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TO: Alameda County Health Care Services

Agency, Dept. of Environmental Health

80 Swan Way, #200 Oakland, CA 94621 DATE: May 24, 1994

ATTN: Ms. Susan L. Hugo

JOB NUMBER: 6-94-5219

SUBJECT: Autopro, 5200 Telegraph Avenue, Oakland, California

WE ARE TRANSMITTING THE FOLLOWING:

• Preliminary Site Assessment Report

CC: Mr. Ondrej M. Kojnok

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FILE

ORIGINATOR

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

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REPORT OF FINDINGS: PRELIMINARY SITE ASSESSMENT

AUTOPRO 5200 TELEGRAPH AVENUE, OAKLAND, CALIFORNIA

Presented to:

MR. GEORGE TUMA, AUTOPRO C/O MR. ONDREJ M. KOJNOK, ATTORNEY AT LAW 762 EL PASEO DE SARATOGA SAN JOSE, CALIFORNIA

Prepared by:

ENVIRONMENTAL SCIENCE & ENGINEERING, INC. CONCORD, CALIFORNIA

Project No. 6-94-5219

May 24, 1994

This report has been prepared by Environmental Science & Engineering, Inc. for the exclusive use of Mr. George Tuma of Autopro and Mr. Ondrej M. Kojnok, Attorney at Law, as it pertains to their site located at 5200 Telegraph Avenue in Oakland, California. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists and engineers practicing in this field. No other warranty, express or implied, is made as to professional advice in this report.

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May 24 1994

UNDER THE PROFESSIONAL REVIEW AND SUPERVISION OF:

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1.0 INTRODUCTION

This report describes the events, and presents the findings of a Preliminary Site Assessment (PSA) conducted by Environmental Science & Engineering, Inc. (ESE) at the Autopro facility (site) located at 5200 Telegraph Avenue in Oakland, California (Figure 1 - Location Map). This PSA was conducted to comply with the terms of an October 28, 1993 compliance letter prepared by the Alameda County Health Care Services Agency, Department of Environmental Health (Alameda County). Activities described herein were consistent with ESE's March 17, 1994 Workplan for PSA, and with Alameda County's March 28, 1994 comments regarding the Workplan. This report also represents the first quarter of required ground water monitoring and reporting for the site.

The objectives of this investigation were to:

- Verify the direction and magnitude of ground water flow beneath the site;
- Determine if soil and ground water beneath the site have been impacted by petroleum hydrocarbons; and
- Establish a program of quarterly ground water monitoring and reporting for the site.

The following report presents the procedures and methods used during this investigation, the results of this investigation, and the conclusions obtained from those results.

1.1 SCOPE OF WORK

To achieve the objectives of this PSA, ESE performed the following tasks:

- Drilled four soil borings at locations adjacent to potential sources of contamination and collected soil samples from those borings at approximate five-foot intervals during drilling. Soil Boring locations are shown on Figure 2 - Site Map;
- Installed and developed 2-inch diameter ground water monitoring wells in the soil borings;
- Analyzed selected soil and ground water samples collected from each well for gasoline,
 diesel fuel, and oil and grease constituents, and for selected heavy metals;
- Surveyed the horizontal locations and top of casing elevations for all monitoring wells;
- Collected ground water level data from each new monitoring well; and
- Reviewed all field and analytical data and prepared a Report of Findings for this PSA.

2.0 BACKGROUND

2.1 SITE SETTING

The site is located at the northeastern corner of the intersection of Telegraph and Claremont Avenues in Oakland, California (Figure 2). The site is located in a mixed commercial and residential area within the northern portion of the City of Oakland.

The site is at an approximate elevation of 120-feet above mean sea level (U.S.G.S., 1959). Regional topography slopes southwest toward the San Francisco Bay.

2.2 SITE HISTORY

Investigation at the subject site was initiated in December 1990 when two 5,000-gallon gasoline underground storage tanks (USTs) and one 5,000-gallon diesel UST were removed from a common excavation ("diesel/gasoline excavation"; Figure 2), a 1,000-gallon waste oil UST was removed from a single excavation ("waste oil excavation"; Figure 2), and an 8,000-gallon gasoline UST was removed from a single excavation ("gasoline only excavation"; Figure 2). UST removal was performed by Pacific Excavators of Martinez, California (Pacific). At the time the USTs were removed, Pacific reported that the tanks were tight and had not leaked.

During UST removal, Pacific excavated tank backfill materials, but did not overexcavate native materials. Pacific did not remove existing product lines or vent lines, which remained exposed in the excavation sidewalls.

After UST removal, Sampling Specialists of Pacheco, California collected verification samples from the excavations and stockpiles of excavated soil. These samples included 10 soil samples from the excavations (two from beneath each of the former USTs) and five samples from four stockpiles. Sampling Specialists also collected two "grab" samples of standing ground water within the diesel/gasoline excavation.

Soil and ground water samples collected from the diesel/gasoline excavation, and soil samples collected from the gasoline only excavation, were analyzed for total petroleum hydrocarbons as gasoline (TPH-G); TPH as diesel (TPH-D); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and total lead. Soil samples collected from the waste oil excavation were analyzed for TPH-G, TPH-D, BTEX, oil and grease (O&G), and purgeable halocarbons (PHs). Ranges of constituents detected in the December 1990 soil and ground water samples are summarized in the following table. For soil and stockpile samples, results are presented in milligrams per kilogram (mg/Kg) or parts per million (ppm). For ground water samples, results are presented in milligrams per liter (mg/L) or ppm.

Analyte	Soil Samples Diesel/Gasoline Excavation	Ground Water Sample Diesel/Gasoline Excavation	Soil Samples Waste Oil Excavation	Soil Samples Gasoline Only Excavation	Soit Samples Stockpiles
TPH-G	38 - 2,900	110.0	19.0 - 36.0	8.8 - 340	ND<1.0- 130
TPH-D	ND < 1.0- 4,500	68.0	32.0 - 47.0	NM	ND<1.0- 56
Benzene	ND<.005- 4.5	0.13	ND<.005	ND<.0050078	ND<.005
Toluene	ND<.005-2.4	0.71	ND<.005034	ND<.005- 0.18	ND < .005
Bthylbenzene	0.23 - 11.0	0.19	.066- 0.12	ND<.005- 0.17	ND<.005- 0.11
Total Xylenes	0.11 - 30.0	0.18	0.12 - 0.37	ND<.005-0.19	ND<.005- 1.1
Total Lead	11.6 - 39.6	1.61	NM	9.38- 17.1	5.32(1)
O&G	NM	NM	8,000- 12,000	NM	240 (2)
PHs	NM	NM	ND<.005	NM	NM

ND: Not detected at the reporting limit indicated

NM: Not measured

(1): Sample collected from gasoline only excavation stockpile

(2): Sample collected from waste oil excavation stockpile

Records available to ESE indicate that the gasoline only excavation stockpile was transported offsite to BFI's Vasco Road facility in February 1991.

At least three additional overexcavation and soil sampling events in one or more of the pits have occurred since removal of the original USTs. Available file information indicates that in May 1991, Pacific collected eight additional samples of soil stockpiled (and presumably overexcavated) from the gasoline only and diesel/gasoline excavations. Analytical results indicated that detectable concentrations of BTEX constituents were present in all but three samples. Where detected, the ethylbenzene and total xylenes fractions occurred in the highest proportions relative to the benzene and toluene fractions, suggesting the presence of diesel fuel and/or weathered gasoline.

In July 1991, Pacific apparently performed additional overexcavation in the gasoline only excavation, and subsequently collected six samples from the excavation sidewalls and three samples from the resultant stockpile. Analytical results for sidewall samples reported TPH-D concentrations ranging from ND<10 mg/Kg to 730 mg/Kg, the latter being quantified by the analytical laboratory as both diesel fuel and weathered gasoline. Stockpile soil samples reported TPH-D concentrations ranging from 20 to 50 mg/Kg.

In a letter dated October 28, 1993 Alameda County mandated that there needed to be more investigation and remediation at the site. This included producing any overexcavation reports concerning the waste oil UST and additional ground water investigations.

ESE prepared a Workplan for Preliminary Site Assessment (Workplan) in March of 1994 (ESE, 1994) that addressed the concerns of Alameda County. This is a summary of activities conducted according to the Workplan.

3.0 PROCEDURES

In April 1994, ESE conducted a PSA at the site. The investigation consisted of drilling four soil borings and installing four ground water monitoring wells (MW-1 through MW-4; Figure 2) in the borings and collecting soil ground water samples from the four new borings/wells. Soil boring and monitoring well locations are shown on Figure 2. All field work was performed by ESE in accordance with the referenced ESE Workplan, and the RWQCB Tri-Regional Board Recommendations (RWQCB, 1990).

3.1 SOIL BORINGS AND SOIL SAMPLING

On April 11 and 12, ESE supervised the drilling of soil borings MW-1 through MW-4. The drilling was performed by Soils Exploration Services, Inc. (SES) of Benicia, California using a truck-mounted hollow stem auger (HSA) drill rig.

The soil generated from the borings (soil samples and soil cuttings) was classified by the ESE geologist in accordance with the Unified Soil Classification System (USCS). Additionally, the ESE geologist noted soil color, relative density, moisture content, biologic content and odor, if present. These observations and a graphical presentation of the soil borings are presented in Appendix A - Geologic Boring Logs.

Soil samples were collected during drilling at approximate five-foot intervals by driving a split-spoon sampler, lined with brass sleeves, 18-inches through the center and ahead of the HSA. The samplers were driven by dropping a 140-pound hammer 30-inches onto rods attached to the top of the sampler. The number of blows required to drive the sampler each six-inch interval were noted and appear on the geologic boring logs (Appendix A). The ends of one brass sleeve from each sampler driven were covered with Teflon lined plastic end caps, which were sealed to the brass sleeve with duct tape, labeled and placed on ice. A portion of each soil sample was sealed in a clean individual Ziploc bag and set in direct sunlight to enhance the volatilization of any VOCs present in the soil. After

approximately 15-minutes each sample was screened for VOCs using a photoionization detector (PID). PID readings appear on the geologic boring logs (Appendix A). Additional samples were collected from depths below the occurrence of ground water for the purpose of lithologic classification.

All soil samples were transported under chain of custody to Coast to Coast Analytical Services (CCAS) of San Jose, California. CCAS is a State-certified analytical laboratory. ESE requested analysis for samples from depths of 10 and 20 feet bgs in MW-1, and from depths of 10 and 15 feet bgs in the remaining borings. Visual inspection and PID readings for soil cuttings, indicated that soil at those depths had been impacted by petroleum hydrocarbons.

Soil boring MW-1 was terminated at a depth of 30 feet below ground surface (bgs) while borings MW-2 through MW-4 were terminated at a depth of 25-feet below ground surface (bgs). Soil generated from the drilling activities was stored on-site in appropriately labeled 55-gallon Department of Transportation (DOT) rated drums pending analysis and proper disposal/recycling.

The soil samples were analyzed by CCAS for the fuel fingerprint constituents TPH-G, TPH-D, TPH as kerosene (TPH-K); 1,2-dichloroethane (1,2-DCA); ethylene dibromide (EDB); and benzene, toluene, ethylbenzene, and xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8260 modified; O&G by Standard Method 5520B; and the metals cadmium, chromium, lead, nickel, and zinc by EPA 6000 and 7000 series methodology.

3.2 <u>WELL INSTALLATION, DEVELOPMENT AND SURVEYING</u>

Monitoring wells MW-1 through MW-4 were installed in their respective borings on April 11 and 12, 1994. A graphic presentation of the well completion details is presented with the boring logs in Appendix A. Wells MW-1 through MW-4 were constructed of new 2-inch diameter, schedule 40 polyvinyl chloride (PVC) pipe. The lower portion of the PVC pipe

in each well is perforated with slot openings, 0.020-inch in width. The perforated sections of pipe in wells MW-1 through MW-4 extend from 30 and 25 feet bgs up to approximately 15 feet bgs. The annular space surrounding the perforated pipe and up to one-foot above is filled with No. 2-12 sand. Prior to installing the sanitary seal, the wells were surged using a teflon surge block that was steamed cleaned between wells. The surging was performed by raising and lowering a surge block through the column of water in each well. The sand pack was remeasured and any subsidence was countered with the addition of more sand. A sanitary seal consisting of approximately two feet of bentonite pellets and 12 feet of neat cement was then installed.

The wells were further developed by bailing and overpumping on April 12 and 22, 1994. Well development serves the purpose of adjusting the sand pack around the well, which improves the filtering and flow properties of the sand pack, improving the communication between the aquifer and the well, and removing fine sediments from the well casing. All development equipment was cleaned between use in each well with Alconox and tap water followed by a tap water rinse. The wells were developed until they produced relatively clear, sand-free water. Approximately 20 to 25 gallons of ground water were purged from each well during the development process. All water generated during well development and associated cleaning procedures was stored on site in appropriately labeled 55-gallon drums pending laboratory analyses, and proper recycling.

ESE placed a notch on the top of casing of each well at the site. The top of the PVC casing (at the notch), and the horizontal location for each well and boring was surveyed and tied into a stationary point located at the site. The vertical coordinate for each well (elevation) was calculated with respect to an assumed elevation of 120 feet above mean sea level. This mark on the top of casing for each well will be used as the reference datum for the measurement of the depth to ground water for each well.

3.3 GROUND WATER MONITORING AND SAMPLING

On April 26, 1994, ESE gauged depth to ground water and checked for the presence of free phase product in wells MW-1 through MW-4 using an electric oil/water interface probe. The interface probe was cleaned between use in each well using an Alconox soap and tap water cleaning solution followed by a tap water rinse, then a distilled water rinse. ESE then purged and sampled ground water from each well. A minimum of three well-casing volumes of ground water were purged from each well using a new disposable polyethylene bailer and new nylon string. During the well purging process the pH, conductivity and temperature of the ground water was periodically monitored for stabilization to ensure the collection of samples representative of the aquifer surrounding each well. Ground water sampling data forms with recorded measurements of pH, conductivity and temperature of the purged water from each well are included as Appendix B - Ground Water Sampling Data Forms. All purged ground water and equipment rinse solutions were contained on site in appropriately labeled 55-gallon drums pending analytical results and proper disposal.

Ground water samples were obtained from wells MW-1 through MW-4 by lowering a new disposable polyethylene bailer into each well using new nylon cord. The first bailer volume was emptied and ground water was decanted from the second bailer volume collected into appropriate laboratory supplied containers. The samples were then sealed with Teflon lined caps, labeled, placed on ice in a cooler and under chain of custody for transport to CCAS. CCAS analyzed each sample for fuel fingerprint constituents (TPH-G, TPH-D, BTEX, 1,2-DCA, and EDB) and metals as described above for soil samples.

A laboratory supplied trip blank, consisting of deionized water, was also transported to CCAS with the other samples and analyzed for fuel fingerprint constituents. The trip blank provides a quality control check on ESE sample handling procedures and ensures that no communication occurs between the sample containers during transport to the laboratory.

3.4 WASTE MATERIALS MANAGEMENT

Soil cuttings generated from borings, decontamination rinsate, development water, and purge water were stored onsite in DOT-rated 55-gallon drums pending appropriate profiling and disposal. Seven drums of cuttings and five drums of rinsate/development/purge water were generated. To profile soil cuttings for disposal, ESE collected a single soil sample from each drum of cuttings, and instructed CCAS to composite the samples and analyze the composite sample for the following:

- Volatile organic compounds (VOCs) using EPA Method 8240;
- Semi-VOCs and polychlorinated biphenyls (PCBs) using EPA Method 8270;
- Title 26 metals (CAM metals) using EPA 6000 and 7000 series methodology;
- Flashpoint using EPA Method 1020;
- Reactivity as cyanide using ASTM Method D5049;
- Reactivity as sulfide using ASTM Method D4978; and,
- PH using EPA Method 9045.

To profile liquid wastes for disposal, ESE used results for ground water samples, analyzed by CCAS as described above. At the time this report was being prepared, soil and liquid waste disposal options were being evaluated on behalf of ESE by Integrated Wastestream Management, Inc. (IWM) of Milpitas, California.

4.0 RESULTS

4.1 SOIL BORINGS AND SOIL SAMPLING

The site is underlain predominantly by silty clay to depths of approximately 10-13 feet below ground surface (bgs). The clay unit is underlain by a sandy gravel unit, which is the apparent shallow water bearing zone at the site, total depth in borings MW-1 through MW-3 (Appendix A). The sandy gravel unit is only five feet thick in boring MW-4, and underlain by apparently the same silty clay unit noted above.

Ground water was found during drilling at depths of 15 to 20 feet bgs. Subsequent to well completion, ground water was measured (on April 11 and 12, 1994) at approximate depths of 11 to 12-feet bgs. The difference in water levels is probably due to low hydraulic conductivity of the sediments and a flow barrier presented by the augers during drilling, rather than due to confining conditions.

While drilling, petroleum hydrocarbon odors were observed in all soil borings at depths below 5-feet bgs with the exception of MW-4. Detectable PID measurements above background from soil samples were recorded for all soil borings at depths of 10 and 15 feet bgs. Detectable PID measurements were also observed in the five-foot sample collected from borings MW-1 and MW-4. The highest PID measurements were observed in the 10-foot bgs samples from borings MW-3 and MW-4. PID measurements for soil samples are shown on the boring logs.

Analytical results are summarized in Table 1 - Analytical Results for Soil Samples. Review of Table 1 demonstrates that TPH-G and BTEX constituents were detected in only one sample (MW-3 @ 15 feet bgs), TPH-D was not detected in any of the samples, and O & G was detected in three samples (MW-1 @ 10, MW-4 @ 10, and MW-4 @ 15 feet bgs). Metals detected in soil samples were each significantly below applicable total threshold limit concentrations (TTLCs) established under Title 26 of the California Code of Regulations.

Sample MW-3 @ 10 feet bgs reported TPH quantifiable in the kerosene range. ESE questioned CCAS regarding these results, and CCAS provided ESE with the chromatogram for the sample, demonstrating that the sample correlates well with a kerosene standard.

Laboratory analytical reports for soil samples including chain of custody documentation, results for laboratory quality assurance/quality control (QA/QC) samples, and the referenced chromatogram for sample MW-3 @ 10 are presented as Appendix C - Laboratory Reports and Chain of Custody Documentation for Soil Samples.

