Sodium perchlorate (T,F,R)
 685. Sodium permanganate (T,F)
 686. *Sodium peroxide (T,F,R)

TITLE 22

(Register 64, No. 41—70-12-04)

TITLE 22

ENVIRONMENTAL HEALTH

(Register 64, No. 41—70-12-04)

§ 66680

(p. 1800.17)

687. Sodium picramate (T,F,R)
 688. *Sodium potassium alloy, NaK, NaK (C,F,R)
 689. *Sodium selenate (T)
 690. Sodium sulfide, Sodium hydrosulfide (T,F)
 691. Sodium thiocyanate, Sodium sulfocyanate (T)
 692. Stannic chloride, Tin tetrachloride (T,C)
 693. *Strontium arsenate (T)
 694. Strontium nitrate (T,F,R)
 695. Strontium peroxide, Strontium dioxide (F,R)
 696. *Strychnine and salts (T)
 697. Styrene, Vinylbenzene (T,F)
 698. Succinic acid peroxide (T,F)
 699. Sulfide salts (soluble) (T)
 700. *Sulfotep, DITHIONE, BLADAFUM, Tetraethyl dithiopyrophosphate, TEDP (T)
 701. *Sulfur chloride, Sulfur monochloride (T,C,R)
 702. *Sulfur mustard (T,C,R)
 703. *Sulfur pentafluoride (T,C)
 704. Sulfur trioxide, Sulfuric anhydride (T,C,F)
 705. Sulfuric acid, Oil of vitriol, Battery acid (T,C)
 706. Sulfurous acid (T,C)
 707. *Sulfuryl chloride, Sulfonyl chloride (T,C,R)
 708. *Sulfuryl fluoride, Sulfonyl fluoride (T,C,R)
 709. *SUPRACIDE, ULTRACIDE, S-(2-Methoxy-2-oxo-1,3,4-thiadiazol-3(2H)-yl) methyl]-O,O-dimethyl phosphorodithioate (T)
 710. *SURECIDE, Cyanophenphos, O-para-Cyanophenyl-O-ethyl phenyl phosphonothioate (T)
 711. *Tellurium hexafluoride (T,C)
 712. *TELODRIN, Isobenzan; 1,3,4,5,6,7,8,8-Octachloro-1,2,3,4,7,7a-hexahydro-4,7-methanonobenzofuran (T)
 713. *TEMK, Aldicarb, 2-Methyl-2-(methylthio) propionaldehyde-O-(methylcarbamoyl) oxime (T)
 714. *2,3,7,8-Tetrachlorodibenzo-para-dioxin, TCDD, Dioxin (T)
 715. syn-Tetrachloroethane (T)
 717. *Tetraethyl lead, TEL (and other organic lead) (T,F)
 718. *Tetraethyl pyrophosphate, TEPP (T)
 719A. Tetrahydrofuran, THF (T,F)
 719B. Tetrahydrophthalic anhydride, Menthyltetrahydrophthalic anhydride (T)
 720. TETRALIN, Tetrahydronaphthalene (T)
 721. Tetranethyl lead, TML (T,F)
 722. *Tetranethyl succinonitrile (T)
 723. *Tetranitronethane (T,F,R)
 724. *Tetraol, ANIMERT V-101; S-para-Chlorophenyl-2,4,6-trichlorophenyl sulfide (T)
 725. Tetrazene, 4-Amidino-1-(nitrosamino-amidino)-1-tetrazene (T,R)
 726. *Thallium (T)
 727. *Thallium compounds (T)
 728. *Thaliozo sulfate, Thallium sulfate, RATOX (T)

KEI-P87-097B-1
 October 27, 1988

TABLE 1
 GROUND WATER MONITORING DATA

<u>Date</u>	<u>Well No.</u>	<u>Depth to Water</u> (feet)	<u>Sheen</u>	<u>Odor</u>	<u>Water Purged</u> (gallons)
10/12/88	MW-1	10.58	none	strong	4
	MW-2	11.00	none	none	6
	MW-3	11.40	none	none	6
8/25/88	MW-1	10.33	none	none	0
	MW-2	10.83	none	none	0
	MW-3	11.25	none	none	0
7/25/88	MW-1	10.30	none	slight	15
	MW-2	11.75	none	none	8
	MW-3	11.25	none	none	19

TABLE 2
 RESULTS OF GROUND WATER ANALYSES
 (Analyses are in Parts Per Billion)

