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April 19, 2005

4329.02

Humboldt County Department of Health and Human Services
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

Attention: Mr. Mark Verhey

Subject: Groundwater Monitoring Report; First Quarter 2005
HPI Redwood Village Texaco, 723 South Fortuna Blvd., Fortuna, CA
LOP No. 12551

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) is pleased to present to the Humboldt County Division of Environmental Health (HCDEH) the results of groundwater monitoring for the first quarter of 2005, at the Humboldt Petroleum, Inc. (HPI) Redwood Village Texaco (Figures 1 and 2). On February 3, 2005, depth-to-water (DTW) was measured in monitoring wells MW4 through MW12 and MW14 through MW18 for calculation of the hydraulic gradients. Groundwater samples were collected from monitoring wells MW4 through MW6, MW10, MW12, and MW15 through MW18 for laboratory analyses. Water was not purged in, nor were samples obtained from, monitoring well MW13 due to a hydraulic head at or below the bottom of the screened interval of the monitoring well.

DTW measurements were recorded when water levels reached equilibrium with the atmosphere, as demonstrated by a change of less than 0.02 feet for measurements made not less than 5 minutes apart. Once water levels equilibrated, water was purged from monitoring wells MW4, MW6, MW10, and MW15 through MW18 using a down-hole pump at a flow rate of less than 1 liter per minute with the intake set within the screened interval of the well. Water was purged in monitoring wells MW5 and MW12 using a 1 $^1/_2$-inch bailer, at a flow rate of less than 1 liter per minute with the intake set within the screened interval of the well. Groundwater was not purged in monitoring wells MW7 through MW9, MW11, and MW14 due to a hydraulic head just above the bottom of the screened interval of the monitoring well. Details can be reviewed on the water sampling log, included as Attachment 1.

Water quality parameters dissolved oxygen (DO), oxidation-reduction potential (ORP), conductivity (Ecw), pH, and temperature (T) were monitored in monitoring wells MW4, MW6, MW10, and MW15 through MW18 by routing the pump discharge through a flow cell. Formation water was sampled when indicator parameters stabilized within the accuracy range of the meters for three consecutive readings not less than 1 minute apart. The accuracy range of the DO, ORP, Ecw, pH, and T meters are ±0.3 mg/L, ±2 mV, ±20 μmhos, ±0.2 pH, and ±0.5 °C, respectively.

While maintaining a constant flow rate, laboratory-supplied sample containers were filled directly from pump discharges. Groundwater samples were kept cold and transported under standard chain-of-custody protocols to North Coast Laboratories Ltd. (NCL) in Arcata, California, for analysis of:

21 W. 4th Street • P.O. Box 1023 • Eureka, California 95502 • 707-443-5054 • 1-800-515-5054 • FAX 707-443-0553
www.lacoassociates.us

- Total Petroleum Hydrocarbons as gasoline (TPHg) by EPA Method 8260B
- Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B
- Methyl Tertiary Butyl Ether (MTBE), Tertiary Amyl Methyl Ether (TAME), Ethyl Tertiary Butyl Ether (ETBE), Di-isopropyl Ether (DIPE), and Tertiary Butyl Alcohol (TBA) by EPA Method 8260B

The groundwater sample from monitoring well MW6 was also analyzed for lead scavengers by EPA Method 8260B.

Hydraulic Gradient

In previous monitoring events, the hydraulic gradients for both the shallow and deep water-bearing units have been typically calculated using the three-point method and hydraulic head elevations. Historic hydraulic head data are included in Table 1 and historic hydraulic gradients are presented in Table 2. Hydraulic heads for monitoring wells screened in the shallow and deep aquifers are provided in Figures 3 and 4.

Shallow Water-Bearing Unit

In previous monitoring events, the hydraulic gradient for the shallow water-bearing unit has typically been calculated using the three-point method and the hydraulic head elevations of monitoring wells MW4, MW10, and MW13. For the current sampling event, the shallow hydraulic gradient was not calculated due to variations in hydraulic head elevations which did not present a clear indication of a real groundwater flow. Previous calculated hydraulic gradients have indicated a southeasterly to southwesterly hydraulic gradient in the shallow water-bearing unit.

Deep Water-Bearing Unit

In previous monitoring events, the hydraulic gradient for the deep water-bearing unit has typically been calculated using the three-point method and the hydraulic head elevations of monitoring wells MW5, MW7, and MW12. The calculated hydraulic heads of monitoring wells MW12 and MW7 are identical for the current monitoring event, preventing a three-point hydraulic gradient calculation in the deep water-bearing unit. However, a hydraulic gradient for the deep water-bearing unit was calculated using the hydraulic head difference of monitoring wells MW7 and MW12 and that of monitoring well MW5, divided by the perpendicular distance between monitoring well MW5 and the equipotential line formed by monitoring wells MW7 and MW12. This calculation resulted in a hydraulic gradient of 7.7 percent in the S50°W direction, which is within the range of previous hydraulic gradients calculated for the deep water-bearing unit. Previous calculated hydraulic gradients have indicated a southwesterly hydraulic gradient in the deep water-bearing unit.

Hydraulic Gradient Discussion

An examination of the hydraulic heads, monitoring well screen intervals, and hydro-stratigraphic conditions of the site suggests that vertical gradients exist in the area defined by an inferred east-west transect that includes monitoring wells MW4, MW18, MW15, and MW11. Table A, included below, contains screen interval information for monitoring wells MW4, MW18, MW15, and MW11.

Table A: Screen Intervals of Select Monitoring Wells				
	Monitoring Well			
Screen Interval (feet, bgs)	MW4	MW18	MW15	MW11
	3 - 10	4 - 14	5 - 10	5 - 10

Evidence of vertical gradients in this area of the site include the more than 7-foot difference in hydraulic head between monitoring wells MW18 and MW15, which are separated by a linear difference of approximately 12 feet. The vertical gradients appear to be driven by differences in lithology in which clayey silt to silty clay lenses may contribute to perching conditions in the area defined by these monitoring wells. In particular, the screen interval of monitoring well MW15 appears to intersect a clayey silt to silty clay lens, which may be acting as a perching layer in the immediate vicinity. Additionally, in the current sampling event there is more than a 7-foot hydraulic head difference between monitoring wells MW4 and MW18, which are separated by a linear difference of 50 feet. The elevated hydraulic head elevations of monitoring wells MW4 and MW15, which over the past hydrologic cycle have been consistently higher than those of monitoring wells MW18, MW11, and MW10, may be caused by recharge during the rainy season or the proximity of underground utility corridors.

Laboratory Results and Discussion

Analyte concentrations in groundwater for the current sampling event are included in Figure 5 and Table B, included below. Historical groundwater analytical results are summarized in Table 1. The laboratory report for the current event is included as Attachment 2.

The case narrative included with NCL's laboratory analytical results indicate that the samples from monitoring wells MW4, MW6, and MW15 through MW18 appear to be similar to gasoline, but certain peak ratios are not that of a fresh gasoline standard. The reported results in these monitoring wells represent the amount of material in the gasoline range. Additionally, some reporting limits were raised for the samples from monitoring wells MW6, MW15, and MW16 due to matrix interference.

Table B: Laboratory Analytical Results for February 3, 2005

WELL	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW4	2,000	6.9	ND<0.50	19	2.5	630	230	34	2.7	---	ND<1.0
MW5	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
MW6	35,000	4,400	94	2,200	1,100	18,000	880	240	92	ND<1.0-10	ND<1.0-10
MW7	no sample collected										
MW8	no sample collected										
MW9	no sample collected										
MW10	ND<50	4.2	ND<0.50	1.8	0.81	1.3	ND<10	ND<1.0	ND<1.0	---	ND<1.0
MW11	no sample collected										
MW12	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	
MW13	no sample collected										
MW14	no sample collected										
MW15	3,100	16	1.4	160	71	13	ND<20	ND<1.0	ND<1.0	---	ND<1.0
MW16	4,300	180	22	300	980	72	ND<35	2.6	ND<1.0	---	ND<1.0
MW17	260	1.4	ND<0.50	3.3	8.0	190	83	7.3	ND<1.0	---	ND<1.0
MW18	2,400	220	27	72	560	23	ND<10	2.5	ND<1.0	---	ND<1.0

Monitoring wells MW9, MW11, MW13, and MW14 were redeveloped on February 10, 2005, using a solid block for surging and a down-hole pump for pumping. Monitoring wells MW17 and MW18 were redeveloped on February 14, 2005, using a solid block for surging and a down-hole pump for pumping. The installation of monitoring wells MW16 through MW18 was described in LACO's *Monitoring Well Installation*, submitted November 2004. The details of both monitoring well redevelopment events can be reviewed in the field notes, included as Attachment 3.

Laboratory results for groundwater samples analyzed from the monitoring wells are consistent with historical concentrations (Table 1). Exceptions to this observation include the first detection of benzene, ethylbenzene, total xylenes, and MTBE in monitoring well MW10, which had been reported as non-detect for all analytes dating to July 2002.

Recommendations

- Continue with the current sampling protocol. The next sampling event is scheduled for May 2005.
- LACO requests a formal meeting with the HCDEH to discuss remedial goals and key wells to be used during the remediation program.

Please call if you have any questions or require additional information.

Sincerely,
LACO ASSOCIATES

V.T. Sullivan

Vincent T. Sullivan, EIT
Staff Engineer

Christopher J. Watt
PG 7586 Exp. 3/31/06

PROFESSIONAL GEOLOGIST
CHRISTOPHER JOHN WATT
No. 7586
Exp.03/31/
STATE OF CALIFORNIA

VTS:lnm

Attachments

cc: Jim Seiler, Humboldt Petroleum, Inc. (sent electronically)

