

**Limited Phase II Environmental Site Assessment
McCormac Property
T.M. 5553
33-Acres Located on Northeast Corner of
Winter Haven Road and Sunnycrest Lane
Fallbrook, California
A.P.N. 160-300-41-00**

April 18, 2012

Prepared For:

**H.B. McCormac Trust
Attention: Mr. Douglas McCormac
16533 2500 Road
Cedaredge, Colorado 81413**

Prepared By:

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Job # 12-157-H

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Limited Phase II Environmental Site Assessment, McCormac Property, Northeast Corner of Winter Haven Road and Sunnycrest Lane, Fallbrook, San Diego County, California; A.P.N. 160-300-41

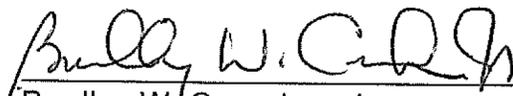
Pursuant to our contractual agreement, Vinje and Middleton Engineering, Inc. has completed the Limited Phase II Environmental Site Assessment at the above referenced property. This work was completed to meet the project review requirements of San Diego County Department of Planning and Land Use.

Our analysis of seven (7) near surface soil samples for organochlorine pesticides and three (3) soil sample for Arsenic metal content revealed no detection of the contaminants of concern. All analytical results were below laboratory detection limits. It is our judgement based on this limited environmental assessment that further evaluation of this property is un-warranted.

Please find four copies of our report for your review and distribution. Vinje & Middleton, Inc. appreciates this opportunity to provide environmental services on this important project.

If you have any questions concerning the findings of this report please contact the undersigned at (760) 743-1214.

VINJE & MIDDLETON ENGINEERING, INC.



Bradley W. Crawshaw Jr.
Project Manager
PG#7888



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1.0 INTRODUCTION

1.1 Purpose

This Limited Phase II Environmental Site Assessment (ESA) was performed pursuant to requirements stipulated by San Diego County Department of Planning and Land Use (DPLU) in their letter dated September 22, 2008. This Limited Phase II ESA is required to satisfy the California Environmental Quality Act (CEQA) Environmental Initial Study in determining the projects potential impacts on the environment. Vinje & Middleton Engineering, Inc. (Vinje & Middleton) has been contracted to perform the identified scope of services on this project for the H.B. McCormac Trust. The contract was executed on March 13, 2012.

The Site encompasses 33.33 acres of land planned to support a major subdivision of 23 lots for single-family home use. One lot will serve as a storm water runoff detention basin. The lots will range in size between 1.0 to 2.0 acres. Subject property is located in north unincorporated San Diego County southeast of Fallbrook, California. Subject property has no street address but is identified as Assessors Parcel Number (A.P.N.) 106-300-41-00 and situated on the northeast corner of the intersection of Winter Haven Road and Sunnycrest Lane. Regional depiction of the Sites location in San Diego County is presented on the attached **Figure 1**.

Western one-quarter of the subject property presently consists of citrus trees of which the perimeter trees bounding Sunnycrest Lane appear to be receiving irrigation water. Remainder of trees are in poor health and are not productive. Majority of the site is in native grasses and weeds.

Focus of the limited Phase II ESA is based on near surface soil conditions where tillage of soil and chemical amendments associated with historic agricultural activities would most likely have been applied.

1.2 Limiting Conditions

The basis for this work was identified in a report by AEI Consultants, entitled, ***Phase I Environmental Site Assessment APN: 106-300-41-00, Fallbrook, California, 92028*** dated August 16, 2007. Vinje & Middleton makes no claims on the likelihood that additional environmental concerns may exist or potentially be present. Determination of groundwater quality and depth below the surface was not addressed in the above referenced report. Determination of the depth and quality of groundwater was not within the scope of our investigation.

Sample locations, collection depths, and chosen laboratory analyses were based on Vinje & Middleton's experience and knowledge in evaluating property for contaminants of concern (COC's) associated with agricultural property. Additionally, we are familiar with resulting human exposure concerns associated with elevated

levels of the COC's in agricultural properties within San Diego County. This assessment is limited to environmentally persistent COC's in the organochlorine pesticide group of compounds due to their long half-life, toxicity, and carcinogenic properties.

2.0 BACKGROUND

2.1 Site History/Development/Usage

AEI's Phase I Environmental Site Assessment (ESA) report identified the Site was viewed as a citrus and avocado grove in the earliest historical photo reviewed (1946). Presently the grove is viewed as inactive with remnant citrus trees still occupying the western quarter of the site.

