MILLER BROOKS
Environmental, Inc.

September 17, 2003

Mr. Bruce G. Ehrlich
Nossaman, Guthner, Knox and Elliot LLP
445 South Figueroa Street, 31st Floor
Los Angeles, California 90071

SITE: GREENPARK RUNKLE CANYON, LLC RUNKLE CANYON PROPERTY IN SIMI VALLEY, CALIFORNIA

RE: SITE INVESTIGATION REPORT OF 550-ACRE PARCEL

Dear Mr. Ehrlich:

Miller Brooks Environmental, Inc. (Miller Brooks) is pleased to submit this report documenting our site investigation of the eastern 550-acre portion (Site) of the 1,615-acre Runkle Canyon Property (Property) in Ventura County, California (see Figure 1). The investigation included surface soil and water sampling, the drilling and sampling of soil borings, and collection of groundwater samples on the Runkle Canyon Property (Figure 1). The purpose of these activities was to identify recognized environmental conditions on the Property, with a particular emphasis on tritium and strontium-90. This report presents the results of sampling and analysis performed on the eastern 550-acre portion of the Property, and includes a description of the Site, a summary of site assessment activities, results of laboratory analyses, and conclusions.

1.0 BACKGROUND INFORMATION

Strontium (chemical symbol Sr) is a silvery metal that is found in nature and has four stable isotopes and twelve radioactive isotopes. Isotopes are different forms of the same element that have the same number of protons in the nucleus but a different number of neutrons. While the four stable isotopes of strontium occur naturally, strontium-90 is a by-product of the fission of uranium and plutonium in nuclear reactors and nuclear weapons. In the 1950s and 1960s, large amounts of strontium-90 were produced during atmospheric nuclear weapons tests and were dispersed worldwide. Strontium-90 has a half-life of 29.1 years. The releases from the 1950s and 1960s have been decaying slowly and result in current low background levels. The average strontium-90 concentration in surface soil is about 0.1 pico Curie per gram (pCi/g; Environmental Protection Agency [EPA], 2003a; Risk Assessment Information System, 2003; Argonne National Laboratory, 2001).

Tritium (H3) is a radioactive isotope of hydrogen that is produced naturally by interactions in the upper atmosphere, and artificially as a result of nuclear testing, especially in the early 1950s. The tritium exchanges with normal hydrogen in water vapor to form tritiated (or "heavy") water, which then becomes part of the Earth's global water. Tritium is also produced during nuclear weapons testing and as a by-product of nuclear reactors. In the mid-1950s and early 1960s, tritium was widely dispersed in the atmosphere during the above ground testing of nuclear weapons. Tritium has a half-life of approximately 12 years and acts as an excellent tracer of water movement in the subsurface and time of travel, or age, within the hydrologic. Tritium emits very low energy beta particles and radiation, and does not penetrate a significant distance in

air. Because of this, tritium outside the body does not produce direct radiation exposure. Potential human exposure to tritium is from the ingestion of tritiated water. Tritium can be naturally present in surface water at about 10 pico Curies per liter (pCi/L) to 30 pCi/L (3 tritium units [TU] to 9 TU; EPA, 2003b; Risk Assessment Information System, 2003; Argonne National Laboratory, 2001; Tuttle, 1992; Hendry, 1988).

2.0 SUMMARY OF CONCLUSIONS

Strontium-90 levels in surface and shallow soil samples were either below detectable concentrations or within background concentrations and below levels considered to pose a health risk. Concentrations of tritium detected in surface water and groundwater at the Site were found to be below levels considered by regulatory agencies to pose a health risk.

3.0 SITE DESCRIPTION

The subject Site is located within an area of undeveloped land referred to as Runkle Canyon, located at the terminus of Sequoia Avenue in the City of Simi Valley in Ventura County, California. The Property consists of three land parcels totaling approximately 1,615 acres. The subject Site comprises the eastern 550 acres of the Property. The Site is identified by the Ventura County's Assessors office as Parcel Numbers, 634-010-495, 685-040-075, 658-040-095, 658-040-100, 658-040-140, 685-040-165, 685-040-190, 685-040-200, 685-040-210, 685-040-220, 685-040-240, 685-051-225, 658-051-230 and 658-130-160. There is no known street address for the subject Site. The Property and Site locations are shown on Figure 1.

The 550-acre portion of the Property consists of a north-south trending valley that is currently used for cattle grazing. A former quarry/sand and gravel mine was located on the southwestern portion of the Property. Features that were associated with the quarry included a small building, a conveyor system, and asphalt roadways. The conveyor system was removed when the mining operations ceased. In 1985, the County of Ventura designated the mine as closed and reclaimed (County of Ventura, 2000). The valley contains unconsolidated fill material generated from the quarrying activities. A small stream, which drains to the north, has downcut through the fill in the valley.

4.0 ENVIRONMENTAL SETTING

The Site is located on the United States Department of the Interior, Geological Survey (USGS) Topographic Maps (7.5-minute series) for the Calabasas Quadrangle dated 1952 and photorevised in 1967. The Property is located in the Simi Hills at the south side of Simi Valley. Site elevations range from approximately 1,000 feet to 1,400 feet above mean sea level (USGS, 1952).

4.1 GEOLOGY

The Property is located on the northern flank of the Simi Hills, within the Western Transverse Ranges geomorphic province. The area is characterized by numerous east-west trending folds and reverse faults from ongoing compressional stresses. The Burro Flats Fault dissects the southern portion of the Property in an east-west direction, but has not been designated as an active fault by the State of California (California Division of Mines and Geology [CDMG], 1984).

The dominant geologic formations underlying the Property are the Santa Susana, Llajas and Chatsworth Formations. These are composed mainly of marine shales and sandstones. The geologic units in the area range from Upper Cretaceous to Lower Tertiary in age. The valley

floors and stream channels are blanketed by Quaternary alluvium. Isolated remnants of older alluvial deposits are located within the elevated areas, generally adjacent to the main drainage of Runkle Canyon. They generally consist of medium- to reddish-brown sandy silt and clay with sand and cobble lenses. The maximum thickness of older alluvium encountered within previous subsurface investigations is 75 feet (CDMG, 1984).

4.2 HYDROGEOLOGY

The Property is located approximately 3 miles south of the Simi Valley Groundwater Basin within the Calleguas Creek Watershed. The major drainages in the area are the Los Angeles River to the southeast and Los Virgenes Creek to the south. The Chatsworth Reservoir is located approximately 10 miles east of the Site (California Regional Water Quality Control Board [CRWQCB], 1994). An unnamed stream drains north to the Runkle Reservoir which is located on the northern portion of the Site and was observed to be dry during the site reconnaissance.

There are two main groundwater systems in the vicinity of the Property. The Shallow Zone groundwater is laterally discontinuous, and is found within the alluvial deposits along drainages and valley floors. Depth to water in the Shallow Zone has ranged from land surface (artesian conditions) to greater than 30 feet below ground surface (bgs). A deeper, regional groundwater zone is present within the fractures of the Chatsworth Formation bedrock, which is the principal water-bearing system in the area. In the deeper regional groundwater zone within the Chatsworth Formation, groundwater has been measured at depths ranging from ground surface (artesian conditions) to approximately 567 feet bgs (Groundwater Resources Consultants, Inc. [GRC], 2000).

The groundwater flow direction in the Chatsworth Formation at the eastern boundary of the Property is to the north-northwest (GRC, 2000). Due to the complex nature of the hydrogeologic setting, the groundwater flow direction and gradient is highly variable on different portions of the Property, so no general regional gradient could be determined.

There are no known municipal supply wells within two miles of the Property (Environmental Data Resources, Inc. [EDR], 2000).

5.0 PREVIOUS ASSESMENTS

In August 1998, RAMCO Environmental, LLC (RAMCO) conducted a preliminary environmental site assessment to determine if any significant environmental liabilities existed on the Site. Based on a records search and site investigation, RAMCO concluded that there was a low risk of environmental liability under the California regulatory codes governing hazardous material in place at the time of assessment. However, RAMCO inaccurately characterized the stored material and waste rock from the abandoned onsite sand and gravel mine, which had been located on a portion of the Site, as stockpiled gangue material. The use of the term "gangue" is suggestive of metalliferous ore and is used to describe material produced during the operation of a sand and gravel mine is inappropriate. RAMCO also identified a "white, fine grain, material deposited by the leaching water of the aggregate stockpiles" that "would suggest a potential for regulated, if not hazardous, material." RAMCO observed one partially buried 55-gallon drum and nine pole-mounted electrical transformers on the Site. RAMCO also reviewed the historic building permits and none were found for the Site (RAMCO, 1998).

A limited surface soil survey was conducted at the Site and adjacent parcel to the south (715-acre parcel) in December 1998 by QST Environmental, Inc. (QST). The purpose of the

survey was to determine if operations at the Santa Susana Field Laboratory (SSFL) facility had impacted soil at the Site through surface water run-off. Based on the July 1995 EPA update *The US EPA Announces Results of Rocketdyne's Off-Site Soil Sampling Program for the Santa Susana Field Laboratory*, which identified the radionuclide constituents of concern, QST collected two soil samples on the Site that were analyzed for cesium-137, strontium-90 and tritium. Soil sample results were compared to the background levels established by the EPA for strontium-90 (0.052 pCi/g), cesium-137 (0.087 pCi/g), and tritium (140 pCi/L). The results indicated that the surface soil at the Site contained concentrations of strontium-90 exceeding background levels as reported by the EPA. Based on these results, QST recommended that a more extensive site investigation be conducted. One composite sample was also collected from the "white, fine grain, material" identified by RAMCO. The material consisted mainly of metals and inorganics that are "normally non-toxic" (QST, 1999).

Based on the QST recommendation, in 1999, Foster Wheeler Environmental Corporation (Foster Wheeler) conducted an extensive sampling program (including 58 samples) on the Site with the primary focus being the clarification of the results from the 1998 QST investigation. There was also additional sampling of the stockpiled sand and gravel mine material (mine tailings) and surface water, with additional sampling for gamma-emitting radionuclides. Foster Wheeler applied a statistical approach from the Multi Agency Radiation Survey and Site Investigation Manual (MARSSIM) to determine that 58 sample locations (one location for every 9 acres) would be a statistically valid number of samples. The samples were collected from the Site on a grid pattern and analyzed for cesium-137, strontium-90 and tritium (Foster Wheeler, 1999).

Tritium was not found at concentrations above the laboratory detection limit. Based on the results of an additional statistical evaluation using the MARSSIM protocol, the cesium-137 and strontium-90 concentrations were found not to exceed exposure limits considered to be protective of human health, and the Site is therefore considered to be non-contaminated for the radionuclides detected. No significant variation was seen in the naturally occurring radionuclides at the Site. There were no unusual or elevated readings noted during the measurement of gamma radiation. The only regulatory standard exceeded was the CRWQCB water quality objectives for sulfate in the stream passing through the tailings. Sulfate levels are not regulated for health risk, but for aesthetics (i.e., taste, color, etc.). No other regulatory standards for soil or water were exceeded in any of the samples collected from the mine tailings or the stream running through the tailings (Foster Wheeler, 1999).

In 2000, Miller Brooks collected soil samples at the base of the ten pole-mounted transformers to evaluate whether the soil contained polychlorinated biphenyls (PCBs) and performed a limited radiation survey. The transformers were located within three groupings; therefore, three soil samples were collected. None of the soil samples contained detectable concentrations of PCBs. The radiation survey data was collected in three locations with readings ranging from 17.1 microRoentgens per hour (uR/hr) to 17.7 uR/hr, which indicated that there was no gross surface contamination in the survey locations. According to Mr. Joseph Takahashi, an American Board of Health Physics certified professional, gross surface contamination would have displayed readings in the 100s of uR/hr (Miller Brooks, 2000).

The Hazardous Materials Program of the Environmental Health Division of the Resource Management Agency responded to a public complaint as to the presence of an apparent damaged electrical transformer and drum in September of 2000. In response, GreenPark coordinated with Southern California Edison for the removal of the power poles and transformers, which were

removed in the middle of 2002 (Miller Brooks, 2003a). The drum was removed from the Site as part of a later site investigation, discussed below.

In January and March 2003, Miller Brooks conducted a Phase I and II Environmental Site Assessment (ESA) on the eastern 550-acre parcel. The ESA included a site walk, drilling and soil sampling, and historic research and records review of the Site and surrounding properties.

During site assessment activities, no evidence of hazardous substances having been stored or handled at the Site was found during the site walk or records review, with the exception of the former presence of ten pole-mounted transformers on the subject Site. The transformers were removed and disposed of by Southern California Edison in the middle of 2002, as discussed above. The subject Site was not identified in any of the databases searched in the report submitted by EDR. The SSFL facility was the only facility identified with the potential to impact the subject Site (Miller Brooks, 2003b).

As part of the ESA, on January 8 and 9, 2003, Miller Brooks (with Seward Engineering) supervised the advancement of seven soil borings (HS-25 through HS-31; Figure 2) to approximate total depths ranging from 15 feet to 66.5 feet bgs. The borings were drilled within areas identified as mine tailings from the sand and gravel quarry operations until bedrock was encountered. Soil and groundwater samples were collected from the borings during the investigation (Miller Brooks, 2003b).

Results of the laboratory analysis of soil samples collected during the investigation of the sand and gravel mine tailings show low concentrations of metals and total petroleum hydrocarbons (TPH) in the soil samples. All concentrations of metals detected in the soil samples were below the EPA Preliminary Remediation Goals (PRGs) for residential soil and do not pose a risk to human health. No PCBs, volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs) concentrations were detected in the soil samples (Miller Brooks, 2003b).

During the investigation, no concentrations of petroleum hydrocarbons or VOCs were detected in groundwater at the Site. In addition, no concentrations of perchlorate were detected in surface water samples collected at the Property, or in the groundwater sample collected from the groundwater monitoring well at the Property (Well-1) during the investigation (Miller Brooks, 2003b). Perchlorate, at levels ranging between 130 to 156 times below the EPA's PRG for perchlorate in residential soil (7.8 milligrams per kilogram [mg/kg]) was detected in two groundwater/silt samples collected at depths greater than 35 feet below the surface of the Property. Based on the depth to the two silt samples impacted with perchlorate, the extremely low levels of perchlorate detected in those samples, the non-detectable levels found in all other sampling, and the lack of exposure pathways, there is no indication that activities at the Property's surface will be impacted by perchlorate (Miller Brooks, 2003b).

In addition, Miller Brooks reviewed information on perchlorate sampling compiled in a February 2003 report by Montgomery Watson Harza (MWA). The report showed that no detectable concentrations of perchlorate were found in soil samples, surface water samples from springs and seeps, and National Pollutant Discharge Elimination System (NPDES) discharge samples collected by the Department of Toxic Substances Control (DTSC) and The Boeing Company (Boeing) at or near the Runkle Canyon Property as part of the SSFL sampling programs (MWA, 2003).

In March 2003, a total of 19 55-gallon drums were identified on the Site. No concentrations of TPH-V, VOCs, or SVOCs were detected in the surface soil samples collected as a part of the subsequent drum removal program. All concentrations of metals detected in these surface soil samples were below EPA PRGs for residential soil. The material in the drums was transported from the Site and disposed of/recycled as non-hazardous waste (Miller Brooks, 2003b).

6.0 SUMMARY OF SITE ASSESSMENT ACTIVITIES

Site assessment activities were conducted on the Property, including the subject Site, to obtain additional data in order to determine if detectable concentrations of strontium-90 and tritium are present in soil and water at the Site. The assessment activities conducted on the Property included the drilling and sampling of six soil borings, the collection of six surface soil samples in run-off and drainage areas, the collection of 17 surface soil samples in approximately the same locations as the Harding ESE surface samples collected in September 2000, and the collection of nine water samples. Activities conducted on the subject Site only discussed below.

Based on the findings from previous investigations at the Property, it was determined that all concentrations of cesium-137 detected on the Property were within EPA background concentrations for soil, and the previous data set was adequate and representative. Therefore, no additional samples were analyzed for cesium-137 during this investigation. In addition, tritium is a radioactive isotope of hydrogen that is bound to water molecules, and is transported in the environment as water (Hendry, 1988; see Section 6.0 for further discussion). Tritium in soil occurs as a gas and has a shorter half-life, so it is generally not found in soil (Robles, 2003). Therefore, tritium analyses were performed on water samples only and not on soil.

Soil Boring Activities and Collection of Surface Soil Samples

On March 13, 2003, Miller Brooks supervised the advancement of five soil borings (MBE-2, MBE-4, MBE-5, MBE-7, and MBE-8; Figure 2) on the Site to a depth of 7 feet bgs. The borings were drilled using a hollow-stem auger drill rig with a split-spoon sampler. During drilling, soil samples were collected from all borings at the surface, 3 feet bgs, and 7 feet bgs for laboratory analysis. In addition, one duplicate sample (Duplicate-2) was collected at the location of MBE-5-Surface for laboratory analysis and quality control. During soil boring activities, Miller Brooks personnel used a photoionization detector (PID) to monitor the soil for VOCs. A description of general field procedures utilized, and copies of the soil boring logs are included in Appendix A.

On March 13 and 14, 2003, Miller Brooks collected six soil samples (MBE-1-Surface, MBE-3-Surface, MBE-6-Surface, MBE-12-Surface, SS-14A and SS-15A) from the surface of the Site. Sample SS-15A was collected approximately 100 feet east of the Site. Three offsite samples (Background-1 through Background-3) were collected as a baseline with which to compare results of the onsite samples. In addition, one duplicate sample (Duplicate-2) was collected at the location of Sample SS-15A for laboratory analysis and quality control. The samples were collected in 4-ounce glass jars and placed in a cooler for transport to a state-certified laboratory, following proper chain of custody protocol. The sample locations are shown on Figure 2 and the general field procedures are included in Appendix A.

