800 North Brand Blvd.
Glendale CA 91203

**ETIC**
Engineering, Inc.

#
3779

26 July 2001

Mr. Barney Chan
Alameda County Health Agency
Division of Environmental Protection
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

RE: Proposed well abandonments at the Nestle Oakland Facility located at 1310 14th Street, Oakland, CA 94607

Dear Mr. Chan:

As discussed in the Site Status Report dated 25 July 2000, Nestle USA is proposing the abandonment of 32 additional wells at the former Nestle Oakland facility. The wells proposed for abandonment are no longer needed for monitoring and gauging purposes at the site.

These wells have been selected such that the monitoring wells remaining following abandonment activities will provide the spatial coverage necessary for continued adequate delineation of groundwater conditions at the site. Historical concentrations of hydrocarbons in groundwater have also been considered when selecting wells for abandonment so that wells which have been useful in identifying areas of hydrocarbon impact at the site will not be removed as a result of this well abandonment proposal.

Please refer to ETIC's July 2001 Groundwater Monitoring Report, First and Second Quarters 2001 for historical data regarding groundwater concentrations and LPH thicknesses for the wells proposed for abandonment.

The following information is attached in support of this proposal for well abandonments at the site:

- Listing of the 32 wells proposed for abandonment and their well construction details (where available)
- Site map showing location of wells proposed for abandonment
- Boring logs for wells proposed for abandonment (where available)

Complete well construction details and boring logs are not available for a majority of the wells proposed for abandonment. Approximate total depths for most wells can be estimated based on historical and typical well installation practices known to have been employed during previous drilling at the site. The well abandonment protocols and grouting procedures will account for the unknown or approximate information available regarding well constructions and depths.

Please review this information and apprise Nestle USA or ETIC of your approval of these proposed well abandonments. We appreciate your time and consideration in this matter. If you have any questions or need any additional information, do not hesitate to contact Doug Oram or Brent Searcy at ETIC Engineering.

Sincerely,

Brent Searcy

Brent Searcy
Project Manager

Attachments

cc: Binayak Acharya, Nestle USA, Inc.
Chuck Headlee, Regional Water Quality Control Board

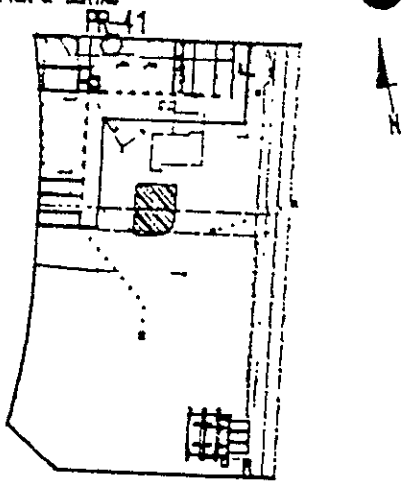
# NESTLE/OAKLAND
# WELLS PROPOSED FOR ABANDONMENT

| Well Type | Well Name | Casing Diameter (in.) | Total Casing Depth (ft. bgs) | Top of Screen (ft. bgs) | Bottom of Screen (ft. bgs) | Length of Screened Interval (ft.) | Screen Slot Size (in.) | Filter Pack Type | Seal Type | Seal Top Depth (ft. bgs) | Seal Base Depth (ft. bgs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Product Recovery Well | PR41 | 2.0 | 15.0 | 5.0 | 15.0 | 10.0 | 0.030 | #3 Sand | Bentonite | 3.0 | 4.0 |
| Product Recovery Well | PR51 | 2.0 | 15.0 | 5.0 | 15.0 | 10.0 | 0.030 | #3 Sand | Bentonite | 3.0 | 4.0 |
| Product Recovery Well | PR204 | 2.0 | 15 to 17 | 5 to 7 | 15 to 17 | ~10.0 | NR | NR | NR | NR | NR |
| | | | | | | | | | | | |
| Vapor Well | V14 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V15 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V25 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V26 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V28 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V29 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V31 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V52 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V53 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Vapor Well | V93 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| | | | | | | | | | | | |
| "Numbered" Well | 78 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 216 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 218 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 219 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 221 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 225 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 228 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 229 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 230 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 234 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 235 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 236 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 242 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 243 | 2.0 | 18.0 | 10.0 | 18.0 | 8.0 | NR | NR | NR | NR | NR |
| "Numbered" Well | 245 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 247 | 2.0 | 18.9 | 10.5 | 18.9 | 8.4 | NR | NR | NR | NR | NR |
| "Numbered" Well | 248 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 251 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| "Numbered" Well | 252 | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |

