Macknet Property

South of Helen Drive

Redlands, San Bernardino County, California

March 8, 2022

Terracon Project No. CB227029



Prepared for: City of Redlands

Redlands, California

Prepared by:

Terracon Consultants, Inc. Colton, California

terracon.com



Environmental Facilities Geotechnical Materials



City of Redlands 35 Cajon Street, Suite 15A Redlands, California 92373

Attn: Ms. Veronica Medina, E.I.T., Assistant Engineer

P: (909) 798-7584 ext. 6

E: vmedina@cityofredlands.org

Re: Phase I Environmental Site Assessment

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

Terracon Project No. CB227029

Dear Ms. Medina:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Environmental Site Assessment (ESA) report for the above-referenced site. This assessment was performed in accordance with Terracon Proposal No. PCB227029, dated February 7, 2022, and Purchase Order, dated February 14, 2022.

We appreciate the opportunity to be of service to you on this project. In addition to Phase I services, our professionals provide geotechnical, environmental, construction materials, and facilities services on a wide variety of projects locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,

Terracon Consultants, Inc.

Laura S. Hedman Staff Geologist Carl A. Parten

Senior Principal / Office Manager III

Todd G. McFarland, PG #7685, CHG #979 Senior Geologist / Department Manager I

Attachments

Terracon Consultants Inc. 1355 East Cooley Drive, Colton, California 92324-3954

P 909-824-7311 F 909-301-6016 terracon.com



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EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (ESA) was performed in accordance with Terracon Proposal No. PCB227029, dated February 7, 2022, and Purchase Order, dated February 14, 2022, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and Client Scope of Work. The ESA was conducted under the supervision or responsible charge of Carl A. Parten, Environmental Professional. Laura S. Hedman performed the site reconnaissance on March 2, 2022.

Findings and Opinions

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Site Description and Use

The site is located at south of Helen Drive, Redlands, San Bernardino County, California 92373, and consists of an approximately 22-acre tract of generally vacant and undeveloped, densely vegetated land (chaparral), located in a residential neighborhood south of Helen Drive. The site is further identified by San Bernardino County Assessor parcel numbers (APNs): 0300-451-13, 0300-451-14, 0300-451-24, and 0300-451-25. At the time of the visual reconnaissance, the site was owned by the Macknet family members.

Historical Information

Based on review of the historical information, the site consisted of undeveloped vacant land from as early as 1899 and has remained relatively unchanged through the present.

The surrounding properties consisted of undeveloped vacant land from as early as 1899. By 1938, the existing water tower was depicted southwest of the site. By 1949, a road (Bruder Lane) appears developed abutting the southern portion of the site. By 1959, existing residential neighborhood developed abuts northwest (130413-130515 East Sunset Drive) and a road depicted east of the site (Kristen Court). The adjoining property to the northeast appeared developed with existing residential homes (13151 Helen Drive) by 1967. By 1975, a residential home developed adjoining south (13202 Bruder Lane). By 1985, road appears developed (Helen Drive), and an existing residential neighborhood developed abuts north and northeast (13039-13087 Helen Drive). The adjoining property to the east was developed with a driveway (Helen Court) and an existing residential home (31280 Helen Court) by 1995. Vacant undeveloped land abuts west, followed by a water tank.

Records Review

Selected federal and state environmental regulatory databases as well as responses from state and local regulatory agencies were reviewed. The site was not identified in the current regulatory

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databases. The facilities listed in the databases do not appear to represent RECs to the site at this time, based upon regulatory status, apparent topographic gradient, and/or distance from the site.

Site Reconnaissance

During the site reconnaissance, a concrete storm water discharge pipe and miscellaneous household trash were identified. Based on visual observations, RECs were not identified in connection with the site.

Adjoining Properties

Helen Drive and Sunset Drive abuts the site to the north, followed by residential neighborhood (13039-13087 Helen Drive) and another residential neighborhood (30413-30515 East Sunset Drive). Kristen Court and Helen Court abuts the site to the east, followed by residential neighborhood (13151 Helen Drive and 31280 Helen Court). Bruder Lane abuts the site to the south, followed by a residential home (13202 Bruder Lane).

Significant Data Gaps

No significant data gaps were identified.

Conclusions

We have performed a Phase I ESA consistent with the procedures included in ASTM Practice E 1527-13 of the Macknet Property, located south of Helen Drive, Redlands, San Bernardino County, California 92373, the site, Assessor Parcel Number (APN): 0300-451-13, 0300-451-14, 0300-451-24, and 0300-451-25. RECs or Controlled RECs (CREC) were not identified in connection with the site.

Recommendations

Based on the scope of services, limitations, and conclusions of this assessment, Terracon did not identify RECs or CRECs. As such, no additional investigation is warranted at this time.

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1.0 INTRODUCTION

1.1 Site Description

Site Name	Macknet Property
Site Location/Address	South of Helen Drive, Redlands, San Bernardino, California 92373
Land Area	The site is an approximately 22-acres tract of land, identified by APNs: 0300-451-13, 0300-451-14, 0300-451-24, and 0300-451-25.
Site Improvements	The site is generally undeveloped.
Anticipated Future Site Use	Development of a new water tower.
Purpose of the ESA	Acquiring the site.