4.2 GROUND WATER FLOW

Ground water elevations in monitoring wells MW-1 through MW-4 were measured on April 26, 1994. The average depth to ground water in wells MW-1 through MW-4 was about 11.45 feet below the top of casing for each well. Ground water elevations measured on April 26 are contoured in Figure 3 - Ground Water Elevations. Elevation contours show that ground water flows in a generally southwest direction at the site with an approximate gradient of 0.018 (93 feet/mile), which is generally consistent with area topography and regional flow toward San Francisco Bay.

ESE did not observe free phase product in any of the wells.

4.3 GROUND WATER SAMPLES

Analytical results for ground water samples collected on April 26 are summarized in Table 2 -Analytical Results for Ground Water Samples. Laboratory reports, chain of custody documentation and results for laboratory QA/QC samples are presented as Appendix D to this report.

With the exception of well MW-2, all ground water samples reported detectable concentrations of TPH-G and one or more BTEX constituent. The only exceedance of applicable California action levels for BTEX constituents was in the sample from well MW-3, which reported a benzene concentration of 70 micrograms per liter (μ g/L), or parts per

billion (the California action level for benzene is 0.7 μ g/L). The highest reported concentration of TPH-G was in the sample from well MW-3 (10,000 μ g/L), which is the apparent downgradient site margin. Diesel fuel was not detected in any of the samples.

Concentrations of TPH-G are contained in Figure 4 for the purpose of demonstrating the approximate extent of the petroleum hydrocarbon plume. This figure indicates that the extent of petroleum hydrocarbons in ground water has not been completely defined to the south and southwest of the site.

One or more of the metals cadmium, lead, nickel, and zinc were detected in each of the samples (chromium was not detected in any of the samples). However, none of these metals were detected at concentrations above applicable TTLCs.

The trip blank, analyzed for fuel fingerprint constituents, reported nondetectable concentrations for all analytes. This is an indication that ESE's samples handling and transport procedures did not results in sample cross-contamination.

4.4 WASTE MATERIALS

Analytical results for composite sample of soil cuttings ("Composite SP-1, -2, -3 & -4") are presented with chain of custody in documentation and QA/QC sample results in Appendix E - Laboratory Reports and Chain of Custody Documentation for Waste Soil Materials. These results, along with those presented for ground water samples in Table 2 and Appendix D, indicate that waste materials generated as a result of this PSA are not hazardous by California Title 26 Standards.

IWM is currently evaluating recycling options for liquid wastes and disposal options for soil cuttings. Final disposition of these materials, along with disposal of liquid wastes generated during future monitoring efforts, will be documented in subsequent quarterly monitoring reports.

5.0 SUMMARY AND CONCLUSIONS

- The site is underlain by a silty clay unit to a depth of 10-13 feet bgs, which will preclude downward migration of any materials spilled at the surface. However, the water bearing zone at the site is a sandy gravel, which is presumably highly permeable. Dissolved petroleum hydrocarbons, if present in sufficient concentrations, may be highly mobile in this zone.
- Petroleum hydrocarbons in the gasoline and kerosene ranges were detected in selected soil samples from the boring for well MW-3. This boring is adjacent to the "gasoline only" excavation. Evaluation of the chromatogram for the sample indicates that the hydrocarbons detected are actually kerosene, and not a degradation byproduct of other fuel constituents. The source for hydrocarbons in the kerosene range is unknown.
- Petroleum hydrocarbons in the O&G range were detected in samples from the 10-15 foot depths in borings MW-1 and MW-4 (Boring MW-1 is immediately adjacent to the waste oil excavation), but at concentrations significantly below those reported in original soil samples from the waste oil excavation. These results for MW-1 confirm a release from the original waste oil UST, and indicate that most O&G was removed during excavation activities. O&G detected in soil samples from MW-4, which is downgradient of the waste oil excavation, may represent downgradient migration of these constituents in shallow ground water.
- Ground water flow beneath the site is to the southwest, which is generally consistent with area topography and regional flow toward San Francisco Bay. This finding suggests that migration of petroleum hydrocarbons in ground water, if occurring, will be to the southwest.

- Analytical results for ground water samples indicate that shallow ground water at the site has been impacted with generally low concentrations of petroleum hydrocarbons, although some concentrations are shown to exceed applicable California action levels (benzene in well MW-3). The results for MW-3 indicate that petroleum hydrocarbons have migrated in ground water to the approximate downgradient site margin, and have not been completely defined in that direction.
- Diesel fuel was not detected in any of the soil or ground water samples indicating that past excavation of soils containing diesel constituents was effective, and that no residual impact to soil and ground water remains.
- Concentrations of selected metals detected in soil and ground water samples do not
 exceed applicable TTLCs, and are not a potential threat to the shallow subsurface.
- Waste materials generated as a result of this investigation are not hazardous and can be disposed and/or recycled as such. Disposal/recycling is pending.

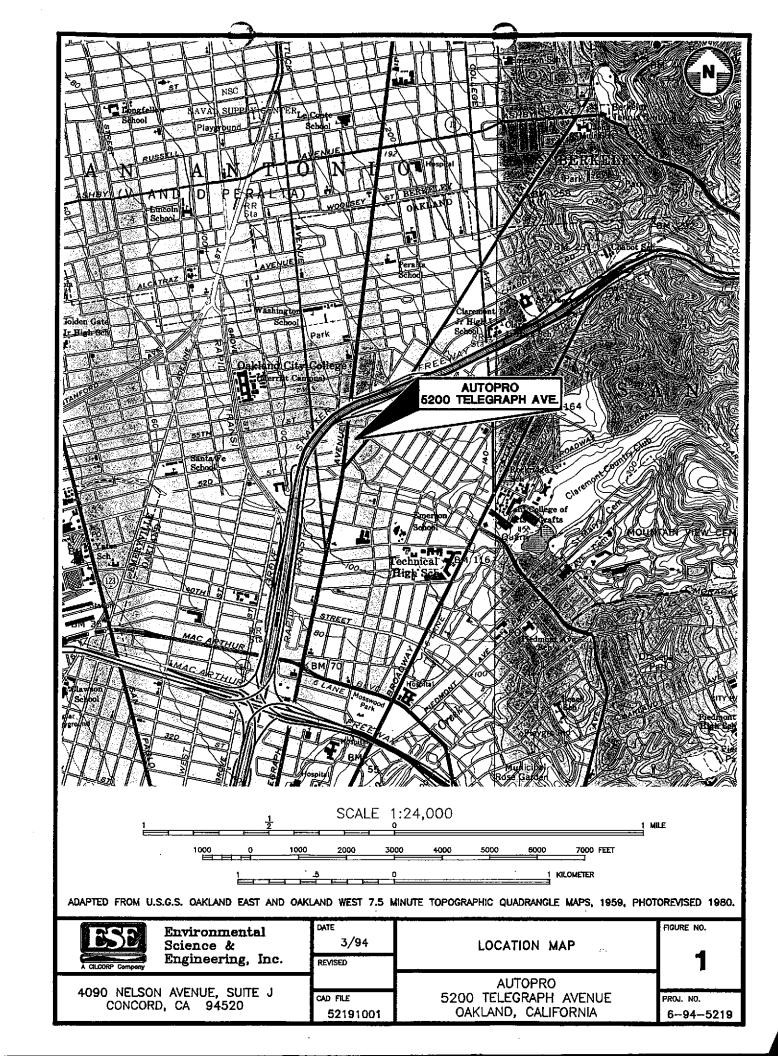
6.0 RECOMMENDATIONS

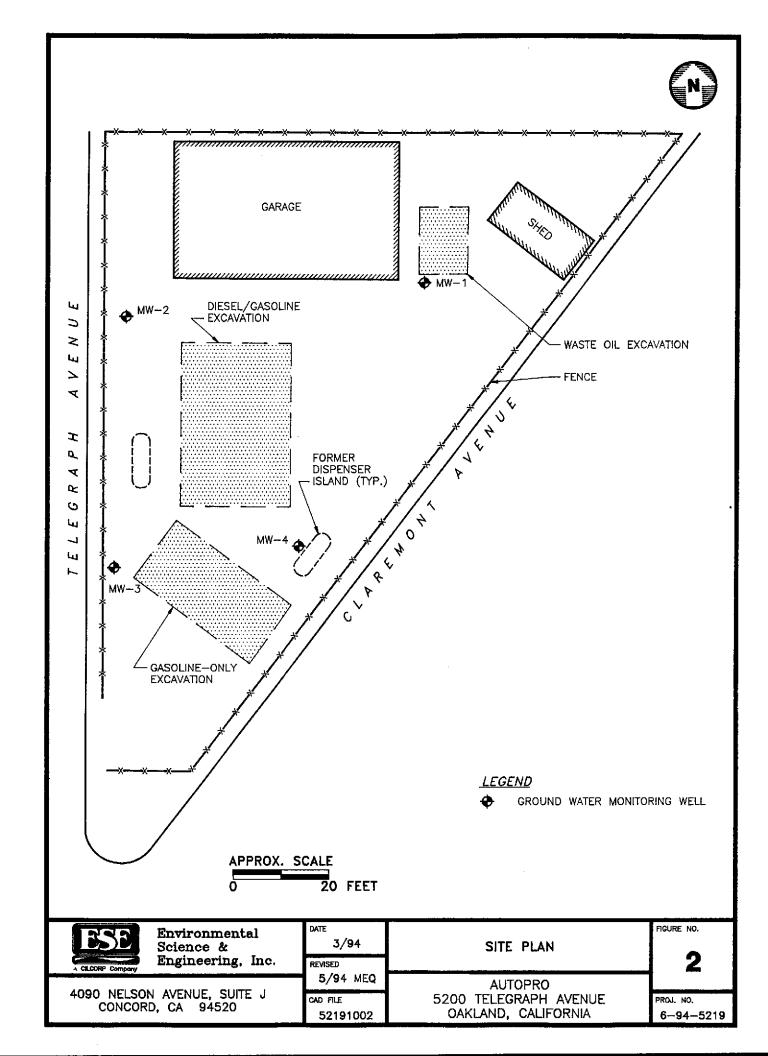
Based upon the findings and associated conclusions for the PSA at Autopro, 5200 Telegraph Avenue, ESE recommends the following course of action:

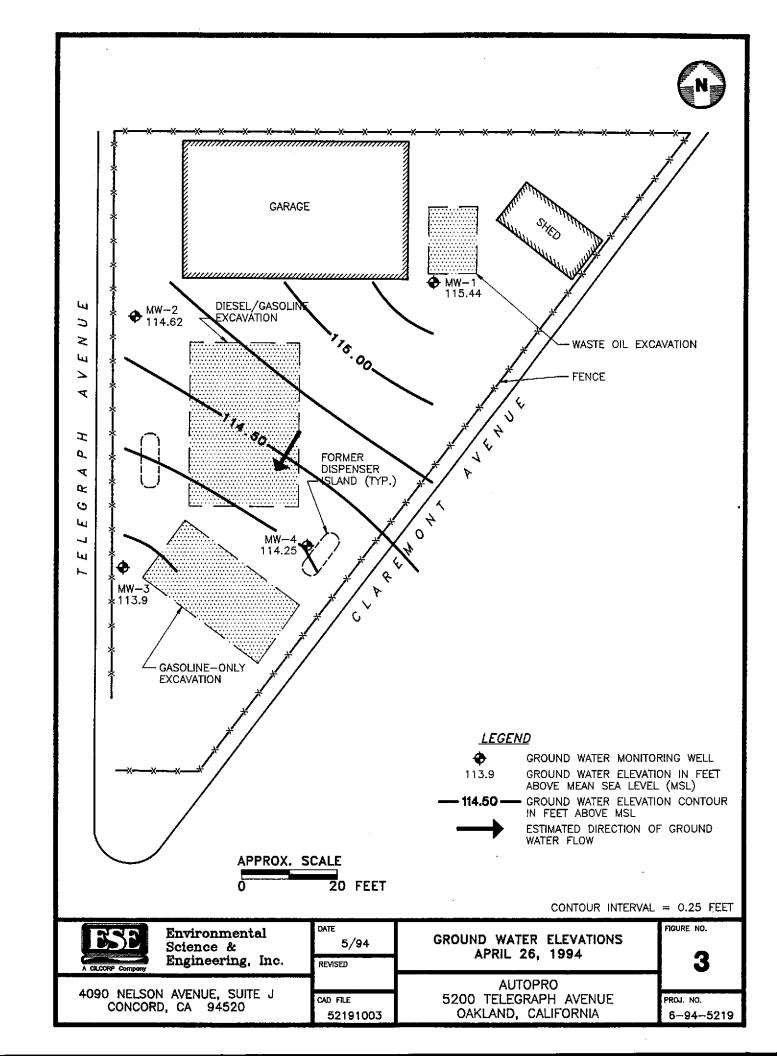
- Install additional ground water monitoring wells downgradient of existing well control in order to define the downgradient extent of petroleum hydrocarbons in ground water. ESE recommends at least one well along the margin of Telegraph Avenue southwest of the site, with a second well at the southern margin of the site (onsite) if accessible, or along the margin of Claremont Avenue south of the site.
- Investigate, through a review of additional information not previously available regarding the site and surrounding area, possible sources for kerosene detected in soil samples.
- Continue quarterly monitoring at the site pursuant to ESE's March 1994 Workplan
 for PSA, using additional well control if added. Analyze samples for fuel fingerprint
 constituents, as conducted for the PSA, plus O&G to determine if ground water
 downgradient of the former waste oil UST has been impacted by O&G.

7.0 REFERENCES

- California Regional Water Quality Control Board, North Coast Region, 1990, Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Storage Tank Sites, dated August 1990.
- Environmental Science & Engineering, Inc., 1994, Workplan for Preliminary Site Assessment, Autopro, 5200 Telegraph Avenue, Oakland, California, dated March 17, 1994.
- United States Geologic Survey, 1959 Oakland East and Oakland West 7.5 Minute Topographic Quadrangles, Photo Revised 1980.







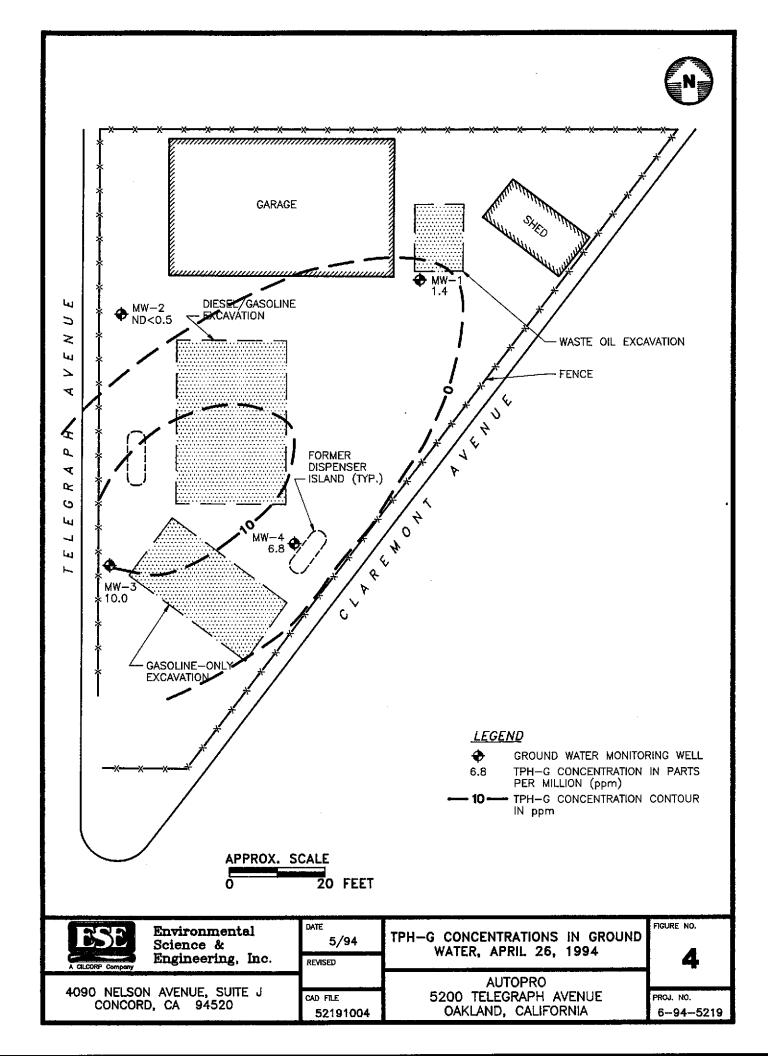


TABLE 1

ANALYTICAL RESULTS FOR SOIL SAMPLES

Autopro 5200 Telegraph Avenue Oakland, California

Sample LD	Depth Sampled	Date Sampled	TPH-G	TPH-D	трн-к	Oil & Grease	Benzene	Toluene	Ethyl-	Total	1,2-	Ethylene		۸	fetals		
	(ft.bgs)					Gitast			benzene	Xylenes	Dichlorethane	dibromide	Ca	Cr	Pb	Ni	Zn
MW-1	10	04/11/94	<1.0	<1.0		110	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.5	36	11	37	56
MW-1	20	04/11/94	<1.0	<1.0	-	<50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.5	43	10	51	67
MW-2	10	04/11/94	<1.0	<1.0	_	<50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.5	28(31) ¹	10	15	30
MW-2	15	04/11/94	<1.0	<1.0	_	<50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.5	30	10	26	71
MW-3	10	04/11/94	< 200	< 200	2,500	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	26	26	30	52
MW-3	15	04/11/94	80	<10	-	<50	0.21	0.87	< 0.05	0.18	< 0.05	< 0.05	<0.5	37	42	31	49
MW-4	10	04/12/94	<1.0	<1.0	-	70	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.5	24	8	26	45
MW-4	15	04/12/94	<1.0	<1.0	-	1,100	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.5	21	8	31	51

Notes:

All concentrations in milligrams per kilogram or parts per million (ppm)

ft. bgs = feet below ground surface

TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-K = Total Petroleum Hydrocarbons as Kerosene

