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 SOUTHERN 715-ACRE PARCEL

Dear Mr. Ehrlich:

Miller Brooks Environmental, Inc. (Miller Brooks) is pleased to submit this report documenting the site investigation activities conducted on the southern 715-acre portion (Site) of the 1,615-acre Runkle Canyon Property (Property) in Ventura County, California (see Figure 1). The site investigation activities were conducted at the request of GreenPark Runkle Canyon, LLC (GreenPark). The purpose of these activities was to identify recognized environmental conditions on the Property with a particular emphasis on strontium-90 and tritium. The investigation included surface soil and water sampling, the drilling and sampling of soil borings, and groundwater sampling on the Runkle Canyon Property. This report presents the results of sampling and analysis performed on the southern 715-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 cycle. 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

No detectable concentrations of strontium-90 were found in surface soil and shallow soil samples at the Site, or in the offsite background samples. Based on the results of this and previous investigations, strontium-90 poses no residential health risk at the Site.

Two water samples were collected at the Site and analyzed for tritium. Concentrations of tritium detected in water at the Site are below the EPA standard for drinking water and are within normal background concentrations. The levels of tritium detected in water at the Site are most likely associated with recent recharge of groundwater from rainfall.

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 southern 715 acres of the Property. The Site is identified by the Ventura County's Assessors office as Parcel Number 685-130-180. There is no known street address for the subject Site. The southern 715-acre portion of the Property consists of hilltop plateau that is currently used for cattle grazing. A former quarry was located at the northern boundary of the Site. The Property and Site locations are shown on Figure 1.

4.0 ENVIRONMENTAL SETTING

The Site is located on the United States Geological Survey (USGS) Topographic Maps (7.5-minute series) for the Calabasas Quadrangle dated 1952 and photorevised in 1967. The Runkle Canyon Property is located in the Simi Hills at the southern end of the Simi Valley. Site elevations range from approximately 1,300 feet to 2,160 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 during 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 north of the subject Property.

There are two distinct groundwater systems in the vicinity of the Site. 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 northeastern 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 Runkle Ranch Property (Environmental Data Resources, 2000).

5.0 PREVIOUS ASSESMENTS

A limited surface soil survey was conducted at the Site and adjacent Property to the north (550-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 and adjacent Property through surface water run-off. Based on the 1995 EPA update *The US EPA Announces Results of Rocketdyne's Off-Site Sampling Program for the Santa Susana Field Laboratory*, which identified the radionuclide constituents of concern at the SSFL facility, QST collected four soil samples at three locations that were analyzed for cesium-137, strontium-90 and tritium. One of the locations, located on the subject Site, was within a natural drainage channel flowing from the locale of the SSFL facility toward the northeastern portion of the Site. Two samples were collected at this location, one at the surface, and one at 1-foot bgs. 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 cesium-137 and strontium-90 exceeding background levels as reported by the EPA. Tritium was detected in the samples at concentrations below the EPA background levels. Based on these results, QST recommended that a more extensive site investigation be conducted (QST, 1999).

In response to this recommendation, in September 2000, Harding ESE conducted surface soil sampling for radionuclide impact on the Property. Following on the assumptions made by QST in 1999, the laboratory analyses were limited to strontium-90, cesium-137, and tritium. Sample locations were selected based on presumed transport and distribution of constituents from the SSFL site, and included onsite drainage features, access road drainage ditches, and low lying areas. Fourteen samples were collected on the 715-acre southern parcel, two samples were collected on the 350-acre western parcel, and one sample was collected approximately 100 feet east of the 550-acre northern parcel of the Property (Figure 2; Harding ESE, 2000).

Results of the soil sampling indicated that all concentrations of tritium were below the minimum detectable activity (MDA). In addition, all concentrations of cesium-137, with the exception of Sample SS-1, were below the MDA. Cesium-137 was detected at a concentration of 0.09 pCi/g in Sample SS-1, which exceeded the MDA of 0.077 pCi/g. Strontium-90 was detected in Samples SS-3 and SS-5 through SS-8 at concentrations that exceeded the MDA for each sample. These samples were collected along the northern and eastern boundaries of the Site (Harding ESE, 2000). These results were then compared to concentrations calculated by Foster Wheeler during a 1999 investigation, which included a statistical evaluation using the Multi Agency Radiation Survey and Site Investigation Manual (MARSSIM) protocol (Foster Wheeler, 1999). Based on the results of an additional statistical evaluation using the MARSSIM protocol, the cesium-137 concentrations were found not to exceed exposure limit considered to be protective of human health (2.87 pCi/g). Strontium-90 results showed four samples exceeding the exposure limit considered to be protective of human health (1.23 pCi/g). Harding ESE recommended further investigation and analysis on the Property to conclusively determine if the Property is contaminated with strontium-90 (Foster Wheeler, 1999 and Harding ESE, 2000).