All soil samples collected during this investigation were analyzed for strontium-90 using EPA Method 905.0. Results of the laboratory analysis of soil samples are presented in Table 1. The laboratory reports and chain of custody documents are included in Appendix B.

Collection of Surface and Groundwater Samples

On January 8 and 9, 2003, groundwater samples were collected from three soil borings drilled at the Site (HS-25, HS-26 and HS-29; Figure 3). The groundwater samples were collected at depths ranging from 37 feet to 56 feet bgs. Groundwater samples were collected directly from the boreholes in 4-ounce glass jars and placed in a cooler for transport to a state-certified laboratory, following proper chain of custody protocol. The sample locations are shown on Figure 3 and the general field procedures are included in Appendix A.

On February 5, 2003, a groundwater sample was collected from one of the groundwater monitoring wells previously installed at the Site (observed during site reconnaissance activities; see Figure 3). Prior to sampling, the depth to water was gauged and approximately seven gallons of groundwater were purged from the well. One groundwater sample (Well-1) was collected from the well following purging activities. The well was abandoned on March 13, 2003. Results of the laboratory analysis of the groundwater sample are presented in Table 2. The laboratory report and chain of custody document are included in Appendix B.

On March 14, 2003, three surface water samples (Creek-1, Creek-2, and Creek-3; Figure 3) were collected from the creek that flows through the central portion of Runkle Canyon. In addition, on May 1, 2003, two surface water samples (Spring-2 and Spring-3) were collected from springs at the Site (Figure 3). Results of the laboratory analysis of water samples are presented in Table 2 and copies of the laboratory reports and chain of custody documents are included in Appendix B.

All water samples collected during the investigations were analyzed for tritium using Low Level Beta Counting by Gas Proportional Counters. For additional information regarding the water sampling activities at the Site, please refer to the Miller Brooks report *Phase I and II Environmental Site Assessment* dated May 8, 2003.

7.0 FINDINGS

Soil observed during the onsite soil sampling investigation is generally described as brown/olive brown to dark brown sand and silty sand with interbedded silty clays and clayey silts from the surface to approximately 67 feet bgs (maximum depth of investigation; Miller Brooks, 2003b). Groundwater was encountered in the borings (MBE-8, HS-25, HS-26, and HS-29) during the investigation at depths ranging from approximately 7 feet to 56 feet bgs.

Laboratory analysis of soil and water samples collected from the 550-acre southern parcel of the Runkle Canyon Property revealed the following:

- Strontium-90 was detected in two soil samples (MBE-1-Surface and MBE-7-3') at concentrations of 2.10 pCi/g and 2.20 pCi/g, respectively. Both of these samples are located on the Site. These concentrations are below levels considered to pose a health risk. No concentrations of strontium-90 were detected any of the other soil samples.

- Tritium was detected in the nine water samples collected at the Site at concentrations ranging from -1 tritium units (TU) in Sample Creek-2 Water to 7 TU in Sample HS-26-37'. The concentrations detected were at levels below regulatory limits and within normal background levels for tritium. The EPA's existing standard for tritium in drinking water is 20,000 pCi/L (6,000 TU; Tuttle, 1992). In general, the higher concentrations (greater than 2 TU) were detected in groundwater samples, and lower concentrations (less than or equal to 2 TU) were detected in surface water samples.

The negative values of tritium reported are the results of the very low levels of tritium present in the samples being analyzed. Because of the random nature of counting observed radioactivity, especially when it is close to the analytical background concentration, the observed amount in the sample will sometimes be less than that of the average background. In those cases, subtraction of the background concentration will produce a negative result for the analysis (Tuttle, 1992).

8.0 DISCUSSION

Strontium-90 concentrations detected at the Site were not compared to background concentrations because the analytical method used to analyze samples at the Site was different from that used in the environmental investigations conducted at neighboring properties. In addition, detected concentrations at the Site (2.1 pCi/g and 2.2 pCi/g) were just above the analytical detection limit. The three background samples collected for the Site were reported as not detected at the method detection limit of 2.0 pCi/g. Therefore, a statistically valid comparison with local background concentration could not be conducted (Robles, 2003).

Environmental investigations conducted at neighboring properties showed that strontium-90 was present in soil at concentrations that were deemed to be either within background concentrations or at levels considered to pose no significant health risk (Robles, 2003). The EPA PRG for strontium-90 in residential soil is 0.331 pCi/g (EPA, 2003c). According to the EPA, "PRGs are generic and intended for screening sites early in the investigation process (often before site-specific information is available)" and that chemical concentrations detected above the PRG would not "automatically trigger a response action", but may warrant further investigation of potential risks at the site (EPA, 2002).

In an effort to determine whether the detected strontium-90 concentrations could represent a health risk to future residents at the Site, a screening risk evaluation was conducted. The risk evaluation was conducted following established procedures and regulatory guidance. Results of the screening risk evaluation are presented in Table 3. California health and environmental protection regulatory agencies consider the incremental cancer risk of 1 in a million as acceptable. Preliminary results of the risk evaluation indicate that health risks associated with incidental exposure to strontium-90 on the Site would not exceed an incremental cancer risk of 0.77 in a million, which is lower than the value found acceptable by the regulatory agencies (Robles, 2003).

In 1992, Rockwell International conducted a review of tritium production, possible releases, and water sampling data from the SSFL facility and vicinity. The review concluded that minor releases of tritium produced at the SSFL facility could have occurred, and that extensive water sampling has confirmed the presence of artificial tritium at levels well below the regulatory limits, and even below the limits for drinking water. During the review, sample results obtained from the SSFL facility were compared to "natural" or background concentrations of tritium detected in drinking water, swimming pools, rainwater, and other natural sources. Tritium concentrations on the SSFL facility and vicinity ranged from negative values to a few thousand pCi/L or TU. Concentrations of tritium in background samples ranged from negative values to approximately 50 pCi/L (15 TU). The EPA's existing standard for tritium in drinking water is 6,000 TU (20,000 pCi/L; Tuttle, 1992; Hendry, 1988). A table summarizing the "natural" tritium sample results is included in Appendix C.

Based on the half-life of tritium and the estimated levels in the atmosphere, concentrations of tritium detected in the samples at the Site were at levels that are typical of recent rainfall (3 TU to 5 TU; Hendry, 1988). In addition, when compared to the EPA standard and background water

sampling data for "natural" concentrations of tritium, the concentrations detected at the Site are below regulatory limits and are within normal background levels.

9.0 CONCLUSIONS

Strontium-90 concentrations in the soil samples and three offsite background samples that were collected as part of a sampling program that encompassed the entire Runkle Canyon Property, including the eastern 550-acre parcel, were either below detectable concentrations or below levels considered to pose a health risk. Concentrations of tritium detected in surface water and groundwater at the Site were found to be below levels considered by regulatory agencies to pose a health risk.

10.0 STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

This report was prepared for the sole use of Greenpark Runkle Canyon, LLC. Any other use without the express written consent of Miller Brooks is prohibited. The conclusions herein are based solely upon the agreed written scope of work outlined in this report. Miller Brooks makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this investigation. Additional information which was not found or available to Miller Brooks at the time of writing this report, may result in modification of the conclusions presented. This report is not a legal opinion. The services performed by Miller Brooks have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

This investigation was supervised or personally conducted by the licensed professional whose signature and license number appear below.

Jennifer L. Canfield
Project Geologist

Elizabeth A. Robbins, RG 4874
Senior Geologist

Attachments:
Table 1 - Results of Laboratory Analysis of Soil Samples
Table 2 - Results of Laboratory Analysis of Water Samples
Table 3 - Estimation of Lifetime Cancer Risks from Residential Exposure to Strontium-90 in Soil
Figure 1 - Vicinity Map
Figure 2 - Site Plan Showing Soil Boring Locations
Appendix A - General Field Procedures and Soil Boring Logs
Appendix B - Official Laboratory Reports and Chain of Custody Records
Appendix C – "Natural" Tritium Sample Results

01-402-0002-03

11.0 REFERENCES

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TABLES

TABLE 1
RESULTS OF STRONTIUM ANALYSIS FOR SOIL SAMPLES
Eastern 550-acre Parcel
Runkle Canyon Property
Simi Valley, California

Sample ID	Date	Sample Depth (in feet)	pCi/g-dry
MBE-1-Surface	3/13/03	surface	2.10 (+/-1.20)
MBE-2-Surface	3/13/03	surface	ND<2.40
MBE-2-3'	3/13/03	3	ND<2.40
MBE-2-7'	3/13/03	7	ND<2.00
MBE-3-Surface	3/13/03	surface	ND<2.00
MBE-4-Surface	3/13/03	surface	ND<2.00
MBE-4-3'	3/13/03	3	ND<2.00
MBE-4-7'	3/13/03	7	ND<2.00
MBE-5-Surface *	3/13/03	surface	ND<2.40
MBE-5-3'	3/13/03	3	ND<2.40
MBE-5-7'	3/13/03	7	ND<2.40
MBE-6-Surface	3/13/03	surface	2.20 (+/- 1.20)
MBE-7-Surface	3/13/03	surface	ND<2.40
MBE-7-3'	3/13/03	3	ND<2.40
MBE-7-7'	3/13/03	7	ND<2.40
MBE-8-Surface	3/13/03	surface	ND<2.40
MBE-8-3'	3/13/03	3	ND<2.40
MBE-8-7'	3/13/03	7	ND<2.40
MBE-12-Surface	3/13/03	surface	ND<2.00
Duplicate 2 *	3/13/03	surface	ND<2.00
SS-14A	3/14/03	surface	ND<2.80
SS-15A **	3/14/03	surface	ND<2.80
Duplicate-2 **	3/14/03	surface	ND<2.80
Background-1	3/14/03	surface	ND<2.00
Background-2	3/14/03	surface	ND<2.00
Background-3	3/14/03	surface	ND<2.20
Trip Blank	3/14/03	Not Apply	ND<10 pCi/L

Notes:
pCi/g-dry = pico curie per gram - dry
ND = not detected at limit indicated
* = Duplicate-2 was collected in the same location as Sample MBE-5-Surface on March 13, 2003.
** = Duplicate-2 was collected at the same location as Sample SS-15A on March 14, 2003.
pCi/g = pico curie per liter

Table 2
RESULTS OF TRITIUM ANALYSIS FOR WATER SAMPLES
Eastern 550-acre Parcel
Runkle Canyon Property
Simi Valley, California

Sample ID	Date	Result (in TU)
Well-1	2/5/03	4
HS-25-56'	1/8/03	3
HS-26-37'	1/8/03	7
HS-29-WATER	1/9/03	5
Creek-1 Water	3/14/03	1
Creek-2 Water	3/14/03	-1
Creek-3 Water	3/14/03	2
Spring - 2	5/1/03	1
Spring - 3	5/1/03	2
Trip Blank	5/1/03	4
Trip Blank	3/14/03	5

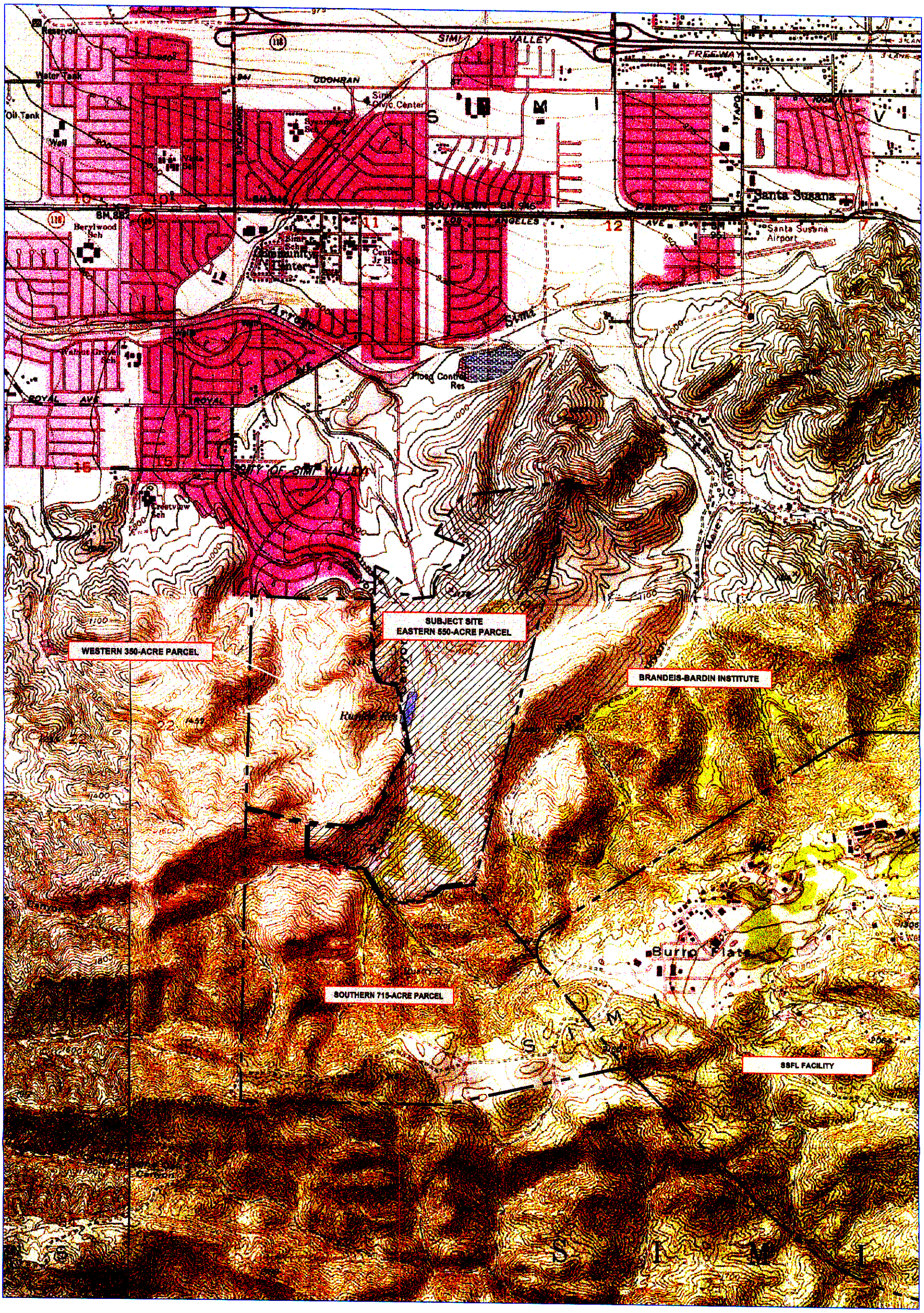
Notes:

TU = tritium units
Negative values result from error band of method
Values less than 10 represent water that fell as rain in last 20 years
Values of 3, 4 or 5 represent current values

Table 3. Estimation of Lifetime Cancer Risks from Residential Exposure to Strontium-90 in Soil

Parameter Symbol	*Parameter Definition*	*Units*	*Strontium-90*
Co	Element concentration in soil	pCi/g	2.2E+00
	Default ambient dust concentration	mg/m^3	5.0E-02
Ca	Element concentration in indoor air	pCi/m^3	1.1E-04
Ei	Total lifetime exposure factor, inhalation	m^3	2.1E+05
ETi	Total lifetime exposure by inhalation	pCi	2.3E+01
SFi	Slope factor, Inhalation	risk/pCi	1.1E-10
	Incremental Cancer Risk from Inhalation	**Risk**	**2.4E-09**
Co	Average radionuclide concentration in soil	pCi/g	2.2E+00
Eo	Total lifetime exposure factor, ingestion	g	1.1E+03
ETo	Total intake by ingestion	pCi	2.3E+03
SFo	Slope factor, Ingestion	risk/pCi	9.2E-11
	Incremental Cancer Risk from Oral Ingestion	**Risk**	**2.1E-07**
Co	Average radionuclide concentration in soil	pCi/g	2.2E+00
Ee	Total lifetime exposure factor, external	years	2.4E+01
ETe	Total lifetime exposure external	yr/pCi/g	1.1E+01
SFe	Slope factor, External	risk/year/pCi/g	4.8E-10
	Incremental Cancer Risk from External Exposure	**Risk**	**5.3E-09**
	TOTAL INCREMENTAL CANCER RISK		**7.7E-07**