<u>Date</u>	<u>Sample Well #</u>	<u>Depth (feet)</u>	<u>TPh as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylene</u>	<u>Ethyl-benzene</u>
10/12/88	MW-1	10.58	14,000	180	420	750	110
	MW-2	11.00	ND	ND	ND	ND	ND
	MW-3	11.40	ND	ND	ND	ND	ND
2/17/88	MW-1	9.50	95,000	2000	5900	10,000	1100
	MW-2	10.21	ND	ND	ND	ND	ND
	MW-3	10.67	ND	ND	ND	ND	ND
<u>Detection Limits</u>			50	0.5	0.5	0.5	0.5

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(p. 1800.18)

ENVIRONMENTAL HEALTH

TITLE 21

(Register 64, No. 41—10-13-64)

- 729. *Thiocarbonylchloride, Thiophosgene (T,C,R)
- 730. *Thionazin, ZINOPHOS; O,O-Tetramethylthiuram monosulfide (T)
- 731. *Thionyl chloride, Sulfur oxychloride (T,C,R)
- 732. *Thiophosphoryl chloride (T,C,R)
- 733. Thorium (powder) (F)
- 734. Tin compounds (organic) (T)
- 735. Titanium (powder) (F)
- 736. Titanium sulfate (T)
- 737. *Titanium tetrachloride, Titanic chloride (T,C,R)
- 738. Toluene, Methylbenzene (T,F)
- 739. *Toluene 2,4-dithiocyanate, TDI (T,R)
- 740A. Toluidine, Aminotoluene (ortho,meta,para) (T)
- 740B. *Toxaphene, Polychlorocamphene (T)
- 741. *TRANID, exo-3-Chloro-endo-6-cyano-2-norbornanone-O-(methylcarbamoyl) oxime (T)
- 743. 1,1,2-Trichloroethane (T)
- 744. Trichloroethylene; Tricloroethene (T)
- 745. Trichloroisocyanuric acid (T,I,F)
- 746. *2,4,6-Trichlorophenoxyacetic acid; 2,4,6-T (T)
- 747. *Trichlorosilane, Silicochloroform (T,C,F,R)
- 748. Trimethylamine, TMA (T,F)
- 749. Trinitroanisole; 2,4,6-Trinitrophenyl methyl ether (T,R)
- 750. 1,3,5-Trinitrobenzene, TNB (T,R)
- 751. 2,4,6-Trinitrobenzoic acid (T,R)
- 752. Trinitronaphthalene, Naphlite (T,R)
- 753. 2,4,6-Trinitroresorcinol, Styptic acid (T,R)
- 754. 2,4,6-Trinitrotoluene, TNT (T,F,R)
- 755. *tris(1-Azolidinyl) phosphine oxide, Triethylenephosphoramide, TEPA (T)
- 756. Tungstic acid and salts (T)
- 757. Turpentine (T,F)
- 758. Uranyl nitrate, Uranium nitrate (T,F,R)
- 759. Urea nitrate (T,F,R)
- 760. n-Valeraldehyde, n-Pentanal (and isomers) (T,F)
- 761. Vanadic acid salts (T)
- 762. Vanadium oxytrichloride (T,C)
- 763. *Vanadium pentoxide, Vanadic acid anhydride (T)
- 764. Vanadium tetrachloride (T,C)
- 765. Vanadium tetroxide (T)
- 766. Vanadium trioxide, Vanadium sesquioxide (T)
- 767. Vanadyl sulfate, Vanadium sulfate (T)
- 768. Vinyl acetate (F,T)
- 769. *Vinyl chloride (T,F)
- 770. Vinyl ethyl ether (F)
- 771. Vinylidene chloride, VC (T,F)
- 772. Vinyl isopropyl ether (F)
- 773. *Vinyltrichlorosilane (T,C,F,R)
- 774. VX, O-Ethyl methyl phosphonyl N,N-diisopropyl thiocholine (T)
- 775. *WEPSYN 155, WP 155, Triamphol, para-(5-Amino-3-phenyl-1H-1,2,4-triazol-1-yl)-N,N,N',N'-tetramethyl phosphonic diamide (T)

TITLE 22

ENVIRONMENTAL HEALTH

(Register 64, No. 41—10-13-64)

§ 66680
(p. 1800.19)