Based on an additional statistical analysis of the 17 samples (Samples SS-1 through SS-17; Figure 2) and two duplicate samples (Samples SS-18 and SS-19) collected on the Site, the average strontium-90 concentration was calculated at 0.88 pCi/g, and the 95 percent upper confidence limit of the mean was calculated at 1.4 pCi/g (Table 1). Therefore, on average, the strontium-90 concentrations detected in soil are lower than the acceptable standard for strontium-90 calculated by Foster Wheeler (1.23 pCi/g). Although, the 95 percent upper confidence limit is higher than the 1.23 pCi/g, the difference is not statistically significant. The incremental cancer risk associated with a strontium-90 concentration of 1.4 pCi/g is 0.55 in a million, which is lower than the incremental cancer risk of 1 in a million that is considered acceptable by California health and environmental protection regulatory agencies (Robles, 2003 and Foster Wheeler, 1999).

In response to that recommendation, in September 2000, Miller Brooks conducted a Phase I site assessment of the Site, which also included the collection of surface soil samples and a limited radiation survey. The Site was not listed on any of the government databases searched during the Phase I site assessment. During site reconnaissance activities, a pole with three transformers was observed on the northern portion of the Site. One soil sample was collected at the base of pole-mounted transformers to evaluate whether the soil contained polychlorinated biphenyls (PCBs). In addition, four surface soil samples were collected along the eastern Site boundary and on the Site near the entrance of the SSFL facility. None of the soil samples contained detectable concentrations of PCBs (Miller Brooks, 2000). The transformers were subsequently removed from the Site in 2002 (Miller Brooks, 2003).

Toluene and m,p-xylenes were detected in one sample collected at the eastern Site boundary at concentrations below the respective Residential Preliminary Remediation Goals (PRGs). No other

volatile organic compounds (VOCs) and no semi-volatile organic compounds (SVOCs) were detected in the sample(s) analyzed. No concentrations of metals exceeding the respective PRGs, total threshold limit concentration (TTLC) or ten times the soluble threshold limit concentration (STLC) were detected in the one onsite sample analyzed for metals. Three samples collected on the eastern Property boundary and on the adjacent Property to the east contained concentrations of dioxin isomers. The results were used to calculate the tetrachlorodibenzo-p-dioxin (TCDD) equivalent concentration and compared to the PRG for TCDD. The TCDD-equivalent results for the dioxin isomers were below the PRG for residential soil for TCDD (Miller Brooks, 2000).

The radiation survey was conducted at nine locations onsite and two locations adjacent to the Site to the east. The data were submitted for review and comment to Mr. Joseph M. Takahashi, a Certified Health Physicist and the then Acting Radiation Safety Officer at the University of California Los Angeles Radiation Safety Division. Mr. Takahashi considered the readings measured at the survey locations to be within normal background levels (Miller Brooks, 2000).

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 are present in soil and concentrations of tritium are present in surface and groundwater at the Site. The assessment activities 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 11 water samples. Activities performed on the subject Site are 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 one soil boring (MBE-11; Figure 2) to a depth of 7 feet bgs on the southern 715-acre parcel of the Property. The boring was drilled using a hollow-stem auger drill rig with a split-spoon sampler. During drilling, soil samples were collected in the boring at the surface, 3 feet bgs, and 7 feet bgs for laboratory analysis. Miller Brooks personnel used a photoionization detector (PID) to monitor the soil for VOCs. A description of general field procedures utilized, and a copy of the soil boring log are included in Appendix A.

On March 13 and 14, 2003, Miller Brooks collected 13 soil samples (SS-1A through SS-13A) from the surface of the Site. In addition, three offsite samples (Background-1 through Background-3) were collected as a baseline with which to compare results of the onsite samples. 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 2 and copies of the laboratory reports and chain of custody documents are included in Appendix B.