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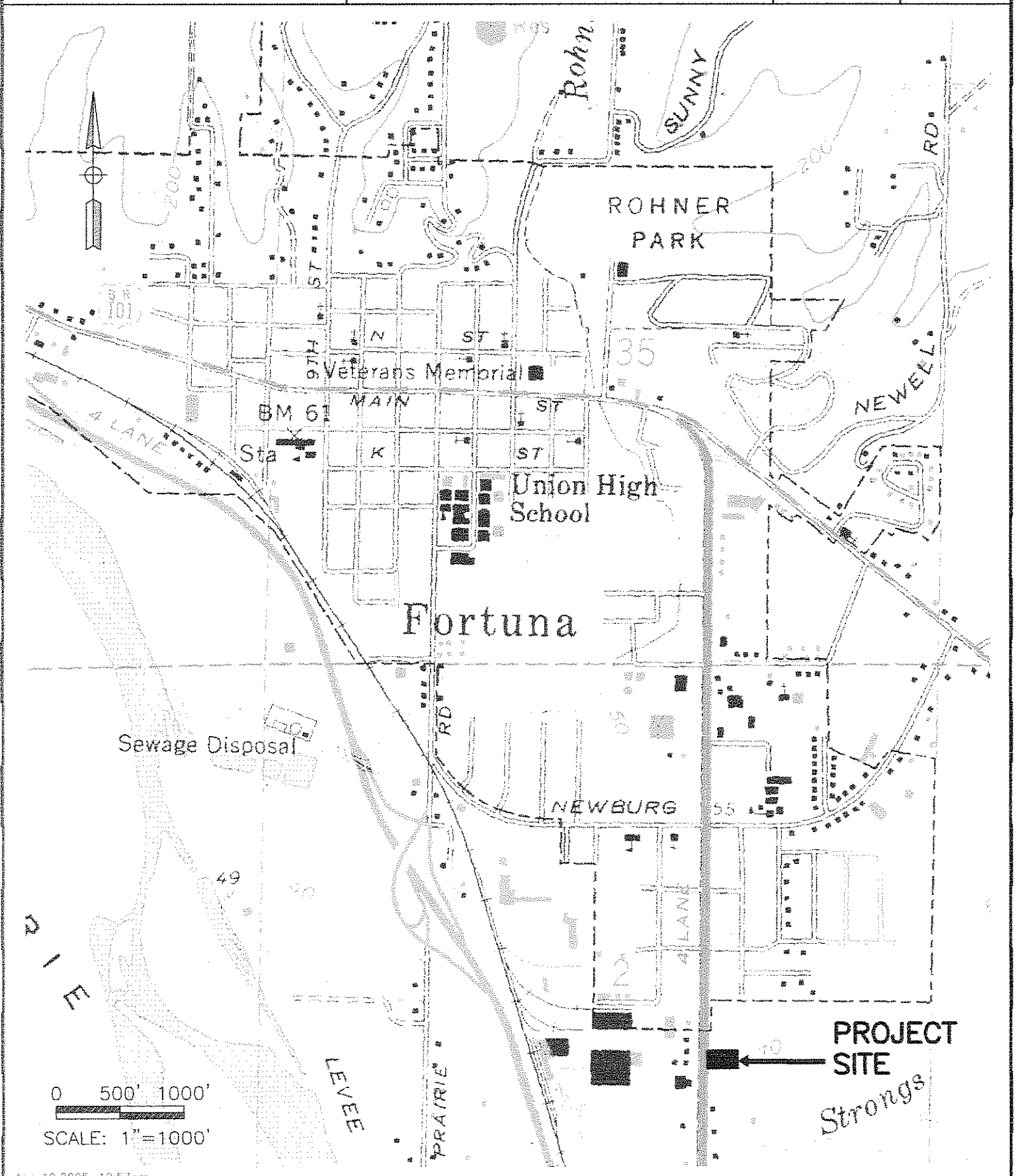
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 1
	CLIENT HUMBOLDT PETROLEUM, INC.	DATE 4/12/05	
	LOCATION R. VILLAGE TEXACO	CHECK	JOB NO. 4329.02
	LOCATION MAP	SCALE 1"=1000'	



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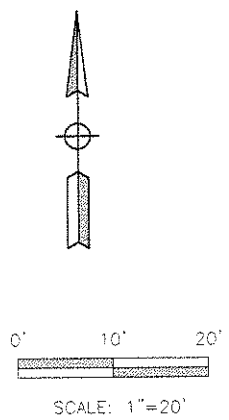

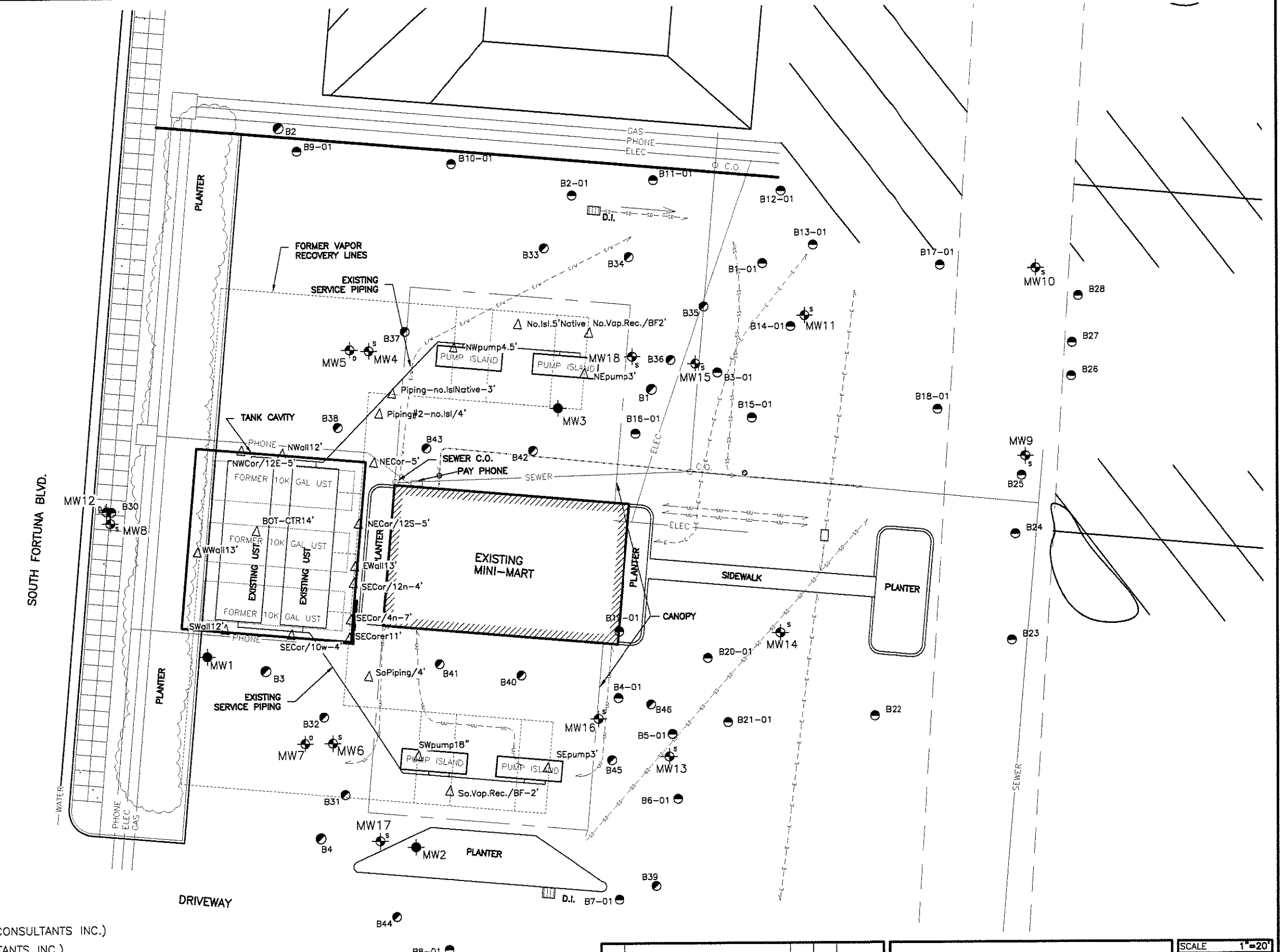

LEGEND

- DESTROYED MONITORING WELL
- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- BORING LOCATION 2001
- CONTINUOUS CORE
- BORING LOCATION 2004
- TANK CLOSURE SAMPLES(1996)

- ELECTRIC/WATER (NORCAL GEO. CONSULTANTS INC.)
- ELECTRIC (NORCAL GEO. CONSULTANTS INC.)
- SANITARY SEWER (NORCAL GEO. CONSULTANTS INC.)
- STORM DRAIN (NORCAL GEO. CONSULTANTS INC.)
- UNDIFFERENTIATED UTILITY (NORCAL GEO. CONSULTANTS INC.)

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

GROUNDWATER MONITORING REPORT
SITE MAP

HUMBOLDT PETROLEUM, INC
R.VILLAGE TEXACO, FORTUNA

SCALE	1"=20'
DRAWN	RJM
CHECK	
APPVD	
DATE	4/12/05
JOB NO.	4329.02
FIGURE	2

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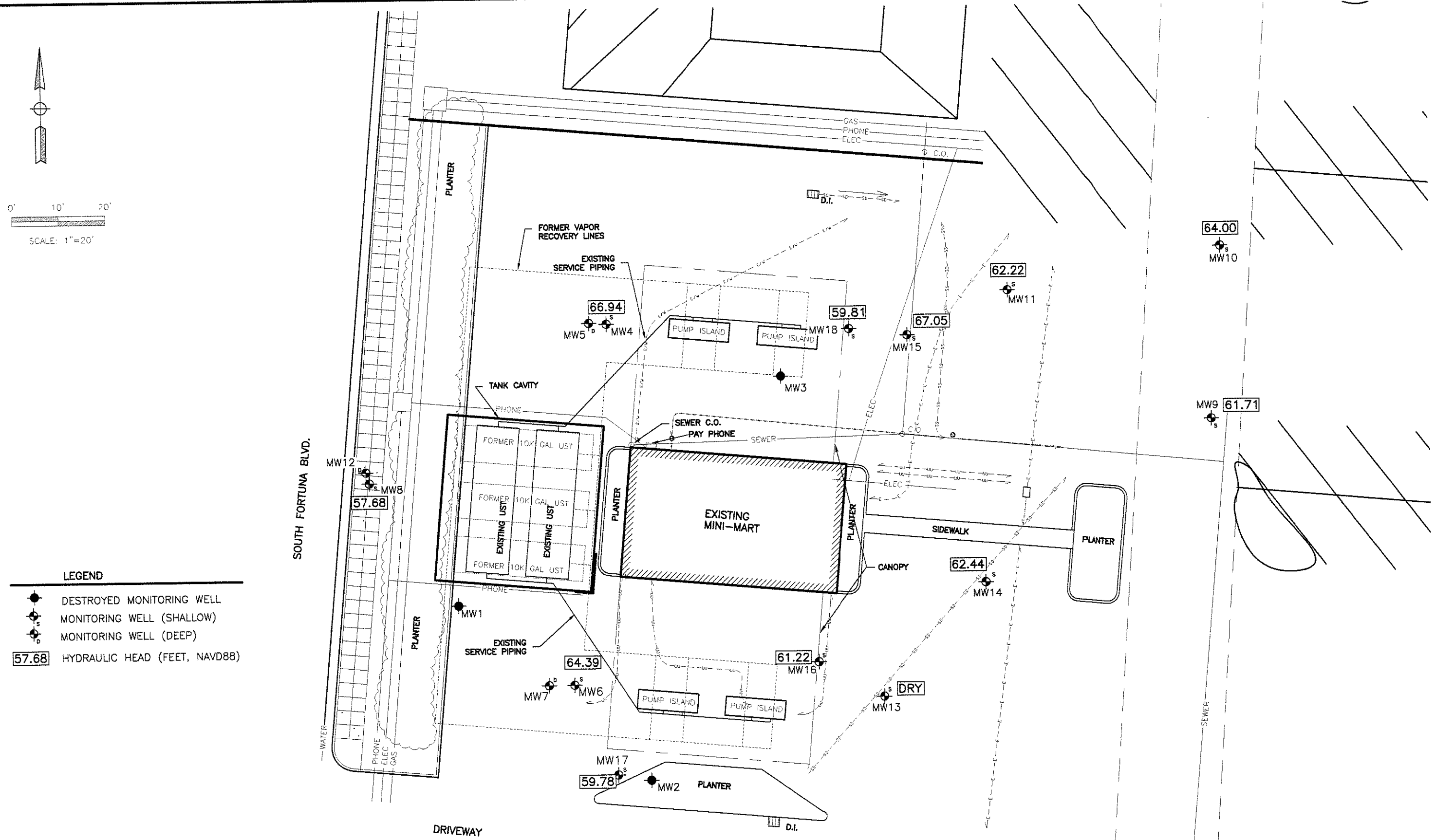

LEGEND

- DESTROYED MONITORING WELL
- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- 57.68 HYDRAULIC HEAD (FEET, NAVD88)

- ELECTRIC/WATER (NORCAL GEO. CONSULTANTS INC.)
- ELECTRIC (NORCAL GEO. CONSULTANTS INC.)
- SANITARY SEWER (NORCAL GEO. CONSULTANTS INC.)
- STORM DRAIN (NORCAL GEO. CONSULTANTS INC.)
- UNDIFFERENTIATED UTILITY (NORCAL GEO. CONSULTANTS INC.)