< = Less than listed detection limits

(31)1 = Q.C. duplicate result reported by CCAS

- = Not reported in analyses

Cd = Cadmium

Cr = Chromium

Pb = Lead

Ni = Nickel

Zn = Zinc

TABLE 2

ANALYTICAL RESULTS FOR GROUND WATER SAMPLES

Autopro 5200 Telegraph Avenue Oakland, California

Sample I.D.	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	Benzene		Toluene (μg/L)	Ethylbenzene		1,2-Dichlorethane	Ethylene dibromide		Metals (mg/L)				
	campeo	(P6/12)	(µg/L)	(µg/L)	(Mg/L)	(μg/L)	(µg/L)	(µg/L)	(jig/L)	СI	B	Pb	Ni	Za		
MW-1	04/26/94	1,400	<50	< 0.50	< 0.50	4.5	2.1	<0.50	<0.50	0.001	< 0.05	< 0.005	0.12	< 0.10		
MW-2	04/26/94	<50	<50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.001	< 0.05	< 0.005	0.06	< 0.10		
MW-3	04/26/94	10,000	<3,000	70	40	40	50	<30	<30	< 0.001	< 0.05	0.043	0.10	0.10		
MW-4	04/26/94	6,800	<300	<3.0	<3.0	3.0	4.0	<3.0	<3.0	< 0.001	< 0.05	0.007	0.06	< 0.10		
TRIP	04/26/94	<50	<50	< 0.50	< 0.50	<0.50	< 0.50	<0.50	<0.50		_		_			

Notes:

TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-D = Total Petroleum Hydrocarbons as Diesel

μg/L = Micrograms per liter or parts per billion (ppb)

mg/L = Milligrams per liter or parts per million (ppm)

Cd = Cadmium

Cr = Chromium

Pb = Lead

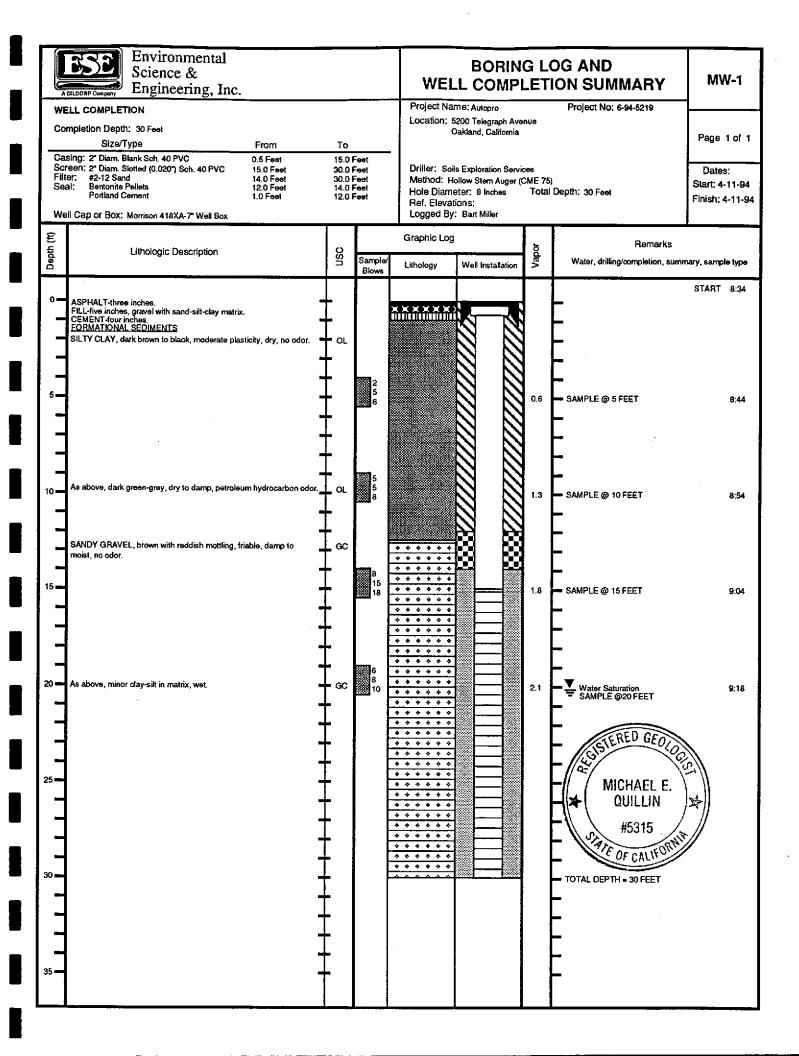
Ni = Nickel

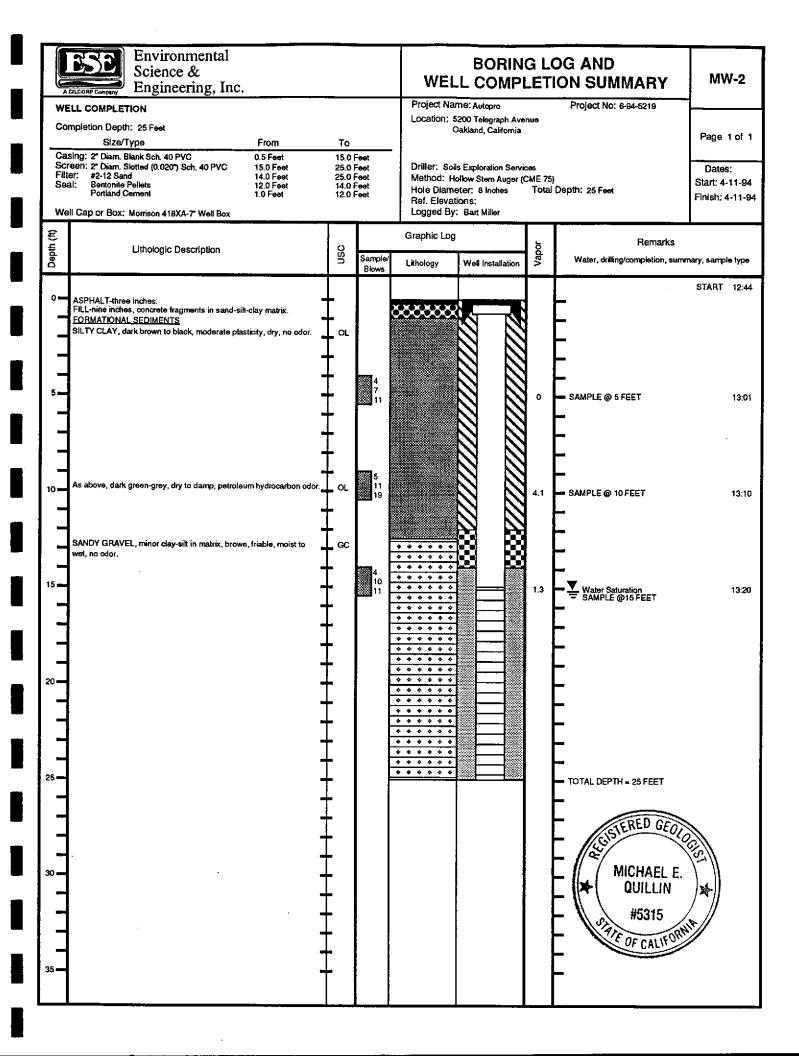
Zn = Zinc

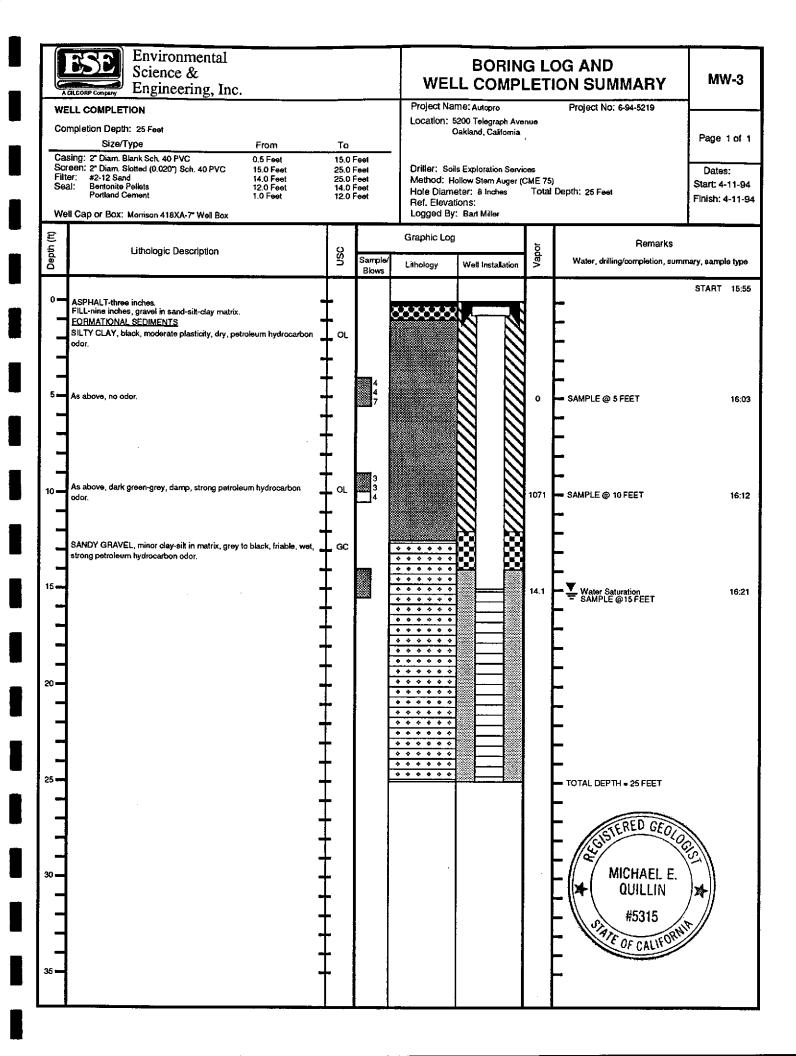
< = Less than listed detection limits

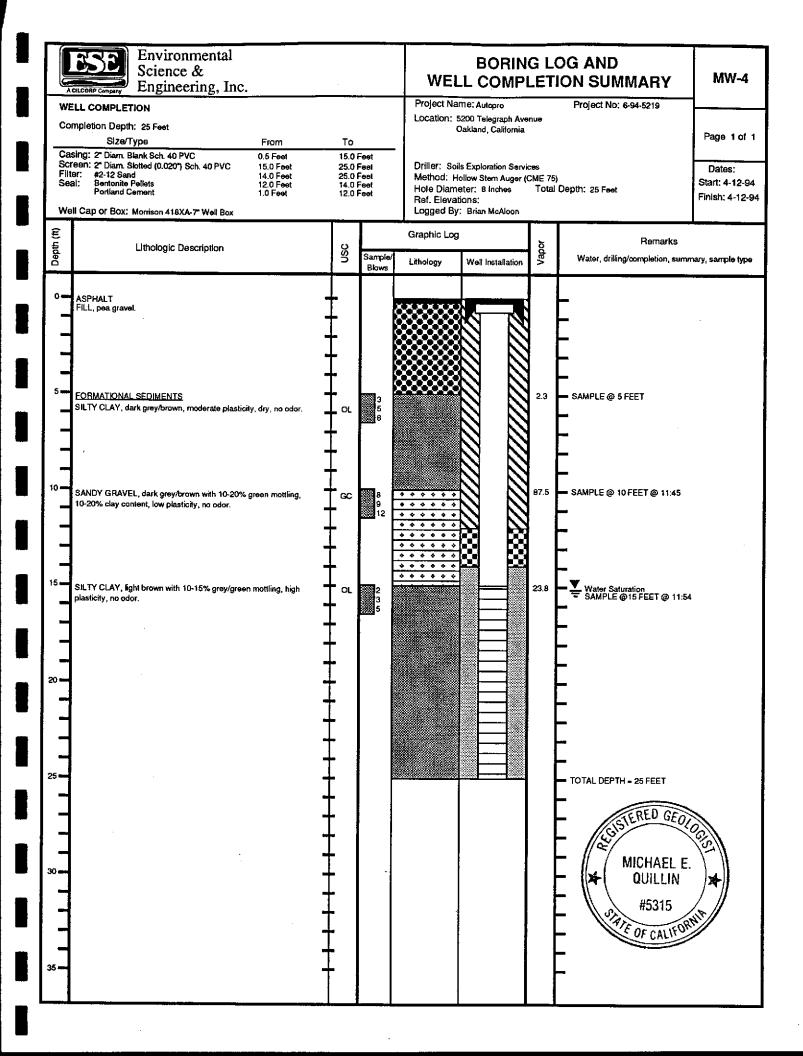
- = Not analyzed

APPENDIX A
GEOLOGIC BORING LOGS









APPENDIX B GROUND WATER SAMPLING DATA FORMS



A CILCORP Company	
PROJECT NAME: AUTOPAD/TRISTAL PROJECT NO.: 6945219 DATE: 26 APA 94	SAMPLE LOCATION I.D.: MW~A SAMPLER: BRIAJ M CA WOON PROJECT MANAGER: MIKE QVILLIN
	· · · · · · · · · · · · · · · · · · ·
CASING DIAMETER SAMPLE TYPE	WELL VOLUMES PER UNIT
2" Ground Water_ Surface Water_ Other Treat. Influent_ Treat. Effluent_ Other	Well Casing I.D. (inches) Gal/Ft. 2.0 0.1632 4.0 0.6528 6.0 1.4690
DEPTH TO PRODUCT: (ft.) PRODUCT THICKNESS: DEPTH TO WATER: 10.97 (ft.) WATER COLUMN: 13.43	TREGISTER AS PRODUCT (ft.) MINIMUM PURGE VOLUME (gal) (gal) (gal) (gal) (gal)
Volume pH E.C. TIME (GAL) (Units) (McComnos) 1/05 0 5:56 6:43 1/:09 2 5:74 0:44 1/:13 4 5:77 0:47 1/:17 6 5:84 0:48	Temperature Turbid. (F°) (NTU) Other 67.7 (NTU) (NTU
INCTRIBUTE CALIDRATION	
INSTRUMENT CALIBRATION	
PH/COND./TEMP.: TYPE HYDAC UNIT# 3067 DAT TURBIDITY: TYPE UNIT# DAT	TE: 4-7694 TIME: 1639 BY: CHV
PURGE METHOD	SAMPLE METHOD
Displacement PumpOtherSubmersible Pump	Bailer (Teflon/PVC/SS)DedicatedOther
SAMPLES COLLECTED	
SAMPLE MW-4 11:20 4-76-9 DUPLICATE SPLIT FIELD BLANK	
FIELD BLANK	<u> </u>
COMMENTS:	<u> </u>
SAMPLER: 7 PROJE 4090 Nelson Avenue, Suite J Concord, CA 94520	CT MANAGER M. Quell. Phone (510) 685-405 Fax (510) 685-5323

Fax (510) 685-5323



SAMPLE COLLECTION LOG

PROJECT NAME: AUTO PR	-0	SAMPLE LOCATION I.D.: MW-3
PROJECT NO.: 6 94 5219 DATE: 26 APR94		SAMPLER: BZIAN MCALOUN
DATE: 26 APRUM		PROJECT MANAGER: MIKE QUILLING
CASING DIAMETER	SAMPLE TYPE	WELL VOLUMES PER UNIT
2"	Ground Water	Well On the
4"	Surface Water	Well Casing <u>LD. (inches)</u> Gal/Ft.
Other	Treat. Influent	<u>I.D. (inches) Gal/Ft.</u> 2.0 0.1632
	Treat. Effluent	4.0 0.6528
	Other	6.0 1.4690
	*	
DEPTH TO PRODUCT:(ft.)	PRODUCT THICKNESS:	(ft.) MHNIMUM PURGE VOLUME
DEPTH TO WATER: 10 97 (ft.)	WATER COLUMN: 13.5	3 (ft.) (3 or 4 WCV): 6.62 (gal)
DEPTH OF WELL: 24.50 (ft.)	WELL CASING VOLUME:	2 2 (gal) ACTUAL VOLUME PURGED: 7.00 (gal)
Volumo		T. 111
Volume TIME (GAL)	pH E.C. (Units) (Micromhos	Temperature Turbid.
1138 0	(Units) (Micromhos 5-44 0.41	
1192 2	5/32 -0.94	
1146	5.40 0.97	<u> </u>
1150	5.68 0.96	67.5
		-
INSTRUMENT CALIBRATION		•
11 (00) th/20	93762	deced
PH/COND./TEMP.: TYPE HYPA	C UNIT# 13000 DA	TE: 4-26-84 TIME: 1630 BY: CHU
TURBIDITY: TYPE	UNIT# DA	TE: TIME: BY:
PURGE METHOD		CANDIE METHOD
FONGE METHOD		SAMPLE METHOD
Displacement Pump C)ther	Bailer (Teflon/PVC/SS)Dedicated
	ubmersible Pump	
	and the second second	Oniel
SAMPLES COLLECTED		
ID _	TIME DAT	
SAMPLE MW-3	1200 A-26	94 CAS TPH-6/BTEX/TPH-D/META
DUPLICATE		
SPUT		
FIELD BLANK		<u> </u>
COMMENTS:_		
Odminici 110.		·
	<u> </u>	
7 / ^	¬ ^	$\mathbf{A} = \mathbf{A} \mathbf{A}$
SAMPLER: //~ /	PROJE	ECT MANAGER MACHILL
4090 Nelson Avenue, Suite J	Concord, CA 94520	Phone (510) 685-4053 Fax (510) 685-5323



4090 Nelson Avenue, Suite J

SAMPLE COLLECTION LOG

A CILCORP Company	•		•	
PROJECT NAME: AUTOPAN		SAMPLE LOCA	ATION ID A	101-2
PROJECT NO .: 6-94-5219		SAMPLER:		
DATE: 4-26-94		PROJECT MAI		
	 			