Collection of Water Samples

On March 14, 2003, one water sample (Windmill-1) was collected from an aboveground tank, which stored groundwater pumped from a windmill located at the southern edge of the Site. In addition, on May 1, 2003, a surface water sample (Spring-1) was collected from a spring at the Site (Figure 2). The water samples were analyzed for tritium using Low Level Beta Counting by Gas Proportional Counters. Results of the laboratory analysis of water samples are presented in Table 3 and copies of the laboratory reports and chain of custody documents are included in Appendix B.

7.0 FINDINGS

Soil observed during this investigation is generally described as brown silty sand to a depth of 7 feet bgs (maximum depth of investigation). Groundwater was not encountered in the boring (MBE-11) during the investigation.

Laboratory analysis of soil samples collected during this investigation revealed the following:

- Strontium-90 was not detected in any of the samples collected on the southern 715-acre parcel. In addition, no concentrations of strontium-90 were detected in the offsite background samples.

- Tritium was detected in the water samples Windmill-1 and Spring-1 at concentrations of -1 tritium units TU and 4 TU, respectively. These levels are at concentrations well below regulatory limits and within normal background levels. The EPA's existing standard for tritium in drinking water is 6,000 TU (20,000 pCi/L; Tuttle, 1992).

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

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). During this investigation, no concentrations of strontium-90 were detected in soil samples collected at the Site, or in the background samples collected offsite.

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 well below regulatory limits and are within normal background levels.

9.0 CONCLUSIONS

No detectable concentrations of strontium-90 were found in surface soil and shallow soil samples at the Site, or in the background samples. Based on the results of this and previous investigations, strontium-90 poses no residential health risk at the Site.

Two water samples were collected at the Site and analyzed for tritium. Concentrations of tritium detected in water at the Site are below EPA standard for drinking water and are within normal background concentrations. The levels of tritium detected in water at the Site are most likely associated with recent recharge of groundwater from rainfall.

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

REGISTERED GEOLOGIST * E. A. ROBBINS * No. 4874 Exp. 02/04 * STATE OF CALIFORNIA

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

01-402-0002-02

11.0 REFERENCES

Argonne National Laboratory, 2001, Human Health Fact Sheet, Strontium and Tritium, www.ead.anl.gov/pub/doc, October.

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Hendry, M. J., 1988, "Do Isotopes Have a Place in Groundwater Studies?" in GROUND WATER, Journal of the Association of Ground Water Scientists and Engineers, National Ground Water Association, Vol. 26, No. 4, p. 410-415.

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Robles, Heriberto, Ph.D, 2003, Personnel communication to Elizabeth Robbins and Jennifer Canfield, Miller Brooks Environmental, Inc., August and September.

Tuttle, R. J., 1992, Tritium Production and Release to Groundwater at SSFL, Safety Review Report, December 1.

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The following documents were reviewed to evaluate the sampling and analysis protocol utilized by Miller Brooks in the investigation and reporting activities on the Runkle Canyon Property:

Agency for Toxic Substance and Disease Registry (ATSDR), 1999, SSFL – Draft Preliminary Site Evaluation, December 1.

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Olson, P., Shepard, K., and Adler, K., 1987, CERCLA Program Phase II – Site Characterization, May 29.

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TABLES

Table 1. Estimation of Lifetime Cancer Risks from Exposure to Strontium-90 Using Harding-ESE Data

Parameter Symbol	*Parameter Definition*	*Units*	*Strontium-90-D*
Co	95% UCL Strontium concentration in soil	pCi/g	1.40E+00
	Default ambient dust concentration	mg/m^3	5.00E-02
Ca	Element concentration in indoor air	pCi/m^3	7.00E-05
Ei	Total lifetime exposure factor, inhalation	m^3	2.09E+05
ETi	Total lifetime exposure by inhalation	pCi	1.46E+01
SFi	Slope factor, Inhalation	risk/pCi	1.13E-10
	Incremental Cancer Risk from Inhalation	**Risk**	**1.65E-09**
Co	95% UCL Strontium concentration in soil	pCi/g	1.40E+00
Eo	Total lifetime exposure factor, ingestion	g	1.05E+03
ETo	Total intake by ingestion	pCi	1.47E+03
SFo	Slope factor, Ingestion	risk/pCi	1.44E-10
	Incremental Cancer Risk from Oral Ingestion	**Risk**	**2.12E-07**
Co	95% UCL Strontium concentration in soil	pCi/g	1.40E+00
Ee	Total lifetime exposure factor, external	years	2.40E+01
ETe	Total lifetime exposure external	yr/pCi/g	1.71E+01
SFe	Slope factor, External	risk/year/pCi/g	1.96E-08
	Incremental Cancer Risk from External Exposure	**Risk**	**3.36E-07**
	TOTAL INCREMENTAL CANCER RISK		**5.49E-07**