No structures, pits, ponds, lagoons, above ground tanks, underground storage tanks, chemical storage sheds, were visible on historic photos reviewed by AEI Consultants nor observed during our field sampling visit (March 29, 2012). Site reconnaissance did not reveal distressed vegetation, chemical storage sheds, labeled or un-labeled drums or polyethylene containers which may have contained chemical soil amendments, pesticides or herbicides.

Interviews with knowledgeable persons, in preparation of the Phase I ESA, did not reveal any information which would increase the likelihood of other environmental concerns existing on the subject property. Regulatory agencies did not identify any Agricultural Pesticide Use Reports on record for the subject property.

Services provided to the Site include: Water by Fallbrook Public Utilities District; Gas and Electric provided by San Diego Gas & Electric; Sewer is to be provided by private septic systems.

Site configuration depicting the project boundary lines, adjacent land use, and street access are shown on the attached Site Plan Map (**Figure 2**).

Easements on, over, under, and bordering the project were not identified in the 2007 referenced Phase I ESA report.

2.2 Proposed Use/Legal Description

Property owner plans to map 23 single-family residences with interior streets and associated dry and wet utility improvements.

Legal Description: Parcel A of Document 95-036034 in Lots 15 & 16, Tract D.

Zoning: A70 - Limited Agriculture. Intended for crop or animal agriculture. Number of animals is specified by neighborhood regulations.

The property is located within Flood Panel: 0602840477F (7/2/2002), Flood Zone X designated to be outside 100-year flood plain.

2.3 Physical Setting

2.3.1 Topography

Topographically the site is located on gentle sloping south/southwest trending terrain. A north to south trending drainage swale is located in the western third of the property with a maximum cut measuring approximately 4-feet in depth. Near the east boundary line a tree lined ephemeral drainage swale parallels west side of Green Canyon Road.

Project elevations range from a high of 668 feet above mean sea level (msl) in the projects north central region to a low elevation of 586 feet msl along the south boundary adjacent Winter Haven Road.

2.3.2 Geology

Regionally, the Site is located within the Peninsular Geomorphic Province of California which extends 900 miles from south Orange County, California to the tip of Baja, Mexico. The peninsular ranges include the Santa Ana Mountains, San Jacinito Mountains, and Laguna Mountains of Southern California. These mountains trend predominantly in a north-south direction.

Rocks in the ranges are dominated by Mesozoic granitic rocks derived from the same Batholith which forms the core of the Sierra Nevada Mountains in California.

According to the Bonsall 7.5' Quadrangle Geologic Map, the geology of the Site is mapped as Cretaceous tonalites (Tan, Siang S., 2000 digitized); Mostly hornblende-biotite tonalite, coarse grained, light grey in color. These bedrock units weather into a brown silty medium-coarse sand with trace clay exposed at surface.

2.3.3 Hydrology

The Porter-Cologne Act (Division 7 of the California Water Code) establishes a program for the protection of beneficial uses of the waters of the state. Specifically, these beneficial uses of surface and ground waters are described in California Water Code Section 13050(f).

The San Diego Regional Water Quality Control Board enforces water quality standards in Region 9 as published in the San Diego Basin Plan. The subject property is located within the Bonsall Hydrologic Sub-Area (3.12) of the Lower San Luis Hydrology Area (903.10) of the San Luis Rey Hydrologic Unit (903.00).

Groundwater beneath the Site has beneficial use designations for municipal, agricultural, and industrial uses. Determination of the depth to groundwater was beyond the scope of this investigation. However, Vinje & Middleton is concurrently designing septic systems for the individual lots on this project and did not encounter groundwater within depth investigated (25-feet bsg).

Surface water bodies were not identified within close proximity of the subject property.

2.4 Adjacent Land Use

Adjacent land use is mixed between single family residential, agricultural, and a church. Table 1 identifies land uses in all compass directions.