FIGURE



N

W E

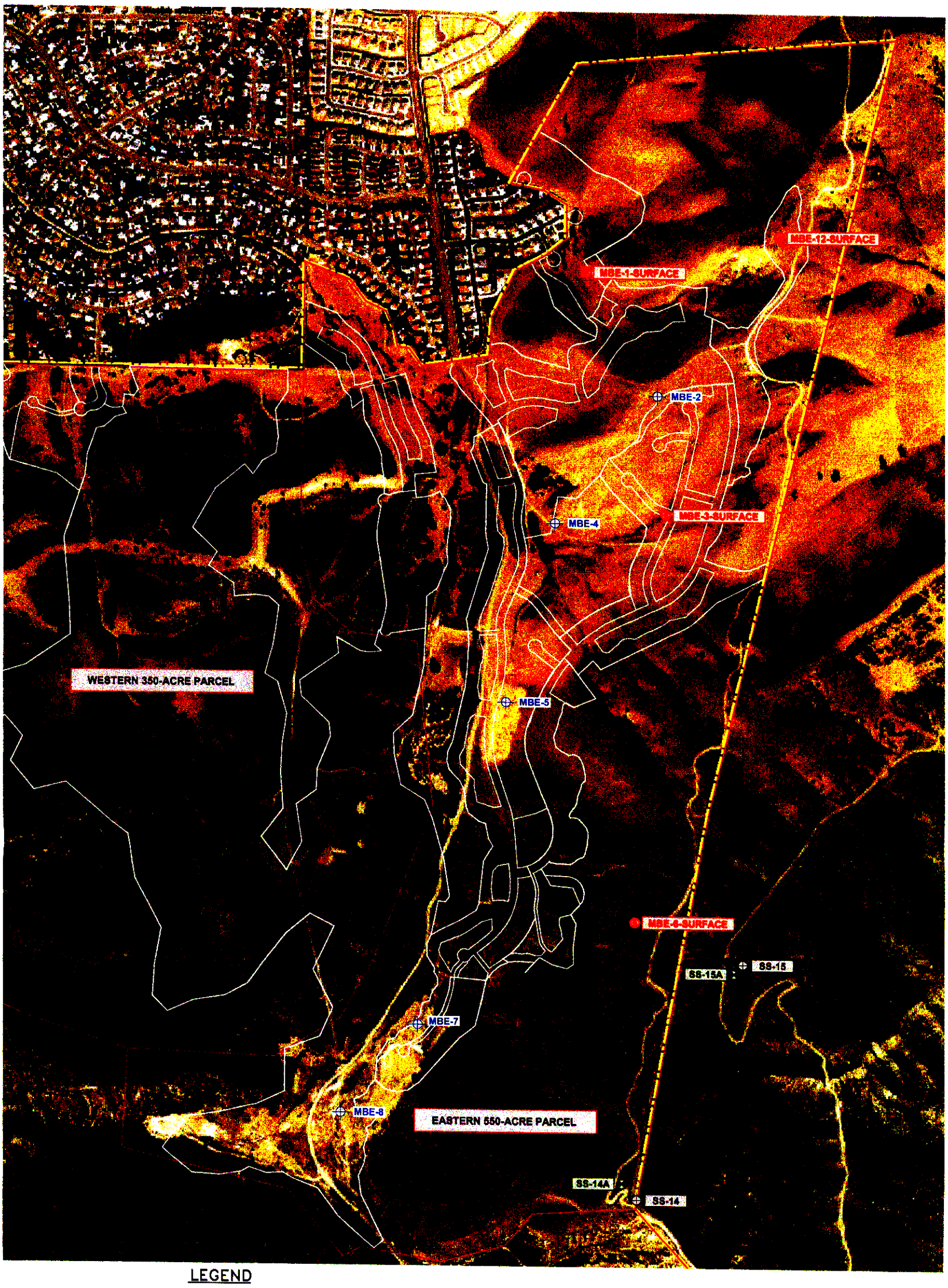
S

0 2000 Feet

SCALE

MILLER BROOKS Environmental, Inc.	DRAWN BY: PEL	VICINITY MAP	FIGURE 1
2124 MAIN STREET, SUITE 200 HUNTINGTON BEACH, CA. 92648 (714) 960-4088	DATE: 11/21/02 REVISED BY: DCN REVISED: 08/28/03 APPROVED BY: EAR	RUNKLE CANYON PROPERTY SIMI VALLEY, CA.	
PROJECT NO. 01-406-0002-02	DATE: 08/28/03	FILE: K:\DWGS\RUNKLE RANCH\VICINITY MAP [F1] DATE PLOTTED: 08/28/03	

tb-b2.dwg-09/21/00



LEGEND

- MBE-8 — SOIL BORING LOCATION (INCLUDES SURFACE SAMPLE)
- MBE-6-SURFACE — SURFACE SOIL SAMPLE LOCATION
- SS-15 — SURFACE SOIL SAMPLE LOCATION (HARDING ESE, 2000)
- SS-15A — SURFACE SOIL SAMPLE LOCATION (MILLER BROOKS, 2003)
- PARCEL BOUNDARY
- PROPOSED DEVELOPMENT
- PROPERTY BOUNDARY

N / W / E / S

0 800 FEET
SCALE

MILLER BROOKS Environmental, Inc.
2124 MAIN STREET, SUITE 200
HUNTINGTON BEACH, CA. 92648
(714) 960-4088

PROJECT NO. 01-402-0002-03

DRAWN BY:	AIL
DATE:	06/05/03
REVISED BY:	AIL
REVISED:	06/05/03
APPROVED BY:	EAR
DATE:	06/05/03

SITE PLAN SHOWING
SOIL SAMPLE LOCATIONS

EASTERN 550-ACRE PARCEL
RUNKLE CANYON PROPERTY
SIMI VALLEY, CA.

FIGURE 2

FILE: K:\DWGS\RUNKLE CANYON\SAR\SURFACE 0613 [B-F3]
DATE PLOTTED: 06/05/03

APPENDIX A

APPENDIX A

GENERAL FIELD PROCEDURES

DRILLING AND SOIL SAMPLING

Soil borings are drilled using continuous-flight, hollow-stem auger drill rig. Soil excavated from the hollow-stem auger borings is contained in labeled, Department of Transportation (DOT) approved, 55-gallon drums or sealed, roll-off bins and stored onsite pending appropriate disposal. The borings are grouted with bentonite to the surface.

Soil samples are obtained from each boring for soil description, field hydrocarbon vapor screening, and possible laboratory analysis. Soil samples are generally retrieved from the borings at 5-foot depth intervals using a standard penetration split-spoon sampler lined with three 2-inch diameter brass sample inserts. The sampler is driven approximately 18 inches beyond the lead auger with a 140-pound hammer dropped from a height of 30 inches.

Upon retrieval, soil samples are immediately removed from the sampler and sealed with Teflon sheeting and polyurethane caps. Each sample is labeled with the project number, boring number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are either delivered to an onsite mobile laboratory for immediate analysis or placed in a cooler with ice at approximately 4 degrees Celsius for transport to an offsite state-certified laboratory. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4 degrees Celsius for possible future testing.

During sampling activities, soil adjacent to the laboratory sample is screened for organic vapors using a photoionization detector (PID). For each vapor screening event, a sample tube is filled approximately 1/3 full with the soil sample, capped at both ends, and shaken. The PID probe is then inserted through a small opening in the cap, and a reading is taken after approximately 15 seconds and recorded on the boring log. The remaining soil recovered is removed from the sample tube and described in accordance with the Unified Soil Classification System. For each sampling interval, field estimates of soil type, color, density/consistency, moisture, and grading are recorded on the boring logs.

SURFACE AND HAND AUGER SOIL SAMPLING

During the investigation, soil is screened for organic vapors using a PID. The soil samples are collected from the soil surface, an excavator bucket or hand-auger boring by inserting a 2-inch brass sample tube into undisturbed soil. The sample tube is sealed with Teflon sheeting and polyurethane caps. Each sample is labeled with the project number, boring number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are either delivered to an onsite mobile laboratory for immediate analysis or placed in a cooler with ice at approximately 4 degrees Celsius for transport to an offsite state-certified laboratory.

FLUID-LEVEL MONITORING IN GROUNDWATER MONITORING WELLS

Fluid levels are monitored in the well using an electronic water level sensor. The depth to water is measured relative to the top of casing.

GROUNDWATER WELL PURGING AND SAMPLING

Groundwater monitoring wells are purged and sampled in accordance with standard regulatory protocol. During purging activities, temperature, pH, and specific conductance are typically measured. Purging is considered complete when these parameters vary less than 10 percent from previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80 percent of its volume before purging.

The purged water is temporarily stored in labeled, Department of Transportation approved 55-gallon drums prior to transport to an appropriate disposal/recycling facility.

Groundwater samples are collected by lowering a 1.5-inch diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the bailer to the container specified by the selected analytical method. Samples are labeled with the project number, well number, sample date, and sampler's initials. Samples are chilled at approximately 4 degrees Celsius prior to analysis by a state-certified laboratory.

SURFACE WATER SAMPLES

Surface water samples are collected by decanting the water into the sample container specified by the selected analytical method. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Samples are labeled with the project number, well number, sample date, and sampler's initials. Samples are chilled at approximately 4 degrees Celsius prior to analysis by a state-certified laboratory.

CHAIN OF CUSTODY PROTOCOL

Chain of custody protocol is followed for all soil samples selected for laboratory analysis. The chain of custody form accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

DECONTAMINATION

Drilling equipment is decontaminated by steam cleaning before being brought onsite. Prior to use, the sampler and sampling tubes are brush-scrubbed in a Liqui-nox and potable water solution, and rinsed twice in clean potable water. Sampling equipment and tubes are also decontaminated before each sample is collected to avoid cross-contamination between borings. Groundwater purging and sampling equipment that could come into contact with well fluids is either dedicated to a well or cleaned prior to each use in a Liqui-nox solution followed by two tap water rinses.

PROJECT NAME:	SITE LOCATION:		
RUNKLE CANYON	SIMI VALLEY, CALIFORNIA		
DRILLING COMPANY:	DRILL RIG:	DRILL CREW:	DATE DRILLED:
GREGG DRILLING	MOBILE B-61	TOM, BRETT, MARTIN	MARCH 13, 2003
DRILLING METHOD:	BORING DIAMETER (IN):	TOTAL DEPTH OF BORING (FT):	LOGGED BY:
HOLLOW-STEM AUGER	8	7.0	J. CANFIELD
SAMPLING METHOD:	HAMMER WEIGHT (LBS):	HAMMER DROP (IN):	REVIEWED BY:
SPLIT-SPOON	140	30	E. A. ROBBINS

DEPTH (FT)	SAMPLE LOCATION	SAMPLE ID	BLOWS PER 6 IN	PID (ppm)	GRAPHIC LOG	USCS SOIL GROUP	DESCRIPTION OF SUBSURFACE MATERIALS
0		MBE-2-Surface	NA	0.0		SM	SILTY SAND: brown (7.5Y 4/4), dry, dense, fine- to medium-grained, poorly graded.
		MBE-2-3'	NA	0.1			
5		MBE-2-7'	NA	0.0			Fine-grained.
							Boring terminated at 7 feet below ground surface. Groundwater not observed.
10							
15							
20							

NOTES:
- ☐ = sample interval
- ▬ = laboratory sample
- ▼ = groundwater observed
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- ppm = parts per million

E. A. ROBBINS, R.G. 4874

MILLER BROOKS Environmental, Inc.

LOG OF BORING MBE-2

PROJECT NUMBER 01-402-0002-02

LOG_OF_BORING_LBY BORELBL.GPJ MBE.GDT 5/19/03

PROJECT NAME:	SITE LOCATION:		
RUNKLE CANYON	SIMI VALLEY, CALIFORNIA		
DRILLING COMPANY:	DRILL RIG:	DRILL CREW:	DATE DRILLED:
GREGG DRILLING	MOBILE B-61	TOM, BRETT, MARTIN	MARCH 13, 2003
DRILLING METHOD:	BORING DIAMETER (IN):	TOTAL DEPTH OF BORING (FT):	LOGGED BY:
HOLLOW-STEM AUGER	8	7.0	J. CANFIELD
SAMPLING METHOD:	HAMMER WEIGHT (LBS):	HAMMER DROP (IN):	REVIEWED BY:
SPLIT-SPOON	140	30	E. A. ROBBINS

DEPTH (FT)	SAMPLE LOCATION	SAMPLE ID	BLOWS PER 6 IN	PID (ppm)	GRAPHIC LOG	USCS SOIL GROUP	DESCRIPTION OF SUBSURFACE MATERIALS
0		MBE-4-Surface	NA	0.0		SM	SILTY SAND: brown (7.5Y 4/4), dry, dense, fine-grained, poorly graded.
		MBE-4-3'	NA	0.1			
5							
		MBE-4-7'	NA	0.0			
							Boring terminated at 7 feet below ground surface. Groundwater not observed.
10							
15							
20							

NOTES:
- ☐ = sample interval
- ■ = laboratory sample
- ▼ = groundwater observed
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- ppm = parts per million

E. A. ROBBINS, R.G. 4874

MILLER BROOKS Environmental, Inc.

LOG OF BORING MBE-4

PROJECT NUMBER 01-402-0002-02

LOG_OF_BORING_LBY BORELBL.GPJ MBE.GDT 5/19/03

PROJECT NAME: RUNKLE CANYON	SITE LOCATION: SIMI VALLEY, CALIFORNIA		
DRILLING COMPANY: GREGG DRILLING	DRILL RIG: MOBILE B-61	DRILL CREW: TOM, BRETT, MARTIN	DATE DRILLED: MARCH 13, 2003
DRILLING METHOD: HOLLOW-STEM AUGER	BORING DIAMETER (IN): 8	TOTAL DEPTH OF BORING (FT): 7.0	LOGGED BY: R. CONEJO
SAMPLING METHOD: SPLIT-SPOON	HAMMER WEIGHT (LBS): 140	HAMMER DROP (IN): 30	REVIEWED BY: E. A. ROBBINS

DEPTH (FT)	SAMPLE LOCATION	SAMPLE ID	BLOWS PER 6 IN	PID (ppm)	GRAPHIC LOG	USCS SOIL GROUP	DESCRIPTION OF SUBSURFACE MATERIALS
0		MBE-5-Surface	NA	0.0		SM	SILTY SAND: weak red (10R 4/3), dry, dense, fine-grained, poorly graded.
		MBE-5-3'	NA	0.1			
5		MBE-5-7'	NA	0.0			Boring terminated at 7 feet below ground surface. Groundwater not observed.
10							
15							
20							

NOTES:
- ☐ = sample interval
- ▬ = laboratory sample
- ▼ = groundwater observed
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- ppm = parts per million

E. A. ROBBINS, R.G. 4874

MILLER BROOKS Environmental, Inc.

LOG OF BORING MBE-5

PROJECT NUMBER 01-402-0002-02

LOG_OF_BORING_LBY BORELBL.GPJ MBE.GDT 5/19/03

PROJECT NAME:			SITE LOCATION:	
RUNKLE CANYON			SIMI VALLEY, CALIFORNIA	
DRILLING COMPANY:	DRILL RIG:		DRILL CREW:	DATE DRILLED:
GREGG DRILLING	MOBILE B-61		TOM, BRETT, MARTIN	MARCH 13, 2003
DRILLING METHOD:	BORING DIAMETER (IN):	TOTAL DEPTH OF BORING (FT):		LOGGED BY:
HOLLOW-STEM AUGER	8	7.0		J. CANFIELD
SAMPLING METHOD:	HAMMER WEIGHT (LBS):	HAMMER DROP (IN):		REVIEWED BY:
SPLIT-SPOON	140	30		E. A. ROBBINS

DEPTH (FT)	SAMPLE LOCATION	SAMPLE ID	BLOWS PER 6 IN	PID (ppm)	GRAPHIC LOG	USCS SOIL GROUP	DESCRIPTION OF SUBSURFACE MATERIALS
0		MBE-7-Surface	NA	0.0		SM	
		MBE-7-3'	NA	0.0			SILTY SAND: brown (7.5Y 4/4), dry, dense, fine-grained, poorly graded.
5						ML	
		MBE-7-7'	NA	0.0			SANDY SILT: pale brown (10YR 6/3), dry, stiff, fine-grained sand.
10							Boring terminated at 7 feet below ground surface. Groundwater not observed.
15							
20							

NOTES:
- ☐ = sample interval
- ▬ = laboratory sample
- ▼ = groundwater observed
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- ppm = parts per million

E. A. ROBBINS, R.G. 4874

MILLER BROOKS Environmental, Inc.

LOG OF BORING MBE-7

PROJECT NUMBER 01-402-0002-02

LOG_OF_BORING_LBY BORELBL.GPJ MBE.GDT 5/19/03

PROJECT NAME:	SITE LOCATION:		
RUNKLE CANYON	SIMI VALLEY, CALIFORNIA		
DRILLING COMPANY:	DRILL RIG:	DRILL CREW:	DATE DRILLED:
GREGG DRILLING	MOBILE B-61	TOM, BRETT, MARTIN	MARCH 13, 2003
DRILLING METHOD:	BORING DIAMETER (IN):	TOTAL DEPTH OF BORING (FT):	LOGGED BY:
HOLLOW-STEM AUGER	8	7.0	R. CONEJO
SAMPLING METHOD:	HAMMER WEIGHT (LBS):	HAMMER DROP (IN):	REVIEWED BY:
SPLIT-SPOON	140	30	E. A. ROBBINS

DEPTH (FT)	SAMPLE LOCATION	SAMPLE ID	BLOWS PER 6 IN	PID (ppm)	GRAPHIC LOG	USCS SOIL GROUP	DESCRIPTION OF SUBSURFACE MATERIALS
0		MBE-8-Surface	NA	0.0		SM	SILTY SAND: brown (7.5Y 4/4), dry, dense, fine-grained, poorly graded.
		MBE-8-3'	NA	0.0			
5		MBE-8-7'	NA	0.0			Wet.
							Boring terminated at 7 feet below ground surface. Groundwater observed at approximately 7 feet below ground surface.
10							
15							
20							

NOTES:
- ☐☐ = sample interval
- ▬ = laboratory sample
- ▼ = groundwater observed
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- ppm = parts per million

E. A. ROBBINS, R.G. 4874

MILLER BROOKS Environmental, Inc.