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

GROUNDWATER MONITORING REPORT
HYDRAULIC HEAD MAP – SHALLOW AQUIFER (2/03/05)

HUMBOLDT PETROLEUM, INC
R.VILLAGE TEXACO, FORTUNA

SCALE	1"=20'
DRAWN	RJM
CHECK	
APPVD	
DATE	4/12/05
JOB NO.	4329.02
FIGURE	3

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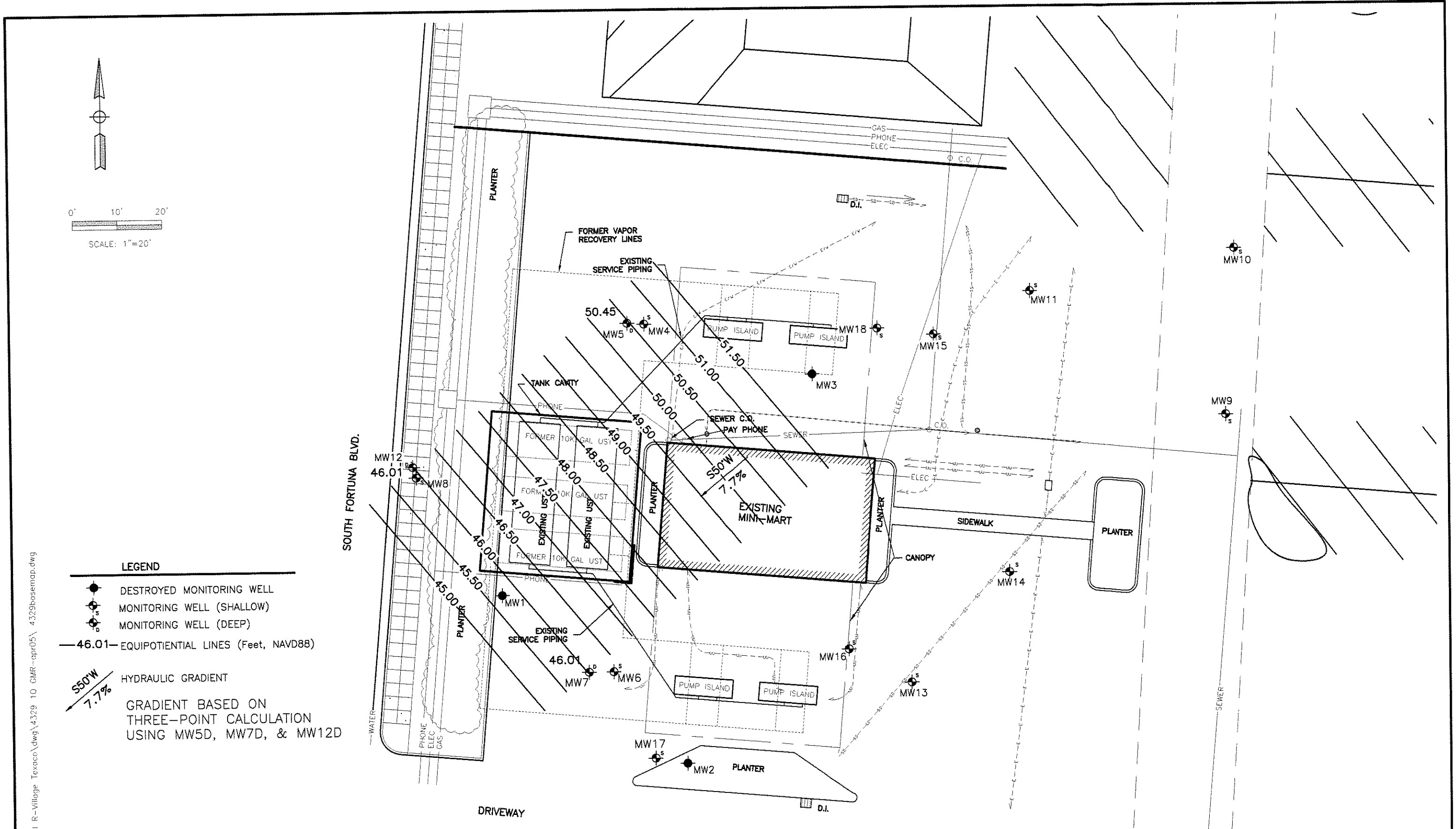

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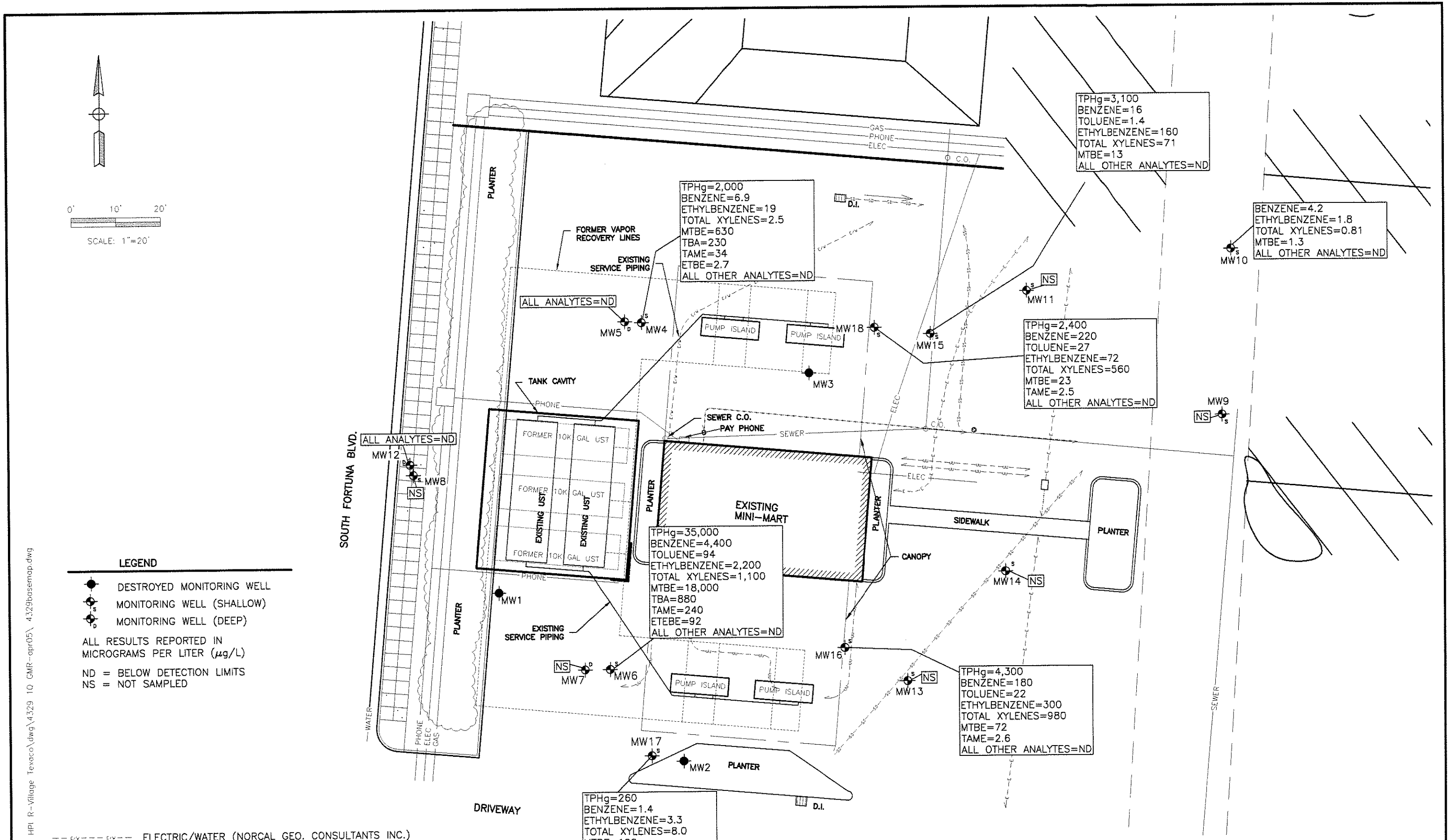
NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

GROUNDWATER MONITORING REPORT
HYDRAULIC GRADIENT MAP – DEEP AQUIFER (2/03/05)

HUMBOLDT PETROLEUM, INC
R.VILLAGE TEXACO, FORTUNA

SCALE	1"=20'
DRAWN	RJM
CHECK	
APPVD	
DATE	4/12/05
JOB NO.	4329.02
FIGURE	4



NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

GROUNDWATER MONITORING REPORT
ANALYTE CONCENTRATIONS IN GROUNDWATER (2/03/05)

HUMBOLDT PETROLEUM, INC
R.VILLAGE TEXACO, FORTUNA

SCALE	1"=20'
DRAWN	RJM
CHECK	
APPVD	
DATE	4/12/05
JOB NO.	4329.02
FIGURE	5

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TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