•				
CASING DIAMETER	SAMPLE TYPE		WELL VOLU	MES PER UNIT
2 8	Ground Water 🔏		Well Casing	
4"	Surface Water	•	I.D. (inches)	Gal/Ft.
Other	Treat. Influent	•	(2.0)	0.1632
	Treat. Effluent		4.0	0.6528
	Other		6.0	1.4690
				1
DEPTH TO PRODUCT:(ft.) DEPTH TO WATER: 11.15 (ft.) DEPTH OF WELL: 24.50 (ft.)	PRODUCT THICKNESS: WATER COLUMN: 13,35 WELL CASING VOLUME: 2	(ft.) (3) or 4	UM PURGE VO WCV):6/9 L VOLUME PU	54 (gal)
Volume	pH E.C.	Temperature	Turbid.	
TIME (GAL)	pH E.C. (Units) (Micromhos)	(F°)	(NTU)	Other
1040 0	<u> 4.34 </u>	<u> </u>	-	U.BROWN
1044 2	4.87 0.42	66.4		(1
1048 4	5.20 0.44	65.9		TRANS.
1052 V	5.47 0.42	65.1		+ e
		<u> </u>		· · · · · · · · · · · · · · · · · · ·
INSTRUMENT CALIBRATION			•	
pH/COND./TEMP.: TYPE Hut	AR INDE # 0 200 2	- 1 31 ad	- 1010	
TURBIDITY: TYPE KY [DAC UNIT# 9308B DAT			BY: CHV
TORBIDITI.	UNIT# DAT	TE: TIM	E:	BY:
				e e
PURGE METHOD		SAI	MPLE METHO	D
Displacement Pump (Other	Bailer (Teflo	n/PVC/SS)	Dedicated
	ubmersible Pump	➤ Bailer (Dispe		Other
	· · ·		2048.0,	
SAMPLES COLLECTED				
ID a	TIME DAT	E, LAB	ANAL'	YSES
SAMPLE Mw-2	<u>1100 4-26-</u>	94 <u>ccas</u>		BIEN HOR-D/ MEIRLS
DUPLICATE				
SPLIT		 `		<u> </u>
FIELD BLANK			-	
COMMENTS:				
		· · · · · · · · · · · · · · · · · · ·		
7 1 1	<u> </u>		· 0-	4.0
SAMPLER: 77- P. />	PROJE	CT MANAGER	Madu	ll-

Concord, CA 94520

Phone (510) 685-4053

Fax (510) 685-5323



SAMPLE COLLECTION LOG

PROJECT NAME: AUTO PAO PROJECT NO.: 6-94-5219	SAMPLE LOCATION I.D.: MW~/
DATE: 26 APR 94	SAMPLER: BRIAN MCACOON PROJECT MANAGER: MIKE QUILLIN
CO MIN 19	PROJECT MANAGER. TIKE QUILLEN
CASING DIAMETER SAMPLE TYPE	PE WELL VOLUMES PER UNIT
2" Ground Wate	er Well Casing
4" Surface Water	
Other Treat. Influent	
Treat. Effluent	
Other	6.0 1.4690
DEPTH TO PRODUCT:(ft.) PRODUCT THICK	NESS:(ft.) MINIMUM PURGE VOLUME
DEPTH TO WATER: 12.69 (ft.) WATER COLUMN	: (1.56 (ft.) (3.6r 4 WCV): 5,66 (gal)
DEPTH OF WELL: 24.25 (ft.) WELL CASING VO	DLUME: 1.89 (gal) ACTUAL VOLUME PURGED: 6 (gal)
Wellium	FO T
Volume pH TIME (GAL) (Units) (N	E.C. Temperature Turbid.
TIME (GAL) (Units) (N	Micromhos) (F°) (NTU) Other
	6-77 67-7 - 11
12-3 4 631	0.76 68.1
INSTRUMENT CALIBRATION	
	4/21/96
pH/COND./TEMP.: TYPE YTTHC UNIT# 9300 TURBIDITY: TYPE UNIT# UNIT#	BB DATE: TIME: 10:30 BY: CHV
TURBIDITY: TYPE UNIT#	DATE: TIME: BY:
DUDGE METHOD	
PURGE METHOD	SAMPLE METHOD
Displacement PumpOther	Bailer (Teflon/PVC/SS)Dedicated
Bailer (Teflon/PVC/SS)Submersible Pump	✓ Bailer (Disposable) Other
· ·	
CAMPI TO COLLECTED	•
OWNELES COLLECTED	
ID TIME SAMPLE NW-1 12110	DATE LAB ANALYSES 4-26-94 CCAS TPH-6/BTEX/TPH-DIMETRA
DUPLICATE	THE THE PROPERTY OF THE PROPER
SPLIT	
FIELD BLANK	
COMMENTS:	
7 1 1	1
SAMPLER: 13 - / . / 17	PROJECT MANAGER Malla
4090 Nelson Avenue, Suite J Concord, CA 94520	Phone (510) 685-4053 Fax (510) 685-5323

APPENDIX C

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION FOR SOIL SAMPLES



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number : JK-1165-1

Project

: 6-94-5219, Auto Pro

Analyzed

: 04/14/94

Analyzed by: ON

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW1-10'	Soil	Bart Miller	•	04/11/94	04/12/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg		NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	ND	
1,2-Dichloroethane			0.005	ND	
Ethylene dibromide			0.005	ND	
Total Petroleum Hydrocarbons (Gas	oline)		1.	ND	
Total Petroleum Hydrocarbons (Die	sel 2)		1.	ND	
Percent Surrogate Recovery				89.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN08A DT/et/ahz MSD1-041494

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1165-1

Project

: 6-94-5219, Auto Pro

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	D BY	SAMPLED DATE	RECEIVED
MW1-10'	Soil	Bart M	üller	04/11/94	04/12/94
CONSTITUENT	*PQL	RESULT	UNITS METHO	D ANALYZED	BY NOTES
Cadmium, Total	0.5	ND	mg/Kg EPA 6	010 04/14/94	DO 1
Chromium, Total	0.5	36.	mg/Kg EPA 6	010 04/14/94	DO 1
Lead, Total	1.	11.	mg/Kg EPA 7	420 04/14/94	DO 1
Nickel, Total	1.	37.	mg/Kg EPA 6	010 04/14/94	DO 1
Zinc, Total	1.	56.	mg/Kg EPA 6	010 04/14/94	DO 1
Oil and Grease	50.	110.	mg/Kg SM552	OB 04/13/94	MT

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG/nfg/mt 5094041301 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Michael Quillin

Project

Lab Number: JK-1165-2

Environmental Science & Engineering

: 6-94-5219, Auto Pro

4090 Nelson Avenue Suite J

Analyzed

: 04/14/94

Concord, CA 94520

Analyzed by: ON

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED BY		E RECEIVED
MW1-20'	Soil	Bart Mille	Bart Miller		04/12/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg		NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	ND	
1,2-Dichloroethane			0.005	ND	
Ethylene dibromide			0.005	ND	
Total Petroleum Hydrocarbons (Gaso)	line)		1.	ND	
Total Petroleum Hydrocarbons (Diese	el 2)		1.	ND	
Percent Surrogate Recovery				90.	

San Jose Lab Certifications: CAELAP #1204

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2ANO2A DT/et/ahz MSD1-041494

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager

^{*}RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1165-2

Project

: 6-94-5219, Auto Pro

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	MATRIX SAMPLED BY Soil Bart Miller		SAMPLED DATE RECEIVED				
MW1-20'	Soil			0	4/11/94	04/12/94		
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES	
Cadmium, Total	0.5	ND	mg/Kg i	EPA 6010	04/14/94	DO	1	
Chromium, Total	0.5	43.	mg/Kg 1	EPA 6010	04/14/94	DO	1	
Lead, Total	1.	10.	mg/Kg 1	EPA 7420	04/14/94	DO	1	
Nickel, Total	1.	51.	mg/Kg 1	EPA 6010	04/14/94	DO	1	
Zinc, Total	1.	67.	mg/Kg 1	EPA 6010	04/14/94	DO	1	
Oil and Grease	50.	ND	mg/Kg :	SM5520B	04/13/94	MT		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG/nfg/mt 5094041301 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number: JK-1165-3

Project

: 6-94-5219, Auto Pro

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW2-10'	Soil	Bart Mille	r	04/11/94	04/12/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg		NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	ND	
1,2-Dichloroethane			0.005	ND	
Ethylene dibromide			0.005	ND	
Total Petroleum Hydrocarbons (Gasol	ine)		1.	ND	
Total Petroleum Hydrocarbons (Diese	1 2)		1.	ND	
Percent Surrogate Recovery				91.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN09A DT/et/ahz MSD1-041494

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1165-3

Project :

: 6-94-5219, Auto Pro

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	D BY	MAS	PLED DATE	RECI	EIVED
MW2-10'	Soil	Bart M	iller	0	4/11/94	04/	12/94
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Cadmium, Total	0.5	ND	mg/Kg	EPA 6010	04/14/94	DO	1
Chromium, Total	0.5	28.	mg/Kg	EPA 6010	04/14/94	DO	1
Lead, Total	1.	10.	mg/Kg	EPA 7420	04/14/94	DO	1
Nickel, Total	1.	15.	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	1.	30.	mg/Kg :	EPA 6010	04/14/94	DO	1
Oil and Grease	50.	ND	mg/Kg	SM5520B	04/13/94	MT	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG/nfg/mt 5094041301 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

QC Batch ID: 5094041301 JK-1165-3 Project : 6-94-5219, Auto Pro

QC DUPLICATE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLED	BY	SAMI	PLED DATE	RECE:	IVED
MW2-10'	Solid		Bart Mi	ller	04	1/11/94	04/1:	2/94
CONSTITUENT	*PQL	RESULT	%DIFF	UNITS	METHOD	ANALYZEI	BY	NOTE
Cadmium, Total	0.5	ND		mg/Kg	EPA 6010	04/14/94	DO 1	1
Chromium, Total	0.5	31.	10.	mg/Kg	EPA 6010	04/14/94	l DO	1
Lead, Total	1.	10.	0.	mg/Kg	EPA 7420	04/14/94	l DO	1
Nickel, Total	1.	15.	0.	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	1.	30.	0.	mg/Kg	EPA 6010	04/14/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG JK1165-3 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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Air, Water & Hazardous Waste Sampling, Analysis & Consultation • Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories



CLIENT: Michael Quillin

COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory) 2059 Junction Ave.

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1165-4

Project

: 6-94-5219, Auto Pro

Analyzed : 04/14/94

Analyzed by: ON

Method

: As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED						
MW2-15'	Soil	Bart Mille	Bart Miller		Sart Miller		Bart Miller		Bart Miller		04/12/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE						
FUEL FINGERPRINT ANALYSIS				<u> </u>	1,2						
Benzene			0.005	ND							
Toluene			0.005	NID							
Ethylbenzene			0.005	ND							
Xylenes			0.005	ND							
1,2-Dichloroethane			0.005	ND							
Ethylene dibromide			0.005	ND							
Total Petroleum Hydrocarbons (Gasolin	ne)		1.	ND							
Total Petroleum Hydrocarbons (Diesel	2)		1.	ND							
Percent Surrogate Recovery				95.							

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN10A DT/et/ahz MSD1-041494 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres

Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1165-4

Project

: 6-94-5219, Auto Pro

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	TRIX SAMPLED BY			SAMPLED DATE RECEIVED				
MW2-15' Soil Bart Mill		Bart Miller 04/11/9			4 04/12/94				
CONSTITUENT	*PQL	RESULT	UNITS M	ETHOD	ANALYZED	BY	NOTES		
Cadmium, Total	0.5	ND	mg/Kg El	PA 6010	04/14/94	DO	1		
Chromium, Total	0.5	30.	mg/Kg El	PA 6010	04/14/94	DO	1		
Lead, Total	1.	10.	mg/Kg El	PA 7420	04/14/94	DO	1		
Nickel, Total	1.	26.	mg/Kg El	PA 6010	04/14/94	DO	1		
Zinc, Total	1.	71.	mg/Kg El	PA 6010	04/14/94	DO	1		
Oil and Grease	50.	ND	mg/Kg Si	45520B	04/13/94	MT			

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG/nfg/mt 5094041301 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



CLIENT: Michael Quillin

COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory) 2059 Junction Ave.

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1165-5

Project

: 6-94-5219, Auto Pro

Analyzed : 04/15/94

Analyzed by: ON

Method

: As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX	SAMPLED BY		SAMPLED DATE	RECEIVED
MW3-10'		Soil	Bart Mille	r	04/11/94	04/12/94
CONSTITUENT			(CAS RN)	*PQL mg/Kg		NOTE
FUEL FINGERPRINT ANALYSIS						1,2
Benzene				1.	ND	
Toluene				1.	ND	
Ethylbenzene				1.	ND	
Xylenes				1.	ND	
1,2-Dichloroethane				1.	ND	
Ethylene dibromide				1.	ND	
Total Petroleum Hydrocarbons	(Gasoline)			200.	ND	
Total Petroleum Hydrocarbons	(Diesel 2)			200.	ND	
Total Petroleum Hydrocarbons	(Kerosene)			200.	2500.	
Percent Surrogate Recovery					91.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN29A/13A DT/et/on MSD1-041494 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1165-5

Project

: 6-94-5219, Auto Pro

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	D BY	SAM	AMPLED DATE RECEIVE			
MW3-10'	Soil	Bart N	filler	0	4/11/94	04/12/94		
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	ВУ	NOTES	
Cadmium, Total	0.5	ND	mg/Kg	EPA 6010	04/14/94	ю	1	
Chromium, Total	0.5	26.	mg/Kg	EPA 6010	04/14/94	DO	1	
Lead, Total	1.	26.	mg/Kg	EPA 7420	04/14/94	DO	1	
Nickel, Total	1.	30.	mg/Kg	EPA 6010	04/14/94	DO	1	
Zinc, Total	1.	52.	mq/Kg	EPA 6010	04/14/94	DO	1	
Oil and Grease	50.	ND			04/13/94			

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG/nfg/mt 5094041301 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



CLIENT: Michael Quillin

COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory) 2059 Junction Ave.

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1165-6

Project

: 6-94-5219, Auto Pro

Analyzed : 04/18/94

Analyzed by: ON

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW3-15'	Soil	Bart Mille	r	04/11/94	04/12/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.05	0.21	
Toluene			0.05	0.07	
Ethylbenzene			0.05	ND	
Xylenes			0.05	0.18	
1,2-Dichloroethane			0.05	ND	
Ethylene dibromide			0.05	ND	
Total Petroleum Hydrocarbons (Gaso)	Line)		10.	80.	
Total Petroleum Hydrocarbons (Diese	el 2)		10.	ND	
Percent Surrogate Recovery				91.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN52A/14A DT/et/on MSD1-041494

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres

Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1165-6

Project

: 6-94-5219, Auto Pro

CLIENT: Michael Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	D BY	SAMPLED DATE	RECEIVED
MW3-15'	Soil	Bart M	filler	04/11/94	04/12/94
CONSTITUENT	*PQL	RESULT	UNITS METH	OD ANALYZED	BY NOTES
Cadmium, Total	0.5	ND	mg/Kg EPA	6010 04/14/94	DO 1
Chromium, Total	0.5	37.	mg/Kg EPA	6010 04/14/94	DO 1
Lead, Total	1.	42.	mg/Kg EPA	7420 04/14/94	DO 1
Nickel, Total	1.	31.	mg/Kg EPA	6010 04/14/94	DO 1
Zinc, Total	1.	49.	mg/Kg EPA	6010 04/14/94	DO 1
Oil and Grease	50.	ND	mg/Kg SM55	20B 04/13/94	MT

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG/nfg/mt 5094041301 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



CLIENT: Mike Quillin

COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory) 2059 Junction Ave.

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1183-1

Project

: 6945219, AutoPro/TriStar

Analyzed

: 04/14/94

Analyzed by: ON

falled .

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW-4-10'	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg		NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	NED	
1,2-Dichloroethane			0.005	ND	
Ethylene dibromide			0.005	NID	
Total Petroleum Hydrocarbons (Gasolin	ne)		1.	ND	
Total Petroleum Hydrocarbons (Diesel	2)		1.	ND	
Percent Surrogate Recovery				95.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN11A DT/et/on MSD1-041494 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1183-1

Project

: 6945219, AutoPro/TriStar

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPI	ED BY	SAMPLED DATE	RECEIVED
MW-4-10'	Soil	B.McA	Aloon	04/12/94	04/13/94
CONSTITUENT	*PQL	RESULT	UNITS METHO) ANALYZED	BY NOTES
Cadmium, Total	0.5	ND	mg/Kg EPA 60	010 04/25/94	KP 1
Chromium, Total	0.5	24.	mg/Kg EPA 60	010 04/25/94	KP 1
Lead, Total	1.	8.	mg/Kg EPA 74	120 04/21/94	DO 1
Nickel, Total	1.	26.	mg/Kg EPA 60	010 04/25/94	KP 1
Zinc, Total	1.	45.	mg/Kg EPA 60	010 04/25/94	KP 1
Oil and Grease	50.	70.	mg/Kg EPA 4:	13.1 04/21/94	AB

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/25/94

NG/sab/aob 5094041701 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Rick & Gaone

Nick Gaone Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number: JK-1183-2

Project

: 6945219, AutoPro/TriStar

: 04/14/94 Analyzed

Analyzed by: ON

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW-4-15'		Soil	B.McAlcon	•	04/12/94	04/13/94
CONSTITUENT			(CAS RN)	*PQL mg/Kg		NOTE
FUEL FINGERPRINT ANALYSIS						1,2
Benzene				0.005	ND	
Toluene				0.005	ND	
Ethylbenzene				0.005	ND	
Xylenes				0.005	ND	
1,2-Dichloroethane				0.005	ND	
Ethylene dibromide				0.005	ND	
Total Petroleum Hydrocarbons	(Gasoline)			1.	ND	
Total Petroleum Hydrocarbons	(Diesel 2)			1.	ND	
Percent Surrogate Recovery					90.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN12A DT/et/on MSD1-041494

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1183-2

Project : 6945219, AutoPro/TriStar

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPL	ED BY	SAMPLED DATE	RECEIVED		
MW-4-15'	Soil	B.McA	aloon	04/12/94	04/13/94		
CONSTITUENT	*PQL	RESULT	UNITS METHOD	ANALYZED	BY	NOTES	
Cadmium, Total	0.5	ND	mg/Kg EPA 601	04/25/94	KP	1	
Chromium, Total	0.5	21.	mg/Kg EPA 601	04/25/94	KP	1	
Lead, Total	1.	8.	mg/Kg EPA 742	0 04/21/94	DO	1	
Nickel, Total	1.	31.	mg/Kg EPA 601	04/25/94	KΡ	1	
Zinc, Total	1.	51.	mg/Kg EPA 601	04/25/94	KP	1	
Oil and Grease	50.	1100.	mg/Kg EPA 413	3.1 04/21/94	AB		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/25/94