LOG OF BORING MBE-8

PROJECT NUMBER 01-402-0002-02

LOG_OF_BORING_LBY BORELBL.GPJ MBE.GDT 5/19/03

APPENDIX B

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Sample Description: Water

Laboratory Reference #: MBE 13986

Client Project ID: Runkle Road
Client Project #: 402-0002-02

Sampled:	—	02/05/03
Received:	—	02/06/03
Analyzed:	02/14/03	02/14/03
Reported:	02/17/03	02/17/03
Lab Sample I.D.:	MB	03020089
Client Sample I.D.:	—	Well-1
Dilution Factor:	1	1

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	CAS NUMBER	SAMPLE RESULTS µg/l	SAMPLE RESULTS µg/l
Benzene	71-43-2	<0.5	<0.5
Bromodichloromethane	75-27-4	<1.0	<1.0
Bromoform	75-25-2	<0.5	<0.5
Bromomethane	74-83-9	<5.0	<5.0
Carbon Disulfide	75-15-0	<0.5	<0.5
Carbon tetrachloride	56-23-5	<0.5	<0.5
Chlorobenzene	108-90-7	<0.5	<0.5
Chlorodibromomethane	124-48-1	<0.5	<0.5
Chloroethane	75-00-3	<5.0	<5.0
Chloroform	67-66-3	<0.5	<0.5
Chloromethane	74-87-3	<5.0	<5.0
1,1-Dichloroethane	75-34-3	<0.5	<0.5
1,2-Dichloroethane	107-06-2	<0.5	<0.5
1,1-Dichloroethene	75-35-4	<1.0	<1.0
trans-1,2-Dichloroethene	156-60-5	<0.5	<0.5
1,2-Dichloropropane	78-87-5	<0.5	<0.5
cis-1,3-Dichloropropene	10061-01-5	<0.5	<0.5
trans-1,3-Dichloropropene	10061-02-6	<0.5	<0.5
Ethylbenzene	100-41-4	<0.5	<0.5
Methylene chloride	75-09-2	<5.0	<5.0
Styrene	100-42-5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	79-34-5	<0.5	<0.5
Tetrachloroethene	127-18-4	<0.5	<0.5
Toluene	108-88-3	<0.5	<0.5
1,1,1-Trichloroethane	71-55-6	<0.5	<0.5
1,1,2-Trichloroethane	79-00-5	<0.5	<0.5
Trichloroethene	79-01-6	<0.5	<0.5
Trichlorofluoromethane	75-69-4	<2.0	<2.0
Vinyl acetate	108-05-4	<5.0	<5.0
Vinyl chloride	75-01-4	<1.0	<1.0
Total Xylenes	1330-20-7	<1.0	<1.0
Dichlorodifluoromethane	75-71-8	<2.0	<2.0
cis-1,2-Dichloroethene	156-59-2	<0.5	<0.5
2,2-Dichloropropane	594-20-7	<0.5	<0.5

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

Laboratory Certification
(ELAP) No.: 1416 Expiration Date: 2003

Laboratory Director's Name (Print) : Mark Noorani

Client: Miller Brooks Environmental

Project No.: 402-0002-02

Project Name: Runkle Ranch

Laboratory Reference: MBE 13986

Analytical Method: 8015d, 8015g, 8260, 6010, 7471, 7196

Date Sampled: 02/05/03
Date Received: 02/06/03
Date Reported: 02/17/03

Sample Matrix: Soil, Water

Chain of Custody Received: Yes

Laboratory Director's Signature: Mark Noorani

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #: MBE 13986

		Sampled:	---	02/05/03
Sample Description:	Water	***Received:***	---	02/06/03
		Analyzed:	02/14/03	02/14/03
Client Project ID:	Runkle Road	***Reported:***	02/17/03	02/17/03
Client Project #:	402-0002-02			
		Lab Sample I.D.:	MB	03020089
		Client Sample I.D.:	---	Well-1
		Dilution Factor:	1	1

ANALYTE (con't)	***CAS NUMBER***	***SAMPLE RESULTS***	
		µg/l	***µg/l***
Bromochloromethane	74-97-5	<0.5	<0.5
1,1-Dichloropropene	563-58-6	<0.5	<0.5
Dibromomethane	74-95-3	<0.5	<0.5
1,2-Dibromoethane	106-93-4	<0.5	<0.5
1,3-Dichloropropane	142-28-9	<0.5	<0.5
Isopropylbenzene	98-82-8	<0.5	<0.5
1,1,1,2-Tetrachloroethane	630-20-6	<0.5	<0.5
1,2,3-Trichloropropane	96-18-4	<0.5	<0.5
Bromobenzene	108-86-1	<0.5	<0.5
n-Propylbenzene	103-65-1	<0.5	<0.5
2-Chlorotoluene	95-49-8	<0.5	<0.5
1,3,5-Trimethylbenzene	108-67-8	<0.5	<0.5
4-Chlorotoluene	106-43-4	<0.5	<0.5
tert-Butylbenzene	98-06-6	<0.5	<0.5
1,2,4-Trimethylbenzene	95-63-6	<0.5	<0.5
sec-Butylbenzene	135-98-8	<0.5	<0.5
4-Isopropyltoluene	99-87-6	<0.5	<0.5
1,3-Dichlorobenzene	541-73-1	<0.5	<0.5
1,4-Dichlorobenzene	106-46-7	<0.5	<0.5
n-Butylbenzene	104-51-8	<0.5	<0.5
1,2-Dichlorobenzene	95-50-1	<0.5	<0.5
1,2-Dibromo-3-chloropropane	96-12-8	<1.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	<0.5	<0.5
Hexachlorobutadiene	87-68-3	<0.5	<0.5
Naphthalene	91-20-3	<0.5	<0.5
1,2,3-Trichlorobenzene	87-61-6	<0.5	<0.5
MTBE	1634-04-4	<1.0	<1.0
DIPE	108-20-3	<2.0	<2.0
TAME	955-05-8	<2.0	<2.0
ETBE	637-92-3	<2.0	<2.0
TBA	75-65-0	<20	<20

SURROGATE RECOVERY	***Acceptable %RC***	***%RC***	***%RC***
Dibromofluoromethane	49 - 160	87	104
Toluene-d8	61 - 140	90	87
4-Bromofluorobenzene	41 - 170	85	74

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Road
Client Project #: 402-0002-02

Sampled:	---	02/05/03
Received:	---	02/06/03
Extracted:	02/13/03	02/13/03
Analyzed:	02/13/03	02/13/03
Reported:	02/17/03	02/17/03

Sample Description: Water

Laboratory Reference #: MBE 13986

Lab Sample I.D.:	MB	03020089
Client Sample I.D.:	---	Well-1
Dilution Factor:	1	1

EXTRACTABLE FUEL HYDROCARBONS - DIESEL (EPA 8015m)

	SAMPLE RESULTS	
ANALYTE	***mg/l***	***mg/l***
Extractable Fuel Hydrocarbons*	<0.5	<0.5

* Extractable Fuel Hydrocarbons are quantitated against a diesel standard.

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Road
Client Project #: 402-0002-02

	Sampled:	---	02/05/03
	Received:	---	02/06/03
Sample Description: Water	***Analyzed:***	02/10/03	02/10/03
	Reported:	02/17/03	02/17/03
Laboratory Reference #: MBE 13986			
	Lab Sample I.D.:	MB	03020089
	Client Sample I.D.:	---	Well-1
	Dilution Factor:	1	1

VOLATILE FUEL HYDROCARBONS (EPA 8015m)

		SAMPLE RESULTS
ANALYTE	***µg/l***	***µg/l***
Volatile Fuel Hydrocarbons*	<50	<50

* Volatile Fuel Hydrocarbons are quantitated against a gasoline standard.

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

Sample Description: Soil

Laboratory Reference #: MBE 13986

Sampled:	—	02/05/03	02/05/03
Received:	—	02/06/03	02/06/03
Extracted:	02/12/03	02/12/03	02/12/03
Analyzed:	02/12/03	02/12/03	02/12/03
Reported:	02/17/03	02/17/03	02/17/03
Lab Sample I.D.:	MB	03020085	03020086
Client Sample I.D.:	—	DS-1	DS-2
Dilution Factor:	1	1	1

EXTRACTABLE FUEL HYDROCARBONS - DIESEL (EPA 8015m)

		SAMPLE RESULTS	
ANALYTE	***mg/kg***	***mg/kg***	***mg/kg***
Extractable Fuel Hydrocarbons*	<8.0	40	21

* Extractable Fuel Hydrocarbons are quantitated against a diesel standard.

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

Sample Description: Soil

Laboratory Reference #: MBE 13986

Sampled:	02/05/03	02/05/03
Received:	02/06/03	02/06/03
Extracted:	02/12/03	02/12/03
Analyzed:	02/12/03	02/12/03
Reported:	02/17/03	02/17/03
Lab Sample I.D.:	03020087	03020088
Client Sample I.D.:	DS-3	DS-4
Dilution Factor:	1	1

EXTRACTABLE FUEL HYDROCARBONS - DIESEL (EPA 8015m)

	SAMPLE RESULTS	
ANALYTE	***mg/kg***	***mg/kg***
Extractable Fuel Hydrocarbons*	37	19

* Extractable Fuel Hydrocarbons are quantitated against a diesel standard.

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

Sample Description: Soil

Laboratory Reference #: MBE 13986

Sampled:	---	02/05/03	02/05/03
Received:	---	02/06/03	02/06/03
Extracted:	02/07/03	02/07/03	02/07/03
Analyzed:	02/07/03	02/07/03	02/07/03
Reported:	02/17/03	02/17/03	02/17/03
Lab Sample I.D.:	MB0207	03020085	03020086
Client Sample I.D.:	---	DS-1	DS-2
Dilution Factor:	1	1	1

VOLATILE FUEL HYDROCARBONS (EPA 8015m)

		SAMPLE RESULTS	
ANALYTE	***mg/kg***	***mg/kg***	***mg/kg***
Volatile Fuel Hydrocarbons*	<5.0	<5.0	<5.0

* Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C14.

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

Sample Description: Soil

Laboratory Reference #: MBE 13986

Sampled:	02/05/03	02/05/03
Received:	02/06/03	02/06/03
Extracted:	02/07/03	02/07/03
Analyzed:	02/07/03	02/07/03
Reported:	02/17/03	02/17/03
Lab Sample I.D.:	03020087	03020088
Client Sample I.D.:	DS-3	DS-4
Dilution Factor:	1	1

VOLATILE FUEL HYDROCARBONS (EPA 8015m)

	SAMPLE RESULTS	
ANALYTE	***mg/kg***	***mg/kg***
Volatile Fuel Hydrocarbons*	<5.0	<5.0

* Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C14.

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

Sample Description: Soil

Laboratory Reference #: MBE 13986

Sampled:	---	02/05/03	02/05/03
Received:	---	02/06/03	02/06/03
Extracted:	02/06/03	02/06/03	02/06/03
Analyzed:	02/06/03	02/06/03	02/06/03
Reported:	02/17/03	02/17/03	02/17/03
Lab Sample I.D.:	MB0206	03020085	03020086
Client Sample I.D.:	---	DS-1	DS-2
Dilution Factor:	1	1	1

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	CAS NUMBER	SAMPLE RESULTS		
		µg/kg	µg/kg	µg/kg
Benzene	71-43-2	<2.5	<2.5	<2.5
Bromodichloromethane	75-27-4	<2.5	<2.5	<2.5
Bromoform	75-25-2	<2.5	<2.5	<2.5
Bromomethane	74-83-9	<5.0	<5.0	<5.0
Carbon Disulfide	75-15-0	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	<2.5	<2.5	<2.5
Chlorobenzene	108-90-7	<2.5	<2.5	<2.5
Chlorodibromomethane	124-48-1	<2.5	<2.5	<2.5
Chloroethane	75-00-3	<5.0	<5.0	<5.0
Chloroform	67-66-3	<2.5	<2.5	<2.5
Chloromethane	74-87-3	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	<2.5	<2.5	<2.5
1,2-Dichloroethane	107-06-2	<2.5	<2.5	<2.5
1,1-Dichloroethene	75-35-4	<2.5	<2.5	<2.5
trans-1,2-Dichloroethene	156-60-5	<2.5	<2.5	<2.5
1,2-Dichloropropane	78-87-5	<2.5	<2.5	<2.5
cis-1,3-Dichloropropene	10061-01-5	<2.5	<2.5	<2.5
trans-1,3-Dichloropropene	10061-02-6	<2.5	<2.5	<2.5
Ethylbenzene	100-41-4	<2.5	<2.5	<2.5
Methylene chloride	75-09-2	<5.0	<5.0	<5.0
Styrene	100-42-5	<2.5	<2.5	<2.5
1,1,2,2-Tetrachloroethane	79-34-5	<2.5	<2.5	<2.5
Tetrachloroethene	127-18-4	<2.5	<2.5	<2.5
Toluene	108-88-3	<2.5	<2.5	<2.5
1,1,1-Trichloroethane	71-55-6	<2.5	<2.5	<2.5
1,1,2-Trichloroethane	79-00-5	<2.5	<2.5	<2.5
Trichloroethene	79-01-6	<2.5	<2.5	<2.5
Trichlorofluoromethane	75-69-4	<5.0	<5.0	<5.0
Vinyl acetate	108-05-4	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	<2.5	<2.5	<2.5
Total Xylenes	1330-20-7	<2.5	<2.5	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	<2.5	<2.5
cis-1,2-Dichloroethene	156-59-2	<2.5	<2.5	<2.5
2,2-Dichloropropane	594-20-7	<2.5	<2.5	<2.5

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #:	MBE 13986	***Sampled:***	---	02/05/03	02/05/03
		Received:	---	02/06/03	02/06/03
Sample Description:	Soil	***Extracted:***	02/06/03	02/06/03	02/06/03
		Analyzed:	02/06/03	02/06/03	02/06/03
Client Project ID:	Runkle Ranch	***Reported:***	02/17/03	02/17/03	02/17/03
Client Project #:	402-0002-02				
		Lab Sample I.D.:	MB0206	03020085	03020086
		Client Sample I.D.:	---	DS-1	DS-2
		Dilution Factor:	1	1	1

ANALYTE (con't)	***CAS NUMBER***	***SAMPLE RESULTS***		
		µg/kg	***µg/kg***	***µg/kg***
Bromochloromethane	74-97-5	<2.5	<2.5	<2.5
1,1-Dichloropropene	563-58-6	<2.5	<2.5	<2.5
Dibromomethane	74-95-3	<2.5	<2.5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	<2.5	<2.5
1,3-Dichloropropane	142-28-9	<2.5	<2.5	<2.5
Isopropylbenzene	98-82-8	<2.5	<2.5	<2.5
1,1,1,2-Tetrachloroethane	630-20-6	<2.5	<2.5	<2.5
1,2,3-Trichloropropane	96-18-4	<2.5	<2.5	<2.5
Bromobenzene	108-86-1	<2.5	<2.5	<2.5
n-Propylbenzene	103-65-1	<2.5	<2.5	<2.5
2-Chlorotoluene	95-49-8	<2.5	<2.5	<2.5
1,3,5-Trimethylbenzene	108-67-8	<2.5	<2.5	<2.5
4-Chlorotoluene	106-43-4	<2.5	<2.5	<2.5
tert-Butylbenzene	98-06-6	<2.5	<2.5	<2.5
1,2,4-Trimethylbenzene	95-63-6	<2.5	<2.5	<2.5
sec-Butylbenzene	135-98-8	<2.5	<2.5	<2.5
4-Isopropyltoluene	99-87-6	<2.5	<2.5	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	<2.5	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	<2.5	<2.5
n-Butylbenzene	104-51-8	<2.5	<2.5	<2.5
1,2-Dichlorobenzene	95-50-1	<2.5	<2.5	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	120-82-1	<2.5	<2.5	<2.5
Hexachlorobutadiene	87-68-3	<2.5	<2.5	<2.5
Naphthalene	91-20-3	<2.5	<2.5	<2.5
1,2,3-Trichlorobenzene	87-61-6	<2.5	<2.5	<2.5
MTBE	1634-04-4	<5.0	<5.0	<5.0
DIPE	108-20-3	<10	<10	<10
TAME	955-05-8	<10	<10	<10
ETBE	637-92-3	<10	<10	<10
TBA	75-65-0	<50	<50	<50
SURROGATE RECOVERY	***Acceptable %RC***	***%RC***	***%RC***	***%RC***
Dibromofluoromethane	26-196	89	114	111
Toluene-d8	31-168	90	101	96
4-Bromofluorobenzene	55-133	76	62	67

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Sample Description: Soil

Laboratory Reference #: MBE 13986

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

Sampled:	02/05/03	02/05/03
Received:	02/06/03	02/06/03
Extracted:	02/06/03	02/06/03
Analyzed:	02/06/03	02/06/03
Reported:	02/17/03	02/17/03
Lab Sample I.D.:	03020087	03020088
Client Sample I.D.:	DS-3	DS-4
Dilution Factor:	1	1

VOLATILE ORGANICS BY GC/MS (EPA 8260)