	Groundwater Measurements			Analytical Results										
WELL/ Sample Date	Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-1														
12/21/1998			dry	no sample collected		---	---	---	---	---	---	---	---	---
8/1/2000				---	---	---	---	---	---	---	---	---	---	---
MW-2														
8/25/1999			dry	no sample collected		---	---	---	---	---	---	---	---	---
8/1/2000				---	---	---	---	---	---	---	---	---	---	---
MW-3														
8/25/1999			16.51	no sample collected		---	---	---	---	---	---	---	---	---
8/1/2000				---	---	---	---	---	---	---	---	---	---	---
MW-4	72.21													
8/11/2000		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
9/8/2000		63.12	9.09	---	---	---	---	---	---	---	---	---	---	---
10/12/2000		64.03	8.18	---	---	---	---	---	---	---	---	---	---	---
11/9/2000		64.64	7.57	**510**	**61**	ND<0.50	**55**	**34**	**210**	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
12/12/2000		64.16	8.05	---	---	---	---	---	---	---	---	---	---	---
1/8/2001		64.81	7.40	---	---	---	---	---	---	---	---	---	---	---
2/14/2001		66.56	5.65	**2,800**	**88**	ND<0.50	**150**	**87.4**	**380**	**94**	**19**	ND<1.0	---	All others ND
2/14/2001		**field duplicate**		**2500**	**81**	ND<0.50	**140**	**79.4**	**340**	**100**	**17**	ND<1.0	---	All others ND
2/14/2001		**method blank**		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<1.0	ND<1.0	All ND<1.0-4.0	ND<1.0
3/12/2001		66.79	5.42	---	---	---	---	---	---	---	---	---	---	---
4/6/2001		66.52	5.69	---	---	---	---	---	---	---	---	---	---	---
5/11/2001		66.41	5.80	**1,300**	**120**	ND<1	**140**	**16**	**380**	**130**	**18**	ND<1.0	All ND<2.5	All others ND
6/8/2001		65.50	6.71	---	---	---	---	---	---	---	---	---	---	---
7/16/2001		66.21	6.00	---	---	---	---	---	---	---	---	---	---	---
8/24/2001		66.09	6.12	**1,400**	**81**	ND<1.3	**78**	**40**	**650**	**290**	**36**	**3.4**	All ND<2.5	All others ND
9/17/2001		65.39	6.82	---	---	---	---	---	---	---	---	---	---	---
10/24/2001		64.62	7.59	---	---	---	---	---	---	---	---	---	---	---
11/5/2001		65.32	6.89	**1,000**	**45**	**1.4**	**68**	**30.6**	**640**	**180**	**30**	**2.3**	All ND<1.0	All others ND
12/5/2001		66.48	5.73	---	---	---	---	---	---	---	---	---	---	---
1/3/2002		67.13	5.08	---	---	---	---	---	---	---	---	---	---	---
2/15/2002		66.63	5.58	**1,700**	**8.5**	ND<0.50	**49**	**13**	**540**	**620**	**27**	**1.9**	All ND<1.0	All others ND
5/3/2002		66.63	5.58	**1,900**	**7.4**	ND<0.50	**23**	**11.85**	**720**	**330**	**30**	**2.7**	All ND<1.0	All others ND
7/31/2002		66.26	5.95	**1,700**	**21**	**0.77**	**72**	**36.2**	**650**	**230**	**32**	**2.6**	All ND<1.0	All others ND
12/5/2002		65.43	6.78	**1,300**	**11**	**0.93**	**55**	**19.5**	**590**	**360**	**30**	**2.8**	All ND<1.0	All others ND
2/13/2003		62.68	9.53	no sample collected			---	---	---	---	---	---	---	---
5/21/2003		66.91	5.30	**2,200**	**20**	ND<0.50	**64**	**16**	**670**	**220**	**34**	**2.6**	All ND<1.0	All others ND
8/6/2003		66.40	5.81	**2,700**	**12**	**1.1**	**80**	**18.8**	**810**	**280**	**38**	**3.0**	All ND<1.0	All others ND
11/6/2003		65.83	6.38	**2,500**	**8.1**	ND<0.50	**44**	**8.88**	**620**	**200**	**28**	**2.2**	All ND<1.0	All others ND
2/11/2004		66.91	5.30	**2,000**	**12**	ND<0.50	**25**	**7.0**	**680**	**390**	**39**	ND<6.0	---	All others ND
5/14/2004		66.30	5.91	**1,900**	**20**	ND<0.50	**41**	**9.8**	**630**	**180**	**34**	**2.6**	---	All others ND
8/30/2004		66.15	6.06	**1,800**	**7.5**	ND<0.50	**29**	**4.8**	**650**	**350**	**39**	**2.8**	---	ND<1.0

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

WELL/ Sample Date	Groundwater Measurements: Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	Analytical Results: TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-4 Continued														
11/22/2004		66.00	6.21	**1,800**	**10**	ND<0.50	**39**	**5.7**	**690**	ND<500	**34**	**3.1**	---	ND<1.0
2/3/2005		66.94	5.27	**2,000**	**6.9**	ND<0.50	**19**	**2.5**	**630**	**230**	**34**	**2.7**	---	ND<1.0
MW-5	72.32													
8/11/2000		50.46	21.86	**no sample collected**			---	---	---	---	---	---	---	---
9/8/2000		49.04	23.28	---	---	---	---	---	---	---	---	---	---	---
10/12/2000		48.40	23.92	---	---	---	---	---	---	---	---	---	---	---
11/9/2000		48.40	23.92	**no sample collected**			---	---	---	---	---	---	---	---
12/12/2000		48.40	23.92	---	---	---	---	---	---	---	---	---	---	---
1/8/2001		48.40	23.92	---	---	---	---	---	---	---	---	---	---	---
2/14/2001		50.47	21.85	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**0.71**	ND<10	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
3/12/2001		50.53	21.79	---	---	---	---	---	---	---	---	---	---	---
4/6/2001		50.54	21.78	---	---	---	---	---	---	---	---	---	---	---
5/11/2001		50.50	21.82	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**1.2**	ND<10	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
6/8/2001		50.47	21.85	---	---	---	---	---	---	---	---	---	---	---
7/16/2001		48.90	23.42	---	---	---	---	---	---	---	---	---	---	---
8/24/2001		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---
9/17/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
10/24/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
11/5/2001		48.82	23.50	**no sample collected**		---	---	---	---	---	---	---	---	---
12/5/2001		48.86	23.46	---	---	---	---	---	---	---	---	---	---	---
1/3/2002		48.90	23.42	---	---	---	---	---	---	---	---	---	---	---
2/15/2002		50.43	21.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	---
5/3/2002		50.47	21.85	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0-2.0	---
7/31/2002		48.99	23.33	**no sample collected**		---	---	---	---	---	---	---	---	---
12/5/2002		48.63	23.69	**no sample collected**		---	---	---	---	---	---	---	---	---
2/13/2003		49.44	22.88	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	---
5/21/2003		50.52	21.80	ND<50	**2.9**	ND<0.50	**0.62**	**0.53**	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	---
8/6/2003		50.45	21.87	ND<50	ND<0.50	**1.4**	**1.1**	**3.9**	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	---
11/6/2003		48.84	23.48	**57**	ND<0.50	ND<0.50	ND<0.50	**0.74**	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	---
2/11/2004		50.49	21.83	**52**	**3.1**	ND<0.50	**1.3**	**1.0**	**2.2**	ND<10	ND<1.0	ND<1.0	---	ND < 1.0-10
5/14/2004		50.49	21.83	ND<50	**5.9**	ND<0.50	**1.7**	**0.96**	**1.6**	ND<10	ND<1.0	ND<1.0	---	ND<1.0
8/30/2004		48.83	23.49	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
11/22/2004		NA	dry	**no sample collected**			---	---	---	---	---	---	---	---
2/3/2005		50.45	21.87	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	
MW-6	72.24													
8/11/2000		NA	dry	**no sample collected**			---	---	---	---	---	---	---	---
9/8/2000		NA	dry	---	---	---	---	---	---	---	---	---	---	---
10/12/2000		NA	dry	---	---	---	---	---	---	---	---	---	---	---
11/9/2000		NA	dry	**no sample collected**			---	---	---	---	---	---	---	---
12/12/2000		NA	dry	---	---	---	---	---	---	---	---	---	---	---
1/8/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
2/14/2001		62.89	9.35	**no sample collected**			---	---	---	---	---	---	---	---

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

	Groundwater Measurements			Analytical Results										
WELL/ Sample Date	Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-6 Continued														
3/12/2001		63.62	8.62	---	---	---	---	---	---	---	---	---	---	---
4/6/2001		63.65	8.59	---	---	---	---	---	---	---	---	---	---	---
5/11/2001		63.71	8.53	**50,000**	**6,400**	**1,100**	**1,400**	**4,160**	**25,000**	**1,600**	**290**	**100**	All ND<50	All others ND
6/8/2001		63.43	8.81	---	---	---	---	---	---	---	---	---	---	---
7/16/2001		63.74	8.50	---	---	---	---	---	---	---	---	---	---	---
8/24/2001		63.00	9.24	**no sample collected**		---	---	---	---	---	---	---	---	---
9/17/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
10/24/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
11/5/2001		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---
12/5/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
1/3/2002		63.67	8.57	---	---	---	---	---	---	---	---	---	---	---
2/15/2002		64.40	7.84	**40,000**	**7,900**	**78**	**830**	**826**	**26,000**	**4,200**	**340**	**100**	All ND<50-100	All others ND
5/3/2002		63.99	8.25	**57,000**	**8,800**	**37**	**930**	**869**	**41,000**	**2,600**	**460**	**140**	All ND<50-100	All others ND
7/31/2002		62.67	9.57	**no sample collected**			---	---	---	---	---	---	---	---
12/5/2002		NA	dry	**no sample collected**			---	---	---	---	---	---	---	---
2/13/2003		63.44	8.80	**54,000**	**8,700**	**180**	**1,500**	**1,510**	**44,000**	ND	**500**	**140**	**1,2-Dichloroethane = 4.2** All others ND<1.0	All others ND
5/21/2003		65.71	6.53	**58,000**	**10,000**	**550**	**2,000**	**3,480**	**28,000**	**1,200**	**390**	**110**	**1,2-Dichloroethane = 3.4** All others ND<1.0	All others ND
8/6/2003		63.39	8.85	**45,000**	**8,700**	**130**	**1,900**	**1,600**	**35,000**	ND	**500**	**160**	ND<1.0	All others ND
11/6/2003		NA	dry	**no sample collected**			---	---	---	---	---	---	---	---
2/11/2004		63.94	8.30	**47,000**	**7,000**	**100**	**1,900**	**1,230**	**28,000**	ND	**380**	ND	ND<100	
5/14/2004		63.92	8.32	**38,000**	**6,300**	**95**	**1,900**	**1,530**	**25,000**	**980**	**340**	**110**	ND<50	ND<50
8/30/2004		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---
11/22/2004		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---
2/3/2005		64.39	7.85	**35,000**	**4,400**	**94**	**2,200**	**1,100**	**18,000**	**880**	**240**	**92**	ND<1.0-10	---
MW-7	72.19													
8/11/2000		46.05	26.14	**no sample collected**		---	---	---	---	---	---	---	---	---
9/8/2000		NA	dry	---	---	---	---	---	---	---	---	---	---	---
10/12/2000		NA	dry	---	---	---	---	---	---	---	---	---	---	---
11/9/2000		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---
12/12/2000		NA	dry	---	---	---	---	---	---	---	---	---	---	---
1/8/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
2/14/2001		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---
3/12/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
4/6/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
5/11/2001		NA	dry	**no sample collected**		---	---	---	---	---	---	---	---	---