Table 1
 Adjacent Land Use
 McCormac Property - A.P.N. 106-300-41
 Fallbrook, CA

Direction from Subject Property	Elevation Relative to Subject Property	Property I.D.	Land Use
North	Higher	106-210-37 thru 106-210-44	Residential
South	Lower	Fallbrook United Methodist Church 1844 Winter Haven Rd.	Church
South	Lower	1757 Winter Haven Rd. 1773 Winter Haven Rd. 106-311-03, 106-311-04, 106-311-05, 106-311-06	(2) Single Family Residential; (4) Vacant SFR Lots
East	Cross-Gradient	106-300-42; APN Investments, Inc.	Vacant Agricultural
East	Cross-Gradient oppos. Green Canyon Rd.	106-300-21; NW K 2 Inc.	Greenhouse-Agricultural
West	Higher	1770 Moonlite Hill Rd. 1743 Moonlite Hill Rd. 1771 Moonlite Hill Rd. 1650 Winter Haven Rd. 106-280-15 Vacant Residential	Residential / Vacant Agricultural

3.0 LOCAL GOVERNMENT DATABASE SEARCH

Local regulatory agencies on-line files were reviewed for reasonably ascertainable and practically reviewable records regarding recognized environmental concerns present at the Site or within proximity of the property in question. This was done due to the duration of time that had elapsed since the Phase I ESA was conducted (2007). The following agency files were reviewed:

- San Diego County Department of Environmental Health
- State Department of Toxic Substance Control

3.1 San Diego County Department of Environmental Health

Vinje & Middleton reviewed San Diego County Department of Environmental Health (DEH) on-line database of hazardous materials release sites and establishments which issued permits for use, storage, and disposal of hazardous materials. Review of DEH records on April 5, 2012 identified one (1) site within 0.5 miles of the subject property with a reported unauthorized release of petroleum fuels.

Genesis Growers LLC, located at 2294 Winter Haven Lane, Fallbrook, CA is on DEH records under Case #H39688-001 for a release of an unspecified quantity of diesel fuel that impacted soil only. The case was granted closure status on May 5, 2006. The release did not impact adjacent properties and is not, in our judgement, considered to have any impact on the subject property.

3.2 State Department of Toxic Substance Control

Vinje & Middleton reviewed the State Water Resources Control Board (SWRCB) Department of Toxic Substance Control (DTSC) on-line database, GeoTracker, on April 5, 2012. EnviroStor identifies Federal and State Superfund Sites, GeoTracker Sites, UST sites, hazardous materials sites, School Evaluation Sites, and cleanup sites. The study Site was not identified on any of the listed databases. Genesis Growers LLC site was identified on the GeoTracker database and discussed in Section 3.1 above.

4.0 PHASE II ACTIVITIES

On March 29, 2012, Vinje & Middleton conducted limited field sampling of surficial soils from ten (10) locations on the referenced site. Weather conditions were sunny, and mild.

Soil sample locations were chosen based on present and former agricultural activity as viewed in the field and from historic aerial photographs. Additionally, sample locations were chosen based on planned residential development. Soil sample locations are illustrated on the attached Site Plan Map (Figure 2).

4.1 Sample Collection and Handling

All soil samples were collected from depths ranging between 0.5 feet to 3.0 feet below the surface. All hand tools used in sample collection were cleaned prior to use. Precautionary measures were taken to preserve sample integrity. A description of steps involved in sampling, equipment de-contamination, documentation, preservation and laboratory delivery are described in 'Field Procedures' provided herein as **Appendix A**.

4.2 Chemical Analyses

Seven (7) soil samples were analyzed for Organochlorine Pesticides using Environmental Protection Agency (EPA) Method 8081A. Three (3) soil samples were analyzed for Arsenic metals using EPA Method 3010B/6010B. Tests were performed by State Certified Analytical Laboratory, Test America, Inc. of Irvine, California.

The organochlorine pesticides (OCPs) were evaluated due to this category of pesticides persistence in the environment, long half-life, toxicity, and water insolubility. Other classes of pesticides (i.e. Carbamates, and Organophosphorus) break down quickly to inert compounds in the environment, and were eliminated from consideration as potential environmental concerns due to their relatively short time they are toxic. No record of their use was provided nor suspected which further eliminated the concern for their detectable presence on-site.

Organochlorine pesticides are often found in agricultural soils in San Diego County decades after legal application. Several OCPs have been banned from use in the United States since the 1970's due to their suspected human carcinogenicity (DDT, Dieldrin, Chlordane, Toxaphene).

Arsenic is a naturally occurring metal and is present in soil throughout San Diego County. It is also known to be a component of certain agricultural chemicals.