ANALYTE	CAS NUMBER	SAMPLE RESULTS	
		µg/kg	µg/kg
Benzene	71-43-2	<2.5	<2.5
Bromodichloromethane	75-27-4	<2.5	<2.5
Bromoform	75-25-2	<2.5	<2.5
Bromomethane	74-83-9	<5.0	<5.0
Carbon Disulfide	75-15-0	<5.0	<5.0
Carbon tetrachloride	56-23-5	<2.5	<2.5
Chlorobenzene	108-90-7	<2.5	<2.5
Chlorodibromomethane	124-48-1	<2.5	<2.5
Chloroethane	75-00-3	<5.0	<5.0
Chloroform	67-66-3	<2.5	<2.5
Chloromethane	74-87-3	<5.0	<5.0
1,1-Dichloroethane	75-34-3	<2.5	<2.5
1,2-Dichloroethane	107-06-2	<2.5	<2.5
1,1-Dichloroethene	75-35-4	<2.5	<2.5
trans-1,2-Dichloroethene	156-60-5	<2.5	<2.5
1,2-Dichloropropane	78-87-5	<2.5	<2.5
cis-1,3-Dichloropropene	10061-01-5	<2.5	<2.5
trans-1,3-Dichloropropene	10061-02-6	<2.5	<2.5
Ethylbenzene	100-41-4	<2.5	<2.5
Methylene chloride	75-09-2	<5.0	<5.0
Styrene	100-42-5	<2.5	<2.5
1,1,2,2-Tetrachloroethane	79-34-5	<2.5	<2.5
Tetrachloroethene	127-18-4	<2.5	<2.5
Toluene	108-88-3	<2.5	<2.5
1,1,1-Trichloroethane	71-55-6	<2.5	<2.5
1,1,2-Trichloroethane	79-00-5	<2.5	<2.5
Trichloroethene	79-01-6	<2.5	<2.5
Trichlorofluoromethane	75-69-4	<5.0	<5.0
Vinyl acetate	108-05-4	<5.0	<5.0
Vinyl chloride	75-01-4	<2.5	<2.5
Total Xylenes	1330-20-7	<2.5	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	<2.5
cis-1,2-Dichloroethene	156-59-2	<2.5	<2.5
2,2-Dichloropropane	594-20-7	<2.5	<2.5

VOLATILE ORGANICS BY GC/MS (EPA 8260) (continued)

Laboratory Reference #:	MBE 13986	***Sampled:***	02/05/03	02/05/03
		Received:	02/06/03	02/06/03
Sample Description:	Soil	***Extracted:***	02/06/03	02/06/03
		Analyzed:	02/06/03	02/06/03
Client Project ID:	Runkle Ranch	***Reported:***	02/17/03	02/17/03
Client Project #:	402-0002-02			
		Lab Sample I.D.:	03020087	03020088
		Client Sample I.D.:	DS-3	DS-4
		Dilution Factor:	1	1

ANALYTE (con't)	***CAS NUMBER***	***SAMPLE RESULTS***	
		µg/kg	***µg/kg***
Bromochloromethane	74-97-5	<2.5	<2.5
1,1-Dichloropropene	563-58-6	<2.5	<2.5
Dibromomethane	74-95-3	<2.5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	<2.5
1,3-Dichloropropane	142-28-9	<2.5	<2.5
Isopropylbenzene	98-82-8	<2.5	<2.5
1,1,1,2-Tetrachloroethane	630-20-6	<2.5	<2.5
1,2,3-Trichloropropane	96-18-4	<2.5	<2.5
Bromobenzene	108-86-1	<2.5	<2.5
n-Propylbenzene	103-65-1	<2.5	<2.5
2-Chlorotoluene	95-49-8	<2.5	<2.5
1,3,5-Trimethylbenzene	108-67-8	<2.5	<2.5
4-Chlorotoluene	106-43-4	<2.5	<2.5
tert-Butylbenzene	98-06-6	<2.5	<2.5
1,2,4-Trimethylbenzene	95-63-6	<2.5	<2.5
sec-Butylbenzene	135-98-8	<2.5	<2.5
4-Isopropyltoluene	99-87-6	<2.5	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	<2.5
n-Butylbenzene	104-51-8	<2.5	<2.5
1,2-Dichlorobenzene	95-50-1	<2.5	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	<5.0
1,2,4-Trichlorobenzene	120-82-1	<2.5	<2.5
Hexachlorobutadiene	87-68-3	<2.5	<2.5
Naphthalene	91-20-3	<2.5	<2.5
1,2,3-Trichlorobenzene	87-61-6	<2.5	<2.5
MTBE	1634-04-4	<5.0	<5.0
DIPE	108-20-3	<10	<10
TAME	955-05-8	<10	<10
ETBE	637-92-3	<10	<10
TBA	75-65-0	<50	<50

SURROGATE RECOVERY	***Acceptable %RC***	***%RC***	***%RC***
Dibromofluoromethane	26-196	111	113
Toluene-d8	31-168	95	95
4-Bromofluorobenzene	55-133	71	70

Miller Brooks Environmental
ATTN: Ms. Elizabeth Robbins
2124 Main St. Suite 200
Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

		Sampled:	—	02/05/03	02/05/03
Sample Description:	Soil	***Received:***	—	02/06/03	02/06/03
		Reported:	02/17/03	02/17/03	02/17/03
Laboratory Reference #:	MBE 13986				
		Lab Sample I.D.:			
		Client Sample I.D.:	MB	03020085	03020086
			—	DS-1	DS-2

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***SAMPLE RESULTS***		
			mg/kg	***mg/kg***	***mg/kg***
Antimony	02/10/03	6010	<5.0	<5.0	<5.0
Arsenic	02/10/03	6010	<1.0	<1.0	<1.0
Barium	02/10/03	6010	<0.5	36	20
Beryllium	02/10/03	6010	<0.5	<0.5	<0.5
Cadmium	02/10/03	6010	<0.5	<0.5	<0.5
Chromium (VI)	02/11/03	7196	<0.5	<0.5	<0.5
Chromium (Total)	02/10/03	6010	<0.5	7.1	3.8
Cobalt	02/10/03	6010	<0.5	4.9	2.6
Copper	02/10/03	6010	<0.5	10	5.4
Lead	02/10/03	6010	<1.0	3.7	2.0
Mercury	02/10/03	7471	<0.1	<0.1	<0.1
Molybdenum	02/10/03	6010	<1.0	<1.0	<1.0
Nickel	02/10/03	6010	<0.5	6.2	3.3
Selenium	02/10/03	6010	<5.0	<5.0	<5.0
Silver	02/10/03	6010	<0.5	0.55	<0.5
Thallium	02/10/03	6010	<5.0	<5.0	<5.0
Vanadium	02/10/03	6010	<0.5	23	14
Zinc	02/10/03	6010	<0.5	35	17

Miller Brooks Environmental
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Huntington Beach, CA 92648

Client Project ID: Runkle Ranch
Client Project #: 402-0002-02

	Sampled:	02/05/03	02/05/03
Sample Description: Soil	***Received:***	02/06/03	02/06/03
	Reported:	02/17/03	02/17/03
Laboratory Reference #: MBE 13986			
	Lab Sample I.D.:		
	Client Sample I.D.:	03020087 DS-3	03020088 DS-4

CCR METALS

ANALYTE	***DATE TESTED***	***EPA METHOD***	***SAMPLE RESULTS***	
			mg/kg	***mg/kg***
Antimony	02/10/03	6010	<5.0	<5.0
Arsenic	02/10/03	6010	<1.0	1.3
Barium	02/10/03	6010	22	18
Beryllium	02/10/03	6010	<0.5	<0.5
Cadmium	02/10/03	6010	<0.5	<0.5
Chromium (VI)	02/11/03	7196	<0.5	<0.5
Chromium (Total)	02/10/03	6010	3.8	4.5
Cobalt	02/10/03	6010	2.9	4.4
Copper	02/10/03	6010	5.9	6.5
Lead	02/10/03	6010	1.8	3.0
Mercury	02/10/03	7471	<0.1	<0.1
Molybdenum	02/10/03	6010	<1.0	<1.0
Nickel	02/10/03	6010	3.7	4.2
Selenium	02/10/03	6010	<5.0	<5.0
Silver	02/10/03	6010	<0.5	<0.5
Thallium	02/10/03	6010	<5.0	<5.0
Vanadium	02/10/03	6010	13	21
Zinc	02/10/03	6010	18	19

QA/QC REPORT

for

Extractable Fuel Hydrocarbons (8015m)

Reporting units: ppm

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Analysis : 02/13/03
Laboratory Sample No : 03020188
Laboratory Reference No : MBE 13986

Analyte	*R1*	*SP CONC*	*MS*	*MSD*	*% MS*	*% MSD*	*RPD*	*ACP %MS*	*ACP RPD*
Extractable Fuel Hydrocarbons	26	100	132	109	106	83	19	42-126	31

Definition of Terms :

R1	Result of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery Of MS: {(MS-R1) / SP} x100
% MSD	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %MS(MSD)	Acceptable Range of Percent
ACP RPD	Acceptable Relative Percent Difference

2. Laboratory Control Sample

Date of Analysis : 02/12/03
Laboratory Standard No : OCA9840

Analyte	*SP CONC*	*RESULTS*	*% RECOVERY*	*ACCEPTABLE %*
Extractable Fuel Hydrocarbons	100	121	121	44-110

QA/QC REPORT
for
Volatile Fuel Hydrocarbons (8015m)
Reporting units: ppm

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Analysis : 02/07/03
Laboratory Sample No : 03020054
Laboratory Reference No : MBE 13986

Analyte	*R1*	*SP CONC*	*MS*	*MSD*	*% MS*	*% MSD*	*RPD*	*ACP %MS*	*ACP RPD*
Volatile Fuel Hydrocarbons	0.0	12.5	13.8	14.4	110	115	4	33-142	31

Definition of Terms :

R1	Result of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery Of MS: {(MS-R1) / SP} x100
% MSD	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %MS(MSD)	Acceptable Range of Percent
ACP RPD	Acceptable Relative Percent Difference

2. Laboratory Control Sample

Date of Analysis : 02/07/03
Laboratory Standard No : OCA9989

Analyte	*SP CONC*	*RESULTS*	*% RECOVERY*	*ACCEPTABLE %*
Volatile Fuel Hydrocarbons	12.5	12.6	101	81-122

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
Reporting Units: ppb

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Analysis : 02/06/03
Laboratory Sample No : 03020053
Laboratory Reference No : MBE 13986

Analyte	*R1*	*SP CONC*	*MS*	*MSD*	*%MS*	*%MSD*	*RPD*	*ACP%*	*ACP RPD*
1,1-Dichloroethene	0.0	50	47	51	94	102	8	59-139	21
Benzene	0.0	50	39	43	78	86	10	70-120	11
Trichloroethene	0.0	50	39	43	78	86	10	55-134	19
Toluene	0.0	50	38	44	76	88	15	74-120	12
Chlorobenzene	0.0	50	41	46	82	92	11	81-121	9

Definition of Terms :

R1	Result of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery of MS: {(MS-R1) / SP} x 100
% MSD	Percent Recovery of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %	Acceptable Range of Percent for MS/MSD
ACP RPD	Acceptable Relative Percent Difference

2. Laboratory Control Sample

Date of Analysis : 02/06/03
Laboratory Standard No : OCA 10291

Analyte	*SP CONC*	*Results*	*% Recovery*	*ACP %*
1,1-Dichloroethene	50	46	92	65-125
Benzene	50	39	78	74-107
Trichloroethene	50	38	76	74-112
Toluene	50	40	80	74-122
Chlorobenzene	50	42	84	81-122

QA/QC REPORT
for Metals
Reporting units: ppm

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)
Laboratory Reference No : MBE 13986

Analyte	*Date Tested*	*QC Sample*	*R1*	*SP CONC*	*MS*	*MSD*	*%MS*	*%MSD*	*RPD*	*ACP%*	*ACP RPD*
Antimony*	02/10/03	A03020036	0.0	20	11.3	10.5	57	53	7	75-125	20
Arsenic	02/10/03	A03020036	9.7	20	27.9	29.6	91	100	6	75-125	20
Barium	02/10/03	A03020036	110	40	150	159	100	123	6	75-125	20
Beryllium	02/10/03	A03020036	0.0	10	9.72	9.42	97	94	3	75-125	20
Cadmium	02/10/03	A03020036	0.0	10	9.49	9.18	95	92	3	75-125	20
Chromium (Total)	02/10/03	A03020036	12	20	30.1	31.1	91	96	3	75-125	20
Chromium (VI)	02/11/03	03020088	0.0	5.00	4.55	4.37	91	87	4	80-120	15
Cobalt	02/10/03	A03020036	5.7	20	23.4	22.6	89	85	3	75-125	20
Copper	02/10/03	A03020036	20	20	39.1	39.7	96	99	2	75-125	20
Lead	02/10/03	A03020036	6.8	20	26.8	24.0	100	86	11	75-125	20
Mercury	02/10/03	A03020036	0.0	1.0	0.980	0.997	98	100	2	80-120	15
Molybdenum	02/10/03	A03020036	0.0	20	16.5	16.1	83	81	2	75-125	20
Nickel	02/10/03	A03020036	15	20	32.6	31.4	88	82	4	75-125	20
Selenium	02/10/03	A03020036	0.0	20	18.9	18.4	95	92	3	75-125	20
Silver	02/10/03	A03020036	0.51	20	17.7	17.2	86	83	3	75-125	20
Thallium	02/10/03	A03020036	0.0	20	17.0	16.4	85	82	4	75-125	20
Vanadium	02/10/03	A03020036	21	20	39.2	41.9	91	105	7	75-125	20
Zinc	02/10/03	A03020036	38	40	68.6	70.7	77	82	3	75-125	20

Definition of Terms :

R1	Result of QC Sample
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery of MS: {(MS-R1) / SP} x 100
% MSD	Percent Recovery of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %	Acceptable Range of Percent for MS/MSD
ACP RPD	Acceptable Relative Percent Difference
*	Matrix spike recovery was low, the method control sample recovery was acceptable.

2. Laboratory Control Sample

Analyte	*Date Tested*	*Spike Standard ID*	*SP CONC*	*Results*	*% Recovery*	*ACP %*
Antimony	02/10/03	OCA 10241	20	19.3	97	80-120
Arsenic	02/10/03	OCA 10241	20	19.5	98	80-120
Barium	02/10/03	OCA 10241	40	37.7	94	80-120
Beryllium	02/10/03	OCA 10241	10	9.85	99	80-120
Cadmium	02/10/03	OCA 10241	10	9.66	97	80-120
Chromium (Total)	02/10/03	OCA 10241	20	18.8	94	80-120
Chromium (VI)	02/11/03	OCA 9771	5.00	4.94	99	80-120
Cobalt	02/10/03	OCA 10241	20	19.0	95	80-120
Copper	02/10/03	OCA 10241	20	19.0	95	80-120
Lead	02/10/03	OCA 10241	20	19.2	96	80-120
Mercury	02/10/03	OCA10041	1.0	1.00	100	80-120
Molybdenum	02/10/03	OCA 10241	20	19.2	96	80-120
Nickel	02/10/03	OCA 10241	20	19.0	95	80-120
Selenium	02/10/03	OCA 10241	20	19.5	98	80-120
Silver	02/10/03	OCA 10241	20	17.2	86	80-120
Thallium	02/10/03	OCA 10241	20	19.3	97	80-120
Vanadium	02/10/03	OCA 10241	20	18.9	95	80-120
Zinc	02/10/03	OCA 10241	40	38.6	97	80-120

INIT_____

QA/QC Report
for
Volatile Organic Compounds (EPA 8260B)
Reporting Units: ppb

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Analysis : 02/14/03
Laboratory Sample No : A03020038
Laboratory Reference No : MBE 13986

Analyte	*R1*	*SP CONC*	*MS*	*MSD*	*%MS*	*%MSD*	*RPD*	*ACP%*	*ACP RPD*
1,1-Dichloroethene	0.0	50	47	47	94	94	0	41-153	23
Benzene	0.0	50	43	42	86	84	2	33-170	23
Trichloroethene	0.0	50	43	43	86	86	0	43-145	23
Toluene	0.0	50	42	42	84	84	0	40-152	23
Chlorobenzene	0.0	50	46	45	92	90	2	48-147	22

Definition of Terms :

R1	Result of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery of MS: {(MS-R1) / SP} x 100
% MSD	Percent Recovery of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %	Acceptable Range of Percent for MS/MSD
ACP RPD	Acceptable Relative Percent Difference

2. Laboratory Control Sample

Date of Analysis : 02/14/03
Laboratory Standard No : OCA 10291

Analyte	*SP CONC*	*Results*	*% Recovery*	*ACP %*
1,1-Dichloroethene	50	47	94	75-123
Benzene	50	42	84	62-134
Trichloroethene	50	42	84	80-118
Toluene	50	41	82	76-119
Chlorobenzene	50	45	90	79-117

QA/QC REPORT
for
Extractable Fuel Hydrocarbons (8015m)
Reporting units: ppm

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Analysis : 02/13/03
Laboratory Sample No : OCA 100
Laboratory Reference No : MBE 13986

Analyte	*R1*	*SP CONC*	*MS*	*MSD*	*% MS*	*% MSD*	*RPD*	*ACP %*	*ACP RPD*
Extractable Fuel Hydrocarbons	0.0	5.0	5.0	5.3	100	106	6	18-114	34

Definition of Terms :

R1	Result of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery Of MS: {(MS-R1) / SP} x100
% MSD	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %MS(MSD)	Acceptable Range of Percent
ACP RPD	Acceptable Relative Percent Difference

2. Quality Control Standard

Date of Analysis : 02/13/03
Laboratory Standard No : OCA9840

Analyte	*SP CONC*	*RESULTS*	*% RECOVERY*	*ACCEPTABLE %*
Extractable Fuel Hydrocarbons	100	111	111	63-143

QA/QC REPORT
for
Volatile Fuel Hydrocarbons (8015m)
Reporting units: ppb

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Analysis : 02/10/03
Laboratory Sample No : 03020095
Laboratory Reference No : MBE 13986

Analyte	*R1*	*SP CONC*	*MS*	*MSD*	*% MS*	*% MSD*	*RPD*	*ACP %MS*	*ACP RPD*
Volatile Fuel Hydrocarbons	0.0	250	254	241	102	96	5	60-136	21

Definition of Terms :

R1	Result of Laboratory Sample Number
SP CONC	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
% MS	Percent Recovery Of MS: {(MS-R1) / SP} x100
% MSD	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
ACP %MS(MSD)	Acceptable Range of Percent
ACP RPD	Acceptable Relative Percent Difference