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

WELL/ Sample Date	Groundwater Measurements: Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	Analytical Results: TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-7 Continued														
6/8/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
7/16/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
8/24/2001		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
9/17/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
10/24/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
11/5/2001		NA	dry	no sample collected			---	---	---	---	---	---	---	---
12/5/2001		45.91	26.28	---	---	---	---	---	---	---	---	---	---	---
1/3/2002		45.90	26.29	---	---	---	---	---	---	---	---	---	---	---
2/15/2002		46.23	25.96	no sample collected		---	---	---	---	---	---	---	---	---
5/3/2002		46.37	25.82	no sample collected		---	---	---	---	---	---	---	---	---
7/31/2002		45.79	26.40	no sample collected		---	---	---	---	---	---	---	---	---
12/5/2002		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		46.28	25.91	no sample collected		---	---	---	---	---	---	---	---	---
5/21/2003		47.76	24.43	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
8/6/2003		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
11/6/2003		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
2/11/2004		46.69	25.50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
5/14/2004		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
8/30/2004		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
11/22/2004		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		46.01	26.18	no sample collected		---	---	---	---	---	---	---	---	---
MW-8	72.30													
8/11/2000		60.53	11.77	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
9/8/2000		58.22	14.08	---	---	---	---	---	---	---	---	---	---	---
10/12/2000		58.22	14.08	---	---	---	---	---	---	---	---	---	---	---
11/9/2000		58.22	14.08	no sample collected		---	---	---	---	---	---	---	---	---
12/12/2000		58.22	14.08	---	---	---	---	---	---	---	---	---	---	---
1/8/2001		58.24	14.06	---	---	---	---	---	---	---	---	---	---	---
2/14/2001		58.22	14.08	no sample collected		---	---	---	---	---	---	---	---	---
3/12/2001		58.22	14.08	---	---	---	---	---	---	---	---	---	---	---
4/6/2001		58.21	14.09	---	---	---	---	---	---	---	---	---	---	---
5/11/2001		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
6/8/2001		58.22	14.08	---	---	---	---	---	---	---	---	---	---	---
7/16/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
8/24/2001		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
9/17/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
10/24/2001		NA	dry	---	---	---	---	---	---	---	---	---	---	---
11/5/2001		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
12/5/2001		58.23	14.07	---	---	---	---	---	---	---	---	---	---	---
1/3/2002		58.22	14.08	---	---	---	---	---	---	---	---	---	---	---
2/15/2002		58.21	14.09	no sample collected		---	---	---	---	---	---	---	---	---
5/3/2002		58.19	14.11	no sample collected		---	---	---	---	---	---	---	---	---

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

WELL/ Sample Date	Groundwater Measurements: Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	Analytical Results: TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-8 Continued														
7/31/2002		58.18	14.12	no sample collected		---	---	---	---	---	---	---	---	---
12/5/2002		57.96	14.34	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		58.16	14.14	ND<2,500	ND<25	ND<25	ND<25	ND<25	ND<50	ND<1000	ND<25	ND<25	All ND<25-50	ND<25
5/21/2003		57.98	14.32	no sample collected		---	---	---	---	---	---	---	---	---
8/6/2003		57.87	14.43	no sample collected		---	---	---	---	---	---	---	---	---
11/6/2003		57.79	14.51	ND<2,500	ND<25	ND<25	ND<25	ND<25	ND<50	ND<1000	ND<25	ND<25	All ND<25-50	ND<25
2/11/2004		57.67	14.63	---	---	---	---	---	---	---	---	---	---	---
5/14/2004		57.65	14.65	no sample collected		---	---	---	---	---	---	---	---	---
8/30/2004		57.70	14.60	no sample collected		---	---	---	---	---	---	---	---	---
11/22/2004		57.66	14.64	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		57.68	14.62	no sample collected		---	---	---	---	---	---	---	---	---
MW-9	71.60													
7/31/2002		59.83	11.77	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**3.1**	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
12/5/2002		62.14	9.46	no sample collected		---	---	---	---	---	---	---	---	
2/13/2003		62.18	9.42	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		61.82	9.78	no sample collected		---	---	---	---	---	---	---	---	---
8/6/2003		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
11/6/2003		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
2/11/2004		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
5/14/2004		61.70	9.90	no sample collected		---	---	---	---	---	---	---	---	---
8/30/2004		61.69	9.91	no sample collected		---	---	---	---	---	---	---	---	---
11/22/2004		61.71	9.89	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		61.71	9.89	no sample collected		---	---	---	---	---	---	---	---	---
MW-10	71.35													
7/31/2002		62.28	9.07	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
12/5/2002		61.94	9.41	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		62.33	9.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		62.51	8.84	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
8/6/2003		62.27	9.08	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
11/6/2003		61.69	9.66	no sample collected		---	---	---	---	---	---	---	---	---
2/11/2004		63.37	7.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
5/14/2004		62.29	9.06	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
8/30/2004		61.97	9.38	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
11/22/2004		61.73	9.62	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		64.00	7.35	ND<50	**4.2**	ND<0.50	**1.8**	**0.81**	**1.3**	ND<10	ND<1.0	ND<1.0	---	ND<1.0
MW-11	71.82													
7/31/2002		62.86	8.96	**420**	**190**	ND<0.50	**0.67**	**12.5**	**32**	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
12/5/2002		62.49	9.33	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		63.06	8.76	**120**	**15**	ND<0.50	**1.1**	**1.1**	**41**	ND<60	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		63.27	8.55	**79**	**5.5**	ND<0.50	ND<0.50	ND<0.50	**26**	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
8/6/2003		62.86	8.96	**73**	**8.3**	ND<0.50	**0.58**	**0.70**	**30**	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
11/6/2003		62.41	9.41	**120**	**1.8**	ND<0.50	ND<0.50	ND<0.50	**24**	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

WELL/ Sample Date	Groundwater Measurements: Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	Analytical Results: TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-11 Continued														
2/11/2004		62.21	9.61	---	---	---	---	---	---	---	---	---	---	---
5/14/2004		62.31	9.51	no sample collected		---	---	---	---	---	---	---	---	---
8/30/2004		62.31	9.51	no sample collected		---	---	---	---	---	---	---	---	---
11/22/2004		62.32	9.50	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		62.22	9.60	no sample collected		---	---	---	---	---	---	---	---	---
MW-12	72.44													
7/31/2002		43.21	29.23	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
12/5/2002		42.50	29.94	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		46.24	26.20	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		47.76	24.68	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
8/6/2003		44.07	28.37	ND<50	ND<0.50	**1.10**	**0.68**	**2.17**	ND<0.50	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
11/6/2003		43.01	29.43	**65**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
2/11/2004		46.69	25.75	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
5/14/2004		45.76	26.68	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
8/30/2004		43.20	29.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
11/22/2004		43.58	28.86	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
2/3/2005		46.01	26.43	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	---	ND<1.0
MW-13	71.84													
7/31/2002		63.00	8.84	**5,700**	**360**	**890**	**140**	**1,070**	**13**	ND<10	ND<1.0	ND<1.0	All ND<1.0-2.0	ND<1.0
12/5/2002		62.67	9.17	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		62.67	9.17	**6,700**	**580**	**50**	**530**	**1,476**	ND<20	ND<80	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		62.26	9.58	no sample collected		---	---	---	---	---	---	---	---	---
8/6/2003		62.23	9.61	no sample collected		---	---	---	---	---	---	---	---	---
11/6/2003		62.24	9.60	no sample collected		---	---	---	---	---	---	---	---	---
2/11/2004		62.21	9.63	no sample collected		---	---	---	---	---	---	---	---	---
5/14/2004		62.24	9.60	no sample collected		---	---	---	---	---	---	---	---	---
8/30/2004		62.23	9.61	no sample collected		---	---	---	---	---	---	---	---	---
11/22/2004		62.25	9.59	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
MW-14	72.06													
7/31/2002		63.58	8.48	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**3.4**	ND<10	ND<1.0	ND<1.0	ND<1.0-2.0	ND<1.0
12/5/2002		62.73	9.33	no sample collected			---	---	---	---	---	---	---	---
2/13/2003		63.01	9.05	**580**	**83**	**7.9**	**28**	**36.4**	**8.2**	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		62.45	9.61	no sample collected		---	---	---	---	---	---	---	---	---
8/6/2003		62.35	9.71	no sample collected		---	---	---	---	---	---	---	---	---
11/6/2003		62.35	9.71	no sample collected		---	---	---	---	---	---	---	---	---
2/11/2004		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
5/14/2004		63.04	9.02	**64**	ND<0.50	ND<0.50	**0.68**	ND<0.50	**5.0**	ND<10	ND<1.0	ND<1.0	---	ND<1.0
8/30/2004		62.73	9.33	**54**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**4.6**	ND<25	ND<1.0	ND<1.0	---	ND<1.0
11/22/2004		NA	dry	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		62.44	9.62	no sample collected		---	---	---	---	---	---	---	---	---

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

	Groundwater Measurements			Analytical Results										
WELL/ Sample Date	Well Head Elevation (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Depth to Water (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead Scavengers (µg/L)	Other Analytes (µg/L)
MW-15	72.21													
7/31/2002		63.16	9.05	**9,900**	**1,100**	**1,300**	**310**	**1,710**	**45**	ND<20	**1.8**	ND<1.0	ND<1.0-2.0	All others ND
12/5/2002		62.82	9.39	no sample collected		---	---	---	---	---	---	---	---	---
2/13/2003		66.66	5.55	**8,000**	**270**	**4.7**	**850**	**791**	**24**	ND<50	**1.1**	ND<1.0	All ND<1.0	ND<1.0
5/21/2003		66.67	5.54	**6,800**	**100**	**4.1**	**480**	**257**	**14**	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0
8/6/2003		64.12	8.09	**5,500**	**310**	**8.9**	**640**	**465**	**20**	ND<20	**1.1**	ND<1.0	All ND<1.0	ND<1.0
11/6/2003		63.05	9.16	**4,700**	**200**	**5.1**	**330**	**205**	**24**	ND<20	**1.2**	ND<1.0	All ND<1.0	ND<1.0
2/11/2004		67.07	5.14	**3,800**	**40**	**1.7**	**200**	**106**	**16**	ND<30	ND<1.0	ND<1.0	---	ND<1.0
5/14/2004		66.26	5.95	**6,000**	**50**	**2.2**	**450**	**143**	**13**	ND<10	ND<1.0	ND<1.0	---	ND<1.0
8/30/2004		63.19	9.02	**4,000**	**39**	**2.0**	**240**	**89**	**19**	ND<25	**1.2**	ND<1.0	---	ND<1.0
11/22/2004		65.39	6.82	**3,700**	**54**	**2.7**	**340**	**210**	**20**	ND<170	**1.2**	ND<1.0	---	ND<1.0
2/3/2005		67.05	5.16	**3,100**	**16**	**1.4**	**160**	**71**	**13**	ND<20	ND<1.0	ND<1.0	---	ND<1.0
MW-16	71.74													
8/30/2004		58.41	13.33	**3,200**	**26**	**85**	**16**	**323**	**36**	ND<10	ND<1.0	ND<1.0	---	ND<1.0
11/22/2004		58.02	13.72	**9,800**	**2,000**	**1,400**	**180**	**1,080**	**280**	**53**	**4.2**	ND<1.0	---	ND<1.0
2/3/2005		61.22	10.52	**4,300**	**180**	**22**	**300**	**980**	**72**	ND<35	**2.6**	ND<1.0	---	ND<1.0
MW-17	71.50													
8/30/2004		57.82	13.68	no sample collected		---	---	---	---	---	---	---	---	---
11/22/2004		57.56	13.94	no sample collected		---	---	---	---	---	---	---	---	---
2/3/2005		59.78	11.72	**260**	**1.4**	ND<0.50	**3.3**	**8.0**	**190**	**83**	**7.3**	ND<1.0	---	ND<1.0
MW-18	71.83													
8/30/2004		58.26	13.57	**580**	**6.3**	**14**	**4.4**	**95**	**17**	ND<10	**1.6**	ND<1.0	---	ND<1.0
11/22/2004		57.99	13.84	**7,400**	**2,000**	**460**	**200**	**890**	**190**	**85**	**13**	ND<1.0	---	ND<1.0
2/3/2005		59.81	12.02	**2,400**	**220**	**27**	**72**	**560**	**23**	ND<10	**2.5**	ND<1.0	---	ND<1.0