TABLE 2
RESULTS OF STRONTIUM ANALYSIS FOR SOIL SAMPLES
Southern 715-acre Parcel
Runkle Canyon Property
Simi Valley, California

Sample ID	Date	Sample Depth (in feet)	pCi/g-dry
MBE-11-Surface	3/13/03	surface	ND<2.40
MBE-11-3' **	3/13/03	3	ND<2.40
MBE-11-7'	3/13/03	7	ND<2.40
Duplicate 1 **	3/13/03	3	ND<2.00
SS-1A	3/14/03	surface	ND<2.20
SS-2A	3/14/03	surface	ND<2.20
SS-3A	3/14/03	surface	ND<2.20
SS-4A	3/14/03	surface	ND<2.20
SS-5A	3/14/03	surface	ND<2.20
SS-6A	3/14/03	surface	ND<2.20
SS-7A	3/14/03	surface	ND<2.20
SS-8A	3/14/03	surface	ND<2.20
SS-9A	3/14/03	surface	ND<2.20
SS-10A	3/14/03	surface	ND<2.20
SS-11A	3/14/03	surface	ND<2.20
SS-12A	3/14/03	surface	ND<2.20
SS-13A	3/14/03	surface	ND<2.20
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
pCi/g = pico curie per liter

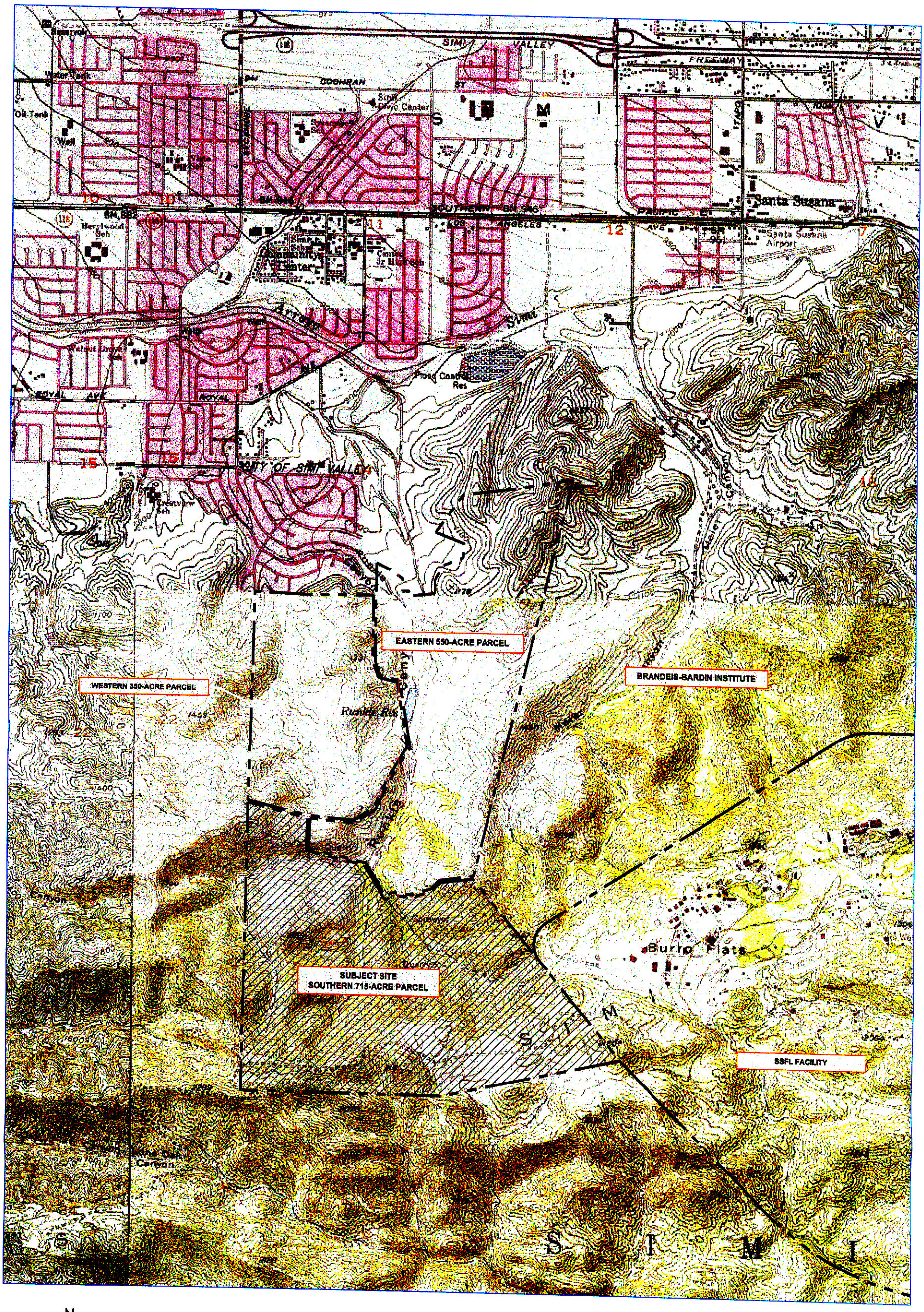
Table 3
RESULTS OF TRITIUM ANALYSIS FOR WATER SAMPLES
Southern 715-acre Parcel
Runkle Canyon Property
Simi Valley, California