NG/sab/aob 5094041701

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

DATE 4/11/94 PAGE	/ OF /			(CHAIN	OF	CU	STOI	Y R	REC	ORD				Environn	nental
PROJECT NAME AUTOPRO			IANA	YSES	5 ТО	BE	PERI	FORI	MED	·	MATRIX				Science &	
ADDRESS 5200 TELEGR	APU AVE.	35		က်							М	N C U O		A CILCORP Company	Engineer	
OAKANO, CA PROJECT NO. 6-94-5219		A-VEREINF	۲۰۱)	í							A T R I	M N B T R I	4090 Suite	Nelson Avenue	Phor	e (510) 685-4053
SAMPLED BY	BARTMILLER	<u>اک</u>	4	4				:			Î	N	Con	cord, CA 94520	Fax (510) 685-5323
LAB NAME CAS	1	FUEL!	<u>\</u>	10						,	:	O E F R		RE	MARKS	•
SAMPLE # DATE TIME	LOCATION	15	21	50						•	MATRIX	S	OKI	CONTAINÉE [65	R, SIZE,	ETC.)
MWI-10' 4/11/94 8:54	IMPACTED Y ZONE	X	X	X							501L	1	IZ		BRASS SLE	
MWI-20' " 9:18	SUL-GW LATER.	$\downarrow \downarrow$	$\perp \parallel$	$\perp \!\!\! \perp$	_	ļ					h	1	2	h	<u></u>	
MWZ-10' " 13 10	ZONE		_/	-41	_	ļ					4	1	-3	п	 -· ,	
MWZ-15' " 13.20	SUIL- GW INTER.	1	/	$/\!\!\perp$							17	1	4	h		
MW3-10' " 16:12	IMMATED ZONE	/	\coprod			<u> </u>					Ŋ	1	15	ч		
MW3-15' " 16:21	SOIL-GWINTER V		✓	V							11	1	16	11		
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2. 120000	1		5	· Con.		77	オ		4/12/	94 9	RES	REPOR SULTS	TO:	SPECIAL REQUIREM	SHIPMENT ENTS	!
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4.				,_,					tr -		7	EBE	_			
5.			77											SA	MPLE REC	EIPT
INSTRUCTIONS TO LABORA	TORY (hand)	lir	ıg,	anal	yses.	, s	tora	ige,	et	c.):			CHAIN OF	CUSTODY	SEALS
NORMAL T.A.T.						,	NP.	_						REC'D GO	OD CONDI	N/COLD Y
Codinated	Temp. of ca	lec	ufo,	011	ceid	-: 6	b F							CONFORMS	TO RECO	RD Y

DATE 12 APRIL 94 PAGE / OF	((CHAIN	OF	CUS	rody	REC	ORD	[Env	vironmental
PROJECT NAME AUTOPRO/TRISTAR		IALYSE	5 ТО	BE F	ERF	ORME)	MATRIX			ence &
,	3	14							йс		gineering, Inc.
PROJECT NO. 6945219 SAMPLED BY B. M'ALOON R. 72	0350	13° L)						M A T R I	NUMBER OF	A CILCORP Company 4090 Nelson Avenue Suite J Concord, CA 94520	Phone (510) 685-4053 Fax (510) 685-5323
	- 7	9149							O E F R	REMAR	KS
SAMPLE # DATE TIME LOCATION								MATRIX	S	(CONTAINER, S	IZE, ETC.)
MW-4-10' 12 APR94 11:45 1K1183-	- - -	XX					1	5011	1	SOIL SAMPLE-2	" DIAL BRASS SLEET
MU-4-15' 12APR94 11:54	2 × >	XX						SOIL	(SOIL SAMPLE -2"	1
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RELINQUISHED BY: (signature)	DECET	<u> </u> Ped By	. (e	gnat	ture) d	ıte l	time		TOTAL NUMBER (OF CONTAINERS
1. 7. (Signacule)		Vintl		ΔM)		13/44 12/54	time 700 -101 RE		T SPECIAL SHI	
3. Menda DAY	Alisa	n(A)	Am	cha	n	04/		1530 M			
5.									,	SAMP	LE RECEIPT
INSTRUCTIONS TO LABORATORY (ha	ndlin	g, ana	lyse	5, S	tora	ge,	etc.) _j ;	4.	CHAIN OF C	JSTODY SEALS
5. INSTRUCTIONS TO LABORATORY (ha				C	uer	np \$	coo	rei=66 upon	Teces	REC'D GOOD	CONDIN COLD Y
V 2 , , , , ,						<i>v</i>		0	a	CONFORMS TO	D RECORD

ł



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041301

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	ED BY	SAMP	LED DATE	RECE:	IVED
METHOD BLANK	Solid						
CONSTITUENT	*PQ	L RESULT	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total	0.5	ND	mg/Kg	EPA 6010	04/14/94	DO	1
Chromium, Total	0.5	ND	mg/Kg	EPA 6010	04/14/94	DO	1
Lead, Total	1.	ND	mg/Kg	EPA 7420	04/14/94	DO	1
Nickel, Total	1.	ND	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	1.	ND	mg/Kg	EPA 6010	04/14/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG JK1165-3 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041301

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMP	LED DATE	RECE:	IVED
MATRIX SPIKE		Solid					···		-
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZEC	BY	NOTE
Cadmium, Total	ND	24.	22.	92.	mg/Kg	EPA 6010	04/14/94	DO	1
Chromium, Total	28.	24.	53.	104.	mg/Kg	EPA 6010	04/14/94	DO	1
Lead, Total	10.	10.	20.	100.	mg/Kg	EPA 7420	04/14/94	DO	1
Nickel, Total	15.	48.	56.	85.	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	30.	48.	76.	96.	mg/Kg	EPA 6010	04/14/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG JK1165-3 Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041301

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMP	LED DATE	RECE	IVED
MATRIX SPIKE DUPLICATE		Solid							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total	ND	24.	22.	0.	mg/Kg	EPA 6010	04/14/94	DO	1
Chromium, Total	28.	24.	51.	8.3	mg/Kg	EPA 6010	04/14/94	DO	1
Lead, Total	10.	9.	18.	12.	mg/Kg	EPA 7420	04/14/94	DO	1
Nickel, Total	15.	47.	55.	0.36	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	30.	47.	74.	2.3	mg/Kg	EPA 6010	04/14/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG JK1165-3 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



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San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041301

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	MATRIX SAMPLE			SAM	SAMPLED DATE RECEIVE			
QC SPIKE		Solid					•		
CONSTITUENT	*PQL	SPIKE	RESULT		UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total	0.5	25.	24.	96.	mg/Kg	EPA 6010	04/14/94	DO	1
Chromium, Total	0.5	25.	26.	104.	mg/Kg	EPA 6010	04/14/94	DO	1
Lead, Total	1.	10.	10.	100.	mg/Kg	EPA 7420	04/14/94	DO	1
Nickel, Total	1.	50.	49.	98.	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	1.	50.	51.	102.	mg/Kg	EPA 6010	04/14/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG JK1165-3 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041301

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION MATRIX			SAMPLED	BY	SAMP	LED DATE F	ECE 1	IVED	
QC SPIKE DUPLICATE		Solid		· · · · · ·					
CONSTITUENT	*PQL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total	0.5	25.	24.	0.	mg/Kg	EPA 6010	04/14/94	ро	1
Chromium, Total	0.5	25.	26.	0.	mg/Kg	EPA 6010	04/14/94	DO	1
Lead, Total	1.	10.	10.	0.	mg/Kg	EPA 7420	04/14/94	DO	1
Nickel, Total	1.	50.	47.	4.2	mg/Kg	EPA 6010	04/14/94	DO	1
Zinc, Total	1.	50.	51.	0.	mg/Kg	EPA 6010	04/14/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/13/94 by AL using EPA 3050

04/18/94

NG JK1165-3 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: OG940415C

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE		SAMPLED DATE RECEIVE		
METHOD BLANK	Solid					
CONSTITUENT	*PQ	L RESULT	UNITS METHOD	ANALYZED	BY NOTE	
Oil and Grease	50.	ND	mg/Kg SM5520B	04/13/94	МТ	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/18/94

NG/nfg/mt JK1165-6 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: OG940415C

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION MATRIX				SAMPLED BY	SAMPLED DATE RECEIVED		
QC SPIKE		Solid					
CONSTITUENT	*PQL	SPIKE	RESULT	%REC UNITS	METHOD	ANALYZED	BY NOTE
Oil and Grease	50.	200.	200.	100. mg/Kg	SM5520B	04/13/94	MT

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/18/94

NG/nfg/mt JK1165-6 Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

hick J. Daone



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: OG940415C

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMP	LED DATE R	ECEIVED
QC SPIKE DUPLICATE		Solid						
CONSTITUENT	*PQL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY NOTE
Oil and Grease	50.	200.	190.	5.1	mg/Kg	SM5520B	04/13/94	MT

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/18/94

NG/nfg/mt JK1165-6 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-041494

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAM	ECEIVED	
METHOD BLANK	Solid				
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
FUEL FINGERPRINT ANALYSIS		***			1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	ND	
1,2-Dichloroethane			0.005	ND	
Ethylene dibromide			0.005	ND	
Total Petroleum Hydrocarbons (Gas	oline)		1.	ND	
Total Petroleum Hydrocarbons (Die			1.	ND	
Percent Surrogate Recovery	•			90.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN01A DT/et/ahz JK1165-2 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-041494

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED			
MATRIX SPIKE	Solid					
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT mg/Kg	%REC	NOTE
FUEL FINGERPRINT ANALYSIS						1,2
Benzene		ND	0.1	0.087	87.	
Toluene		ND	0.1	0.086	86.	
Ethylbenzene		ND	0.1	0.1	100.	
Xylenes		ND	0.1	0.1	100.	
1,2-Dichloroethane		ND	0.1	0.088	88.	
Ethylene dibromide		ND	0.1	0.091	91.	
Total Petroleum Hydrocarbons (Diesel 2)	ND	10.	11.	110.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN03A/06A DT/et/ahz JK1165-2

Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres

Organics Manager



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QC Batch ID: MSD1-041494

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MATRIX SPIKE DUPLICATE	Solid						
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT mg/Kg	₹REC	%DIFF	NOTE
FUEL FINGERPRINT ANALYSIS							1,2
Benzene		ND	0.1	0.091	91.	4.5	
Toluene		ND	0.1	0.091	91.	5.6	
Ethylbenzene		ND	0.1	0.11	110.	9.5	
Xylenes		ND	0.1	0.1	100.	0.	
1,2-Dichloroethane		ND	0.1	0.1	100.	13.	
Ethylene dibromide		ND	0.1	0.099	99.	8.4	
Total Petroleum Hydrocarbons (Diesel 2)	ND	10.	9.	90.	20.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN04A/07A DT/et/ahz JK1165-2

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

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QC Batch ID: MSD1-041894

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/18/94

Analyzed by: ON

Method : As Listed

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAM	RECEIVED	
METHOD BLANK	Solid		····		
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	ND	
1,2-Dichloroethane			0.005	ND	
Ethylene dibramide			0.005	ND	
Total Petroleum Hydrocarbons (Ga	soline)		1.	ND	
Total Petroleum Hydrocarbons (Di	esel 2)		1.	ND	
Percent Surrogate Recovery				92.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/21/94 MSD1/2AN32A DT/et/on JK1185-1

Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



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QC Batch ID: MSD1-041894

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/18/94

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION MATRIX		SAMPLED BY	SAMPLED DATE RECEIVED			
MATRIX SPIKE	Solid		-			
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT mg/Kg	%REC	NOTE
FUEL FINGERPRINT ANALYSIS						1,2
Benzene		ND	0.1	0.084	84.	
Toluene		ND	0.1	0.086	86.	
Ethylbenzene		ND	0.1	0.097	97.	
Xylenes		ND	0.1	0.096	96.	
1,2-Dichloroethane		ND	0.1	0.093	93.	
Ethylene dibromide		ND	0.1	0.1	100.	
Total Petroleum Hydrocarbons (Diesel 2)	ND	10.	9.8	98.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/21/94 MSD1/2AN34A/37A DT/et/on JK1185-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

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QC Batch ID: MSD1-041894

CLIENT: Coast-to-Coast Analytical Services, Inc.

: 04/18/94 Analyzed

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MATRIX SPIKE DUPLICATE	Solid					•	
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT mg/Kg	%REC	%DIFF	NOTE
FUEL FINGERPRINT ANALYSIS							1,2
Benzene		ND	0.1	0.091	91.	8.	
Toluene		ND	0.1	0.09	90.	4.5	
Ethylbenzene		ND	0.1	0.096	96.	1.	
Xylenes		ND	0.1	0.097	9 7.	1.	
1,2-Dichloroethane		ND	0.1	0.1	100.	7.3	
Ethylene dibromide		ND	0.1	0.1	100.	0.	
Total Petroleum Hydrocarbons (Diesel	2)	ND	10.	12.	120.	20.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/21/94 MSD1/2AN35A/38A DT/et/on JK1185-1

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



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QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLE	D BY	SAMP	LED DATE I	RECE	IVED
METHOD BLANK	Solid							
CONSTITUENT		*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total		0.5	ND	mg/Kg	EPA 6010	04/19/94	DO	1
Chromium, Total		0.5	ND	mg/Kg	EPA 6010	04/19/94	DO	1
Lead, Total	•	1.	ND	mg/Kg	EPA 7420	04/21/94	DO	1
Nickel, Total		1.	ND	mg/Kg	EPA 6010	04/19/94	DO	1
Zinc, Total		1.	ND	mg/Kg	EPA 6010	04/19/94	DO	1

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



SoCal Division (Camarillo Laboratory) 4765 Calle Quetzal, Camarillo, California 93012

(805) 389-1353 FAX (805) 389-1438

QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLED	BY	SAMP	LED DATE F	ECE:	IVED	
MATRIX SPIKE		Solid							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total	ND	25.	21.	84.	mg/Kg	EPA 6010	04/19/94	DO	1
Chromium, Total	72.	25.	88.	64.	mg/Kg	EPA 6010	04/19/94	DO	1
Lead, Total	13.	25.	35.	88.	mg/Kg	EPA 7420	04/21/94	DO	1
Nickel, Total	110.	49.	150.	82.	mg/Kg	EPA 6010	04/19/94	DO	1
Zinc, Total	52.	49.	95.	88.	mg/Kg	EPA 6010	04/19/94	DO	1

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Mck J. Darne Nick Gaone

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(805) 389-1353 FAX (805) 389-1438

QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMP	LED DATE	RECE	IVED
MATRIX SPIKE DUPLICATE		Solid							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Total	ND	25.	21.	0.	mg/Kg	EPA 6010	04/19/94	DO	1
Chromium, Total	72.	25.	89.	6.1	mg/Kg	EPA 6010	04/19/94	DO	1
Lead, Total	13.	25.	35.	0.	mg/Kg	EPA 7420	04/21/94	DO	1
Nickel, Total	110.	50.	150.	2.	mg/Kg	EPA 6010	04/19/94	DO	1
Zinc, Total	52.	50.	95.	2.	mg/Kg	EPA 6010	04/19/94	DO	1

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

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hick F. Haone



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QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED				
QC SPIKE		Solid							*	
CONSTITUENT	*PQL	SPIKE	RESULT	%REC	UNITS	METH	HOD	ANALYZED	BY	NOTE
Cadmium, Total	0.5	25.	24.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Chromium, Total	0.5	25.	24.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Lead, Total	1.	25.	23.	92.	mg/Kg	EPA	7420	04/21/94	DO	1
Nickel, Total	1.	50.	50.	100.	mg/Kg	EPA	6010	04/19/94	DO	1
Zinc, Total	1.	50.	49.	98.	mg/Kg	EPA	6010	04/19/94	DO	1

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

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Inorganics Manager

hek J. Haoke

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QC Batch ID: OG940421A

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	ID BY		LED DATE	RECEIVED
METHOD BLANK	Solid					
CONSTITUENT	*PQL	RESULT		METHOD	ANALYZED	BY NOTE
Oil and Grease	50.	ND	mg/Kg	EPA 413.1	04/21/94	AB

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/26/94

NG/sab/aob/nfg JK1183-2 Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

Mich J. Haone

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QC Batch ID: OG940421A

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLE	D BA	SAMP	LED DATE F	
QC SPIKE	7.7.7	Solid						
CONSTITUENT	*PQL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	BY NOTE
Oil and Grease	50.	630.	590.	94.	mg/Kg	EPA 413.1	04/21/94	AB

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/26/94

NG/sab/aob/nfg JK1183-2 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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QC Batch ID: OG940421A

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED BY	SAMP	LED DATE R	ECEIVED
QC SPIKE DUPLICATE		Solid					
CONSTITUENT	*PQL	SPIKE	RESULT	%DIFF UNITS	METHOD	ANALYZED	BY NOTE
Oil and Grease	50.	630.	640.	8.1 mg/Kg	EPA 413.1	04/21/94	AB

Lab Certifications: CAELAP #1598 & #1783; UTELAP #E-142; AZELAP #AZO162; A2LA #0136-01; L.A.Co.CSD #10187 *RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/26/94

NG/sab/aob/nfg JK1183-2 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-041494

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAM	pled date r	ECEIVED
METHOD BLANK	Solid				,
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.005	ND	
Toluene			0.005	ND	
Ethylbenzene			0.005	ND	
Xylenes			0.005	ND	
1,2-Dichloroethane			0.005	ND	
Ethylene dibromide			0.005	ND	;
Total Petroleum Hydrocarbons (Gasoli	ne)		1.	ND	
Total Petroleum Hydrocarbons (Diesel	2)		1.	ND	
Percent Surrogate Recovery				90.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN01A DT/et/ahz JK1165-2 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres

Organics Manager



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QC Batch ID: MSD1-041494

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	SAMPLED BY	•	SAMPLED DATE RECEIVED				
MATRIX SPIKE	Solid						
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT mg/Kg	%REC	NOTE	
FUEL FINGERPRINT ANALYSIS						1,2	
Benzene		ND	0.1	0.087	87.		
Toluene		ND	0.1	0.086	86.		
Ethylbenzene		ND	0.1	0.1	100.		
Xylenes		ND	0.1	0.1	100.		
1,2-Dichloroethane		ND	0.1	0.088	88.		
Ethylene dibramide		ND	0.1	0.091	91.		
Total Petroleum Hydrocarbons (Diese	1 2)	ND	10.	11.	110.		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN03A/06A DT/et/ahz JK1165-2 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-041494