Notes:
TPHg - total petroleum hydrocarbons as gasoline
Xylenes - total of m,p-xylenes and o-xylenes
Fuel oxygenates include:
MTBE- methyl tertiary butyl ether-
ETBE - ethyl tertiary butyl ether
TAME - tertiary amyl methyl ether
TBA - teriary butyl alcohol
DIPE - Di-isopropyl ether

All results reported in micrograms per liter (µg/L)
ND - non-detect at the reporting limit shown (µg/L)
Bold results indicate analyte detection
--- Not sampled

TABLE 2: HISTORIC HYDRAULIC GRADIENT DATA
HPI R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

Date	Shallow Aquifer		Deep Aquifer	
	Direction	Slope	Direction	Slope
11/9/2000	NA	NA	NA	NA
12/12/2000	NA	NA	NA	NA
12/5/2002	S72°E	3.70%	NA	NA
2/13/2003	S82°W	0.061	S50°W	0.055
5/21/2003	S43°E	4.60%	S49°W	4.80%
8/6/2003	S43°W	0.044	NA	NA
11/6/2003	S70°E	3.48%	NA	NA
2/11/2004	S42°E	0.046	S49°W	0.066
5/14/2004	S38°E	4.20%	S57°W	8.20%
8/30/2004	NA	NA	NA	NA
11/22/2004	S61°E	NA	NA	NA
2/3/2005	NA	NA	S50°W	7.7%

Attachment 1

LACO ASSOCIATES CONSULTING ENGINEERS	PROJECT Well Redevelopment	BY JLS	SHEET NO. 1 of 2
21 W. 4th Street Eureka, California 95502 707-443-5054	LOCATION Fortuna Blvd, Fortuna	DATE 2-10-05	
	CLIENT Fortuna Shell (HPI)	CHECKED	JOB NO. 4329.02 / 3000
		DATE 2/11/05	

12:00 Leaving for site

12:30 on-site, setting up on MW # 9

12:40 DTW @ 9.91', adding water & surging

1:10 added 6 gallons of water surged with solid Block then w/check ball, to out 5 gallons by surging starting to pump

2:15 added 5 more gallons & pump out 5 more, comming out mostly clear to a little tan, will let sit 5 min & pump again to get most of water I put in.

2:20 Pump another gallon of water, Well Redeveloped decoding & moving to MW 11

2:40 DTW @ 9.85' in MW 11, adding water & surging

3:00 Add 4 gallons of water & surge, when adding the next 4 gallons will take in 1 W & not filling, used solid block & then check ball, surged out 3 gallons of water & starting to pump w/DHP

3:40 water comming out clear & making lots of water, pumped out about 10 gallons of water, Well Redeveloped, DTW @ 4.85', decoding & moving to MW # 13

4:00 No water in well, adding water & surging

4:15 add 4 gallons of water, used solid block & then check ball, surged out 3 gallons of water starting to pump w/DHP

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4th Street
Eureka, California 95502
707-443-5054

PROJECT Well Redevelopment	BY JLS	SHEET NO. 2 of 2
LOCATION So. Fortuna Blvd, Fortuna	DATE 2-1-05	
CLIENT Fortuna Shell (HPI)	CHECKED	JOB NO. 4329.02 13000
	DATE	

4:50 Water coming out clear & making little water. Pumped out total 4 gallons of water. Well Redeveloped, deconing + Moving to MW #14

5:05 DTW @ 9.45', adding water & surging

5:25 added 5 gallons of water, used total black thar check ball, surged out 3 gallons of water starting to pump with DHP

6:00 water coming out clear, & making water. pumped out 5 gallons of water. Well Redeveloped deconing + checking DTW on all wells mentioned

6:30 off-site

MW	DTW
9	9.91
11	4.85'
13	5.12'
14	5.13'

LACO ASSOCIATES CONSULTING ENGINEERS	PROJECT Well Redevelopment	BY JLS	SHEET NO. 1 of 1
21 W. 4th Street Eureka, California 95502 707-443-5054	LOCATION S. Fortuna Blvd. Fortuna	DATE 2/14/05	
	CLIENT R-Village (HPI)	CHECKED	JOB NO. 4329.02 13000
		DATE 2/15/05	

10:15 on-site, setting on on MW #9

10:20 DTW @ 9.15', adding water & surging

10:35 added 4 gallons of water, surged with solid block & then with check ball, surged out 3 gallons & starting to pump with DHP

11:10 pumped out 2 gallons of water, will let sit to see if making water, moving to MW 18

11:45 DTW @ 10.20', adding water & surging

12:00 added 2 gallons & surged with solid block then check ball, starting to pump with DHP

12:30 pumped out 10 gallons of water, water coming out clear & well making good water, Well Redevelopment discontinued, moving to MW #17

1:45 DTW @ 13.75', adding water & surging

2:00 added 5 gallons of water, surged with solid block & then check ball, surged out 2 gallons, starting to pump w/ DHP

2:45 pumped out 2 gallons, well still not making water discontinued & heading to leave site

3:15

MW#	DTW
9	6.51
11	7.42
13	4.48
14	5.05
17	5.08
18	13.11

3:25 off site

Attachment 2

NORTH COAST LABORATORIES LTD.

RECEIVED
LACO ASSOCIATES
FEB 18 2005
BY: JG

3:30

February 16, 2005

LACO Associates
P.O. Box 1023
Eureka, CA 95502

DRG
CJW
FRB

Attn: Accounts Payable

Order No.: 0502078
Invoice No.: 48116
PO No.: TASK 3020
ELAP No. 1247-Expires July 2006

RE: 4329.02, HPI-R Village Texaco

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4329-MW4-W
02A	4329-MW5-W
03A	4329-MW6-W
04A	4329-MW10-W
05A	4329-MW12-W
06A	4329-MW15-W
07A	4329-QCMB-W
08A	4329-QCFD-W
09A	4329-QCTB-W
10A	4329-MW16-W
11A	4329-MW17-W
12A	4329-MW18-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831

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North Coast Laboratories, Ltd. **Date:** *14-Feb-05*

CLIENT: LACO Associates
Project: 4329.02, HPI-R Village Texaco
Lab Order: 0502078

CASE NARRATIVE

Gasoline Components/Additives:
Samples 4329-MW4-W, 4329-MW6-W, 4329-MW15-W, 4329-QCFD-W, 4329-MW16-W, 4329-MW17-W and 4329-MW18-W appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

Some reporting limits were raised for samples 4329-MW6-W, 4329-MW15-W and 4329-MW16-W due to matrix interference.

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Date: 14-Feb-05
WorkOrder: 0502078

ANALYTICAL REPORT

Client Sample ID: 4329-MW4-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-01A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	630	50	µg/L	50		2/10/05
Tert-butyl alcohol (TBA)	230	10	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	2.7	1.0	µg/L	1.0		2/10/05
Benzene	6.9	0.50	µg/L	1.0		2/10/05
Tert-amyl methyl ether (TAME)	34	1.0	µg/L	1.0		2/10/05
Toluene	ND	0.50	µg/L	1.0		2/10/05
Ethylbenzene	19	0.50	µg/L	1.0		2/10/05
m,p-Xylene	2.5	0.50	µg/L	1.0		2/10/05
o-Xylene	ND	0.50	µg/L	1.0		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	95.2	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	2,000	50	µg/L	1.0		2/10/05

Client Sample ID: 4329-MW5-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-02A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		2/9/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		2/9/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/9/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/9/05
Benzene	ND	0.50	µg/L	1.0		2/9/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		2/9/05
Toluene	ND	0.50	µg/L	1.0		2/9/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/9/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/9/05
o-Xylene	ND	0.50	µg/L	1.0		2/9/05
Surrogate: 1,4-Dichlorobenzene-d4	98.3	80.8-139	% Rec	1.0		2/9/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		2/9/05

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Date: 14-Feb-05
WorkOrder: 0502078

ANALYTICAL REPORT

Client Sample ID: 4329-MW6-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-03A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	18,000	1,000	µg/L	1,000		2/10/05
Tert-butyl alcohol (TBA)	880	10	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	92	1.0	µg/L	1.0		2/10/05
Benzene	4,400	50	µg/L	100		2/10/05
Tert-amyl methyl ether (TAME)	240	100	µg/L	100		2/10/05
1,2-Dichloroethane	ND	10	µg/L	1.0		2/10/05
Toluene	94	0.50	µg/L	1.0		2/10/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		2/10/05
Chlorobenzene	ND	1.0	µg/L	1.0		2/10/05
Ethylbenzene	2,200	50	µg/L	100		2/10/05
m,p-Xylene	870	50	µg/L	100		2/10/05
o-Xylene	230	50	µg/L	100		2/10/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/10/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/10/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	92.6	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	35,000	5,000	µg/L	100		2/10/05

Client Sample ID: 4329-MW10-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-04A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	1.3	1.0	µg/L	1.0		2/9/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		2/9/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/9/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/9/05
Benzene	4.2	0.50	µg/L	1.0		2/9/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		2/9/05
Toluene	ND	0.50	µg/L	1.0		2/9/05
Ethylbenzene	1.8	0.50	µg/L	1.0		2/9/05
m,p-Xylene	0.81	0.50	µg/L	1.0		2/9/05
o-Xylene	ND	0.50	µg/L	1.0		2/9/05
Surrogate: 1,4-Dichlorobenzene-d4	99.2	80.8-139	% Rec	1.0		2/9/05

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Date: 14-Feb-05

ANALYTICAL REPORT

WorkOrder: 0502078

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		2/9/05

Client Sample ID: 4329-MW12-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00