2. Laboratory Control Sample

Date of Analysis : 02/10/03
Laboratory Standard No : OCA9993

Analyte	*SP CONC*	*RESULTS*	*% RECOVERY*	*ACCEPTABLE %*
Volatile Fuel Hydrocarbons	500	512	102	66-127

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900
FAX 714/538-1209

CLIENT Orange Coast Analytical (4376)
ATTN: Mark Norrani
3002 Dow Ave.
Suite 532
Tustin, CA 92680

LAB REQUEST 106150
REPORTED 02/10/2003
RECEIVED 02/07/2003

PROJECT Runkle Road

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
410530	Well - 1

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Tito L. Parola
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical
Microbiological

Environmental

Order #: 410530 **Client Sample ID:** Well - 1

Matrix: WATER

Date Sampled: 02/05/2003

Analyte	Result	DLR	Units	Date/Analyst
314 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	02/10/03 BGS

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 1

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY:	Miller Brooks Environmental	PROJECT NAME:	Runkle Ranch
SEND REPORT TO:	Elizabeth Robbins	NUMBER:	402-0002-02
ADDRESS:	2124 Main St, Ste 200	LOCATION:	Simi Valley
	Huntington Beach, CA 92648	ADDRESS:	
PHONE:	714 960-4068	FAX: 714 960-2162	SAMPLED BY: Jennifer Canfield

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: VOCs (8260)	TPH-Gas	Perchlorate	Chromium	Title 22 metals	REMARKS/PRECAUTIONS
DS-1	1	2/5/03	1:10	SOIL	6" ring		X	X			X	
DS-2			1:20				X	X			X	
DS-3			1:30				X	X			X	
DS-4			2:00				X	X			X	
WELL-1	9		1:45	aq	vanes		X	X	X	X		

Total No. of Samples: 4

Method of Shipment:

Relinquished By: Jennifer Canfield	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time: 02/6/03 14:15	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time: 2/6/03 14:15

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900 *FAX 714/538-1209*

CLIENT Orange Coast Analytical (4376)
ATTN: Mark Norrani
3002 Dow Ave.
Suite 532
Tustin, CA 92680

LAB REQUEST 108126
REPORTED 03/27/2003
RECEIVED 03/19/2003

PROJECT Runkle Ranch

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
419242	Creek - 1 Water
419243	Creek - 2 Water
419244	Windmill - 1 Water
419245	Creek - 3 Water
419246	Trip Blank
419247	Creek - 1 Soil
419248	Creek - 2 Soil
419249	Creek - 3 Soil

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Tito L. Parola
President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

CLIENT Orange Coast Analytical (4376) LAB REQUEST 108126

ATTN: Mark Norrani

3002 Dow Ave. REPORTED 03/27/2003

Suite 532

Tustin, CA 92680 RECEIVED 03/19/2003

PROJECT Runkle Ranch

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
419250	Laboratory Method Blank-W
419251	Laboratory Method Blank-S

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Tito L. Parola
President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

Order #: 419242 **Client Sample ID:** Creek - 1 Water
Matrix: WATER
Date Sampled: 03/14/2003
Time Sampled: 09:00

Analyte	Result	DLR	Units	Date/Analyst
314 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	03/25/03 BGS

Order #: 419243 **Client Sample ID:** Creek - 2 Water
Matrix: WATER
Date Sampled: 03/14/2003
Time Sampled: 09:15

Analyte	Result	DLR	Units	Date/Analyst
314 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	03/25/03 BGS

Order #: 419244 **Client Sample ID:** Windmill - 1 Water
Matrix: WATER
Date Sampled: 03/14/2003
Time Sampled: 10:30

Analyte	Result	DLR	Units	Date/Analyst
314 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	03/25/03 BGS

Order #: 419245 **Client Sample ID:** Creek - 3 Water
Matrix: WATER
Date Sampled: 03/14/2003
Time Sampled: 11:20

Analyte	Result	DLR	Units	Date/Analyst
314 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	03/25/03 BGS

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

Order #: 419246 **Client Sample ID:** Trip Blank
Matrix: WATER
Date Sampled: 03/14/2003

Analyte	Result	DLR	Units	Date/Analyst
14 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	03/25/03 BGS

Order #: 419247 **Client Sample ID:** Creek - 1 Soil
Matrix: SOLID

Analyte	Result	DLR	Units	Date/Analyst
14 Perchlorate by Ion Chomatography				
Perchlorate	ND	0.040	mg/Kg	03/25/03 BGS

Order #: 419248 **Client Sample ID:** Creek - 2 Soil
Matrix: SOLID

Analyte	Result	DLR	Units	Date/Analyst
14 Perchlorate by Ion Chomatography				
Perchlorate	ND	0.040	mg/Kg	03/25/03 BGS

Order #: 419249 **Client Sample ID:** Creek - 3 Soil
Matrix: SOLID

Analyte	Result	DLR	Units	Date/Analyst
14 Perchlorate by Ion Chomatography				
Perchlorate	ND	0.040	mg/Kg	03/25/03 BGS

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

rder #: 419250 **Client Sample ID:** Laboratory Method Blank-W
latrix: WATER

Analyte	Result	DLR	Units	Date/Analyst
14 Perchlorate by Ion Chomatography				
Perchlorate	ND	4	ug/L	03/25/03 BGS

rder #: 419251 **Client Sample ID:** Laboratory Method Blank-S
latrix: SOLID

Analyte	Result	DLR	Units	Date/Analyst
14 Perchlorate by Ion Chomatography				
Perchlorate	ND	0.040	mg/Kg	03/25/03 BGS

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-001
Client Sample ID: MBE-7-Surface
Matrix: SOIL

Collection Date: 03/13/03 10:25
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-002
Client Sample ID: MBE-7-3'
Matrix: SOIL

Collection Date: 03/13/03 10:40
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-003
Client Sample ID: MBE-7-7'
Matrix: SOIL

Collection Date: 03/13/03 10:50
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-004
Client Sample ID: MBE-8-Surface
Matrix: SOIL

Collection Date: 03/13/03 12:25
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

TRACKING NO. PAGE NO.
030603R0001

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-005
Client Sample ID: MBE-8-3'
Matrix: SOIL

Collection Date: 03/13/03 12:45
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-006
Client Sample ID: MBE-8-7'
Matrix: SOIL

Collection Date: 03/13/03 12:55
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-007
Client Sample ID: MBE-11-Surface
Matrix: SOIL

Collection Date: 03/13/03 13:35
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-008
Client Sample ID: MBE-11-3'
Matrix: SOIL

Collection Date: 03/13/03 13:40
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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030603R0002

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-009
Client Sample ID: MBE-11-7'
Matrix: SOIL

Collection Date: 03/13/03 13:45
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-010
Client Sample ID: MBE-5-Surface
Matrix: SOIL

Collection Date: 03/13/03 14:30
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-011
Client Sample ID: MBE-5-3'
Matrix: SOIL

Collection Date: 03/13/03 14:33
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-012
Client Sample ID: MBE-5-7'
Matrix: SOIL

Collection Date: 03/13/03 14:35
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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030603R0003

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-013
Client Sample ID: MBE-2-Surface
Matrix: SOIL

Collection Date: 03/13/03 14:45
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-014
Client Sample ID: MBE-2-3'
Matrix: SOIL

Collection Date: 03/13/03 15:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.40		E905.0	03/27/03 17:00 / db

Lab ID: C03030603-015
Client Sample ID: MBE-2-7'
Matrix: SOIL

Collection Date: 03/13/03 15:05
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-016
Client Sample ID: MBE-12-Surface
Matrix: SOIL

Collection Date: 03/13/03 14:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-017
Client Sample ID: MBE-1-Surface
Matrix: SOIL

Collection Date: 03/13/03 14:10
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	2.10	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db
Strontium 90 precision (±)	1.20	pCi/g-dry				E905.0	03/28/03 16:00 / db

Lab ID: C03030603-018
Client Sample ID: MBE-6-Surface
Matrix: SOIL

Collection Date: 03/13/03 15:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	2.20	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db
Strontium 90 precision (±)	1.20	pCi/g-dry				E905.0	03/28/03 16:00 / db

Lab ID: C03030603-019
Client Sample ID: MBE-3-Surface
Matrix: SOIL

Collection Date: 03/13/03 15:15
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-020
Client Sample ID: MBE-4-Surface
Matrix: SOIL

Collection Date: 03/13/03 15:30
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle
Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-021
Client Sample ID: MBE-4-3'
Matrix: SOIL
Collection Date: 03/13/03 15:35
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-022
Client Sample ID: MBE-4-7'
Matrix: SOIL
Collection Date: 03/13/03 15:40
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-023
Client Sample ID: Duplicate 1
Matrix: SOIL
Collection Date: 03/13/03
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-024
Client Sample ID: Duplicate 2
Matrix: SOIL
Collection Date: 03/13/03
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-025
Client Sample ID: MBE-10-Surface
Matrix: SOIL

Collection Date: 03/14/03 11:45
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-026
Client Sample ID: MBE-9-Surface
Matrix: SOIL

Collection Date: 03/14/03 11:50
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-027
Client Sample ID: Background-1
Matrix: SOIL

Collection Date: 03/14/03 07:55
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Lab ID: C03030603-028
Client Sample ID: Background-2
Matrix: SOIL

Collection Date: 03/14/03 08:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.00		E905.0	03/28/03 16:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-029
Client Sample ID: Background-3
Matrix: SOIL

Collection Date: 03/14/03 12:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-030
Client Sample ID: SS-1A
Matrix: SOIL

Collection Date: 03/14/03 09:30
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-031
Client Sample ID: SS-2A
Matrix: SOIL

Collection Date: 03/14/03 09:35
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-032
Client Sample ID: SS-3A
Matrix: SOIL

Collection Date: 03/14/03 09:40
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-033
Client Sample ID: SS-4A
Matrix: SOIL

Collection Date: 03/14/03 09:50
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-034
Client Sample ID: SS-5A
Matrix: SOIL

Collection Date: 03/14/03 09:55
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-035
Client Sample ID: SS-6A
Matrix: SOIL

Collection Date: 03/14/03 10:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-036
Client Sample ID: SS-7A
Matrix: SOIL

Collection Date: 03/14/03 10:05
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-037
Client Sample ID: SS-8A
Matrix: SOIL

Collection Date: 03/14/03 10:10
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-038
Client Sample ID: SS-9A
Matrix: SOIL

Collection Date: 03/14/03 10:15
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-039
Client Sample ID: SS-10A
Matrix: SOIL

Collection Date: 03/14/03 10:40
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-040
Client Sample ID: SS-11A
Matrix: SOIL

Collection Date: 03/14/03 10:45
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle
Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-041
Client Sample ID: SS-12A
Matrix: SOIL
Collection Date: 03/14/03 10:50
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-042
Client Sample ID: SS-13A
Matrix: SOIL
Collection Date: 03/14/03 09:45
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.20		E905.0	03/31/03 17:00 / db

Lab ID: C03030603-043
Client Sample ID: SS-14A
Matrix: SOIL
Collection Date: 03/14/03 11:00
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.80		E905.0	04/01/03 15:15 / db

Lab ID: C03030603-044
Client Sample ID: SS-15A
Matrix: SOIL
Collection Date: 03/14/03 11:30
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.80		E905.0	04/01/03 15:15 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-045
Client Sample ID: SS-16A
Matrix: SOIL

Collection Date: 03/14/03 11:40
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.80		E905.0	04/01/03 15:15 / db

Lab ID: C03030603-046
Client Sample ID: SS-17A
Matrix: SOIL

Collection Date: 03/14/03 11:10
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.80		E905.0	04/01/03 15:15 / db

Lab ID: C03030603-047
Client Sample ID: Duplicate-1
Matrix: SOIL

Collection Date: Not Provided
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.80		E905.0	04/01/03 15:15 / db

Lab ID: C03030603-048
Client Sample ID: Duplicate-2
Matrix: SOIL

Collection Date: Not Provided
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/g-dry		2.80		E905.0	04/01/03 15:15 / db

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

Lab Order: C03030603
Report Date: 04/21/03

Lab ID: C03030603-049
Client Sample ID: Trip Blank
Matrix: AQUEOUS

Collection Date: Not Provided
DateReceived: 03/20/03

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Strontium 90	ND	pCi/L		10		E905.0	04/01/03 15:15 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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ANALYTICAL SUMMARY REPORT

April 21, 2003

Mark Noorani
Orange Coast Analytical Inc
3002 Dow Ste 532
Tustin, CA 92780

Workorder No.: C03030603

Project Name: Runkle

Energy Laboratories Inc. received the following 49 samples from Orange Coast Analytical Inc on 3/20/2003 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C03030603-001	MBE-7-Surface	03/13/03 10:25	03/20/03	Soil	Digestion For RadioChemistry Strontium 90
C03030603-002	MBE-7-3'	03/13/03 10:40	03/20/03	Soil	Same As Above
C03030603-003	MBE-7-7'	03/13/03 10:50	03/20/03	Soil	Same As Above
C03030603-004	MBE-8-Surface	03/13/03 12:25	03/20/03	Soil	Same As Above
C03030603-005	MBE-8-3'	03/13/03 12:45	03/20/03	Soil	Same As Above
C03030603-006	MBE-8-7'	03/13/03 12:55	03/20/03	Soil	Same As Above
C03030603-007	MBE-11-Surface	03/13/03 13:35	03/20/03	Soil	Same As Above
C03030603-008	MBE-11-3'	03/13/03 13:40	03/20/03	Soil	Same As Above
C03030603-009	MBE-11-7'	03/13/03 13:45	03/20/03	Soil	Same As Above
C03030603-010	MBE-5-Surface	03/13/03 14:30	03/20/03	Soil	Same As Above
C03030603-011	MBE-5-3'	03/13/03 14:33	03/20/03	Soil	Same As Above
C03030603-012	MBE-5-7'	03/13/03 14:35	03/20/03	Soil	Same As Above
C03030603-013	MBE-2-Surface	03/13/03 14:45	03/20/03	Soil	Same As Above
C03030603-014	MBE-2-3'	03/13/03 15:00	03/20/03	Soil	Same As Above
C03030603-015	MBE-2-7'	03/13/03 15:05	03/20/03	Soil	Same As Above
C03030603-016	MBE-12-Surface	03/13/03 14:00	03/20/03	Soil	Same As Above
C03030603-017	MBE-1-Surface	03/13/03 14:10	03/20/03	Soil	Same As Above
C03030603-018	MBE-6-Surface	03/13/03 15:00	03/20/03	Soil	Same As Above
C03030603-019	MBE-3-Surface	03/13/03 15:15	03/20/03	Soil	Same As Above
C03030603-020	MBE-4-Surface	03/13/03 15:30	03/20/03	Soil	Same As Above
C03030603-021	MBE-4-3'	03/13/03 15:35	03/20/03	Soil	Same As Above
C03030603-022	MBE-4-7'	03/13/03 15:40	03/20/03	Soil	Same As Above
C03030603-023	Duplicate 1	03/13/03 0:00	03/20/03	Soil	Same As Above

TRACKING NO. PAGE NO.
030603R0020

Energy Laboratories Inc.

Sample Receipt Checklist

Client Name **ORNG-CST-ANLYTCL-INC** Date and Time Received: **3/20/2003 14:00:00**

Work Order Number **C03030603** Received by **sh**

Checklist completed by Signature 3/20/03 Date Reviewed by Initials Date

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	10 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments:

The were two bottles marked as Duplicate-1 for the 3-14-03 samples, SAG faxed client per Mark Noorani bottles matched w/ sampler name. Also per M. Noorani project is Runkle only.

Corrective Action _____

TRACKING NO. PAGE NO.

030603R0019

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

C03030603-024	Duplicate 2	03/13/03 0:00	03/20/03	Soil	Same As Above
C03030603-025	MBE-10-Surface	03/14/03 11:45	03/20/03	Soil	Same As Above
C03030603-026	MBE-9-Surface	03/14/03 11:50	03/20/03	Soil	Same As Above
C03030603-027	Background-1	03/14/03 7:55	03/20/03	Soil	Same As Above
C03030603-028	Background-2	03/14/03 8:00	03/20/03	Soil	Same As Above
C03030603-029	Background-3	03/14/03 12:00	03/20/03	Soil	Same As Above
C03030603-030	SS-1A	03/14/03 9:30	03/20/03	Soil	Same As Above
C03030603-031	SS-2A	03/14/03 9:35	03/20/03	Soil	Same As Above
C03030603-032	SS-3A	03/14/03 9:40	03/20/03	Soil	Same As Above
C03030603-033	SS-4A	03/14/03 9:50	03/20/03	Soil	Same As Above
C03030603-034	SS-5A	03/14/03 9:55	03/20/03	Soil	Same As Above
C03030603-035	SS-6A	03/14/03 10:00	03/20/03	Soil	Same As Above
C03030603-036	SS-7A	03/14/03 10:05	03/20/03	Soil	Same As Above
C03030603-037	SS-8A	03/14/03 10:10	03/20/03	Soil	Same As Above
C03030603-038	SS-9A	03/14/03 10:15	03/20/03	Soil	Same As Above
C03030603-039	SS-10A	03/14/03 10:40	03/20/03	Soil	Same As Above
C03030603-040	SS-11A	03/14/03 10:45	03/20/03	Soil	Same As Above
C03030603-041	SS-12A	03/14/03 10:50	03/20/03	Soil	Same As Above
C03030603-042	SS-13A	03/14/03 9:45	03/20/03	Soil	Same As Above
C03030603-043	SS-14A	03/14/03 11:00	03/20/03	Soil	Same As Above
C03030603-044	SS-15A	03/14/03 11:30	03/20/03	Soil	Same As Above
C03030603-045	SS-16A	03/14/03 11:40	03/20/03	Soil	Same As Above
C03030603-046	SS-17A	03/14/03 11:10	03/20/03	Soil	Same As Above
C03030603-047	Duplicate-1		03/20/03	Soil	Same As Above
C03030603-048	Duplicate-2		03/20/03	Soil	Same As Above
C03030603-049	Trip Blank		03/20/03	Aqueous	Strontium 90

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative or Report.