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/14/94

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX Solid	SAMPLED BY		SAMPLED DATE RECEIVED				
MATRIX SPIKE DUPLICATE		E I Mile	J					
CONSTITUENT	II,	ORIGINAL RESULT	SPIKE AMOUNT	RESULT mg/Kg	%REC	%DIFF	NOTE	
FUEL FINGERPRINT ANALYSIS							1,2	
Benzene		ND	0.1	0.091	91.	4.5		
Toluene		ND	0.1	0.091	91.	5.6		
Ethylbenzene		ND	0.1	0.11	110.	9.5		
Xylenes		ND	0.1	0.1	100.	0.		
1,2-Dichloroethane		ND	0.1	0.1	100.	13.		
Ethylene dibromide		ND	0.1	0.099	99.	8.4		
Total Petroleum Hydrocarbons (Diesel 2))	ND	10.	9.	90.	20.		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

04/20/94 MSD1/2AN04A/07A DT/et/ahz JK1165-2

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager

APPENDIX D

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION FOR GROUND WATER SAMPLES



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number : JK-1337-1

Project

: 6-94-5219, Autopro

Analyzed : 04/29/94

Analyzed by: ON

Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	RECEIVED
MW-1	Groundwater	в.Р.М.		04/26/94	04/26/94
CONSTITUENT		(CAS RN)	*PQL µg/L	RESULT μg/L	NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			0.5	0.5	
Toluene			0.5	ND	
Ethylbenzene			0.5	4.5	
Xylenes			0.5	2.1	
1,2-Dichloroethane			0.5	ND	
Ethylene dibromide			0.5	ND	
Total Petroleum Hydrocarbons (Gasoline	}		50.	1400.	
Total Petroleum Hydrocarbons (Diesel 2))		50.	ND	
Percent Surrogate Recovery				104.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2A057A DT/et/on MSD1-042994

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1337-1

Project

: 6-94-5219, Autopro

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED		AMPLED	RECE	EIVED
MW-1	Groundwater	в.Р.М.		(04/2	5/94 1211	04/2	26/94
CONSTITUENT	*PQL	RESULT	UNITS	METHO	OD OC	ANALYZED	BY	NOTES
Cadmium, Total Recoverable	0.001	0.001	mg/L	EPA	7131	05/05/94	KР	1
Chromium, Total Recoverable	0.05	ND	mg/L	EPA	7190	05/04/94	KР	1
Lead, Total Recoverable	0.005	ND	mg/L	EPA '	7421	05/05/94	KΡ	1
Nickel, Total Recoverable	0.05	0.12	mg/L	EPA 7	7520	05/04/94	KΡ	1
Zinc, Total Recoverable	0.1	ND	mg/L	EPA	7950	05/05/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/08/94

NG/nfg/jst 0594042901 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Lab Number: JK-1337-2

Environmental Science & Engineering

Project

: 6-94-5219, Autopro

4090 Nelson Avenue Suite J

Analyzed

: 04/29/94

Analyzed by: ON

Concord, CA 94520

: As Listed Method

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW-2	Groundwater	B.P.M.		04/26/94	04/26/94
CONSTITUENT		(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
FUEL FINGERPRINT ANALYSIS				<u> </u>	1,2
Benzene			0.5	ND	
Toluene			0.5	ND	
Ethylbenzene			0.5	ND	
Xylenes			0.5	ND	
1,2-Dichloroethane			0.5	ND	
Ethylene dibromide			0.5	ND	
Total Petroleum Hydrocarbons (Gasoline	≥)		50.	ND	
Total Petroleum Hydrocarbons (Diesel 2	!)		50.	ND	
Percent Surrogate Recovery				85.	

San Jose Lab Certifications: CAELAP #1204

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2AO58A DT/et/on MSD1-042994 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager

^{*}RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1337-2

Project

: 6-94-5219, Autopro

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED		RECEIVED	
MW-2	Groundwater	B.P.M.		04/26/94 110		0 04/26/9	
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Cadmium, Total Recoverable	0.001	ND	mg/L	EPA 7131	05/05/94	ΚP	1
Chromium, Total Recoverable	0.05	ND	mg/L	EPA 7190	05/04/94	KP	1.
Lead, Total Recoverable	0.005	ND	mg/L	EPA 7421	05/05/94	KP	1
Nickel, Total Recoverable	0.05	0.06	mg/L	EPA 7520	05/04/94	ΚP	1
Zinc, Total Recoverable	0.1	ND	mg/L	EPA 7950	05/05/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/08/94

NG/nfg/jst 0594042901 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1337-3

Project

: 6-94-5219, Autopro CLIENT: Mike Quillin Environmental Science & Engineering

Analyzed : 04/29/94 4090 Nelson Avenue Suite J

Concord, CA 94520 Analyzed by: ON Method : As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	RECEIVED
MW-3	Groundwater	В.Р.М.		04/26/94	04/26/94
CONSTITUENT		(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene	•		30.	70.	
Toluene			30.	40.	
Ethylbenzene			30.	40.	
Xylenes			30.	50.	
1,2-Dichloroethane			30.	ND	
Ethylene dibromide		•	30.	ND	
Total Petroleum Hydrocarbons (Gasoline)		3000.	10000.	
Total Petroleum Hydrocarbons (Diesel 2			3000.	ND	
Percent Surrogate Recovery	-			86.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2AO59A DT/et/on MSD1-042994 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1337-3

Project

: 6-94-5219, Autopro

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	MATRIX SAMPLED BY		8	RECEIVED		
MW-3	Groundwater	в.Р.М.		04/2	26/94 1200	04/2	26/94
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Cadmium, Total Recoverable	0.001	ND	mg/L	EPA 7131	05/05/94	ΚP	1
Chromium, Total Recoverable	0.05	ND	mg/L	EPA 7190	05/04/94	ΚP	1
Lead, Total Recoverable	0.005	0.043	mg/L	EPA 7421	05/05/94	ΚP	1
Nickel, Total Recoverable	0.05	0.10	mg/L	EPA 7520	05/04/94	KP	1
Zinc, Total Recoverable	0.1	0.1	mg/L	EPA 7950	05/05/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/08/94

·NG/nfg/jst 0594042901 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number: JK-1337-4

Project

: 6-94-5219, Autopro

Analyzed : 05/02/94

Analyzed by: ON

Method

: As Listed

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
MW-4	Groundwater	B.P.M.		04/26/94	04/26/94
CONSTITUENT		(CAS RN)	*PQL μg/L	RESULT µg/L	NOTE
FUEL FINGERPRINT ANALYSIS					1,2
Benzene			3.	ND	
Toluene			3.	ND	
Ethylbenzene			3.	3.	
Xylenes			3.	4.	
1,2-Dichloroethane			3.	ND	
Ethylene dibromide			3.	ND	
Total Petroleum Hydrocarbons (Gasol	ine)		300.	6800.	
Total Petroleum Hydrocarbons (Diese	1 2)		300.	ND	
Percent Surrogate Recovery				87.	

San Jose Lab Certifications: CAELAP #1204

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2AO71A/60A DT/et/on MSD1-042994

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres

Organics Manager

^{*}RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1337-4

Project

: 6-94-5219, Autopro

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLEI	BY		SAMPLED	RECE	EIVED
MW-4	Groundwater	в.Р.М.		04/	26/94 1120	04/2	26/94
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Cadmium, Total Recoverable	0.001	ND	mg/L	EPA 713	1 05/05/94	ΚP	1
Chromium, Total Recoverable	0.05	ND	mg/L	EPA 719	05/04/94	KP	1
Lead, Total Recoverable	0.005	0.007	mg/L	EPA 742	1 05/05/94	KP	1
Nickel, Total Recoverable	0.05	0.06	mg/L	EPA 752	05/04/94	KΡ	1
Zinc, Total Recoverable	0.1	ND	mg/L	EPA 795	05/05/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/08/94

NG/nfg/jst 0594042901 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Lab Number: JK-1337-5

Environmental Science & Engineering

Project

: 6-94-5219, Autopro

4090 Nelson Avenue Suite J

Analyzed : 04/29/94

Analyzed by: ON

: As Listed

Concord, CA 94520

Method

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLE	ED BY		E RECEIVED	
Trip	Ac	Jueous	B.P.M	-			04/26/94
CONSTITUENT			(CAS	RN)	*PQL μg/L	RESULT µg/L	NOTE
FUEL FINGERPRINT ANALYSIS							1,2
Benzene					0.5	ND	
Toluene					0.5	ND	
Ethylbenzene					0.5	ND	
Xylenes					0.5	ND	
1,2-Dichloroethane					0.5	ND	
Ethylene dibromide					0.5	ND	
Total Petroleum Hydrocarbons (G	asoline)				50.	ND	
Total Petroleum Hydrocarbons (D	iesel 2)				50.	ND	
Percent Surrogate Recovery						82.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2AO50A DT/et/on MSD1-042994

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-042994

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/29/94

Analyzed by: ON

Method : As Listed

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
METHOD BLANK	Aqueous				······		
CONSTITUENT		(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE		
FUEL FINGERPRINT ANALYSIS					1,2		
Benzene			0.5	ND			
Toluene			0.5	ND			
Ethylbenzene			0.5	ND			
Xylenes			0.5	ND			
1,2-Dichloroethane			0.5	ND			
Ethylene dibromide			0.5	ND			
Total Petroleum Hydrocarbons (Ga	soline)		50.	ND			
Total Petroleum Hydrocarbons (Di	esel 2)		50.	ND			
Percent Surrogate Recovery				86.			

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2A049A DT/et/on JK1337-5 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-042994

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/29/94

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	7	SAMPLED DATE RECEIVED		
MATRIX SPIKE	Aqueous					
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT µg/L	%REC	NOTE
FUEL FINGERPRINT ANALYSIS	<u> </u>					1,2
Benzene		ND	10.	8.4	84.	
Toluene		ND	10.	10.	100.	
Ethylbenzene		ND	10.	13.	130.	
Xylenes		ND	10.	12.	120.	
1,2-Dichloroethane		ND	10.	9.	90.	
Ethylene dibromide		ND	10.	8.8	88.	
Total Petroleum Hydrocarbons (Gasoline)	1	ND	250.	260.	104.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2AO51A/55A DT/et/on JK1337-5 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres

Organics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: MSD1-042994

CLIENT: Coast-to-Coast Analytical Services, Inc.

: 04/29/94 Analyzed

Analyzed by: ON

Method : As Listed

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEI			
MATRIX SPIKE DUPLICATE	Aqueous						
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT µg/L	%REC	%DIFF	NOTE
FUEL FINGERPRINT ANALYSIS							1,2
Benzene		ND	10.	8.2	82.	2.4	
Toluene		ND	10.	10.	100.	О.	
Ethylbenzene		ND	10.	12.	120.	8.	
Xylenes		ND	10.	11.	110.	8.7	
1,2-Dichloroethane		ND	10.	9.2	92.	2.2	
Ethylene dibromide		ND	10.	8.1	81.	8.3	
Total Petroleum Hydrocarbons (Gasoline))	ND	250.	240.	96.	8.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) ANALYZED by CAL DHS DRAFT TPH, EPA 8260 modified (GC/MS)

05/03/94 MSD1/2AO52A/56A DT/et/on JK1337-5

Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Organics Manager

Dudley Torres



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 0594042901

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLED	BY	SAMP	LED DATE	RECE:	IVED
METHOD BLANK	Aqueous							
CONSTITUENT		*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Dissolved		0.001	ND	mg/L	EPA 7131	05/05/94	KP	1
Chromium, Dissolved		0.01	ND	mg/L	EPA 6010	05/06/94	DO	1
Lead, Dissolved		0.005	ND	mg/L	EPA 7421	05/05/94	KΡ	1
Nickel, Dissolved		0.05	ND	mg/L	EPA 6010	05/06/94	DO	1
Zinc, Dissolved		0.1	ND	mg/L	EPA 6010	05/06/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/09/94

NG/nfg/kjp JK1340-1 Respectfully submitted, ·

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 0594042901

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX	i	SAMPLED	BY	SAMP	LED DATE 1	RECE:	IVED
MATRIX SPIKE		Aqueous							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Dissolved	ND	0.010	0.010	100.	mg/L	EPA 7131	05/05/94	KΡ	1
Chromium, Dissolved	ND	0.50	0.44	88.	mg/L	EPA 6010	05/06/94	DO.	1
Lead, Dissolved	ND	0.050	0.052	104.	mg/L	EPA 7421	05/05/94	ΚP	1
Nickel, Dissolved	ND	1.0	0.88	88.	mg/L	EPA 6010	05/06/94	DO	1
Zinc, Dissolved	ND	1.0	0.9	90.	mg/L	EPA 6010	05/06/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/09/94

NG/nfg/kjp JK1340-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 0594042901

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAME	LED DATE	RECE:	IVED
MATRIX SPIKE DUPLICATE		Aqueous							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Cadmium, Dissolved	ND	0.010	0.010	0.	mg/L	EPA 7131	05/05/94	KP	1
Chromium, Dissolved	ND	0.50	0.44	0.	mg/L	EPA 6010	05/06/94	DO	1
Lead, Dissolved	ND	0.050	0.052	0.	mg/L	EPA 7421	05/05/94	KP	1
Nickel, Dissolved	ND	1.0	0.87	1.1	mg/L	EPA 6010	05/06/94	DO	1
Zinc, Dissolved	ND	1.0	0.9	0.	mg/L	EPA 6010	05/06/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/09/94

NG/nfg/kjp JK1340-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 0594042901

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX	:	SAMPLED	BY	SAMP	LED DATE	RECE:	IVED
QC SPIKE		Aqueous							
CONSTITUENT	*PQL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	ВУ	NOTE
Cadmium, Dissolved	0.001	0.010	0.011	110.	mg/L	EPA 7131	05/05/94	KP	1
Chromium, Dissolved	0.01	0.50	0.45	90.	mg/L	EPA 6010	05/06/94	DO	1
Lead, Dissolved	0.005	0.050	0.056	112.	mg/L	EPA 7421	05/05/94	ΚP	1
Nickel, Dissolved	0.05	1.0	0.91	91.	mg/L	EPA 6010	05/06/94	DO	1
Zinc, Dissolved	0.1	1.0	0.9	90.	mg/L	EPA 6010	05/06/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/29/94 by NT using EPA 3005

05/09/94

NG/nfg/kjp JK1340-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

APPENDIX E

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION FOR WASTE SOIL MATERIALS



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Lab Number: JK-1182-1

Environmental Science & Engineering

: 6945219, AutoPro/TriStar

4090 Nelson Avenue Suite J

Analyzed : 04/23/94

Analyzed by: MM

Concord, CA 94520

Method

: EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	Ž.	SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL µg/Kg		NOTE
VOLATILE ORGANIC COMPOUNDS					1
Acetone		(67641)	100.	ND	
Benzene		(71432)	5.	ND	
Bromodichloromethane		(75274)	5.	ND	
Bromoform		(75252)	5.	ND	
Bromomethane		(74839)	5.	ND	
2-Butanone (MEK)		(78933)	50.	ND	
Carbon Disulfide		(75150)	10.	ND	
Carbon Tetrachloride		(56235)	5.	ND	
Chlorobenzene		(108907)	5.	ND	
Chloroethane		(75003)	5.	ND	
2-Chloroethyl Vinyl Ether		(110758)	50.	ND	
Chloroform		(67663)	10.	ND	
Chloromethane		(74873)	5.	NID	
Dibromochloromethane		(124481)	5.	ND	
1,2-Dichlorobenzene		(95501)	5.	ND	
1,3-Dichlorobenzene		(541731)	5.	ND	
1,4-Dichlorobenzene		(106467)	5.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) EXTRACTED by EPA 5030 (purge-and-trap)

04/28/94 FIN2/042213B DT/et/on FIN2/042294S



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number: JK-1182-1

roject . 60

: 6945219, AutoPro/TriStar

Analyzed : 04/23/94

Analyzed by: MM

Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL µg/Kg		NOTE
1,1-Dichloroethane		(75343)	5.	ND	
1,2-Dichloroethane		(107062)	5.	ND	
1,1-Dichloroethene		(75354)	5.	ND	
cis-1,2-Dichloroethene		(156592)	5.	ND	
trans-1,2-Dichloroethene		(156605)	5.	ND	
1,2-Dichloropropane		(78875)	5.	ND	
cis-1,3-Dichloropropene		(100610105)	5.	ND	
trans-1,3-Dichloropropene		(10061026)	5.	ND	
Ethylbenzene		(100414)	5.	ND	
2-Hexanone		(591786)	30.	ND	
Methyl Isobutyl Ketone (MIBK)		(108101)	30.	ND	
Methylene Chloride		(75092)	30.	ND	
Styrene		(100425)	5.	ND	
1,1,2,2-Tetrachloroethane		(79345)	5.	ND	
Tetrachloroethene		(127184)	5.	ND	
Toluene		(108883)	5.	ND	
1,1,1-Trichloroethane		(71556)	5.	ND	
1,1,2-Trichloroethane		(79005)	5.	ND	
Trichloroethene		(79016)	5.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/28/94 FIN2/042213B DT/et/on FIN2/042294S



CLIENT: Mike Quillin

COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory) 2059 Junction Ave.

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Lab Number : JK-1182-1

Project

: 6945219, AutoPro/TriStar

Analyzed : 04/23/94

Analyzed by: MM

Method

: EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 3 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	Z.	SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL µg/Kg	_	NOTE
Trichlorofluoromethane		(75694)	5.	ND	
Trichlorotrifluoroethane		(76131)	30.	ND	
Vinyl Acetate		(108054)	30.	ND	
Vinyl Chloride		(75014)	5.	ND	
Xylenes (total)		(1330207)	5.	12.	
Total Petroleum Hydrocarbons (Gasol	.ine)		200.	700	
D4-DCA (% Surrogate Recovery #1)	•			98.	
D8-TOL (% Surrogate Recovery #2)				101.	
BFB (% Surrogate Recovery #3)				93.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/28/94 FIN2/042213B DT/et/on FIN2/042294S

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres Organics Manager



CLIENT: Mike Quillin

COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory) 2059 Junction Ave.