Lab ID: 0502078-05A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		2/9/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		2/9/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/9/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/9/05
Benzene	ND	0.50	µg/L	1.0		2/9/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		2/9/05
Toluene	ND	0.50	µg/L	1.0		2/9/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/9/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/9/05
o-Xylene	ND	0.50	µg/L	1.0		2/9/05
Surrogate: 1,4-Dichlorobenzene-d4	99.3	80.8-139	% Rec	1.0		2/9/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		2/9/05

Client Sample ID: 4329-MW15-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00

Lab ID: 0502078-06A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	13	1.0	µg/L	1.0		2/10/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/10/05
Benzene	16	0.50	µg/L	1.0		2/10/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		2/10/05
Toluene	1.4	0.50	µg/L	1.0		2/10/05
Ethylbenzene	160	25	µg/L	50		2/10/05
m,p-Xylene	55	0.50	µg/L	1.0		2/10/05
o-Xylene	16	0.50	µg/L	1.0		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	95.3	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed

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ANALYTICAL REPORT

TPHC Gasoline	3,100	50	µg/L	1.0		2/10/05

Client Sample ID: 4329-QCMB-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-07A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		2/10/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/10/05
Benzene	ND	0.50	µg/L	1.0		2/10/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		2/10/05
Toluene	ND	0.50	µg/L	1.0		2/10/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/10/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/10/05
o-Xylene	ND	0.50	µg/L	1.0		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	99.2	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		2/10/05

Client Sample ID: 4329-QCFD-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-08A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	180	50	µg/L	50		2/10/05
Tert-butyl alcohol (TBA)	76	10	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/10/05
Benzene	0.98	0.50	µg/L	1.0		2/10/05
Tert-amyl methyl ether (TAME)	6.6	1.0	µg/L	1.0		2/10/05
Toluene	ND	0.50	µg/L	1.0		2/10/05
Ethylbenzene	2.6	0.50	µg/L	1.0		2/10/05
m,p-Xylene	5.0	0.50	µg/L	1.0		2/10/05
o-Xylene	0.74	0.50	µg/L	1.0		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	94.5	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	240	50	µg/L	1.0		2/10/05

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Date: 14-Feb-05
WorkOrder: 0502078

ANALYTICAL REPORT

Client Sample ID: 4329-QCTB-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-09A **Matrix:** Trip Blank

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		2/9/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		2/9/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/9/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/9/05
Benzene	ND	0.50	µg/L	1.0		2/9/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		2/9/05
Toluene	ND	0.50	µg/L	1.0		2/9/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/9/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/9/05
o-Xylene	ND	0.50	µg/L	1.0		2/9/05
Surrogate: 1,4-Dichlorobenzene-d4	97.5	80.8-139	% Rec	1.0		2/9/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		2/9/05

Client Sample ID: 4329-MW16-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-10A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	72	1.0	µg/L	1.0		2/10/05
Tert-butyl alcohol (TBA)	ND	35	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/10/05
Benzene	180	25	µg/L	50		2/10/05
Tert-amyl methyl ether (TAME)	2.6	1.0	µg/L	1.0		2/10/05
Toluene	22	0.50	µg/L	1.0		2/10/05
Ethylbenzene	300	25	µg/L	50		2/10/05
m,p-Xylene	800	25	µg/L	50		2/10/05
o-Xylene	180	25	µg/L	50		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	97.1	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	4,300	2,500	µg/L	50		2/10/05

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WorkOrder: 0502078

ANALYTICAL REPORT

Client Sample ID: 4329-MW17-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-11A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	190	50	µg/L	50		2/10/05
Tert-butyl alcohol (TBA)	83	10	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/10/05
Benzene	1.4	0.50	µg/L	1.0		2/10/05
Tert-amyl methyl ether (TAME)	7.3	1.0	µg/L	1.0		2/10/05
Toluene	ND	0.50	µg/L	1.0		2/10/05
Ethylbenzene	3.3	0.50	µg/L	1.0		2/10/05
m,p-Xylene	6.9	0.50	µg/L	1.0		2/10/05
o-Xylene	1.1	0.50	µg/L	1.0		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	94.4	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	260	50	µg/L	1.0		2/10/05

Client Sample ID: 4329-MW18-W **Received:** 2/3/05 **Collected:** 2/3/05 0:00
Lab ID: 0502078-12A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	23	1.0	µg/L	1.0		2/10/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		2/10/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		2/10/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		2/10/05
Benzene	220	25	µg/L	50		2/10/05
Tert-amyl methyl ether (TAME)	2.5	1.0	µg/L	1.0		2/10/05
Toluene	27	0.50	µg/L	1.0		2/10/05
Ethylbenzene	72	0.50	µg/L	1.0		2/10/05
m,p-Xylene	420	25	µg/L	50		2/10/05
o-Xylene	140	25	µg/L	50		2/10/05
Surrogate: 1,4-Dichlorobenzene-d4	94.3	80.8-139	% Rec	1.0		2/10/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	2,400	50	µg/L	1.0		2/10/05

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Date: 14-Feb-05

CLIENT: LACO Associates
Work Order: 0502078
Project: 4329.02, HPI-R Village Texaco

QC SUMMARY REPORT

Method Blank

Sample ID: **MB 020905** Batch ID: **R33287** Test Code: **8260OXYW** Units: **µg/L** Analysis Date: **2/9/05 8:59:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS3_050209B** SeqNo: **482326**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0									
Tert-butyl alcohol (TBA)	ND	10									
Di-isopropyl ether (DIPE)	ND	1.0									
Ethyl tert-butyl ether (ETBE)	ND	1.0									
Benzene	ND	0.50									
Tert-amyl methyl ether (TAME)	ND	1.0									
Toluene	0.1484	0.50									J
Ethylbenzene	0.1327	0.50									J
m,p-Xylene	0.2196	0.50									J
o-Xylene	ND	0.50									
1,4-Dichlorobenzene-d4	0.959	0.10	1.00	0	95.9%	81	139	0			

Sample ID: **MB 020905** Batch ID: **R33285** Test Code: **GASW-MS** Units: **µg/L** Analysis Date: **2/9/05 8:59:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS3_050209A** SeqNo: **482305**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	25.18	50									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 14-Feb-05

CLIENT: LACO Associates
Work Order: 0502078
Project: 4329.02, HPI-R Village Texaco

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05096** Batch ID: **R33287** Test Code: **8260OXYW** Units: **µg/L** Analysis Date: **2/9/05 5:36:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS3_050209B** SeqNo: **482323**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	20.42	1.0	20.0	0	102%	80	120	0			
Tert-butyl alcohol (TBA)	353.6	10	400	0	88.4%	25	162	0			
Di-isopropyl ether (DIPE)	20.97	1.0	20.0	0	105%	80	120	0			
Ethyl tert-butyl ether (ETBE)	20.82	1.0	20.0	0	104%	77	120	0			
Benzene	21.10	0.50	20.0	0	106%	78	117	0			
Tert-amyl methyl ether (TAME)	20.53	1.0	20.0	0	103%	64	136	0			
Toluene	19.29	0.50	20.0	0	96.5%	80	120	0			
Ethylbenzene	20.33	0.50	20.0	0	102%	80	120	0			
m,p-Xylene	41.07	0.50	40.0	0	103%	80	120	0			
o-Xylene	20.06	0.50	20.0	0	100%	80	120	0			
1,4-Dichlorobenzene-d4	1.00	0.10	1.00	0	100%	81	139	0			

Sample ID: **LCSD-05096** Batch ID: **R33287** Test Code: **8260OXYW** Units: **µg/L** Analysis Date: **2/9/05 6:01:00 AM** Prep Date:

Client ID: Run ID: **ORGCMS3_050209B** SeqNo: **482324**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	20.69	1.0	20.0	0	103%	80	120	20.4	1.31%	20	
Tert-butyl alcohol (TBA)	357.2	10	400	0	89.3%	25	162	354	0.989%	20	
Di-isopropyl ether (DIPE)	21.00	1.0	20.0	0	105%	80	120	21.0	0.148%	20	
Ethyl tert-butyl ether (ETBE)	20.91	1.0	20.0	0	105%	77	120	20.8	0.430%	20	
Benzene	21.15	0.50	20.0	0	106%	78	117	21.1	0.239%	20	
Tert-amyl methyl ether (TAME)	20.90	1.0	20.0	0	104%	64	136	20.5	1.76%	20	
Toluene	19.42	0.50	20.0	0	97.1%	80	120	19.3	0.655%	20	
Ethylbenzene	20.53	0.50	20.0	0	103%	80	120	20.3	0.988%	20	
m,p-Xylene	41.33	0.50	40.0	0	103%	80	120	41.1	0.635%	20	
o-Xylene	20.43	0.50	20.0	0	102%	80	120	20.1	1.85%	20	
1,4-Dichlorobenzene-d4	1.02	0.10	1.00	0	102%	81	139	1.00	1.71%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: LACO Associates
Work Order: 0502078
Project: 4329.02, HPI-R Village Texaco

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05097** Batch ID: **R33285** Test Code: **GASW-MS** Units: **µg/L** Analysis Date: **2/9/05 7:17:00 AM** Prep Date:
Client ID: Run ID: **ORGCMS3_050209A** SeqNo: **482302**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	1,073	50	1,000	0	107%	80	120	0			

Sample ID: **LCSD-05097** Batch ID: **R33285** Test Code: **GASW-MS** Units: **µg/L** Analysis Date: **2/9/05 7:43:00 AM** Prep Date:
Client ID: Run ID: **ORGCMS3_050209A** SeqNo: **482303**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	1,072	50	1,000	0	107%	80	120	1,070	0.146%	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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Chain of Custody

LABORATORY NUMBER: 0502078

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501
Phone: (707) 443-5054
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4329.02
Project Name: HPI - R Village Texaco
Purchase Order Number: task 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS	CONTAINER	PRESERVATIVE
	4329-MW4-W	2-3-05	AM	GW	8260 List 1	9	b
	4329-MW5-W				3		
	4329-MW6-W				3		
	~~4329-MW7-W~~						
	~~4329-MW8-W~~						
	~~4329-MW9-W~~						
	4329-MW10-W				3		
	~~4329-MW11-W~~						
	4329-MW12-W				3		
	~~4329-MW13-W~~		PM				
					8260 List5	9	b

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
Cold, intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	2-3-05 4:32 pm	K. Thompson	2/3/05 1632

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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Chain of Custody

LABORATORY NUMBER: 0502078

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W 4th St. Eureka CA 95501
Phone: (707) 443-5054
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4329.02
Project Name: HPI - R Village Texaco
Purchase Order Number: task ~~5th~~ 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	ANALYSIS: 8260 List 1
	~~4329-MW14-W~~	2-3-05	AM	GW	9	b	3
	4329-MW15-W						3
	4329-QCMB-W						3
	4329-QCFD-W						3
	4329-QCTB-W		PM				1
	4329-MW16-W	2/3		GW			3
	MW17-W						3
	MW18-W						3

