



July 13, 1994

Susan Keach  
Oro Loma Sanitary District  
2600 Grant Avenue  
San Lorenzo, California 94580

Re: Monthly Discharge Compliance Report  
Chevron Service Station #9-0504  
15900 Hesperian Blvd.  
San Lorenzo, California  
WA Job #4-551-54  
Permit No. 015

Dear Ms. Keach:

This letter reports the data and analytic results from monthly monitoring activities performed by Weiss Associates (WA) on the ground water treatment system at the site referenced above. WA submits this information on behalf of Chevron U.S.A. Products Company. Ground water is extracted from two wells (C-1, C-2) equipped with electric submersible pumps. The treatment system consists of two, 1,000 lb aqueous-phase carbon vessels connected in series. As permitted by the Oro Loma Sanitary District, treated ground water is discharged to the sanitary sewer.

Between May 11 and June 21, 1994, the system pumped 97,096 gallons of ground water. This brings the total volume of extracted and treated ground water to about 1,156,273 gallons. The average flow rate for the 41 days of operation was about 1.64 gallons per minute. Table 1 summarizes system performance, flow meter readings, average flow rates and comments pertaining to system operation.

On June 21, 1994, WA collected water samples from the system influent, first carbon effluent (midpoint) and second carbon effluent. Samples were analyzed by a California-certified laboratory for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene and xylenes. Certificate of analysis and chain-of-custody documents are also attached. Laboratory analytical results indicate that discharged ground water is in compliance with the discharge limits.

Susan Keach  
July 13, 1994

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If you have any questions please contact the undersigned at (510) 450-6000.

Sincerely,  
Weiss Associates



Michael J. Cooke  
Project Geologist

MC:mc

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Attachments: Table 1. Performance Summary  
Table 2. Summary of Analytic Results  
Analytic Results  
Chain-of-Custody Form

cc: Mark Miller, Chevron U.S.A. Products Company

Table 1. Performance Summary, Chevron Service Station #9-0504, 15900 Hesperian Boulevard, San Lorenzo, CA

DATE	C-1 TOTALIZER READING (gal)	C-2 TOTALIZER READING (gal)	TOTAL FLOW (gal)	FLOW BETWEEN READINGS (gal)	DAYS BETWEEN READINGS	AVERAGE FLOW (gpm)	COMMENTS
08/13/92	0	0	0	0	0	0	Start three-hour test
08/13/92	345	340	685	685	0	0	End three-hour test
09/02/92	403	394	797	112	20	0.00	System start-up
09/09/92	14,184	19,440	33,624	32,827	7	3.26	
10/06/92	18,939	51,734	70,673	37,049	27	0.95	
11/13/92	21,498	70,892	92,390	21,717	38	0.40	System off from 11/9/92 to 11/13/92.
12/29/92	21,877	89,606	111,483	19,093	46	0.29	
01/12/93	39,537	89,914	129,451	17,968	14	0.89	
01/22/93	52,064	89,918	141,982	12,531	10	0.87	Pump in well C-2 pulled for repairs.
02/19/93	71,129	89,944	161,073	19,091	28	0.47	Pump in well C-2 reinstalled, system left off.
02/23/93	71,131	89,956	161,087	14	4	0.00	Pump in C-1 pulled, leak at C-2 wellhead repaired, system off.
04/07/93	71,131	89,956	161,087	0	43	0.00	Replaced pump head in well C-1, replaced GWE hose on wells C-1 and and C-2, system restarted.
04/22/93	85,505	138,926	224,431	63,344	15	2.93	
05/10/93	102,220	160,262	262,482	38,051	18	1.47	
06/21/93	296,350	176,421	472,771	210,289	42	3.48	C-2 pump clogged at check valve, blockage cleared
07/14/93	334,827	190,316	525,143	52,372	23	1.58	System off on arrival.
08/12/93	370,703	190,316	561,019	35,876	29	0.86	Pump C-2 pulled for motor replacement. Installed new pump motor in C-2. C-1 intake clogged, blockage cleared.
09/16/93	391,322	273,667	664,989	103,970	35	2.06	Pump in C-1 pulled for repairs.
10/27/93	---	---	---	---	--	---	Suction pump tested in well C-1.
10/28/93	391,497	337,589	729,086	64,097	42	1.06	
11/11/93	391,497	354,342	745,839	16,753	14	0.83	
12/16/93	391,721	383,756	775,477	29,638	35	0.59	New pump installed in C-1. Pump C-2 requires replacement.
01/26/94	443,890	383,760	827,650	52,173	41	0.88	System off due to on site construction. No samples taken.

-- Table 1. Continued on Next Page --

Table 1. Performance Summary, Chevron Service Station #9-0504, 15900 Hesperian Boulevard, San Lorenzo, CA

DATE	C-1 TOTALIZER READING (gal)	C-2 TOTALIZER READING (gal)	TOTAL FLOW (gal)	FLOW BETWEEN READINGS (gal)	DAYS BETWEEN READINGS	AVERAGE FLOW (gpm)	COMMENTS
02/23/94	447,989	383,760	831,749	4,099	28	0.10	System off occasionally during reporting period due to on site construction.
03/04/94	448,763	383,760	832,523	774	9	0.06	C-2 vault damaged during construction. Analytic results from 2/24/94 showed breakthrough to effluent. System resampled.
03/22/94	449,785	383,760	833,545	1,022	18	0.04	Pump C-2 defective, requires replacement.
03/31/94	463,264	383,756	847,020	13,475	9	1.04	
04/21/94	512,306	384,122	896,428	49,408	21	1.63	Well C-2 pump replaced
05/11/94	615,815	443,362	1,059,177	162,749	20	5.65	
06/21/94	675,815	480,458	1,156,273	97,096	41	1.64	System off upon arrival due to pressure regulator malfunction.