ANANIA · GEOLOGIC ENGINEERING

BORING LOG

LOCATION OF BORING




| | | | | | |
|---|---|---|---|---|---|
| SITE/LOCATION | CARNATION/OAKLAND | | | | BORING NO. PR-41 |
| PROJECT NO. | 004-86-056 | | | | SHEET 1 OF 1 |
| WATER LEVEL | | | | | DRILLER |
| TIME | | | | | START: TIME 12:00 / FINISH: TIME 12:50 |
| DATE | | | | | START: DATE 4-26-89 / FINISH: DATE 4-26-89 |
| CASING DEPTH | | | | | |

DRILLING CONTRACTOR

DRILLER MIKE MOORE

DRILLING METHOD HOLLOW STEM AUGER

SAMPLING METHOD 140# HAMMER 30" DROP, MODIFIED CALIFORNIA SAMPLER

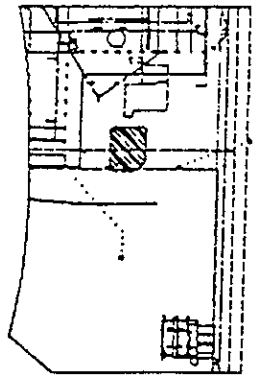
LOGGER CHRIS NIELSON-GEROUDNE

N/S 2888.8 2669.9 E/W 3140.0 ELEV. 14.43

BORING DIAMETER: ? WELL CASING DIAMETER:

REVIEWED BY: M.A.M. DATE 5-29-89

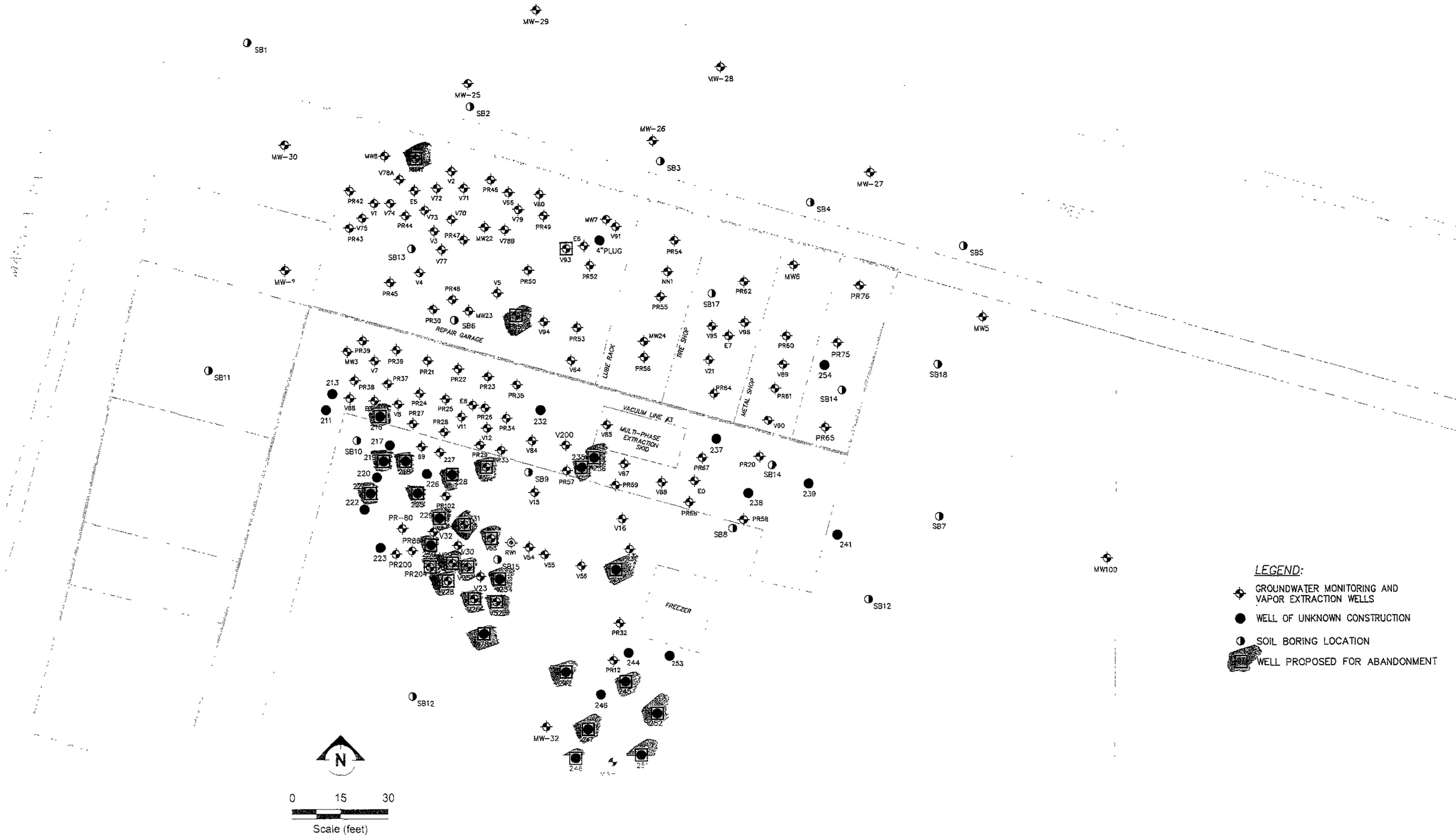
| DIST. FROM SURF. | WELL CONST. CASING | WELL CONST. ANNULUS | LEGEND | TLV READING | SAMPLE NO. | RECOVERY | BLOWS PER 6 IN. | USCS | LOG OF MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PORTLAND CEMENT CONCRETE |
| 1 | | | | | | | | | SANDY GRAVEL |
| 2 | | 4" BENTONITE CEMENT SLURRY | | | | | | ML | SANDY SILT- BLACK TO DARK BROWN, MOIST, MEDIUM STIFF WITH TRACE GRAVEL, SEWAGE ODOR. |
| 3 | BLANK | | | | | | | | |
| 4 | | 3/8" BENT. PELL. | | | | | | | |
| 5 | | | | 3 | | | | | SILTY SAND- MOTTLED GREEN/GRAY, MOIST, MEDIUM DENSE. |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | GRADES MOIST TO WET. |
| 9 | | | | | | | | | |
| 10 | 0.020 INCH SLOT | 3/4" SAND | | 38 | | | | | GRADES WET |
| 11 | | | | | | | | | |
| 12 | | | | | | | | SM | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | COLOR CHANGE TO YELLOW BROWN. |
| 15 | | | | 10000 | | | | | |
| | | | | | | | | | TEST BORING TERMINATED @ 15' ON 4-26-89 |
| | | | | | | | | | MATERIALS: 2 BAGS OF SAND |
| | | | | | | | | | 1/2 5 GALLON BUCKET OF BENTONITE |