Added per Steve to lab 2/4

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	2-3-05 4:32 pm		2/3/05 1032

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 3

LAGO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: R Village Texaco
Project No.: 4329.02
Date: 2-3-05
Golbal ID No.: T0602300415
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.25
Time on site: 8:15
Time off site: 3:45
Mileage: 48

WELL No.:	MW4		MW5		MW6		MW7		MW8	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	3-10		15-24.1		3-10		15-26.3		10-15	
DEPTH TO WATER (ft)	5.27		21.87		7.85		26.15		14.62	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.8	5.6			5.9	5.9				
TEMP (°C)	13.1	14.5			16.0	17.5				
Ecw (µmohs)	225	211			206	196				
ORP (mV)	22	37			24	12				
DO (mg/L)	1.07	0.52			1.16	0.36				
OTHER (units)	—				—					
PURGE: TIME	10:20	10:28	10:40	10:45	11:14	11:24				
METHOD (DHP/CB/B)	DHP		1½" B		DHP					
RATE (Lpm)	0.19		0.20		0.16					
VOLUME (L)	1.50		1.0		1.60					
COLOR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR				
ODOR	LIGHT SWEET	/ SLIGHT RUBBER	STRONG SULFUR		MED SWEET	/ RUBBER				
INTAKE DEPTH (FEET)	9.0		—		9.5					
SAMPLE: TIME	10:29		10:49		11:25		—		—	
METHOD (DHP/CB/B)	DHP		1½" B		DHP		—		—	
ANALYTES	8260 List 1		8260 List 1		8260 List 5		8260 List 1		8260 List 1	
TOTAL DRAWDOWN (FEET)	0.64		—		0.94		—		—	
REMARKS	—		—		—		NO PURGE - SAMPLE ONLY 0.19" H_2O		NO PURGE - SAMPLE ONLY 0.21" H_2O	
WELL CONDITION	good		good		good		good		good	

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

WASTE DRUMS: 1 DOT DRUM ONSITE DECON + PURGE FULL

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: R Village Texaco
Project No.: 4329.02
Date: 2-3-05
Golbal ID No.: T0602300415
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.25
Time on site: 8:15
Time off site: 3:45
Mileage: 48

WELL No.:	MW9		MW10		MW11		MW12		MW13	
DIAMETER (in)	2.00		2.00		2.00		1.50		2.00	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		28-30.9		5 - 10	
DEPTH TO WATER (ft)	9.89		7.35		9.60		26.45		DRY	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH			5.9	5.7						
TEMP (°C)			16.8	16.4						
Ecw (µmohs)			141	143						
ORP (mV)			35	74						
DO (mg/L)			2.54	1.56						
OTHER (units)			—							
PURGE: TIME			11:45	11:55	—	—	12:28	12:34		
METHOD (DHP/CB/B)			DHP		1/2" B		1/2" B			
RATE (Lpm)			0.16				0.17			
VOLUME (L)			1.60				1.0			
COLOR			CLEAR	CLEAR			CLEAR	TURBID		
ODOR			SLIGHT ORGANIC				LIGHT SULFOR			
INTAKE DEPTH (FEET)			9.0				—			
SAMPLE: TIME	—		11:56		—		12:36		—	
METHOD (DHP/CB/B)	—		DHP		—		1/2" B		—	
ANALYTES	8260 List 1		8260 List 1		8260 List 1		8260 List 1		8260 List 1	
TOTAL DRAWDOWN (FEET)	NO PURGE-SAMPLE ONLY 0.19 H_2O		1.28		—		—		—	
REMARKS	—		—		ATTEMPTED TO BAIL NOT ENOUGH H_2O TO		—		—	
WELL CONDITION	good		good		good	FILL ONE VOA	good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

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TEL 707.443.5054
FAX 707.443.0553

Project Name: R Village Texaco
Project No.: 4329.02
Date: 2-3-05
Golbal ID No.: T0602300415
PM: CJW

Tech: SJD
Mobe/Demobe time: .25/.25
Travel time: 1.25
Time on site: 8:15
Time off site: 3:45
Mileage: 48

WELL No.:	MW14		MW15		MW16		MW17		MW18	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	5-10		5-10		4-14		4-14		4-14	
DEPTH TO WATER (ft)	9.62		5.16		10.52		11.73		12.02	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING — FIELD INTRINSICS: pH			6.1	6.0	6.2	5.9	6.5	6.4	6.7	6.5
TEMP (°C)			16.7	16.4	16.1	17.5	16.7	18.0	16.6	16.9
Ecw (µmohs)			232	220	189	180	203	209	183	191
ORP (mV)			-38	-47	-26	-17	-16	10	-39	-12
DO (mg/L)			1.64	0.34	1.16	0.39	4.88	4.54	1.23	1.04
OTHER (units)			—		—		—		—	
PURGE: TIME			1:12	1:20	2:12	2:20	2:37	2:47	1:37	1:47
METHOD (DHP/CB/B)			DHP		DHP		DHP		DHP	
RATE (Lpm)			0.19		0.19		0.19		0.16	
VOLUME (L)			1.50		1.50		1.90		1.60	
COLOR			CLEAR	CLEAR	CLOUDY	CLOUDY	MED. BROWN TURBID	MED. BROWN TURBID	MED. BROWN TURBID	MED. BROWN TURBID
ODOR			MED. FUEL / RUBBER		MED. RUBBER / SWEET		MED. SWEET		YES?	
INTAKE DEPTH (FEET)			9.0		13.5		13.5		13.5	
SAMPLE: TIME	—		1:21		2:21		2:48		1:48	
METHOD (DHP/CB/B)	—		DHP		DHP		DHP		DHP	
ANALYTES	8260 List 1		8260 List 1		8260 List 1		8260 List 1		8260 List 1	
TOTAL DRAWDOWN (FEET)	—		0.50		0.81		1.88		1.08	
REMARKS	NO PURGE - SAMPLE ONLY 0.25 H_2O		—		—		FD - MB		—	
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

LACO ASSOCIATES
CONSULTING ENGINEERS
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FAX 707.443.0553

Project Name: R. Village Texaco
Project No.: 4329.02
Tech: SJD
Date: 2-3-05

METER ACCURACY RANGE

	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L

WELL ID: MW4

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:22	5.8	14.0	224	33	1.27
10:24	5.6	14.2	218	36	0.62
10:26	5.6	14.5	214	37	0.56
10:28	5.6	14.5	211	37	0.52

WELL ID: MW6

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:16	5.9	16.4	204	22	0.95
11:18	5.8	16.7	200	20	0.62
11:20	5.8	17.0	198	16	0.43
11:22	5.9	17.3	198	13	0.38
11:24	5.9	17.5	196	12	0.36

WELL ID: MW10

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:47	5.8	16.6	143	54	1.87
11:49	5.7	16.3	145	65	1.61
11:51	5.7	16.3	144	70	1.57
11:53	5.7	16.4	143	73	1.59
11:55	5.7	16.4	143	74	1.56

WELL ID: MW15

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:14	6.0	16.8	225	-41	0.83
1:16	6.0	16.5	223	-45	0.47
1:18	6.0	16.4	221	-47	0.38
1:20	6.0	16.4	220	-47	0.34

WELL ID: MW18

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:39	6.6	16.6	186	-26	1.15
1:41	6.5	16.6	189	-18	1.03
1:43	6.5	16.7	191	-14	1.27
1:45	6.5	16.7	191	-12	1.15
1:47	6.5	16.9	191	-12	1.04

WELL ID: MW16

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:14	6.0	16.6	184	-18	0.79
2:16	5.8	17.0	181	-16	0.53
2:18	5.9	17.3	180	-17	0.44
2:20	5.9	17.5	180	-17	0.39

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: R. VILLAGE TEXACO
Project No.: 4329.02
Tech: SJD
Date: 2-3-05

WELL ID: MW17

METER ACCURACY RANGE

+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:39	6.4	17.0	206	-4	4.53
2:41	6.4	17.6	207	4	4.48
2:43	6.4	17.9	208	7	4.51
2:45	6.4	18.0	208	9	4.52
2:47	6.4	18.0	209	10	4.54

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

LACO ASSOCIATES
CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: R. VILLAGE TERRACE

Project No.: 4329.02

Tech: SJD

Date: 2-3-05

WELL ID: mw4		WELL ID: mw5		WELL ID: mw6		WELL ID: mw7		WELL ID: mw8		WELL ID: mw9	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:50	5.26	8:52	21.87	9:14	7.84	9:16	26.18	9:09	14.62	9:03	9.89
9:30	5.27	9:32	21.87	9:53	7.85	9:55	26.18	9:49	14.62	9:44	9.89
10:16	5.27			11:10	7.85						

WELL ID: mw10		WELL ID: mw11		WELL ID: mw12		WELL ID: mw13		WELL ID: mw14		WELL ID: mw15	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
9:01	7.35	8:59	9.60	9:11	26.43	9:23	DRY	9:06	9.62	8:56	5.21
9:42	7.35	9:39	9.60	9:51	26.43			9:46	9.62	9:36	5.08
										12:46	5.16
										12:56	5.16

WELL ID: mw16		WELL ID: mw17		WELL ID: mw18		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
20	10.46	9:18	11.53	8:54	11.96						
:59	10.50	9:57	11.61	9:34	11.99						
2:53	10.52	12:51	11.72	12:48	12.02						
:05	10.52	1:02	11.72	12:58	12.02						

REVISED:8/16/04

WASTE DISPOSAL FORM

Project No. 4329.02 Date 2-3-05

Location R. VILLAGE TEXACO By SJD

Number of Soil Drums Ø Number of Water Drums 1

Please Insert a Check Mark

	Yes	No	Condition of Drums: Good	Fair	Deteriorated
Soil DOT drums	☐	☑	☐	☐	☐
Water DOT drums	☑	☐	☑ FULL	☐	☐

Other _____

※ Please describe location of all drums with references with the site, or write any comments, below.

BEHIND AIR/WATER STATION NEXT TO RESTAURANT

NORTH COAST LABORATORIES LTD.
3680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501
Phone: (707) 443-5054
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4329.02
Project Name: HPI - R Village Texaco
Purchase Order Number: task 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 1 (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: 8260 List5 (CONTAINER 9, PRESERVATIVE b)
	4329-MW4-W	2-3-05	Am	GW	3	
	4329-MW5-W				3	
	4329-MW6-W					3
	4329-MW10-W				3	
	4329-MW12-W				3	
			pm			

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
Cold, intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	2-3-05 4:32 pm	K. Thompson	2/3/05 1632

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W 4th St. Eureka CA 95501
Phone: (707) 443-5054
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4329.02
Project Name: HPI - R Village Texaco
Purchase Order Number: task 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS	CONTAINER	PRESERVATIVE
		2-3-05	AM	GW	8260 List 1	9	b
	4329-MW15-W	↓	↓	↓		3	
	4329-QCMB-W					3	
	4329-QCFD-W					3	
	4329-QCTB-W		PM			1	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	2-3-05 4:32 pm		2/3/05 1032

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT