

8/6/97 Reviewed 2/25/97 QR by MPDS. GW sampled on 1/28/97 flowed SW at 0.03 ft/ft. Huge MTBE concs: up to 160,000 ppb in MW5. THEY DID NOT ACCOUNT FOR THE MTBE, AS PER MY 2/7/97 LETTER REQUEST. MW1 had a sheen. Note the naphthalene in MW4. High concs!!!

THEY SHOULD DELINEATE THE EXTENT OF THE MTBE, since it is >10,000 ppb. This is an informal RWQCB policy. We should write them a letter; it should be addressed to Tina Berry, Tosco Marketing Co., 2000 Crow Canyon Pl, Suite 400, San Ramon CA 94583 (tel: 277-2321).

3/31/98 - Work Plan Due by Today! (Received ^{QMR} 3/25/98)

- 4/2/98
- Plume is not defined
 - Concerned about Benzene moving under residences X Harrison St.
 - MTBE is very high in all wells
 - They have closed this station
 - Removal Plans submitted to City of Oakland
 - I have not seen an inv. plan yet!

2/7/96 spoke w/Bob Boust: USTs replaced in 1984, double walled plasteel. Not sure if they have overspill protection. He will try to find out. He doubts samples were taken in 1984; he doesn't have any records. He thinks the contam in MW1 comes from the UST pit. We agreed to move MW5 to approx 25' NW of MW3, and to sample semi-annually, in 1st and 3rd Qs.

Wrote wp approval letter

4/29/96 Reviewed 2/12/96 QR by MPDS. **GW sampled on 1/18/96 flowed SW at 0.03 ft/ft.** GWes increased this Q, as did benzene and MTBE. Max concs are 30,000 ppb TPHg, 1500 ppb benzene (MW1), and 5500 ppb MTBE (MW3). Phoned Bob Boust: He thinks new wells are in. His contact is Tom Berkins at KEI. (They didn't notify me.) He will contact Tom re status.

Waiting for the 2 new wells to be installed.

6/11/96 Reviewed 5/17/96 "Continuing Soil and GW Invest" report by KEI. **On 3/20/96, two 2" Mws and two borings were installed; see Fig 3.** GW encountered bet 9.75 and 11'bgs. Wells developed on 3/27, sampled on 4/18/96 along w/the other wells. **GW sampled on 4/18/96 flowed downhill, generally S to SW, at 0.03 ft/ft.** Big hits of MTBE in all 5 wells. Increase in hits in the 3 pre-existing wells. Max gw hits are: 66,000 ppb Tphg (MW1), 5,500 ppb benzene (MW5), and 66,000 ppb MTBE (MW5). Big disparity between hits in MW3 and MW5, both DG wells, close to each other. Soil hits: Table 4: TOG migrated fm waste oil pit to EB2 (540 ppm) and MW4 (1000 ppm). Only benzene hit was 0.023 ppm in MW5 at 9'bgs. **They took grab water samples from EB1 and EB2 (Table 5).** EB1 was pretty clean. But EB2 had 410 ppb TPHd, 1400 ppb TPHg, and 690 ppb benzene. OK; looks pretty good.

11/21/96 Reviewed 5/16/96 QR by MPDS. **GW sampled on 4/18/96 flowed South at 0.03 ft/ft.** This info was already incorporated into the 5/17/96 big KEI report. **MTBE is a problem. How tight is their Ust system? Lm for Pam re the MTBE vis a vis Ust inspection program.**

2/7/97 Reviewed 8/27/96 QR by MPDS. **Gw sampled on 7/24/96 flowed SW at 0.04 ft/ft. MTBE is still a problem.**

Reviewed 12/2/96 QR by MPDS. **GW sampled on 10/24/96 flowed SW at 0.04 ft/ft. MTBE is still a problem.** MW3 is the DG well; it has 3800 TPHg, 660 benzene, and 65,000 MTBE.

WROTE LETTER TO RP, allowing biannual sampling.

6/1/95 Reviewed 5/23/95 QR by MPDS. GW sampled on 4/17/95 flowed SW at 0.03 ft/ft. Up to 48,000 ppb TPHg and 880 ppb benzene (MW1). These concs are representative of previous sampling events; it seems the results for 1/10/95 (low concs in MW1) were anomalous. Note my 9/2/94 tel con w/Hagop of KEI: he was writing a wp for 2 Sbs and 1 MW at that time. But I never received it. Que paso?

Spoke w/Bob Boust: Told him I should write a ltr requesting invest near wo UST, as proposed in their own TR report. Discussed placement of well. He doesn't want it onsite bec he thinks it would be dirty. And closest offsite area is a triangle strip on other side MacArthur, which he thinks CalTrans owns. I thought of Geoprobng for rapid site assessment, prior to MW inst. While we're at it, why not do a point UG of MW1? But soil in MW1 was all ND. OK, so do a grab gw sample in the pt UG of MW1. He said they're already overbudget for calendar/fiscal year 1995, and haven't received reimbursements from CleanUp Fund. Must write ltr to RP.

11/2/95 letter to RP (from Dale Klettke) requesting a SWI.

12/15/95 JE reviewed DK's work

1/24/96 JE reviewed 11/20/95 QR by MPDS. GW sampled on 10/23/95 flowed S-SW at 0.03 ft/ft. Highest hits were in UG MW1: 47,000 ppb TPHg and 780 ppb benzene, which is a decrease fm last Q. Note that GWE also decreased in MW1.