Notes:

a = Change in C-1 totalizer between 9/16/93 and 10/28/93 due to suction pump test on 10/27/93.

gal = gallons

gpm = gallons per minute

-- = not available

Table 2. Summary of Analytic Results, Chevron Service Station #9-0504 Hesperian Blvd., San Lorenzo, California

DATE SAMPLED	LAB	SYSTEM INFLUENT					SYSTEM MIDPOINT First Carbon Effluent					SYSTEM EFFLUENT Second Carbon Effluent					pH	COD mg/l	TSS mg/l
		TPH-G	B	E	T	X	TPH-G	B	E	T	X	TPH-G	B	E	T	X			
-----parts per billion (ppb)----->																			
08/14/92	a SPA/CEC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	4.2	17	<4
09/09/92	SPA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA
10/06/92	SPA/CEC	480	34	1.5	10	33	<50	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	7.1	<5	<4
11/13/92	SPA/CEC	4,000	96	30	99	310	<50	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	6.9	<5	<4
12/29/92	b SPA/CEC	3,500	340	52	110	400	<50	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	6.8	<5	<4
01/12/93	c SPA/GTEL	2,700	150	32	88	340	<50	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	6.8	5	500
02/19/93	SPA/GTEL	8,000	390	180	420	1,300	<50	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	<0.5	<0.5	7.3	<5	<4
04/07/93	SPA/GTEL	12,000	360	420	440	2,200	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	6.9	<5	<4
05/10/93	SPA/SA	6,000	170	150	83	780	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	NA	<5	<4
06/21/93	SPA/SA	3,000	120	91	54	550	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	7.0	<20	<4
07/14/93	c SPA/GTEL	400	31	4.7	0.6	110	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	6.7	<5	<4
08/12/93	c SPA/SA	2,100	89	130	86	790	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	6.6	25	<4
09/16/93	d SPA	2,800	76	10	38	550	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
10/28/93	SPA	2,700	62	47	11	350	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	6.8	<20	<4
11/11/93	SPA	1,600	67	25	22	400	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
12/16/93	e SPA	300	9.2	16	4	74	<50	<0.5	<0.5	<0.5	<1.5	<50	0.5	<0.5	<0.5	<1.5	NA	NA	NA
01/26/94	SPA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
02/23/94	e SPA	2,100	36	81	0.8	360	<50	0.6	<0.5	<0.5	<1.5	<50	1.5	<0.5	<0.5	<1.5	NA	NA	NA
03/04/94	SPA	100	2.5	<0.5	0.5	7.9	<50	<0.5	<0.5	<0.5	<1.5	<50	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
04/21/94	SPA	3,000	87	130	22	730	<50	<0.5	<0.5	<0.5	0.6	<50	<0.5	<0.5	<0.5	<0.5	7.41	28	ND
05/11/94	SPA/SA	2,100	67	31	17	470	<50	1.4	<0.5	<0.5	4.3	<50	<0.5	<0.5	<0.5	<0.5	NA	28	NA
06/21/94	SPA	2,100	65	100	23	730	82	3.5	2.6	1.2	25	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA

-- Table 2. continued next page --

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Table 2. Summary of Analytic Results, Chevron Service Station #9-0504 Hesperian Blvd., San Lorenzo, California  
(continued)

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Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline  
by modified EPA Method 8015  
B = Benzene by EPA Method 8020  
E = Ethylbenzene by EPA Method 8020  
T = Toluene by EPA Method 8020  
X = Xylenes by EPA Method 8020  
COD = Chemical oxygen demand by EPA Method 410.4  
TSS = Total suspended solids by EPA Method 160.1  
<n = Not detected at detection limit of n ppb  
SPA = Superior Precision Analytical Laboratory,  
Martinez, California  
CEC = Clayton Environmental Consultants, Pleasanton, California  
GTEL = GTEL Environmental Laboratories, Inc., Concord, California  
SA = Sequoia Analytical, Redwood City, California  
mg/l = milligrams per liter  
NA = Not analyzed

Notes:

- a = Initial three-hour test sample.  
Additional analysis performed prior to system start-up:  
Cyanide by EPA method 335.2, CEC results <0.01  
Phenolics By EPA method 420.1, CEC results <0.005  
Metals by EPA SW methods 486, 6000 and 7000 series, SPA  
results for all metals <n, per laboratory detection limits
- b = system extraction from well C-2 only.
- c = system extraction from well C-1 only.
- d = Sampling requirements for pH, COD, and TSS changed from  
monthly to quarterly.
- e = Analytic results indicate breakthrough in effluent.  
Resample necessary to determine validity of analytic results.
- f = Samples not taken because on site construction caused the power  
to be turned off and the sewer connection to be dismantled.
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