Sample ID	Date	Result (in TU)
Spring - 1	5/1/03	4
Windmill-1 Water	3/14/03	-1
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

FIGURES



N
W E
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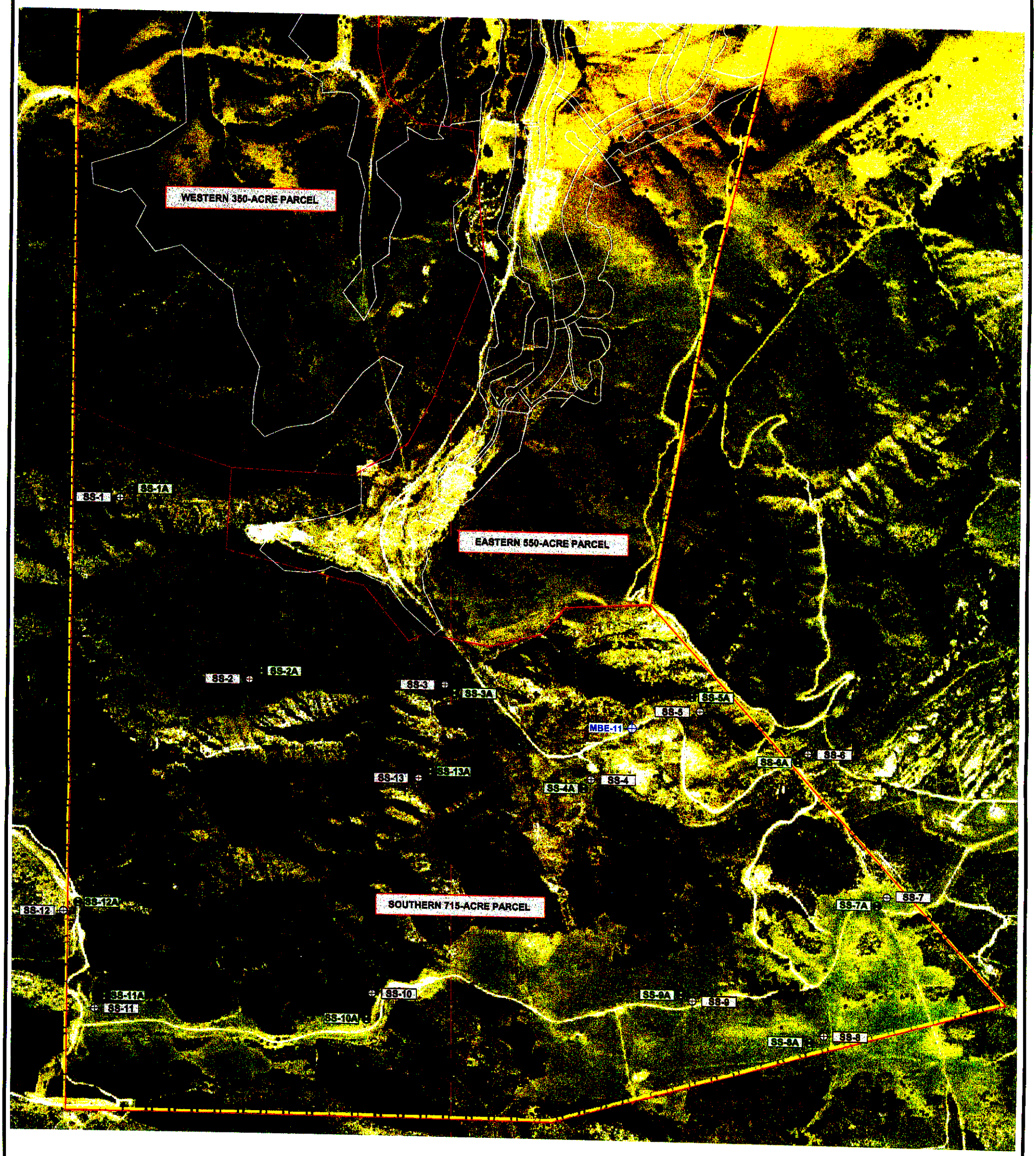
0 2000 Feet
SCALE