If you have any questions regarding these tests results, please call.

Report Approved By: R. Gerling
ROGER GARLING
LABORATORY SUPERVISOR

TRACKING NO. PAGE NO.
030603R0021

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

Date: *21-Apr-03*

CLIENT: Orange Coast Analytical Inc
Project: Runkle
Sample Delivery Group: C03030603

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by NELAC. Some client specific reporting requirements may not require NELAC reporting protocol.

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

The total number of pages of this report are indicated by the last four digits of the tracking number located in the lower right corner.

Analysis Request and Chain of Custody Record

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

Lab Job No: _____
Page 1 of 2

REQUIRED TAT: Normal

CUSTOMER INFORMATION

Mr. Mark Noorani
Orange Coast Analytical, Inc.
3002 Dow St., Suite 532
Tustin, CA 92780

PROJECT INFORMATION

PROJECT NAME: Rumble Ranch
NUMBER: 402-0002-02
LOCATION: Simi Valley, CA
ADDRESS:
SAMPLED BY: Jennifer Canfield / R. Conejo

ANALYSIS/METHOD REQUEST: Strontium-90

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	REMARKS/PRECAUTIONS
SS-1A	1	3/14/03	9:30	Soil	4oz Jar		X
SS-2A			9:35				
SS-3A			9:40				
SS-4A			9:50				
SS-5A			9:55				
SS-6A			10:00				
SS-7A			10:50				
SS-8A			10:10				
SS-9A			10:15				
SS-10A			10:40				
SS-11A			10:45				
SS-12A			10:50				
SS-13A			9:45				
SS-14A			11:00				

Total No. of Samples: 19 + trip blank

Method of Shipment: Fed Ex

Relinquished By: Jennifer Canfield Date/Time: 3/14/03 4:58p

Relinquished By: M. Von Kanvaly Date/Time: 3-18-03 4:00 pm

Relinquished By: Date/Time:

Received By: Date/Time:

Received By: Date/Time: 3/20/03 1400

Received For Lab By: Guillermo Torres Date/Time: 3/14/03 4:50 pm

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

PAGE NO. 7

Analysis Request and Chain of Custody Record

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

Lab Job No:
Page 2 of 2

REQUIRED TAT: Normal

CUSTOMER INFORMATION

Mr. Mark Noorani
Orange Coast Analytical, Inc.
3002 Dow St., Suite 532
Tustin, CA 92780

PROJECT INFORMATION

PROJECT NAME: Runkle Ranch
NUMBER: 402-0002-02
LOCATION: Simi Valley
ADDRESS:
SAMPLED BY:

ANALYSIS/METHOD REQUEST: Sr-90

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	Sr-90								REMARKS/PRECAUTIONS
SS-15A	1	3/14/03	11:30	Soil	4oz jar		X								
SS-16A	↓	↓	11:40	↓	↓		↓								
SS-17A	↓	↓	11:10	↓	↓		↓								
Duplicate-1	↓	↓	—	↓	↓		↓								
Duplicate-2	↓	↓	—	↓	↓		↓								
Trip Blank	↓	↓	—	aq.	poly		↓								

Total No. of Samples: 20 (19 + 1 trip blank)

Method of Shipment: Fed Ex

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	3/14/03 458p		
[signature]	3-18-03 4:00 pm	[signature]	3/20/03 1400
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 3/14/03 4:58pm

Reporting Format: (check)
NORMAL ______ S.D. HMMD ______
RWQCB ______ OTHER ______

Sample Integrity: (check)
intact ______ on ice ______

TASK NO.
PAGE NO.

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

Lab Job No: 1408-
Page 1 of 1

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY:	Orange Coast Analytical	PROJECT NAME	Whittle Road
SEND REPORT TO:	Mark Noorani	NUMBER	402-0002-02
ADDRESS:	3002 Dow St. #532	LOCATION	
	Tustin, CA 92780	ADDRESS	
PHONE:	7148320064	FAX: 7148320067	SAMPLED BY: JC

ANALYSIS/METHOD REQUEST: Low level Tritium

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	Low level Tritium	REMARKS/PRECAUTIONS
Creek-1	1	3-11-03	0900	W			X	Detection Limit
Creek-2	1	"	0915	"			X	Needs is
Windmill-1	1	"	1020	"			X	4 Tritium units.
Creek-3	1	"	1120	"			X	
Trip Blank	1		—	"			X	
								Please fax results when available

Total No. of Samples: 5

Method of Shipment: Fed Ex

Relinquished By: MA	Date/Time: 3-12-03 3:00 PM	Received By:	Date/Time:	Reporting Format: (check) NORMAL _____ S.D. HMMD _____
Relinquished By:	Date/Time:	Received By:	Date/Time:	RWQCB _____ OTHER _____
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:	Sample Integrity: (check) intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

Lab Job No: ____ Page 1 of ____

REQUIRED TAT: Normal

CUSTOMER INFORMATION

COMPANY: [illegible] Environmental
REPORT TO: [illegible]
ADDRESS: [illegible]
[illegible]

PROJECT INFORMATION

PROJECT NAME: Run [illegible] Ranch
NUMBER: 402-2002-02
LOCATION: Simi Valley, CA
ADDRESS:
SAMPLED BY: Jennifer Canfield / R. Ornija

ANALYSIS/METHOD REQUEST: Tritium, Perchlorate

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	Tritium	Perchlorate	REMARKS/PRECAUTIONS
[illegible]	3	3/11/03	9 am	soil / water	jar / poly		X	X	Analyze soil and water
[illegible]	3		[illegible]	↓			X	X	for perchlorate for
[illegible]			[illegible]	water			✓	✓	these samples
[illegible]			[illegible]	soil / water	↓		✓	✓	Analyze water only
									for tritium.
Trip blank	1	3/11/03	–	aq	poly		X		1 trip blank to each
Trip blank	1	3/11/03	–	aq	poly			X	lab gc 3/11/03

Total No. of Samples: 11 containers

Method of Shipment:

Relinquished By: [signature] Date/Time:

Received By: [signature] Date/Time: 3/13/03 3:00

Relinquished By: Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received For Lab By: Date/Time:

Reporting Format: (check)
NORMAL ____ S.D. HMMD ____
RWQCB ____ OTHER ____

Sample Integrity: (check)
intact ____ on ice ____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 2 of 2

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Miller Brooks Environmental	PROJECT NAME: Runkle Ranch
SEND REPORT TO: Elizabeth Robbins	NUMBER: 402-0002-02
ADDRESS: 2124 Main Street, Ste 200 HB, CA 92648	LOCATION: Simi Valley
	ADDRESS:
PHONE: 7149604088 FAX:	SAMPLED BY:

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: 5r-90	REMARKS/PRECAUTIONS
SS-15A	1	3/14/03	11:30	Soil	4oz jar		X	
SS-16A			11:40					
SS-17A			11:10					
Duplicate-1			—					
Duplicate-2			—					
Trip Blank			—	aq.	poly			

Total No. of Samples: 20 (19 + 1 trip blank)

Method of Shipment:

Relinquished By: Jennifer Carl	Date/Time: 3/14/03 4:58p	Received By: / Date/Time:
Relinquished By:	Date/Time:	Received By: / Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature] / Date/Time: 3/14/03 4:58pm

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 2

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
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(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Miller Brooks Environmental	PROJECT NAME: Rumble Ranch
SEND REPORT TO: Elizabeth Robbins	NUMBER: 402-0002-02
ADDRESS: 2124 Main Street, Ste 200 HB, CA 92648	LOCATION: Simi Valley, CA
	ADDRESS:
PHONE: 7149604088 FAX: 7149602462	SAMPLED BY: Jennifer Canfield / R. Conejo

ANALYSIS/METHOD REQUEST: Strontium-90

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	REMARKS/PRECAUTIONS
SS-1A	1	3/14/03	9:30	Soil	4oz jar		X
SS-2A			9:35				
SS-3A			9:40				
SS-4A			9:50				
SS-5A			9:55				
SS-6A			10:00				
SS-7A			10:55				
SS-8A			10:10				
SS-9A			10:15				
SS-10A			10:40				
SS-11A			10:45				
SS-12A			10:50				
SS-13A			9:45				
SS-14A			11:00				

Total No. of Samples: 19 + trip blank

Method of Shipment:

Relinquished By: Jennifer Canfield Date/Time: 3/14/03 4:58p	Received By: Date/Time:	Reporting Format: (check) NORMAL _____ S.D. HMMD _____
Relinquished By: Date/Time:	Received By: Date/Time:	RWQCB _____ OTHER _____
Relinquished By: Date/Time:	Received For Lab By: Guillermo Lorca Date/Time: 3/14/03 4:50 pm	Sample Integrity: (check) intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 3 of 3

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
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(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY:	Miller Brooks Env.	PROJECT NAME:	Runkle Ranch
SEND REPORT TO:	Elizabeth Robbins	NUMBER:	402-0002-02
ADDRESS:	2124 Main St. Ste 200 HB, CA	LOCATION:	Simi Valley, CA
		ADDRESS:	
PHONE:	714 960-4088	FAX:	714 960 2462
		SAMPLED BY:	Jennifer Canfield / R. Conejo

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: Strontium-90	REMARKS/PRECAUTIONS
Background-3	1	3/14/03	12:00	Soil	4oz jar		X	

Total No. of Samples: 1 / 29 total

Method of Shipment:

Relinquished By: Jennifer Canfield	Date/Time:	Received By:	Date/Time: 7:00 3/13/03
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

Lab Job No: ______
Page 2 of 3

REQUIRED TAT: Normal

CUSTOMER INFORMATION	
COMPANY:	Miller Brooks Environmental
SEND REPORT TO:	Elizabeth Robbins
ADDRESS:	2124 Main St., Ste 200 HB, CA 92648
PHONE:	714 960-4088
FAX:	714 960-2462

PROJECT INFORMATION	
PROJECT NAME:	Runkle Canyon
NUMBER:	402-0002-02
LOCATION:	Simi Valley, CA
ADDRESS:	
SAMPLED BY:	Jennifer Canfield & Richard Griggs

ANALYSIS/METHOD REQUEST

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	Strontium-90 Sr90						REMARKS/PRECAUTIONS
MBE-2-7'	1	3/13/03	3:05	soil	~~4oz jar~~	ring	X						
MBE-12-surface	↓	↓	2:00	↓	4oz jar		↓						
MBE-1-surface			2:10										
MBE-6-surface			3:00										
MBE-3-surface			3:15										
MBE-4-surface			3:30		↓								
MBE-4-3'			3:35		brass ring								
MBE-4-7'			3:40		brass ring								
Duplicate-1			—		~~ring~~								
Duplicate-2	↓	↓	—	↓	jar		↓						
MBE-10-surface	1	3/14/03	11:45		jar		X						
MBE-9-surface	↓	3/14/03	11:50	↓	jar		X						
Background-1	↓	↓	7:55	↓	↓		X						
Background-2	↓	↓	8:00	↓	↓		X						

Total No. of Samples: 14 / 29 total

Method of Shipment:

Relinquished By:	Date/Time:	Received By:	Date/Time:
Jennifer Canfield (signature)		(signature)	3:00 3/13/03
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:

Reporting Format: (check)
NORMAL ______ S.D. HMMD ______
RWQCB ______ OTHER ______

Sample Integrity: (check)
intact ______ on ice ______

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 3

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532
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(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY:	Miller Brooks Environmental	PROJECT NAME:	Runkle Canyon
SEND REPORT TO:	Elizabeth Robbins	NUMBER:	402-0002-02
ADDRESS:	2124 Main Street, Ste 200 Huntington Beach, CA 92648	LOCATION:	Simi Valley, CA
		ADDRESS:	
PHONE:	714 960-4078	FAX: 714 960-2462	SAMPLED BY: Jennifer Canfield/K. Conger

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: Strontium-90	REMARKS/PRECAUTIONS
MBE-7-Surface	1	3/13/03	10:25	Soil	4oz jar		X	
MBE-7-3'			10:40		ring			
MBE-7-7'			10:50		↓			
MBE-8-Surface			12:25		jar			
MBE-8-3'			12:45		ring			
MBE-8-7'			12:55		↓			
MBE-11-Surface			1:35		jar			
MBE-11-3'			1:40		ring			
MBE-11-7'			1:45		↓			
MBE-5-Surface			2:30		jar			
MBE-5-3'			2:33		ring			
MBE-5-7'			2:35		↓			
MBE-2-Surface			2:45		jar			
MBE-2-3'			3:00		ring			

Total No. of Samples: 14/29 total

Method of Shipment:

Relinquished By: Jennifer Canfield	Date/Time:	Received By:	Date/Time: 3:00 3/13/03
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 1

ORANGE COAST ANALYTICAL, INC.

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Normal

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Miller Brooks Environmental	PROJECT NAME: Runkle Ranch
SEND REPORT TO: Elizabeth Robbins	NUMBER: 402-0002-02
ADDRESS: 2124 Main Street, Ste 200 Huntington Beach, CA 92648	LOCATION: Simi Valley, CA
	ADDRESS:
PHONE: 714 960-4088 FAX: 714 960 2462	SAMPLED BY: Jennifer Canfield / R. Conejo

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: Tritium	Perchlorate	REMARKS/PRECAUTIONS
Creek-1	3	3/14/03	9:00	soil / water	jar poly(2)		X	X	Analyze soil and water for perchlorate for creek samples
Creek-2	3	↓	9:15	↓	↓		X	X	
Windmill-1	2	↓	1030	water	↓		X	X	
Creek-3	3	↓	11:20	soil / water	↓		X	X	Analyze water only for tritium.

Total No. of Samples: 11 containers

Method of Shipment:

Relinquished By: Jennifer Canfield Date/Time:

Received By: [signature] Date/Time: 3/13/03 3:00

Relinquished By: Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received For Lab By: Date/Time:

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

UNIVERSITY OF Miami
THE ROSENSTIEL SCHOOL

February 19, 2003

TRITIUM LABORATORY

Data Release #03-009
Job # 1707

ORANGE COAST ANALYTICAL, INC.
TRITIUM SAMPLES

PO No. 13936-40

Dr. James D. Happell
Assistant Research Professor

Distribution:
Orange Coast Analytical, Inc.
Attn: Mark Nooran
3002 Dow, Suite 532
Tustin, CA 92780

Rosenstiel School of Marine and Atmospheric Science
Tritium Laboratory
4600 Rickenbacker Causeway
Miami, FL 33149-1098
Phone: (305) 361-4100
Fax: (305) 361-4112
email: tritium@rsmas.miami.edu

Revised 1 January 2002

GENERAL COMMENTS ON TRITIUM RESULTS

Tritium Scale New Half-life

Tritium concentrations are expressed in TU, where 1 TU indicates a T/H abundance ratio of 10^{-18}. The values refer to the tritium scale recommended by U.S. National Institute of Science and Technology (NIST, formerly NBS), and International Atomic Energy Agency (IAEA). The TU-numbers are based on the NIST tritium water standard #4926E. Age corrections and conversions are made using the recommended half-life of **12.32 years**, i.e., a decay rate of $\lambda = 5.626\%$ year^{-1}. In this scale, 1 TU is equivalent to 7.151 dpm/kg H_2O, or 3.222 pCi/kg H_2O, or 0.1192 Bq/kg H_2O (Bq = disint/sec).

TU values are calculated for date of sample collection, REFDATE in the table, as provided by the submitter. If no such date is available, date of sample arrival at our laboratory is used.

The stated errors, eTU, are one standard deviation (1 sigma) including all conceivable contributions. In the table, QUANT is quantity of sample received, and ELYS is the amount of water taken for electrolytic enrichment. DIR means direct run (no enrichment).

Remark: From 1 Jan 1994 through 31 Dec 2001 we used the previously recommended value for the half-life, 12.43 years. The use of the new number, 12.32 years will in practice increase the reported TU-values by 0.9 %. This is insignificant since our reported values carry 1 sigma uncertainties of 3 % or more.

It is interesting to note that before 1994 we used the older, then recommended value of 12.26 years.

Very low tritium values

In some cases, negative TU values are listed. Such numbers can occur because the net tritium count rate is, in principle the difference between the count rate of the sample and that of a tritium-free sample (background count or blank sample). Given a set of "unknown" samples with no tritium, the distribution of net results should become symmetrical around 0 TU. The negative values are reported as such for the benefit of allowing the user unbiased statistical treatment of sets of the data. For other applications, 0 TU should be used.

Additional information

Refer to Services Rendered (Tritium), Section II.8, in the "Tritium Laboratory Price Schedule; Procedures and Standards; Advice on Sampling", and our Web-site www.rsmas.edu/groups/tritium.

Tritium efficiencies and background values are somewhat different in each of the nine counters and values are corrected for cosmic intensity, gas pressure and other parameters. For tritium, the efficiency is typically 1.00 cpm per 100 TU (direct counting). At 50x enrichment, the efficiency is equivalent to 1.00 cpm per 2.4 TU. The background is typically 0.3 cpm, known to about ± 0.02 cpm. Our reported results include not only the Poisson statistics, but also other experimental uncertainties such as enrichment error, etc.