# ANANIA GEOLOGIC ENGINEERING — BORING LOG

| | |
|---|---|
| SITE/LOCATION | CARNATION/OAKLAND |
| PROJECT NO. | 004-88-059 |
| BORING NO. | PR-51 |
| SHEET | 1 of 1 |
| WATER LEVEL | |
| TIME | |
| DATE | |
| CASING DEPTH | |
| DRILLER | |
| START | FINISH |
| TIME | TIME 10:15 |
| DATE | DATE 4-28-89 |
| DRILLING CONTRACTOR | |
| DRILLER | MIKE MOORE |
| DRILLING METHOD | HOLLOW STEM AUGER |
| SAMPLING METHOD | 140# HAMMER 30" DROP, MODIFIED CALIFORNIA SAMPLER |
| LOGGER | CHRIS NIELSON-CERIGIONE |
| N/S | 2621.8 |
| E/W | 3168.4 |
| ELEV. | 14.58 |
| BORING DIAMETER: | 6 INCHES |
| WELL CASING DIAMETER: | 2 INCHES |

| DIST. FROM SURF. | WELL CONST. CASING | WELL CONST. ANNULUS | LEGEND | TLV READING | SAMPLE NO. | RECOVERY | BLOWS PER 6 IN. | USCS | LOG OF MATERIAL |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | PORTLAND CEMENT CONCRETE |
| | | | | | | | | GP | |
| 1 | | 4" BENTONITE CEMENT SLURRY | | | | | | ML | SANDY GRAVEL- MOIST, MEDIUM DENSE. |
| 2 | | | | | | | | | SANDY SILT- DARK BROWN TO BLACK, MOIST, MEDIUM STIFF, SEWAGE ODOR (FILL). |
| 3 | BLANK | | | | | | | | ENCOUNTERING (RED BRICK). |
| 4 | | 3/8" CEMENT PELL | | | | | | | SILTY SAND- GRAY/GREEN BROWN, MOIST, MEDIUM DENSE. |
| 5 | | | | | | | | | |
| 7 | | | | | | | | SM | COLOR CHANGE TO BROWN, GRADES VERY MOIST TO WET. |
| 9 | 0.030 INCH SLOT | 3/4" SAND | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | COLOR CHANGE TO YELLOW BROWN, GRADES WET. |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | TEST BORING TERMINATED @ 15' ON 4-28-89 |




**ETIC** Engineering, Inc.

SITE PLAN SHOWING PROPOSED WELL ABANDONMENTS - JULY 2001
FORMER NESTLE OAKLAND FACILITY
1310 14th STREET. OAKLAND, CALIFORNIA

FIGURE.
**1**