- 776. Xylene, Dimethylbenzene (ortho,meta,para) (T,F)
- 777. Zinc (powder) (F)
- 778. Zinc ammonium nitrate (T,F)
- 779. *Zinc arsenate (T)
- 780. *Zinc arsenite (T)
- 781. Zinc chloride (T,C)
- 782. Zinc compounds (T)
- 783. *Zinc cyanide (T)
- 784. Zinc nitrate (T,F,R)
- 785. Zinc permanganate (T,F)
- 786. Zinc peroxide, Zinc dioxide (T,F,R)
- 787. *Zinc phosphide (T,F,R)
- 788. Zinc sulfate (T)
- 789. Zirconium (powder) (F)
- 790. *Zirconium chloride, Zirconium tetrachloride (T,C,R)
- 791. Zirconium picramate (F)



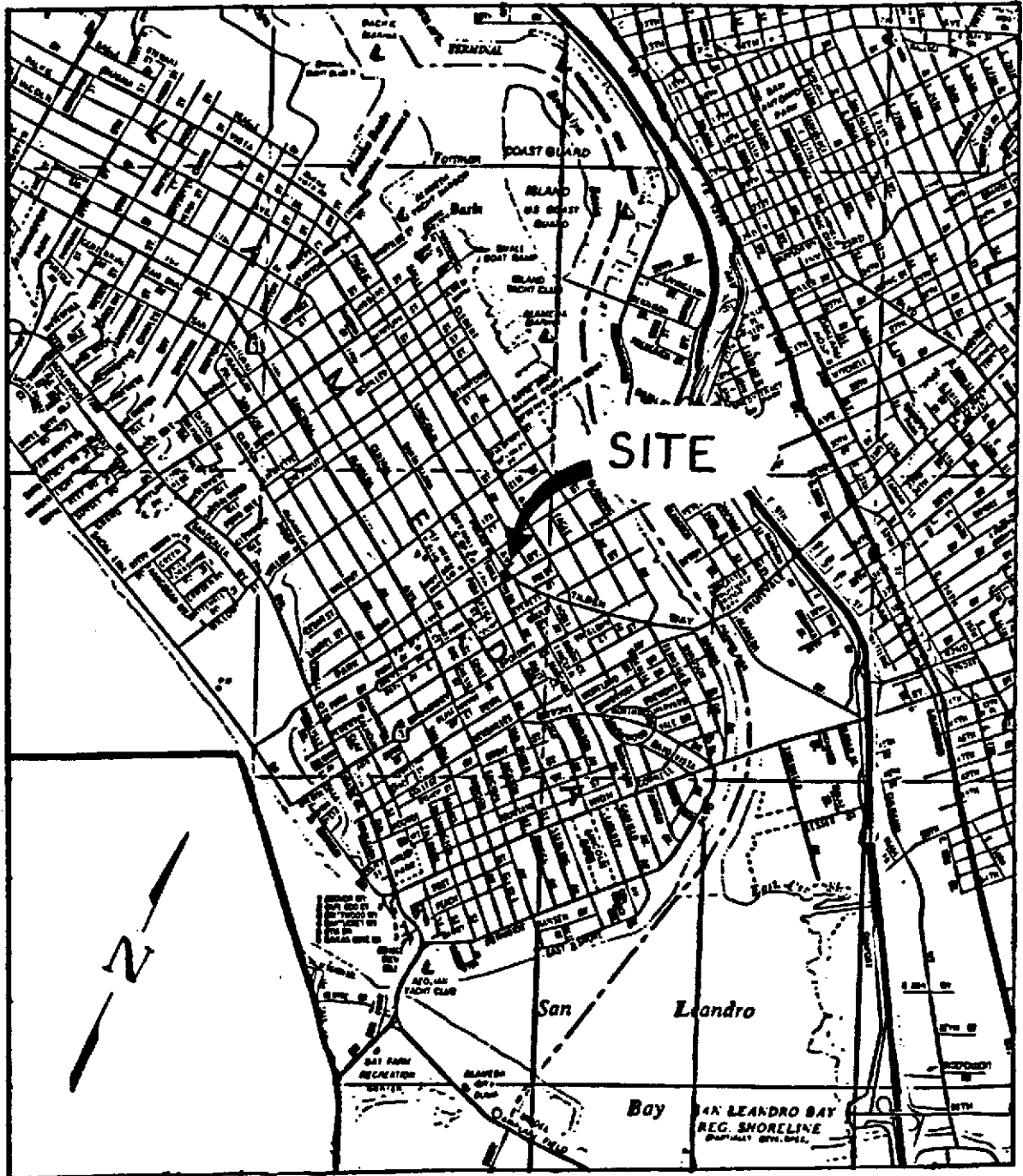
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

