Chevron

Chevron U.S.A. Products Company
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Marketing Department
Phone 510 842 9500

December 13, 1993

Ms. Eva Chu
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station No. 9-3356
19201 Center Street, Castro Valley, CA 94546

Dear Ms. Chu:

There appears to be a reasonable explanation why Alton Geoscience screened monitoring well MW-3 from 19 to 39 feet. When Alton was drilling B-3 (MW-3), they encountered a damp to saturated layer of soil between 5 and 15 feet. Beyond 15 feet, they encountered only dry soil. They probably made three assumptions. First, they probably assumed the soil at 10 feet was perched groundwater. Second, they probably assumed the depth to water at this location was similar to B-1 (MW-1), and third, they probably assumed the saturated layer of soil did not go beyond 17.5 feet. Because they did not want the perched water to influence the monitoring well, they probably decided to screen the well between the last sample that was damp (15 ft.) and the first sample that was dry (20 ft.). Hopefully, this explanation answers your question.

For your information, there has never been a dramatic change in the direction of groundwater, and there is only a minor difference between the screen interval and the depth to water.

Please refer to the boring log and well construction detail for additional information. If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

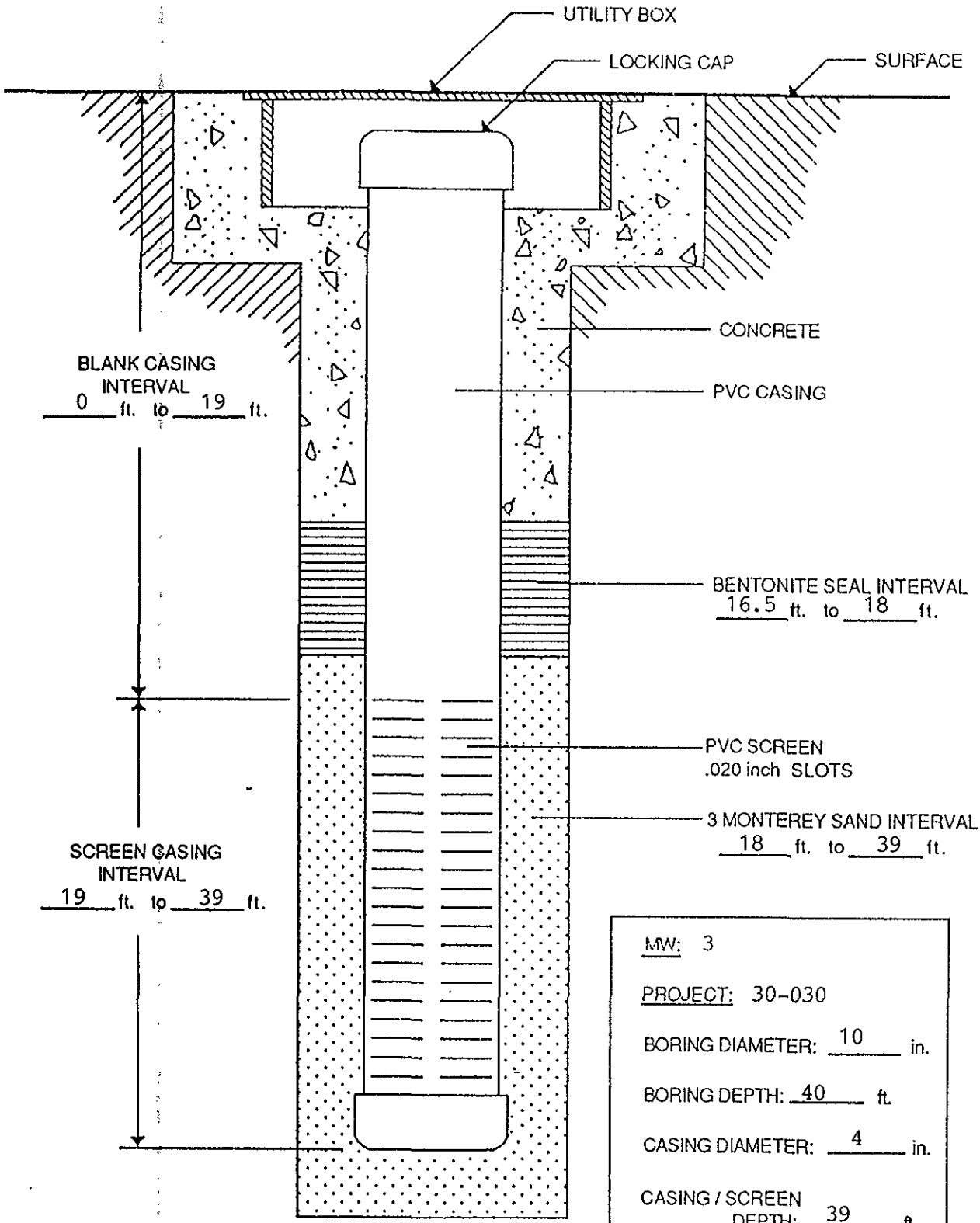
LKAN/MacFile 9-3356R8

Enclosures

cc: Mr. Eddie So
RWQCB-S.F.Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Steve Willer
Chevron U.S.A. Products Co.

MONITORING WELL CONSTRUCTION DETAIL



MW: 3

PROJECT: 30-030

BORING DIAMETER: 10 in.

BORING DEPTH: 40 ft.

CASING DIAMETER: 4 in.

CASING / SCREEN DEPTH: 39 ft.

NOTE: DRAWING IS NOT TO SCALE

ALTON GEOSCIENCE
1170 BURNETT AVE., STE S
CONCORD, CA 94520

BORING LOG

PROJECT: 30-030 BORING DATE: 8-18-89

LOCATION: CASTRO VALLEY GEOLOGIST: S. ROSEN

TYPE: 10" HSA BORING NO.: 3

DRILLING COMPANY: WEST HAZMAT

DEPTH (FEET)	I	BLOW CTS	MATERIAL ENCOUNTERED	USCS
			Hand excavated first 4 feet.	
5 ++		8,13,7	Soft, damp, dark brown, silty, sandy CLAY (fill material). CGI <50 ppm. TRPH = 250 ppm, TPH = ND, B = ND, T = ND, E = ND, X = ND.	CL
10 ++		6,6,8	Soft, wet to saturated, dusky brown, sandy CLAY. CGI 50 ppm. TRPH = 14 ppm, TPH = ND, B = ND, T = ND, E = ND, X = ND.	CL
15		8,12,18	Soft to medium stiff, damp, moderate brown, sandy CLAY. CGI 50 ppm.	CL
▽				
20		9,15,16	Medium stiff, dry to damp, moderate yellowish brown, clayey SILT. CGI = 75 ppm.	ML
25 ++		34,50 for 5"	Hard, dry, moderate yellowish brown, semi-indurated, clayey SILT. CGI 50 ppm. TPH = ND, B = ND, T = ND, E = ND, X = ND.	ML
30		70 for 3"	Hard, dry, dusky yellowish brown, semi-indurated, clayey SILT. CGI <75 ppm.	ML
35		50 for 3"	Hard, dry, medium light gray, semi-indurated SILT. CGI = 50 ppm.	ML
40		50 for 0"	No sample retrieved.	

TPH = Total Petroleum Hydrocarbons
TRPH = Total Recoverable Petroleum Hydrocarbons
▽ = Ground Water Piezometric Surface
ND = Not Detected
CGI = Combustible Gas Indicator

++ = Sample Analyzed for Hydrocarbon Concentration
I = Sampling Interval
ppm = Parts per Million
LEL = Lower Explosive Limit

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylene
Total Depth = 40 Feet