5.0 EVALUATION OF RESULTS

Soil samples, S-1 through S-7, were collected in native soil from 0.5-feet to 3.0-feet below surface grade and analyzed for OCPs' using Environmental Protection Agency (EPA) Method 8081A. Soil samples AS-1 and AS-2, were collected from near surface soils on former agricultural land for determination of Arsenic metal content associated with agricultural chemicals. Soil sample AS-3 was collected in an area not viewed as historically developed for agriculture and any detectable Arsenic concentrations would indicate natural background levels. A total of three soil samples were analyzed for Arsenic content using EPA Method 6010B.

Laboratory results are posted in **Table 2** and **3** below. Test America, Inc. official laboratory report is attached as **Appendix B**.

Table 2
 Organochlorine Pesticide Results
 McCormac Project - A.P.N. 160-300-41
 Fallbrook, CA

Sample No.	S-1	S-2	S-3	S-4	S-5	S0-6	S-7
Depth (Ft.)	2.0	1.0	0.5	3.0	1.5	2.5	1.0
OCP Compound	Units: ug/kg						
Heptachlor epoxide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Endosulfan sulfate	<10	<10	<10	<10	<10	<10	<10
Aldrin	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
alpha-BHC	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
beta-BHC	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
delta-BHC	<10	<10	<10	<10	<10	<10	<10
Endosulfan II	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4,4'-DDT	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Endrin ketone	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlordane	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
gamma-BHC (Lindane)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dieldrin	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Endrin	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methoxychlor	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4,4'-DDD	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4,4'-DDE	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Endrin aldehyde	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Heptachlor	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toxaphene	<200.0	<200.0	<200.0	<200.0	<200.0	<200.0	<200.0
Endosulfan I	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Note: <5, <10, <50, and <200 indicates the laboratory results are less than the respective equipment detection limit. Otherwise, not detectable.

Representative surficial soil samples (S1 - S7) collected in present and former grove areas of the subject property posted levels of OCP's which were below their respective laboratory detection limits. Soil samples were collected within the upper three feet (3.0 ft.) of tillable soil where these insoluble pesticides would most likely be present. This limited assessment found no indication that OCP's were applied to soil at this Site.

Table 3
Arsenic Metal Content
McCormac Property-A.P.N. 160-300-41
Fallbrook, CA

Sample I.D.	Depth (Ft.)	Arsenic Content (mg/kg)
AS-1	0.5	ND
AS-2	1.0	ND
AS-3	0.5	ND

Note: ND = Not Detected within the Laboratory Reporting Limit (< 2 mg/kg).

6.0 CONCLUSIONS

This limited Phase II Environmental Site Assessment has been performed in response to recognized environmental concerns identified in AEI's *Phase I Environmental Site Assessment, APN: 106-300-41 dated August 16, 2007*. The assessment was deemed necessary due to the properties historical past use for agricultural purposes with plans for conversion to a 23-lot residential subdivision.

Vinje & Middleton has completed a limited Phase II Environmental Site Assessment of near surface soil for the presence of chlorinated pesticides, and Arsenic metal on A.P.N. 160-300-41-00.

The findings and opinions presented in this report result from review of AEI Consultants, Inc. Phase I ESA report, review of current local regulatory databases, and collection/analysis of ten (10) near surface soil samples for OCP's and Arsenic metal content. This limited Phase II environmental assessment has revealed no evidence of recognized environmental concerns associated with the properties past land use and the contaminants of concern. In our professional opinion, further assessment of this property is not warranted.

7.0 LIMITATIONS

This report was prepared for the exclusive use by our client, H.B. McCormac Trust and their designated representative(s) and only for the purposes stated within a reasonable time from its issuance. It should be noted that changes within the condition of a site can

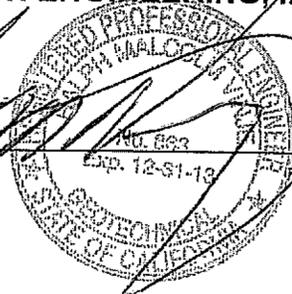
occur with time due to natural or man created conditions, either on-site or from adjacent properties. In addition, changes in the standard-of-practice and/or government codes and regulations may occur. Findings and opinions can be considered valid only as of the date of the Site visit.

In performance of our professional services, we comply with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions. The client recognizes that conditions often change and that our conclusions are based upon observations and available information. We shall not be liable for conditions or consequences arising from relevant facts of information either incorrect, concealed, with-held or not fully disclosed from other sources. The scope of this investigation was limited to the funds allotted which limited the number of soil samples collected and analyzed.

We appreciate your choosing Vinje & Middleton, Inc. for your environmental needs. If we may be of further assistance on this or any other project, please contact us at 760-743-1214.

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