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1182-1

Project

: 6945219, AutoPro/TriStar

Analyzed

: 04/29/94

Analyzed by: DT

Method : EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 1 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
SEMIVOLATILE ORGANIC COMPOUNDS					1
Acenaphthylene		(208968)	0.5	ND	
Acenaphthene		(83329)	0.5	ND	
Anthracene		(120127)	0.5	ND	
Benzidine		(92875)	5.	ND	
Benzo(a)anthracene		(56553)	0.5	ND	
Benzo(b)fluoranthene		(205992)	0.5	ND	
Benzo(k)fluoranthene		(207089)	0.5	ND	
Benzo(a)pyrene		(50328)	0.5	ND	
Benzo(ghi)perylene		(191242)	0.5	ND	
Bis(2-chloroethoxy)methane		(111911)	0.5	ND	
Bis(2-chloroethyl)ether		(111444)	0.5	ND	
Bis(2-chloroisopropyl)ether		(39638329)	0.5	ND	
Bis(2-ethylhexyl)phthalate		(117817)	1.	ND	
4-Bromophenylphenylether		(101553)	0.5	ND	
Butylbenzylphthalate		(85687)	0.5	ND	
2-Chloronaphthalene		(91587)	0.5	ND	
4-Chlorophenylphenylether		(7005723)	0.5	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/26/94 by MP using EPA 3550



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

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Lab Number: JK-1182-1

Project

: 6945219, AutoPro/TriStar

Analyzed : 04/29/94

Analyzed by: DT

Method: EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 2 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
Chrysene		(218019)	0.5	ND	
Dibenzo(a,h)anthracene		(53703)	0.5	ND	
Di-n-butylphthalate		(84742)	0.5	ND	
1,2-Dichlorobenzene		(95501)	0.5	ND	
1,3-Dichlorobenzene		(541731)	0.5	ND	
1,4-Dichlorobenzene		(106467)	0.5	ND	
3,3-Dichlorobenzidine		(91941)	5.	ND	
Diethylphthalate		(84662)	0.5	ND	
Dimethylphthalate		(131113)	0.5	NID	
2,4-Dinitrotoluene		(121142)	0.5	ND	
2,6-Dinitrotoluene		(606202)	0.5	ND	
Di-n-octylphthalate		(117840)	0.5	ND	
Fluoranthene		(206440)	0.5	ND	
Fluorene		(86737)	0.5	ND	
Hexachlorobenzene		(118741)	0.3	ND	
Hexachlorobutadiene		(87683)	0.5	ND	
Hexachlorocyclopentadiene		(77474)	0.3	ND	
Hexachloroethane		(67721)	0.5	ND	
Indeno(1,2,3-cd)pyrene		(193395)	0.5	ND	

San Jose Lab Certifications: CAELAP #1204

^{*}RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

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CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

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Lab Number: JK-1182-1

Project

: 6945219, AutoPro/TriStar

Analyzed : 04/29/94

Analyzed by: DT

Method: EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 3 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
Isophorone		(78591)	0.5	ND	
Methylnaphthalenes		(91576)	0.5	ND	
Naphthalene		(91203)	0.5	ND	
Nitrobenzene		(98953)	0.5	ND	
N-Nitrosodimethylamine		(62759)	0.5	ND	
N-Nitrosodiphenylamine		(86306)	0.5	ND	
N-Nitrosodi-n-propylamine		(621647)	0.5	ND	
Phenanthrene		(85018)	0.5	ND	
Pyrene		(129000)	0.5	ND	
Trichlorobenzene		(108703)	0.5	ND	
4-Chloro-3-methylphenol		(59507)	2.	ND	
2-Chlorophenol		(95578)	2.	ND	
Cresols (total)			2.	ND	
2,4-Dichlorophenol		(120832)	2.	ND	
2,4-Dimethylphenol		(105679)	2.	ND	
2,4-Dinitrophenol		(51285)	2.	ND	
2-Methyl-4,6-dinitrophenol		(534521)	2.	ND	
2-Nitrophenol		(88755)	2.	NID	
4-Nitrophenol		(100027)	2.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Project

Lab Number : JK-1182-1

Environmental Science & Engineering

•

: 6945219, AutoPro/TriStar

4090 Nelson Avenue Suite J

Analyzed : 04/29/94

Analyzed by: DT

Concord, CA 94520

Method : EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 4 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg		NOTE
Pentachlorophenol		(87865)	2.	ND	
Phenol		(108952)	2.	ND	
2,4,6-Trichlorophenol		(88062)	2.	ND	
Aldrin		(309002)	0.5	ND	
alpha BHC		(319846)	0.5	ND	
beta BHC		(319857)	0.5	ND	
delta-BHC		(319868)	0.5	ND	
gamma BHC (Lindane)		(58899)	0.5	ND	
p,p'-DDD		(72548)	0.5	ND	
p,p'-DDE		(72559)	0.5	ND	
p,p'-DDT		(50293)	0.5	ND	
Dieldrin		(60571)	0.5	ND	
Endosulfan I		(959988)	0.5	ND	
Endosulfan II		(33213659)	0.5	ND	
Endosulfan sulfate		(1031078)	0.5	ND	
Endrin		(72208)	0.5	ND	
Endrin aldehyde		(7421934)	0.5	ND	
Heptachlor		(76448)	1.	ND	
Heptachlor epoxide		(1024573)	1.	ND	

San Jose Lab Certifications: CAELAP #1204

^{*}RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

Lab Number: JK-1182-1

Project : 6945

: 6945219, AutoPro/TriStar

Analyzed : 04/29/94

Analyzed by: DT

Method: EPA 8270

REPORT OF ANALYTICAL RESULTS

Page 5 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE	E RECEIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAloon		04/12/94	04/13/94
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
Methoxychlor		(72435)	1.	ND	
AROCLOR 1016		(12674112)	10.	ND	
AROCLOR 1221		(11104282)	10.	ND	
AROCLOR 1232		(11141165)	10.	ND	
AROCLOR 1242		(53469219)	10.	ND	
AROCLOR 1248		(12672296)	10.	ND	
AROCLOR 1254		(11097691)	10.	ND	
AROCLOR 1260		(11096825)	10.	ND	
Phenol-d5 (Surrogate % Recovery)				46.	
2-Fluorophenol (Surrogate % Recovery)	1			27.	
2,4,6-Tribromophenol (Surrogate % Rec	covery)			81.	
Nitrobenzene-d5 (Surrogate % Recovery	7)			35.	
2-Fluorobiphenyl (Surrogate % Recover	•			55.	
4-Terphenyl-d14 (Surrogate % Recovery				31.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/29/94 FIN3/JK118201 DT/et BNA-042694S Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number : JK-1182-1

Project

: 6945219, AutoPro/TriStar

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	ED BY	SAM	PLED DATE	REC	EIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McA	l∞n	0	4/12/94	04/:	13/94
CONSTITUENT	*PQL	RESULT	UNITS M	ÆTHOD	ANALYZED	BY	NOTES
Antimony, Total	1.	ND	mg/Kg E	EPA 7041	04/21/94	DO	1
Arsenic, Total	0.5	3.6	mg/Kg E	PA 7060	04/24/94	KP	1
Barium, Total	5.	160.	mg/Kg E	EPA 6010	04/22/94	DO	1
Beryllium, Total	0.5	ND	mg/Kg E	PA 6010	04/22/94	DO	1
Cadmium, Total	0.5	ND	mg/Kg E	PA 6010	04/22/94	DO	1
Chromium, Total	0.5	33.	mg/Kg E	PA 6010	04/22/94	DO	1
Cobalt, Total	1.	6.	mg/Kg E	PA 6010	04/22/94	DO	1
Copper, Total	0.5	26.	mg/Kg E	PA 6010	04/22/94	DO	1
Lead, Soluble	0.1	1.4	mg/L E	PA 7420	04/19/94	DO	2,3
Lead, Total	1.	31.	mg/Kg E	PA 7420	04/21/94	DO	1
Mercury, Total	0.004	0.15	mg/Kg E	PA 7471	04/20/94	NG	
Molybdenum, Total	3.	ND	mg/Kg E	PA 6010	04/22/94	DO	1
Nickel, Total	1.	39.	mg/Kg E	PA 6010	04/22/94	DO	1
Selenium, Total	0.5	ND			04/24/94		1
Silver, Total	0.2	0.6			04/21/94		1
Thallium, Total	5.	5.			04/21/94		1
Vanadium, Total	2.	28.			04/22/94		1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 04/17/94 by AL using EPA 3050
- (2) Sample Preparation on 04/18/94 by NT using EPA 3010
- (3) CA WET Extraction (Citrate Buffer) on 04/15/94 by AL

04/26/94

NG/nfg/kjp 5094041701 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

hick F. Haoni



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

Lab Number: JK-1182-1

Project

: 6945219, AutoPro/TriStar

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE	D BY		PLED DATE	RECE	EIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil	B.McAl	oon		4/12/94	04/1	13/94
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Zinc, Total	1.	70.	mg/Kg	EPA 6010	04/22/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/kjp · 5094041701

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

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Lab Number: JK-1182-1

Project

: 6945219, AutoPro/TriStar

CLIENT: Mike Quillin

Environmental Science & Engineering

4090 Nelson Avenue Suite J

Concord, CA 94520

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	C	SAMPLED BY	SA	MPLED DATE	RECE	EIVED
Composite of SP-1,-2,-3 & -4 (Stockpile)	Soil		B.McAloon		04/12/94	04/1	.3/94
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Flashpoint PRESENCE OF CYANIDE	1. 0.5	>200. Negative	_	EPA 1020	04/21/94 9 04/14/94		1
PRESENCE OF SULFIDE pH	10.	Negative 7.1			8 04/15/94 04/14/94	AB	2

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Standard used was 1-butanol which flashed at 97 degrees F.
- (2) Determined in deionized water.

04/22/94

NG/sab/ttn FP940421A Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Sion Blawell

Nick Gaone

Inorganics Manager

DATE 12 APR 94	PAGE	/ OF	/			CHA	IN	OF	CUS	TOI	OY F	REC	ORD				Environmental	
PROJECT NAME AUTOS	_ , -			ANAI	LYSI	SI	O F	3E I	PERI	FORI	1ED		MATRI	ζ .		35)	Science &	
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OAKLA	JD CA	(IF.		6	\delta	1		(447)	FI-KLEPR	:			M A T	MM	4090	A CILCORF Company Nelson Avenue	Phone (510) 685-4	1053
PROJECT NO. 694				(9340)	०८६३	CAM MEMLE			3				A T R I X	M N B T E A R I	Suite Conc		Fax (510) 685-532	,
SAMPLED BY B. M.	CALOON	IR /1/		_		Ĭ	ы	2384	Ē				Σ̈́	l N		·		
LAB NAME				1/02.5	SVOCS	Į	RCI	ساد	Ä					FR	(RI CONTAINE	EMARKS R, SIZE, ETC.)	
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NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: FIN2/042294S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/22/94

Analyzed by: MM

Method : EPA

: EPA 8240

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SA	SAMPLED DATE RECE		
METHOD BLANK	Solid			•		
CONSTITUENT		(CAS RN)	*PQL µg/Kg	RESULT μg/Kg	NOTE	
VOLATILE ORGANIC COMPOUNDS					1	
Acetone		(67641)	100.	ND		
Benzene		(71432)	5.	ND		
Bromodichloromethane		(75274)	5.	ND		
Bromoform		(75252)	5.	ND		
Bromomethane		(74839)	5.	ND		
2-Butanone (MEK)		(78933)	50.	ND		
Carbon Disulfide		(75150)	10.	ND		
Carbon Tetrachloride		(56235)	5.	ND		
Chlorobenzene		(108907)	5.	ND		
Chloroethane		(75003)	5.	ND		
2-Chloroethyl Vinyl Ether		(110758)	50.	ND		
Chloroform		(67663)	10.	ND		
Chloromethane		(74873)	5.	ND		
Dibromochloromethane		(124481)	5.	ND		
1,2-Dichlorobenzene		(95501)	5.	ND		
1,3-Dichlorobenzene		(541731)	5.	ND		
1,4-Dichlorobenzene		(106467)	5.	ND		
1,1-Dichloroethane		(75343)	5.	ND		
1,2-Dichloroethane		(107062)	5.	ND		
1,1-Dichloroethene		(75354)	5.	ND		
cis-1,2-Dichloroethene		(156592)	5.	ND		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) EXTRACTED by EPA 5030 (purge-and-trap)

04/28/94 FIN2/042205B DT/et JK1247-3



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: FIN2/042294S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/22/94

Analyzed by: MM

Method : EPA 8240

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SA	MPLED DATE RE	CEIVED
METHOD BLANK	Solid				
CONSTITUENT		(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
trans-1,2-Dichloroethene		(156605)	5.	ND	
1,2-Dichloropropane		(78875)	5.	ND	
cis-1,3-Dichloropropene		(100610105)	5.	ND	
trans-1,3-Dichloropropene		(10061026)	5.	ND	
Ethylbenzene		(100414)	5.	ND	
2-Hexanone		(591786)	30.	ND	
Methyl Isobutyl Ketone (MIBK)		(108101)	30.	ND	
Methylene Chloride		(75092)	30.	ND	
Styrene		(100425)	5.	ND	
1,1,2,2-Tetrachloroethane		(79345)	5.	ND	
Tetrachloroethene		(127184)	5.	ND	
Toluene		(108883)	5.	ND	
1,1,1-Trichloroethane		(71556)	5.	ND	
1,1,2-Trichloroethane		(79005)	5.	ND	
Trichloroethene		(79016)	5.	ND	
Trichlorofluoromethane		(75694)	5.	ND	
Trichlorotrifluoroethane		(76131)	30.	ND	
Vinyl Acetate		(108054)	30.	ND	
Vinyl Chloride		(75014)	5.	ND	
Xylenes (total)		(1330207)	5.	ND	
Total Petroleum Hydrocarbons (Gasoline)		200.	ND	
Total Petroleum Hydrocarbons (Diesel)			200.	ND	
D4-DCA (% Surrogate Recovery #1)				79.	
D8-TOL (% Surrogate Recovery #2)				104.	
BFB (% Surrogate Recovery #3)				101.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) Respectfully submitted,

04/28/94

FIN2/042205B

DT/et

JK1247-3

COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: FIN2/042294S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/22/94

Analyzed by: MM

Method: EPA 8240

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED I	BY .	SAMPLED DA	TE RECE	RECEIVED	
MATRIX SPIKE	Solid						
CONSTITUENT		ORIGINA RESULT	. SPIKE AMOUNT	RESULT µg/Kg	₹REC	NOTE	
VOLATILE ORGANIC COMPOUNDS						1	
Benzene		ND	250.	236.	94.		
Chlorobenzene		ND	250.	260.	104.		
1,1-Dichloroethene		ND	250.	280.	112.		
Toluene		ND	250.	260.	104.		
Trichloroethene	•	ND	250.	299.	120.		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) EXTRACTED by EPA 5030 (purge-and-trap)

04/28/94 FIN2/042206B DT/et JK1247-3 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

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QC Batch ID: FIN2/042294S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/22/94

Analyzed by: MM

Method: EPA 8240

QC MATRIX SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAM	PLED BY	SAMPLED DATE RECEIVED			
MATRIX SPIKE DUPLICATE	Solid						
CONSTITUENT		ORIGINAL RESULT	SPIKE AMOUNT	RESULT µg/Kg	%REC	*DIFF	NOTE
VOLATILE ORGANIC COMPOUNDS					·		1
Benzene		ND	250.	220.	88.	7.	
Chlorobenzene		ND	250.	257.	103.	1.2	
1,1-Dichloroethene		ND	250.	285.	114.	1.8	
Toluene		ND	250.	228.	91.	13.	
Trichloroethene		ND	250.	262.	105.	13.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) EXTRACTED by EPA 5030 (purge-and-trap)

04/28/94 FIN2/042207B DT/et JK1247-3 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: BNA-042694S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/28/94

Analyzed by: DT

Method : EPA 8270

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 1 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SA	MPLED DATE RE	CEIVED
METHOD BLANK	Solid				
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
SEMIVOLATILE ORGANIC COMPOUNDS					1
Acenaphthylene		(208968)	0.5	ND	
Acenaphthene		(83329)	0.5	ND	
Anthracene		(120127)	0.5	ND	
Benzidine		(92875)	5.	ND	
Benzo(a)anthracene		(56553)	0.5	ND	
Benzo(b)fluoranthene		(205992)	0.5	ND	
Benzo(k)fluoranthene		(207089)	0.5	ND	
Benzo(a)pyrene		(50328)	0.5	ND	
Benzo(ghi)perylene		(191242)	0.5	ND	
Bis(2-chloroethoxy)methane		(111911)	0.5	ND	
Bis(2-chloroethyl)ether		(111444)	0.5	ND	
Bis(2-chloroisopropyl)ether		(39638329)	0.5	ND	
Bis(2-ethylhexyl)phthalate		(117817)	1.	ND	
4-Bromophenylphenylether		(101553)	0.5	ND	
Butylbenzylphthalate		(85687)	0.5	ND	
2-Chloronaphthalene		(91587)	0.5	ND	
4-Chlorophenylphenylether		(7005723)	0.5	ND	
Chrysene		(218019)	0.5	ND	
Dibenzo(a,h)anthracene		(53703)	0.5	ND	
Di-n-butylphthalate		(84742)	0.5	ND	
1,2-Dichlorobenzene		(95501)	0.5	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/26/94 by MP using EPA 3550

04/29/94 · FIN3/BLK0426S DT/et JK1182-1



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: BNA-042694S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/28/94

Analyzed by: DT

Method : EPA 8270

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 2 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SA	MPLED DATE RE	CEIVED
METHOD BLANK	Solid				
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
1,3-Dichlorobenzene		(541731)	0.5	ND	
1,4-Dichlorobenzene		(106467)	0.5	ND	
3,3-Dichlorobenzidine		(91941)	5.	ND	
Diethylphthalate		(84662)	0.5	ND	
Dimethylphthalate		(131113)	0.5	ND	
2,4-Dinitrotoluene		(121142)	0.5	ND	
2,6-Dinitrotoluene		(606202)	0.5	ND	
Di-n-octylphthalate	•	(117840)	0.5	ND	
Fluoranthene		(206440)	0.5	ND	
Fluorene		(86737)	0.5	ND	
Hexachlorobenzene		(118741)	0.3	ND	
Hexachlorobutadiene		(87683)	0.5	ND	
Hexachlorocyclopentadiene		(77474)	0.3	ND	
Hexachloroethane		(67721)	0.5	ND	
Indeno(1,2,3-cd)pyrene		(193395)	0.5	ND	
Isophorone		(78591)	0.5	ИD	
Methylnaphthalenes		(91576)	0.5	ND	
Naphthalene		(91203)	0.5	ND	
Nitrobenzene		(98953)	0.5	ND	
N-Nitrosodimethylamine		(62759)	0.5	ND	
N-Nitrosodiphenylamine		(86306)	0.5	ND	
N-Nitrosodi-n-propylamine		(621647)	0.5	ND	
Phenanthrene		(85018)	0.5	ND	