KEI's 12/7/95 "Workplan" for 2 more Mws and 2 borings. MW5 seems too far away DG to be of any use. Instead, we should be investigating the area around MW1; maybe UG of MW1. No need to send reports to RWQCB.

Phoned Tom Berkins (PM) at KEI: lm

2/1/96 spoke w/Tom Berkins: the invest. Around the w.o. UST is fine. I'm concerned that MW5 is too far away to be of much use. Yes, it may give us the ND line, but I think it's more impt to invest the MW1 area. We wondered if there are over spills from the USTs that are contributing to the gw plume. He will call Bob Boust, and find out the age of the USTs, overflow protection, single wall? And see if they plan to replace them. Remember the 12/98 upgrade regs. Then call me 2/5 and conference call w/B. Boust. He doesn't have results for Jan 96 QS yet.

- 8/3/94 Removal of 280-gal waste oil UST. See field report.
- 8/15/94 Spoke w/Hagop Kevork: WO-1 was 1,400 ppm TOG at 9', and ND at 14'bgs. Bottom 9' sample also had 46 ppm TPH-g, 97 TEH (O&G range), 0.12 benzene, similar TEX, high 8270s, one low hit 8010. Wall samples confirmed the high TOG. So he went ahead and analyzed the 14' bgs sample for everything, and is now waiting for those results. We only analyzed the walls for TOG: 160, 17,000, 2200, 2400ppm. We'll go ahead and analyze the wall w/17,000 ppm TOG (sample #2) for everything. . .so we know the worst case constituents left in place. . .no need to do the other 3 walls. How about a couple borings on either side of pit to determine lateral extent? (as well as a MW in MacArthur St.) The pit is still open. They installed the new UST and backfilled the pit. Soil will be disposed to Forward Landfill in Manteca.
- 9/2/94 Haig Kevork phoned. He's writing a wp for 2 SBs and 1 MW. We have high 8270 on sample #2. Soil SP went to Laidlaw just yesterday (class 1 landfill in Kettleman Hills).
- 10/4/94 Reviewed 9/13/94 "Soil Sampling Report," by KEI. (It's the Tank Removal Report for wo UST). Hits left in place at 9'bgs: up to 17,000 ppm TOG, 1,400 ppm TPH-d, 960 ppm TPH-g, 2.2 ppm benzene, some 8010 and 8270 compounds (metals were <10X the STLCS). They recommend 2 or 3 SBs to define soil contam., and one DG MW. They will submit a wp for this.
- Reviewed 8/11/94 QR by MPDS. GW sampled on 7/13/94 flowed SW and had up to 35,000 ppb TPHg and 550 ppb benzene (UG MW1).
- 2/7/95 Reviewed 11/8/94 QR by MPDS. GW sampled on 10/10/94 flowed SW and had up to 52,000 ppb TPHg and up to 1,000 ppb benzene (both increases in UG MW1). GWE decreased; strange.
- 5/18/95 Reviewed 2/6/95 QR by MPDS. GW sampled on 1/10/95 flowed SW at 0.03 ft/ft, and had **marked decreases in concs in all 3 wells, while GWEs had a marked increase. Strange. Any explanation?** Up to 850 ppb TPHg, and up to 16 ppb benzene.

Site Summary STID 1120
Unocal station #1871
96 MacArthur Blvd.
Oakland CA 94610

. . . continued from handwritten notes. . .

- 3/22/93 Received QR by GSI dated 3/8/93. GW flowed West. GW samples collected on 1/25/93 have up to 120,000 ppb TPHg and 2,100 ppb benzene (MW1). These levels represent a decrease. UG well (MW1) still has the highest concs. Strange.
- 6/28/93 Reviewed 6/17/93 QR by GSI. GW flowed SW. GW sampled 4/29/93 had up to 100,000 ppb TPHg (MW1) and 1,700 ppb benzene (MW3). Again, the UG well MW1 had highest concs. of TPHg. DG MW3 had a substantial increase in concs.
- 10/6/93 Reviewed 8/27/93 QR by GSI. GW flowed SW on 7/16. Gw sampled on 7/16 had up to 29,000 ppb TPHg (MW1) and 1,100 ppb benzene (MW3). TPHg and benz concs. decreased in all 3 wells.
- 2/22/94 Reviewed 12/16/93 QR by MPDS. GW flowed SW on 10/19/93, and had increasing concs. in MW1 and MW2, while MW3 decreased. UG MW1 had highest hits (67,000 ppb TPHg and 1,400 ppb benzene). Im Kevin T. He's out on workman's comp. I wanted to get latest tank test results.
- 4/6/94 Reviewed the 2/14/94 QR by MPDS. GW sampled on 1/20/94 flowed SW, and had increased concs. of TPHg (up to 92,000 ppb in UG MW1), and both increased and decreased concs. of benzene (up to 1,200 ppb in MW1). GWes rose in all 3 wells this Q, so there is consistency in seeing the increased concs. . . probably some cap. fringe soil contaminant action here. What is going on here? Why does the UG well continue to have the highest concs?
- 6/22/94 reviewed UST Closure Plan for w.o. tank.
- 6/28/94 approved plans; Im S. Iverson
- 6/29/94 reviewed 5/11 QR by MPDS. GW sampled 4/13 flowed SW w/decreasing concs, altho MW-1 still has the highest concs.
- 8/1/94 Brian Oliva told me that RP wants to pull UST on 8/3 at 11 am. Im for Mike Kolmer at Gettler Ryan (551-7555 X380).