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 [FIB]	DATE PLOTTED: 08/28/03

tb-b2.dwg-09/21/00



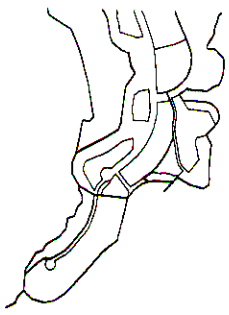
LEGEND

MBE-11 — SOIL BORING LOCATION (INCLUDES SURFACE SAMPLE)

SS-11 — SURFACE SOIL SAMPLE LOCATION (HARDING ESE, 2000)

SS-11A — SURFACE SOIL SAMPLE LOCATION (MILLER BROOKS, 2003)

PARCEL BOUNDARY



PROPOSED DEVELOPMENT

PROPERTY BOUNDARY

N
W E
S

0 900 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

SOUTHERN 715-ACRE PARCEL
RUNKLE CANYON PROPERTY
SIMI VALLEY, CA.

FILE: K:\DWGS\RUNKLE CANYON\SAR\SURFACE 0613 [B-F4]
DATE PLOTTED: 06/05/03

FIGURE
2

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.

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	88	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-11-Surface	NA	0.2		SM	SILTY SAND: brown (7.5Y 4/4), dry, dense, fine-grained, poorly graded.
		MBE-11-3'	NA	0.0			Trace medium- to coarse-grained.
5		MBE-11-7'	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-11

PROJECT NUMBER 01-402-0002-02

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

APPENDIX B

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.

Suite 532

Tustin, CA 92680

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
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

rder #: 419242 **Client Sample ID:** Creek - 1 Water
atrix: WATER
ıte Sampled: 03/14/2003
me Sampled: 09:00

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

rder #: 419243 **Client Sample ID:** Creek - 2 Water
atrix: WATER
ıte Sampled: 03/14/2003
me Sampled: 09:15

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

rder #: 419244 **Client Sample ID:** Windmill - 1 Water
atrix: WATER
ate Sampled: 03/14/2003
ime Sampled: 10:30

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

rder #: 419245 **Client Sample ID:** Creek - 3 Water
atrix: WATER
ate Sampled: 03/14/2003
ime Sampled: 11:20

Analyte	Result	DLR	Units	Date/Analyst
4 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

der #: 419246 **Client Sample ID:** Trip Blank
trix: WATER
e Sampled: 03/14/2003

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

der #: 419247 **Client Sample ID:** Creek - 1 Soil
trix: SOLID

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

der #: 419248 **Client Sample ID:** Creek - 2 Soil
trix: SOLID

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

der #: 419249 **Client Sample ID:** Creek - 3 Soil
trix: SOLID

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

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

der #: 419250 **Client Sample ID:** Laboratory Method Blank-W
trix: WATER

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

der #: 419251 **Client Sample ID:** Laboratory Method Blank-S
trix: SOLID

Analyte	Result	DLR	Units	Date/Analyst	
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

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

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

Lab ID: C03030603-001
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.