San Jose Lab Certifications: CAELAP #1204

04/29/94 FIN3/BLK0426S DT/et JK1182-1

^{*}RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: BNA-042694S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/28/94

Analyzed by: DT

Method: EPA 8270

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 3 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SA	MPLED DATE RE	CEIVED
METHOD BLANK	Solid				
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
Pyrene		(129000)	0.5	ND	
Trichlorobenzene		(108703)	0.5	ND	
4-Chloro-3-methylphenol		(59507)	2.	ND	
2-Chlorophenol		(95578)	2.	ND	
Cresols (total)			2.	ND	
2,4-Dichlorophenol		(120832)	2.	ND	
2,4-Dimethylphenol		(105679)	2.	ND	
2,4-Dinitrophenol		(51285)	2.	ND	
2-Methyl-4,6-dinitrophenol		(534521)	2.	ND	
2-Nitrophenol		(88755)	2.	ND	
4-Nitrophenol		(100027)	2.	ND	
Pentachlorophenol		(87865)	2.	ND	
Phenol		(108952)	2.	ND	
2,4,6-Trichlorophenol		(88062)	2.	ND	
Aldrin		(309002)	0.5	ND	
alpha BHC		(319846)	0.5	ND	
beta BHC		(319857)	0.5	ND	
delta-BHC		(319868)	0.5	ND	
gamma BHC (Lindane)		(58899)	0.5	ND	
p,p'-DDD		(72548)	0.5	ND	
p,p'-DDE		(72559)	0.5	ND	
p,p'-DDT		(50293)	0.5	ND	
Dieldrin		(60571)	0.5	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/29/94 FIN3/BLK0426S DT/et JK1182-1



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: BNA-042694S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/28/94

Analyzed by: DT

Method : EPA 8270

METHOD BLANK

REPORT OF ANALYTICAL RESULTS

Page 4 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SA	MPLED DATE RE	CEIVED
METHOD BLANK	Solid				
CONSTITUENT		(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
Endosulfan I		(959988)	0.5	ND	
Endosulfan II		(33213659)	0.5	ND	
Endosulfan sulfate		(1031078)	0.5	ND	
Endrin		(72208)	0.5	ND	
Endrin aldehyde		(7421934)	0.5	ND	
Heptachlor		(76448)	1.	ND	
Heptachlor epoxide		(1024573)	1.	ND	
Methoxychlor		(72435)	1.	ND	
AROCLOR 1016		(12674112)	10.	ND	
AROCLOR 1221		(11104282)	10.	ND	
AROCLOR 1232		(11141165)	10.	ND	
AROCLOR 1242		(53469219)	10.	ND	
AROCLOR 1248		(12672296)	10.	ND	
AROCLOR 1254		(11097691)	10.	ND	
AROCLOR 1260		(11096825)	10.	ND	
Phenol-d5 (Surrogate % Recovery)				47.	
2-Fluorophenol (Surrogate % Recovery)				28.	
2,4,6-Tribromophenol (Surrogate % Recove	ery)			55.	
Nitrobenzene-d5 (Surrogate % Recovery)				39.	
2-Fluorobiphenyl (Surrogate % Recovery)				67.	
4-Terphenyl-d14 (Surrogate % Recovery)				44.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/29/94 FIN3/BLK0426S DT/et JK1182-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: BNA-042694S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/29/94

Analyzed by: DT

Method: EPA 8270

QC SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED I	ЗY	SAMPLED DA	TE RECE	EC NOTE
QC SPIKE	Solid					
CONSTITUENT		* PQ L mg/ Kg	SPIKE AMOUNT	RESULT mg/Kg	%REC	NOTE
SEMIVOLATILE ORGANIC COMPOUNDS						1
Acenaphthene		0.5	1.6	0.647	40.	
1,4-Dichlorobenzene		0.5	1.6	0.865	54.	
2,4-Dinitrotoluene		0.5	1.6	0.741	46.	
N-Nitrosodi-n-propylamine		0.5	1.6	0.620	39.	
Pyrene		0.5	1.6	0.436	27.	
Trichlorobenzene		0.5	1.6	0.521	33.	
4-Chloro-3-methylphenol		2.	3.3	1.15	35.	
2-Chlorophenol		2.	3.3	0.96	29.	
4-Nitrophenol		2.	3.3	1.4	42.	
Pentachlorophenol		2.	3.3	2.0	61.	
Phenol		2.	3.3	1.0	30.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/26/94 by MP using EPA 3550

04/29/94 FIN3/LCS10426S DT/et JK1182-1

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: BNA-042694S

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 04/29/94

Analyzed by: DT

Method : EPA 8270

QC SPIKE

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SA	MPLED BY	SAMP:	LED DA	TE RECE	EIVED
QC SPIKE DUPLICATE	Solid						
CONSTITUENT		*PQL mg/Kg	SPIKE AMOUNT	RESULT mg/Kg	%REC	%DIFF	NOTE
SEMIVOLATILE ORGANIC COMPOUNDS				<u></u>			1
Acenaphthene		0.5	1.6	0.709	44.	9.1	
1,4-Dichlorobenzene		0.5	1.6	0.850	53.	1.7	
2,4-Dinitrotoluene		0.5	1.6	0.731	46.	1.4	
N-Nitrosodi-n-propylamine		0.5	1.6	0.655	41.	5.5	
Pyrene		0.5	1.6	0.372	23.	16.	
Trichlorobenzene		0.5	1.6	0.590	37.	12.	
4-Chloro-3-methylphenol		2.	3.3	1.3	39.	12.	
2-Chlorophenol		2.	3.3	1.0	30.	4.1	
4-Nitrophenol		2.	3.3	1.4	42.	0.	
Pentachlorophenol		2.	3.3	2.1	64.	4.9	
Phenol		2.	3.3	1.05	32.	4.9	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/26/94 by MP using EPA 3550

04/29/94 FIN3/LCS20426S DT/et JK1182-1

Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: WET94041801

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX		SAMPLED	BY		LED DATE R		
METHOD BLANK	Solid							
CONSTITUENT			RESULT	UNITS	METHOD	ANALYZED	BY	NOTE
Lead, Soluble		0.1	ND	mg/L	EPA 7420	04/19/94	DO	1,2

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 04/18/94 by NT using EPA 3020
- (2) CA WET Extraction (Citrate Buffer) on 04/15/94 by NT

04/26/94

NG/nfg JK1198–6 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

Mick J. Haone



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: WET94041801

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMPI	LED DATE F	ECEIVED
MATRIX SPIKE		Solid	140					
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	BY NOTE
Lead, Soluble	ND	2.5	2.6	104.	mg/L	EPA 7420	04/19/94	DO 1,2

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/18/94 by NT using EPA 3020

(2) CA WET Extraction (Citrate Buffer) on 04/15/94 by NT

04/26/94

NG/nfg JK1198-6 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: WET94041801

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMP	LED DATE I	ŒŒ!	IVED
MATRIX SPIKE DUPLICATE		Solid							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	&DIFF	UNITS	METHOD	ANALYZED	BY	NOTE
Lead, Soluble	ND	2.5	2.6	0.	mg/L	EPA 7420	04/19/94	DO	1,2

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/18/94 by NT using EPA 3020

(2) CA WET Extraction (Citrate Buffer) on 04/15/94 by NT

04/26/94

NG/nfg JK1198-6 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: WET94041801

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED BY	SAMPI	LED DATE R	ECEIVED
QC SPIKE		Solid					
CONSTITUENT	*PQL	SPIKE	RESULT	%REC UNITS	METHOD	ANALYZED	BY NOTE
Lead, Soluble	0.1	2.5	2.5	100. mg/L	EPA 7420	04/19/94	DO 1,2

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 04/18/94 by NT using EPA 3020
- (2) CA WET Extraction (Citrate Buffer) on 04/15/94 by NT

04/26/94

NG/nfg JK1198-6 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

Mck J. Jaone



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	MATRIX SAMPLED BY			SAMPLED DATE RECEIVED			
METHOD BLANK	Solid							
CONSTITUENT	*PQI	RESULT	UNITS	METHOD	ANALYZED	BY	NOTE	
Antimony, Total	1.	ND	mg/Kg	EPA 7041	04/21/94	DO	1	
Arsenic, Total	0.5	ND	mg/Kg	EPA 7060	04/20/94	ΚP	1	
Barium, Total	5.	ND	mg/Kg	EPA 6010	04/19/94	DO	1	
Beryllium, Total	0.5	ND	mg/Kg	EPA 6010	04/19/94	DO	1	
Cadmium, Total	0.5	ND	mg/Kg	EPA 6010	04/19/94	DO	1	
Chromium, Total	0.5	ND	mg/Kg	EPA 6010	04/19/94	DO	1	
Cobalt, Total	1.	ND	mg/Kg	EPA 6010	04/19/94	DO	1	
Copper, Total	0.5	ND	mg/Kg	EPA 6010	04/19/94	DO	1	
Lead, Total	1.	ND	mg/Kg	EPA 7420	04/21/94	ĐO	1	
Mercury, Total	0.00	4 ND	mg/Kg	EPA 7471	04/20/94	NG		
Molybdenum, Total	3.	ND			04/19/94	DO	1	
Nickel, Total	1.	ND			04/19/94	DO	1	
Selenium, Total	0.5	ND			04/20/94	ΚP	1	
Silver, Total	0.2	ND			04/21/94	ΚP	1	
Thallium, Total	5.	ND			04/21/94	DO	1	
Vanadium, Total	2.	ND			04/19/94	DO	1	
Zinc, Total	1.	ND			04/19/94	DO	1	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Rich J. Brone

Nick Gaone Inorganics Manager

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QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY	SAMI	LED DATE I	RECE:	IVED
MATRIX SPIKE		Solid							
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%REC	UNITS	METHOD	ANALYZED	BY	NOTE
Antimony, Total	ND	9.9	9.1	92.	mg/Kg	EPA 7041	04/21/94	DO	1
Arsenic, Total	3.1	9.9	12.	90.	mg/Kg	EPA 7060	04/20/94	ΚP	1
Barium, Total	130.	49.	170.	82.	mg/Kg	EPA 6010	04/19/94	DO	1
Beryllium, Total	ND	49.	44.	90.	mg/Kg	EPA 6010	04/19/94	DO	1
Cadmium, Total	ND	25.	21.	84.	mg/Kg	EPA 6010	04/19/94	DO	1
Chromium, Total	72.	25.	88.	64.	mg/Kg	EPA 6010	04/19/94	DO	1
Cobalt, Total	10.	49.	61.	104.	mg/Kg	EPA 6010	04/19/94	DO	1
Copper, Total	34.	49.	73.	80.	mg/Kg	EPA 6010	04/19/94	DO	1
Lead, Total	13.	25.	35.	88.	mg/Kg	EPA 7420	04/21/94	DO	1
Mercury, Total	0.074	0.048	0.13	117.	mg/Kg	EPA 7471	04/20/94	NG	
Molybdenum, Total	ND	49.	50.	102.	mg/Kg	EPA 6010	04/19/94	DO	1
Nickel, Total	110.	49.	150.	82.	mg/Kg	EPA 6010	04/19/94	DO	1
Selenium, Total	ND	9.9	6.3	64.	mg/Kg	EPA 7740	04/20/94	ΚP	1
Thallium, Total	9.	49.	56.	96.	mg/Kg	EPA 7840	04/21/94	DO	1
Vanadium, Total	54.	25.	78.	96.	mg/Kg	EPA 6010	04/19/94	DO	1
Zinc, Total	52.	49.	95.	88.			04/19/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC MATRIX SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY		SAMP.	LED DAT	E RECE	IVED
MATRIX SPIKE DUPLICATE		Solid								
CONSTITUENT	ORIGINAL	SPIKE	RESULT	%DIFF	UNITS	MET	HOD	ANALYZ	ED BY	NOTE
Antimony, Total	ND	9.9	9.8	7.4	mg/Kg	EPA	7041	04/21/9	94 DO	1
Arsenic, Total	3.1	9.9	11.	12.	mg/Kg	EPA	7060	04/20/9	94 KP	1
Barium, Total	130.	50.	170.	2.	mg/Kg	EPA	6010	04/19/9	94 DO	1
Beryllium, Total	ND	50.	44.	2.	mg/Kg	EPA	6010	04/19/9	94 DO	1
Cadmium, Total	ND	25.	21.	0.	mg/Kg	EPA	6010	04/19/9	94 DO	1
Chromium, Total	72.	25.	89.	6.1	mg/Kg	EPA	6010	04/19/9	94 DO	1
Cobalt, Total	10.	50.	61.	2.	mg/Kg	EPA	6010	04/19/9	94 DO	1
Copper, Total	34.	50.	73.	2.	mg/Kg	EPA	6010	04/19/9	94 DO	1
Lead, Total	13.	25.	35.	0.	mg/Kg	EPA	7420	04/21/9	94 DO	1
Mercury, Total	0.074	0.048	0.13	0.	mg/Kg	EPA	7471	04/20/9	94 NG	
Molybdenum, Total	ND	50.	51.	0.04	mg/Kg	EPA	6010	04/19/9	94 DO	1
Nickel, Total	110.	50.	150.	2.	mg/Kg	EPA	6010	04/19/9	94 DO	1
Selenium, Total	ND	9.9	6.2	1.6	mg/Kg	EPA	7740	04/20/9	94 KP	1
Thallium, Total	9.	50.	56.	2.	mg/Kg	EPA	7840	04/21/9	94 DO	1
Vanadium, Total	54.	25.	79.	4.1	mg/Kg	EPA	6010	04/19/9	94 DO	1
Zinc, Total	52.	50.	95.	2.	mg/Kg	EPA	6010	04/19/9	94 DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: 5094041701

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION		MATRIX		SAMPLED	BY		SAMP	LED DATE	RECE	IVED
QC SPIKE	· · · · · · · · · · · · · · · · · · ·	Solid								
CONSTITUENT	*PQL	SPIKE	RESULT	%REC	UNITS	METT	HOD	ANALYZED	BY	NOTE
Antimony, Total	1.	10.	7.9	79.	mg/Kg	EPA	7041	04/21/94	DO	1
Arsenic, Total	0.5	10.	12.	120.	mg/Kg	EPA	7060	04/20/94	KP	1
Barium, Total	5.	50.	52.	104.	mg/Kg	EPA	6010	04/19/94	DO	1
Beryllium, Total	0.5	50.	48.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Cadmium, Total	0.5	25.	24.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Chromium, Total	0.5	25.	24.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Cobalt, Total	1.	50.	48.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Copper, Total	0.5	50.	48.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Lead, Total	1.	25.	23.	92.	mg/Kg	EPA	7420	04/21/94	DO	1
Mercury, Total	0.004	0.10	0.10	100.	mg/Kg	EPA	7471	04/20/94	NG	
Molybdenum, Total	3.	50.	51.	102.	mg/Kg	EPA	6010	04/19/94	DO	1
Nickel, Total	1.	50.	50.	100.	mg/Kg	EPA	6010	04/19/94	DO	1
Selenium, Total	0.5	10.	13.	130.	mg/Kg	EPA	7740	04/20/94	KP	1
Thallium, Total	5.	50.	49.	98.	mg/Kg	EPA	7840	04/21/94	DO	1
Vanadium, Total	2.	25.	24.	96.	mg/Kg	EPA	6010	04/19/94	DO	1
Zinc, Total	1.	50.	49.	98.	mg/Kg	EPA	6 0 10	04/19/94	DO	1

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit) (1) Sample Preparation on 04/17/94 by AL using EPA 3050

04/26/94

NG/nfg/jst JK1135-1 Respectfully submitted, COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager



NorCal Division (San Jose Laboratory) 2059 Junction Ave. San Jose, CA 95131 (408) 955-9077

QC Batch ID: CN940414A

CLIENT:

QC DUPLICATE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	:	SAMPLE	D BY	SZ	MPLED DATE	RECEIVED
9404135-16 (SP-8A,B,D,E)	Solid		Unknov	vn		04/08/94	04/12/94
CONSTITUENT	*PQL	RESULT	%DIFF	UNITS	METHOD	ANALYZE	D BY NOTE
PRESENCE OF CYANIDE		Absent	0.		ASTM D50	04/14/9	4 AB

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/22/94

NG/nfg/aob JKl167-6 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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QC Batch ID: PH940414A

CLIENT:

QC DUPLICATE
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
pH (Digestion) and Metals Cu & Pb (Dig)	Aqueous	Unknowa	04/14/94. 04/14/94		
CONSTITUENT	*PQL RESULT	%DIFF UNITS ME	THOD ANALYZED BY NOTE		
рН	0.1 9.3	0. Units EP	A 150.1 04/14/94 TO		

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/22/94

NG/sab/ttn JK1194-1 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Sion Maurel

Nick Gaone

Inorganics Manager

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NorCal Division (San Jose Laboratory) 2059 Junction Ave.

San Jose, CA 95131 (408) 955-9077

QC Batch ID: H2S940415B

CLIENT:

QC DUPLICATE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	MATRIX SAMPLED BY		ED BY	SAMPLED DATE RECEIVED		
11, Composite of SP-18A,B,C,D	Solid	Solid		Unknown		4/14/94	04/14/94
CONSTITUENT	*PQL	RESULT	%DIFF	UNITS	METHOD	ANALYZEI	BY NOTE
PRESENCE OF SULFIDE		Absent	0.		ASTM D497	78 04/15/94	1 AB

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/22/94

NG/nfg/aob JK1198-6 Respectfully submitted,

COAST-TO-COAST ANALYTICAL SERVICES, INC.

Nick Gaone

Inorganics Manager

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