End

Client: ORANGE COAST ANALYTICAL, INC.
Recvd : 03/01/17
Job# : 1707
Final : 03/02/16

Purchase Order: 13936-40
Contact: Mark Noorani, 714/832-0064
3002 Dow, Suite 532
Tustin, CA 92780 (F)-0067

Cust	LABEL INFO	JOB.SX	REFDATE	QUANT	ELYS	TU	eTU
ORANGE	COAST-HS-25-56' DIR	1707.01	030108	300	DIR	3	2
ORANGE	COAST-HS-26-37' DIR	1707.02	030108	300	DIR	7	2
ORANGE	COAST-HS-29-WATER DIR	1707.03	030109	400	DIR	5	2

UNIVERSITY OF Miami
THE ROSENSTIEL SCHOOL

March 26, 2003

TRITIUM LABORATORY

Data Release #03-022
Job # 1723

ORANGE COAST ANALYTICAL, INC.
TRITIUM SAMPLES

PO No. 12380

Dr. James D. Happell
Assistant Research Professor

Distribution:
Orange Coast Analytical, Inc.
Attn: Mark Noorani
3002 Dow, Suite 532
Tustin, CA 92780

Rosenstiel School of Marine and Atmospheric Science
Tritium Laboratory
4600 Rickenbacker Causeway
Miami, FL 33149-1098
Phone: (305) 361-4100
Fax: (305) 361-4112
email: tritium@rsmas.miami.edu

Revised 1 January 2002

GENERAL COMMENTS ON TRITIUM RESULTS

Tritium Scale New Half-life

Tritium concentrations are expressed in TU, where 1 TU indicates a T/H abundance ratio of 10^{-18}. The values refer to the tritium scale recommended by U.S. National Institute of Science and Technology (NIST, formerly NBS), and International Atomic Energy Agency (IAEA). The TU-numbers are based on the NIST tritium water standard #4926E. Age corrections and conversions are made using the recommended half-life of **12.32 years**, i.e., a decay rate of $\lambda = 5.626\%\ year^{-1}$. In this scale, 1 TU is equivalent to 7.151 dpm/kg H_2O, or 3.222 pCi/kg H_2O, or 0.1192 Bq/kg H_2O (Bq = disint/sec).

TU values are calculated for date of sample collection, REFDATE in the table, as provided by the submitter. If no such date is available, date of sample arrival at our laboratory is used.

The stated errors, eTU, are one standard deviation (1 sigma) including all conceivable contributions. In the table, QUANT is quantity of sample received, and ELYS is the amount of water taken for electrolytic enrichment. DIR means direct run (no enrichment).

Remark: From 1 Jan 1994 through 31 Dec 2001 we used the previously recommended value for the half-life, 12.43 years. The use of the new number, 12.32 years will in practice increase the reported TU-values by 0.9 %. This is insignificant since our reported values carry 1 sigma uncertainties of 3 % or more.

It is interesting to note that before 1994 we used the older, then recommended value of 12.26 years.

Very low tritium values

In some cases, negative TU values are listed. Such numbers can occur because the net tritium count rate is, in principle the difference between the count rate of the sample and that of a tritium-free sample (background count or blank sample). Given a set of "unknown" samples with no tritium, the distribution of net results should become symmetrical around 0 TU. The negative values are reported as such for the benefit of allowing the user unbiased statistical treatment of sets of the data. For other applications, 0 TU should be used.

Additional information

Refer to Services Rendered (Tritium), Section II.8, in the "Tritium Laboratory Price Schedule; Procedures and Standards; Advice on Sampling", and our Web-site www.rsmas.edu/groups/tritium.

Tritium efficiencies and background values are somewhat different in each of the nine counters and values are corrected for cosmic intensity, gas pressure and other parameters. For tritium, the efficiency is typically 1.00 cpm per 100 TU (direct counting). At 50x enrichment, the efficiency is equivalent to 1.00 cpm per 2.4 TU. The background is typically 0.3 cpm, known to about ± 0.02 cpm. Our reported results include not only the Poisson statistics, but also other experimental uncertainties such as enrichment error, etc.

End

Client: ORANGE COAST ANALYTICAL, INC.
Recvd : 03/02/12
Job# : 1723
Final : 03/03/25

Purchase Order:
Contact: Mark Noorani, 714/832-0064,-0067(F)
3002 Dow, Suite 532
Tustin, CA 92780

Cust	LABEL INFO	JOB.SX	REFDATE	QUANT	ELYS	TU		eTU
ORANGE COAST-	WELL 1	1723.01	030205	500	DIR	4	*	2

* Average of duplicate runs

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THE ROSENSTIEL SCHOOL

May 7, 2003

TRITIUM LABORATORY

Data Release #03-033
Job # 1723

ORANGE COAST ANALYTICAL, INC.
TRITIUM SAMPLES

PO No. 12380

Dr. James D. Happell
Assistant Research Professor

Distribution:
Orange Coast Analytical, Inc.
Attn: Mark Nooran
3002 Dow, Suite 532
Tustin, CA 92780

Rosenstiel School of Marine and Atmospheric Science
Tritium Laboratory
4600 Rickenbacker Causeway
Miami, FL 33149-1098
Phone: (305) 361-4100
Fax: (305) 361-4112
email: tritium@rsmas.miami.edu

Revised 1 January 2002

GENERAL COMMENTS ON TRITIUM RESULTS

Tritium Scale New Half-life

Tritium concentrations are expressed in TU, where 1 TU indicates a T/H abundance ratio of 10^{-18}. The values refer to the tritium scale recommended by U.S. National Institute of Science and Technology (NIST, formerly NBS), and International Atomic Energy Agency (IAEA). The TU-numbers are based on the NIST tritium water standard #4926E. Age corrections and conversions are made using the recommended half-life of **12.32 years**, i.e., a decay rate of $\lambda = 5.626\%\ \text{year}^{-1}$. In this scale, 1 TU is equivalent to 7.151 dpm/kg H_2O, or 3.222 pCi/kg H_2O, or 0.1192 Bq/kg H_2O (Bq = disint/sec).

TU values are calculated for date of sample collection, REFDATE in the table, as provided by the submitter. If no such date is available, date of sample arrival at our laboratory is used.

The stated errors, eTU, are one standard deviation (1 sigma) including all conceivable contributions. In the table, QUANT is quantity of sample received, and ELYS is the amount of water taken for electrolytic enrichment. DIR means direct run (no enrichment).

Remark: From 1 Jan 1994 through 31 Dec 2001 we used the previously recommended value for the half-life, 12.43 years. The use of the new number, 12.32 years will in practice increase the reported TU-values by 0.9 %. This is insignificant since our reported values carry 1 sigma uncertainties of 3 % or more.

It is interesting to note that before 1994 we used the older, then recommended value of 12.26 years.

Very low tritium values

In some cases, negative TU values are listed. Such numbers can occur because the net tritium count rate is, in principle the difference between the count rate of the sample and that of a tritium-free sample (background count or blank sample). Given a set of "unknown" samples with no tritium, the distribution of net results should become symmetrical around 0 TU. The negative values are reported as such for the benefit of allowing the user unbiased statistical treatment of sets of the data. For other applications, 0 TU should be used.

Additional information

Refer to Services Rendered (Tritium), Section II.8, in the "Tritium Laboratory Price Schedule; Procedures and Standards; Advice on Sampling", and our Web-site www.rsmas.edu/groups/tritium.

Tritium efficiencies and background values are somewhat different in each of the nine counters and values are corrected for cosmic intensity, gas pressure and other parameters. For tritium, the efficiency is typically 1.00 cpm per 100 TU (direct counting). At 50x enrichment, the efficiency is equivalent to 1.00 cpm per 2.4 TU. The background is typically 0.3 cpm, known to about ± 0.02 cpm. Our reported results include not only the Poisson statistics, but also other experimental uncertainties such as enrichment error, etc.

End

Client: ORANGE COAST ANALYTICAL, INC.
Recvd : 03/03/21
Job# : 1736
Final : 03/05/06

Purchase Order: 402-002-02
Contact: Mark Noorani 714/832-0064,-0067(F)
3002 Dow, Suite 532
Tustin, CA 92780

Cust	LABEL INFO	JOB.SX	REFDATE	QUANT	ELYS	TU		eTU
ORANGE COAST-	CREEK-1 DIRECT	1736.01	030314	500	DIR	1	*	3
ORANGE COAST-	CREEK-2 DIRECT	1736.02	030314	500	DIR	-1	*	3
ORANGE COAST-	WINDMILL-1 DIRECT	1736.03	030314	500	DIR	-1	*	3
ORANGE COAST-	CREEK-3 DIRECT	1736.04	030314	500	DIR	2	*	3
ORANGE COAST-	TRIP BLANK DIRECT	1736.05	030314	500	DIR	5	*	2

* Average of duplicate runs

UNIVERSITY OF Miami
THE ROSENSTIEL SCHOOL

June 20, 2003

TRITIUM LABORATORY

Data Release #03-048
Job # 1755

ORANGE COAST ANALYTICAL, INC.
TRITIUM SAMPLES

PO No. 14168

Dr. James D. Happell
Assistant Research Professor

Distribution:
Orange Coast Analytical, Inc.
Attn: Mark Nooran
3002 Dow, Suite 532
Tustin, CA 92780

Rosenstiel School of Marine and Atmospheric Science
Tritium Laboratory
4600 Rickenbacker Causeway
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Phone: (305) 361-4100
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Revised 1 January 2002

GENERAL COMMENTS ON TRITIUM RESULTS

Tritium Scale New Half-life

Tritium concentrations are expressed in TU, where 1 TU indicates a T/H abundance ratio of 10^{-18}. The values refer to the tritium scale recommended by U.S. National Institute of Science and Technology (NIST, formerly NBS), and International Atomic Energy Agency (IAEA). The TU-numbers are based on the NIST tritium water standard #4926E. Age corrections and conversions are made using the recommended half-life of **12.32 years**, i.e., a decay rate of $\lambda = 5.626\%\ year^{-1}$. In this scale, 1 TU is equivalent to 7.151 dpm/kg H_2O, or 3.222 pCi/kg H_2O, or 0.1192 Bq/kg H_2O (Bq = disint/sec).

TU values are calculated for date of sample collection, REFDATE in the table, as provided by the submitter. If no such date is available, date of sample arrival at our laboratory is used.

The stated errors, eTU, are one standard deviation (1 sigma) including all conceivable contributions. In the table, QUANT is quantity of sample received, and ELYS is the amount of water taken for electrolytic enrichment. DIR means direct run (no enrichment).

Remark: From 1 Jan 1994 through 31 Dec 2001 we used the previously recommended value for the half-life, 12.43 years. The use of the new number, 12.32 years will in practice increase the reported TU-values by 0.9 %. This is insignificant since our reported values carry 1 sigma uncertainties of 3 % or more.

It is interesting to note that before 1994 we used the older, then recommended value of 12.26 years.

Very low tritium values

In some cases, negative TU values are listed. Such numbers can occur because the net tritium count rate is, in principle the difference between the count rate of the sample and that of a tritium-free sample (background count or blank sample). Given a set of "unknown" samples with no tritium, the distribution of net results should become symmetrical around 0 TU. The negative values are reported as such for the benefit of allowing the user unbiased statistical treatment of sets of the data. For other applications, 0 TU should be used.

Additional information

Refer to Services Rendered (Tritium), Section II.8, in the "Tritium Laboratory Price Schedule; Procedures and Standards; Advice on Sampling", and our Web-site www.rsmas.edu/groups/tritium.

Tritium efficiencies and background values are somewhat different in each of the nine counters and values are corrected for cosmic intensity, gas pressure and other parameters. For tritium, the efficiency is typically 1.00 cpm per 100 TU (direct counting). At 50x enrichment, the efficiency is equivalent to 1.00 cpm per 2.4 TU. The background is typically 0.3 cpm, known to about ± 0.02 cpm. Our reported results include not only the Poisson statistics, but also other experimental uncertainties such as enrichment error, etc.

End

Client: ORANGE COAST ANALYTICAL, INC.
Recvd : 03/05/08
Job# : 1755
Final : 03/06/19

Purchase Order: 402-002-02
Contact: Mark Noorani 714/832-0064,-0067(F)
3002 Dow, Suite 532
Tustin, CA 92780

Cust	LABEL INFO		JOB.SX	REFDATE	QUANT	ELYS	TU	eTU
ORANGE COAST-	SPRING 1	DIR	1755.01	030501	1000	DIR	4	2
ORANGE COAST-	SPRING 2	DIR	1755.02	030501	1000	DIR	1	2
ORANGE COAST-	SPRING 3	DIR	1755.03	030501	1000	DIR	2	2
ORANGE COAST-	TRIP BLK	DIR	1755.04	030501	1000	DIR	4	3

APPENDIX C

8.0 DETERMINATION OF NATURAL TRITIUM

To further investigate the levels of tritium present in natural water in the local area, to permit some judgment as to what is "natural" and what is "artificial" tritium, the results identified by consideration of the previous plot as "natural" are displayed in Figure 8–1, as a cumulative probability plot. In this plot, an estimated Gaussian distribution, determined by a least-squares fit to the data, is shown by the diagonal straight line passing through the points. If the points were perfectly selected from a Gaussian distribution, the points would all be exactly on the line. The observed agreement is quite good.

This natural or background tritium set consists of the following samples and results (in pCi/L ± 2-sigma):

1. 17th and G Streets surface drainage	42.9 ± 9.07
2. Chatsworth swimming pool	36.7 ± 9.50
3. Tap water from LADWP, Chatsworth	35.8 ± 8.54
4. R–2A pond (9/18/89)	34.0 ± 8.40
5. Bell Creek (9/18/89)	30.0 ± 8.12
6. Tap water from LADWP, Canoga Park	29.7 ± 10.1
7. ETEC Power Pak cooling tower water	28.8 ± 8.51
8. Arrowhead bottled drinking water	26.1 ± 7.69
9. R–2A pond (6/21/90)	20.8 ± 8.99
10. SRE pond (9/17/89)	20.1 ± 7.42
11. SRE pond (6/28/90)	19.1 ± 8.77
12. RMDF pond	17.0 ± 7.30
13. Ventura County Waterworks, Moorpark	16.6 ± 8.52
14. Rainfall (9/17/89)	15.8 ± 7.14
15. Canadian Glacier bottled drinking water	15.4 ± 8.31
16. WS–5 (depth to water 405 ft)	12.7 ± 8.37
17. RD–18 (depth to water 84 ft)	11.3 ± 8.08
18. RD—7 (depth to water 70 ft)	10.0 ± 7.96
19. Dead Water (UST)	8.86 ± 7.97
20. RD–25 (depth to water 50 ft)	8.73 ± 7.88

21. R-1 pond	7.55 ± 7.95
22. RD-21 (depth to water 105 ft)	5.84 ± 7.72
23. Dead Water (UST)	4.34 ± 3.27
24. Dead Water (UST)	3.33 ± 3.13
25. RD-25 (depth to water 50 ft)	3.24 ± 6.93
26. Dead Water (UST)	1.99 ± 3.15
27. Dead Water (UST)	1.50 ± 7.78
28. Dead Water (UST)	0.53 ± 3.03
29. RD-22 (depth to water 303 ft)	-0.58 ± 7.37
30. Golden Wilderness bottled drinking water	-3.07 ± 7.32

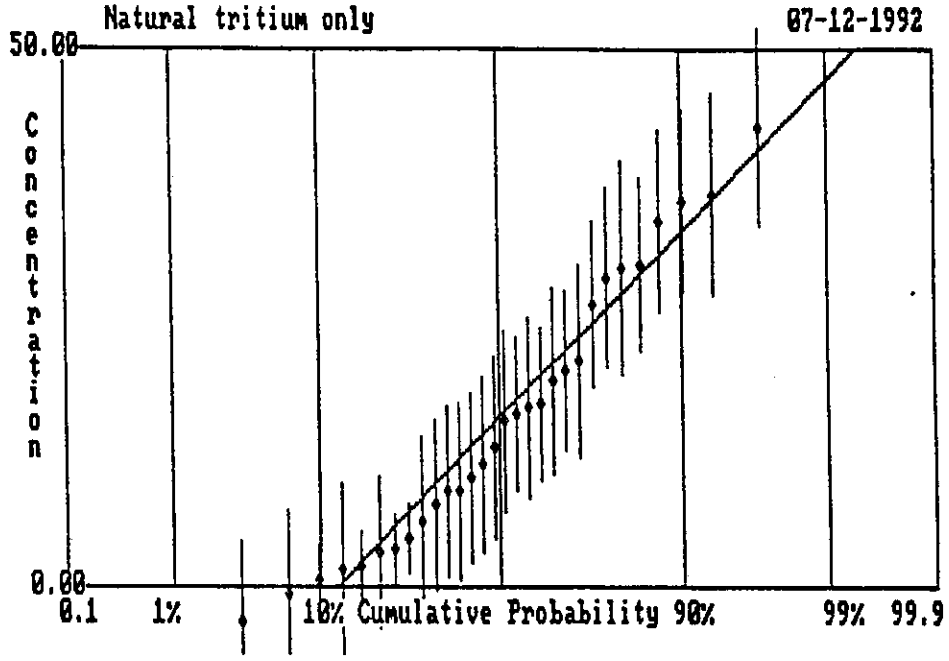

Figure 8-1. Cumulative Probability Plot of Results of Tritium-in-Water Analyses by U.S. Testing, Using Electrolytic Enrichment, for "Natural" Water Samples. The Straight Line Through Most of the Data Points Represents an Approximate Gaussian Distribution