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LABORATORY ANALYTICAL REPORT

Client: Orange Coast Analytical Inc
Project: Runkle

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

Lab ID: C03030603-005
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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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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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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030603R0006

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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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030603R0007

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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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030603R0011

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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.

TRACKING NO. PAGE NO.
030603R0013

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 _____ 3/20/03 Reviewed by _____

Signature / Date — 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 _____

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030603R0019

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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

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030603R0020

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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: 

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030603R0021

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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.

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

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, 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.	Strontium-90	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 jc					
SS-5A			9:55 jc					
SS-6A			10:00					
SS-7A			10:05 jc					
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:	Date/Time:	Received By:	Date/Time:
Jennifer Canfield	3/14/03 4:50p		
Ron Von Karvaly	3-18-03 4:00pm	[signature]	3/20/03 1400
		Received For Lab By: Guillermo Torres	3/14/03 4:50pm

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.

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

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	4 oz 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: Jennifer Carfagno Date/Time: 3/14/03 4:58p

Received By: Date/Time:

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

Relinquished By: Date/Time: 3-18-03 4:00 pm

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

Relinquished By: Date/Time:

Received For Lab By: Date/Time: 3/14/03 4:58pm

Sample Integrity: (check)
intact _____ on ice _____

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.

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	Ruckle Road
SEND REPORT TO:	Mark Noorani	NUMBER	402-0002-02
ADDRESS:	3002 Dow St. #532	LOCATION	
	Tustin, CA 92780	ADDRESS	
PHONE	714 832 0064 FAX 714 832 0067	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	900	W			X								Detection Limit
Creek-2	1	↓	915				X								needed 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:	Date/Time:	Received By:	Date/Time:
M. Noorani (signature)	3-12-03 3:00 pm		
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 ______

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

COMPANY: [illegible]
CONTACT: [illegible]
ADDRESS: [illegible]

PROJECT INFORMATION

PROJECT NAME: Kinder Morgan
NUMBER: 122-0032-02
LOCATION: Simi Valley, CA
ADDRESS:

SAMPLED BY: [illegible]

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: Tritium	ANALYSIS/METHOD REQUEST: Perchlorate	REMARKS/PRECAUTIONS
[illegible]	3	3/11/03	9 am	soil/water	poly/jar		X	X	Analyze soil and water for perchlorate for all samples. Analyze water only for tritium. 1 trip blank to each lab per 3/14/03.
[illegible]	3		9:15	↓	↓		X	X	
[illegible]	[illegible]		[illegible]	water			✓	✓	
[illegible]	[illegible]		[illegible]	soil/water	↓		✓	-	
Trip blank	1	3/11/03	-	aq	poly		X		
Trip blank	1	3/11/03	-	aq	poly			X	

Total No. of Samples: [illegible]

Relinquished By: [illegible] Date/Time:

Relinquished By: Date/Time:

Relinquished By: Date/Time:

Method of Shipment:

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

Received By: Date/Time:

Received For Lab By: Date/Time:

Reporting Format: (check)

NORMAL _____ S.D. HMMD _____

RWQCB _____ OTHER _____

Sample Integrity: (check)

intact _____ on ice _____

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:

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	4 oz 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 Carey	Date/Time: 3/14/03 458p	Received By: / Date/Time:
Relinquished By:	Date/Time:	Received By: / Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: / 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 Report

Lab Job No: _____
Page 1 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: Rancho Ranch
SEND REPORT TO: Elizabeth Robbins	NUMBER: 402-0002-02
ADDRESS: 2124 Main Street, Ste 200	LOCATION: Simi Valley, CA
HB, CA 92648	ADDRESS:
PHONE: 7149604088 FAX: 7149602462	SAMPLED BY: Jennifer Canfield / R. Conejo

ANALYSIS/METHOD REQUEST: Stoichum-90

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	Stoichum-90	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			10:05					
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 _____
RWQCB _____ OTHER _____

Relinquished By: Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received For Lab By: Guillermo Lorres Date/Time: 3/14/03 4:50 PM

Sample Integrity: (check)
intact _____ on ice _____

ORANGE COAST ANALYTICAL, INC.