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LOCATION MAP

792. Acetylene sludge (C)
793. Acid and water (C)
794. Acid sludge (C)
795. AFU Floc (F)
796. Alkaline caustic liquids (C)
797. Alkaline cleaner (C)
798. Alkaline corrosive battery fluid (C)
799. Alkaline corrosive liquids (C)
800. Asbestos waste (T)
801. Ashes (T,C)
802. Bag house wastes
803. Battery acid (C)
804. Beryllium waste (T)
805. Bilge water (T)
806. Boiler cleaning waste (T,C)
807. Bunker Oil (T,F)
808. Catalyst
809. Caustic sludge (C)
810. Caustic wastewater (C)
811. Chemical cleaners
812. Chemical toilet waste
813. Cleaning solvents (F)
814. Corrosion inhibitor (T,C)
815. Data processing fluid (F)
816. Drilling fluids
817. Drilling mud
818. Dyes
819. Etching acid liquid or solvent (C,F)
820. Fly ash (T,C)
821. Fuel waste (T,F)
822. Insecticides (T)
823. Laboratory waste
824. Lime and sulfur sludge (C)
825. Lime sludge (C)
826. Lime wastewater (C)
827. Liquid cement
828. Liquid cleaning compounds
829. Mine tailings
830. Obsolete explosives (R)
831. Oil and water (T)
832. Oil Ash (T,C)
833. Paint (or varnish) remover or stripper (F)
834. Paint thinner (T,F)
835. Paint waste (or slops) (T,F)
836. Pickling liquor (C)
837. Pigments
838. Plating waste (T,C)
839. Printing ink
840. Retrograde explosives (R)
841. Sludge acid (C)
842. Soda ash (C)
843. Solvents (F)
844. Spent acid (C)
845. Spent caustic (C)
846. Spent (or waste) cyanide solutions (T,C)
847. Spent mixed acid (C)
848. Spent plating solution (T,C)
849. Spent sulfuric acid (C)
850. Stripping solution (T,F)
851. Sulfonation oil (F)
852. Tank bottom sediment
853. Tank cleaning sludges
854. Tanning sludges
855. Toxic chemical toilet wastes (T)
856. Unrinsed pesticide containers (T)
857. Unwanted or waste pesticides-an unusable portion of active ingredient or undiluted formulation (T)
858. Waste chemicals
859. Waste exopoxides
860. Waste (or slop) oil (T)
861. Weed killer (T)



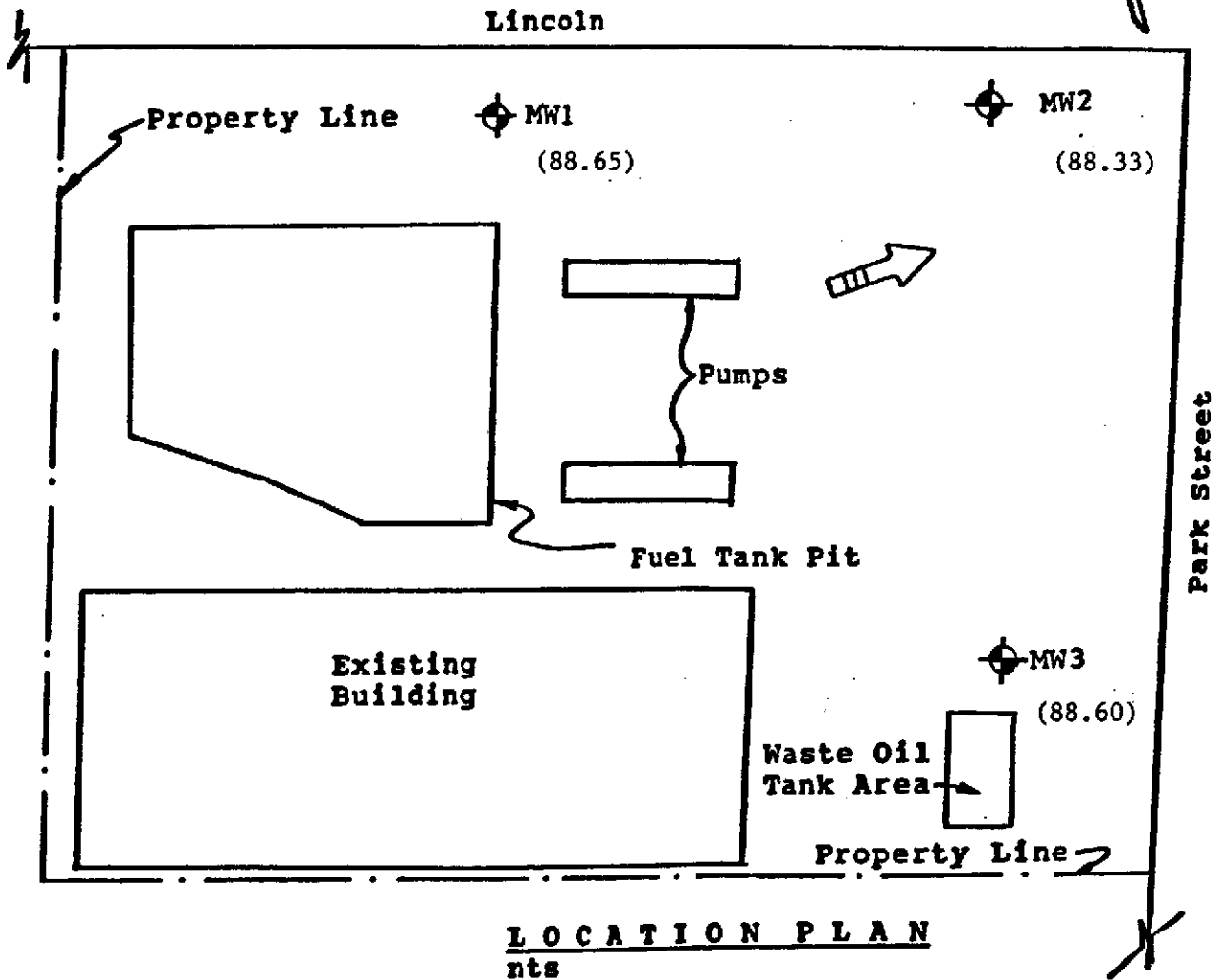
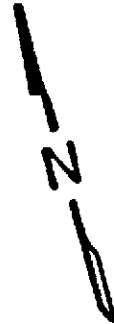
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P.O. BOX 813

BENICIA, CA 94510

(415) 876-8100 (707) 746-8915



LOCATION PLAN
nts



Monitoring Well



Direction of groundwater flow (10-12-88)

() Groundwater elevation (feet)

Surface elevation at top of MW3 assumed 100'
as datum (MW-1 99.23', MW-2 99.33')

MOBIL Service Station
1541 Park Street
Alameda, California



SEQUOIA ANALYTICAL

2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222 • FAX (415) 364-9233

Kaprealian Engineering, Inc.
P.O. Box 913
Benicia, CA 94510
Attn: Mardo Kaprealian, P.E.
President

Date Sampled: 10/12/88
Date Received: 10/12/88
Date Analyzed: 10/18/88
Date Reported: 10/19/88

Project: Mobil, Alameda,
Park/Lincoln

TOTAL PETROLEUM FUEL
HYDROCARBONS WITH BTEX DISTINCTION

<u>Sample Number</u>	<u>Sample Description</u> Water	<u>Low to Medium Boiling Point Hydrocarbons</u> ppb	<u>Benzene</u> ppb	<u>Toluene</u> ppb	<u>Ethyl Benzene</u> ppb	<u>Xylenes</u> ppb
8101048	MW2	N.D.	N.D.	N.D.	N.D.	N.D.
8101049	MW3	N.D.	N.D.	N.D.	N.D.	N.D.
8101050	MW1	14000	180	420	110	750

Detection Limits: 50 0.5 0.5 0.5 0.5

Method of Analysis: EPA 5030/8015/8020

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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Project: Mobil, Alameda,
Park/Lincoln

LABORATORY ANALYSIS

Sample Number

8101049

Sample Description

Liquid, MW3

Analyte

Detection Limit

Sample Result

Total Dissolved Solids, mg/L

1.0

790

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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CHAIN OF CUSTODY

SAMPLER: Ray He DATE/TIME OF COLLECTION: 10/12/88 TURN AROUND TIME: 1 week
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: MOBIL ALAMEDA
PARK / LINCOLN

SAMPLE #	ANALYSES	GRAB OR COMP.	NUMBER OF CONTAINERS	SOIL/WATER
→ MW1	TPHG. B7VE.	Grab	2V	W
MW2	" "	"	2V	"
MW3	TPHG. B7XE	"	2V	"
	TDS ²	"	2V	"

RELINQUISHED BY*	TIME/DATE	RECEIVED BY*	TIME/DATE
1. <u>Ray He</u>	<u>16:30</u> <u>10/12/88</u>	<u>Ken H M</u>	<u>16:30</u> <u>10/12/88</u>
2.			
3.			
4.			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____