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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 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

ANALYSIS/METHOD REQUEST: Strontium-90

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	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:	Date/Time:	Received By:	Date/Time:
Jennifer Canfield		[signature]	3/13/03 7:00
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 ______

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.:

REQUIRED TAT: Normal

Analysis Request and Chain of Custody

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Miller Brooks Environmental	PROJECT NAME: Runkle Canyon
SEND REPORT TO: Elizabeth Robbins	NUMBER: 402-0002-02
ADDRESS: 2124 Main St., Ste 200 HB, CA 92648	LOCATION: Simi Valley, CA
	ADDRESS:
PHONE: 714960-4088 FAX: 714960-2462	SAMPLED BY: Jennifer Canfield & Richard Griggs

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS/METHOD REQUEST: Chromium-9D 5590	REMARKS/PRECAUTIONS
MBE-2-7'	1	3/12/03	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: 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 _____

ORANGE COAST ANALYTICAL, INC.
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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

Lab Job No: _____ Page 1 of 3

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	LOCATION:	Simi Valley, CA
	Huntington Beach, CA 92648	ADDRESS:	
PHONE:	714 960-4088	FAX: 714 960-2462	SAMPLED BY: Jennifer Canfield/K. Cornejo

ANALYSIS/METHOD REQUEST: Strontium - 90

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	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		rings		

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 _____

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	ANALYSIS/METHOD REQUEST: Perchlorate	REMARKS/PRECAUTIONS
Creek-1	3	3/4/03	9:00	soil/water	jar		X	X	Analyze soil and water for perchlorate for creek samples. Analyze water only for tritium.
Creek-2	3	"	9:15	"	"		X	X	
Windmill-1	2	"	1030	water	"		X	X	
Creek-3	3	"	11:20	soil/water	"		X	X	

Total No. of Samples: 11 containers

Method of Shipment:

Relinquished By: Jennifer Canfield Date/Time:

Received By: 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

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 $\lambda = 5.626\%\ year^{-1}$. 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
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 : 03/05/08
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

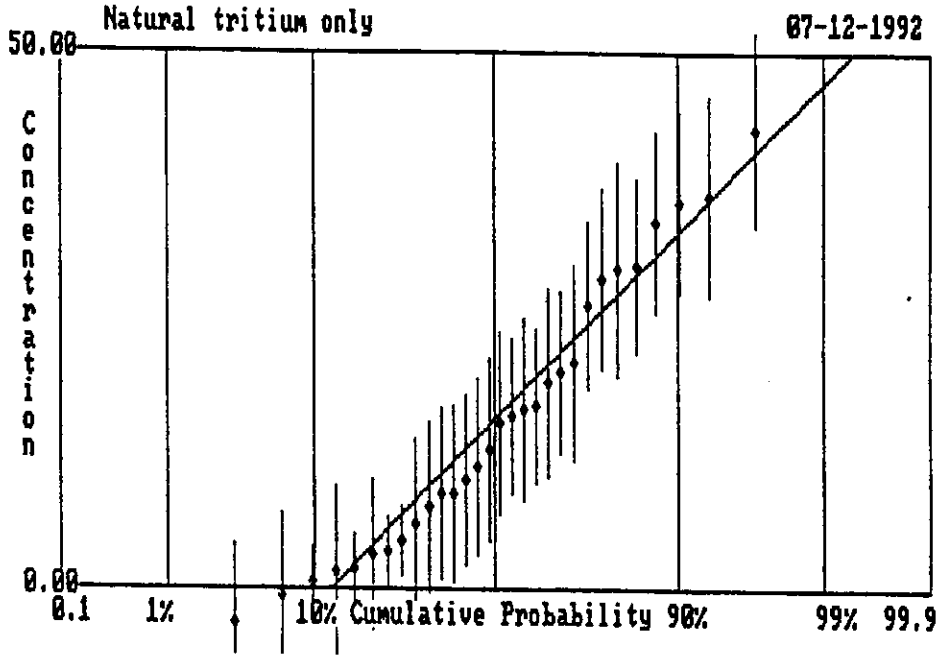

Figure 8–1. Cumulative Probability Plot of Results of Tritium–in–Water Analyses by U.S. Testing, Using Electrolytic Enrichment, for "Natural" Water Samples. The Straight Line Through Most of the Data Points Represents an Approximate Gaussian Distribution