The location of the site is depicted on Exhibit 1 of Appendix A, which was reproduced from a portion of the Redlands, Yucaipa, El Casco, and Sunnymead, California USGS 7.5-minute series topographic map (2018). The site and adjoining properties are depicted on the Site Diagram, which is included as Exhibit 2 of Appendix A. Acronyms and terms used in this report are described in Appendix F.

1.2 Scope of Services

This Phase I ESA was performed in accordance with Terracon Proposal No. PCB227029, dated February 7, 2022, and Purchase Order, dated February 14, 2022, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and Client Scope of Work. The purpose of this ESA was to assist the client in developing information to identify RECs in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, and a visual noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are noted in the applicable sections of the report.

ASTM E1527-13 contains a new definition of "migrate/migration," which refers to "the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface." By including this explicit reference to migration in ASTM E1527-13, the Standard clarifies that the potential for vapor migration should be addressed as part of a Phase I ESA. This Phase I ESA has considered vapor migration in evaluation of RECs associated with the site.

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1.3 Standard of Care

This ESA was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I ESAs, such as the one performed at this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this ESA. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

1.4 Additional Scope Limitations, ASTM Deviations and Data Gaps

Based upon the agreed-on scope of services, this ESA did not include subsurface or other invasive assessments, vapor intrusion assessments or indoor air quality assessments (i.e. evaluation of the presence of vapors within a building structure), business environmental risk evaluations, or other services not particularly identified and discussed herein. Credentials of the company (Statement of Qualifications) have not been included in this report but are available upon request. Pertinent documents are referred to in the text of this report, and a separate reference section has not been included. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this ESA was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This ESA was further limited by the following:

Reasonable attempts were made to contact the local and state regulatory agencies; however, at the issuance of this report, a response from the San Bernardino County Environmental Health/Department of Public Health (EHS/DPH) and the City of Redlands remains pending. Based on a review of historical information and the regulatory databases, the absence of this response does not represent a significant data gap.

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An evaluation of the significance of limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

1.5 Reliance

This ESA report is prepared for the exclusive use and reliance of, City of Redlands. Use or reliance by any other party is prohibited without the written authorization of City of Redlands and Terracon Consultants, Inc. (Terracon).

Reliance on the ESA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, ESA report, and Terracon's Agreement For Services. The limitation of liability defined in Terracon's Agreement For Services is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E1527-13 Sections 4.6 and 4.8. If the ESA will be used by a different user (third party) than the user for whom the ESA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-13.

1.6 Client Provided Information

Prior to the site visit, Ms. Veronica Medina, client's representative, was asked to provide the following user questionnaire information as described in ASTM E1527-13 Section 6.

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Client Questionnaire Responses

Client Questionnaire Item	Client Did Not	Client's Response	
	Respond	Yes	No
Specialized Knowledge or Experience that is material to a REC in connection with the site.			Х
Actual Knowledge of Environmental Liens or Activity Use Limitations (AULs) that may encumber the site.			X
Actual Knowledge of a Lower Purchase Price because contamination is known or believed to be present at the site.			х
Commonly Known or Reasonably Ascertainable Information that is material to a REC in connection with the site.			х
Obvious Indicators of Contamination at the site.			Х

Terracon's consideration of the client provided information did not identify RECs. A copy of the questionnaire is included in Appendix C.

2.0 PHYSICAL SETTING

Physical	Setting Information	Source			
	Topography				
Site Elevation	Approximately 2,100 to 2,220 feet above the National Geodetic Vertical Datum (NGVD).	See Exhibit 1 in Appendix A – Redlands, Yucaipa, El Casco, and Sunnymead, California (2018)			
Topographic Gradient	Multi-directional; however, steeply sloping generally toward the west.				
Closest Surface Water	Earthen pond located approximately 3,500 feet northwest of the site (Redlands Country Club).	USGS Topographic Map Google Map Data (2022), www.google.com/maps			
	Soil Characteristics				
Soil Type	Saugus sandy loam (ShF)	Soil Survey of San Bernardino County			
Description	ShF: Moderate infiltration rates, Deep and moderately deep, moderately well and well drained soils with moderately coarse textures; 30 to 50 percent slopes.	Southwestern Part, California (CA677); United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS); issued 2021. https://websoilsurvey.sc.egov.usda.gov			
Geology/Hydrogeology					
Formation	Older Surficial Sediments (Qoa)				

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Physical Setting Information		Source	
Description	Weakly indurated alluvial fan deposits derived from local terrains of plutonic rocks; alluvial fan deposits of sand, minor gravel, top surface slope more than 40 ft per 0.7 mile from the source terrains and dissected by stream channel from the source terrains (Pleistocene).	Geologic map of the Sunnymead/south ½ of Redlands quadrangles California (Dibblee, T.W. and Minch, J.A.; Dibblee Geological Foundation) Dated 2003 https://ngmdb.usgs.gov/mapview	
Estimated Depth to First Occurrence of Groundwater	Site: Unknown, no data readily available. Vicinity: Measured at approximately 176 feet below ground surface (bgs) in a irrigation well located approximately 1.4 miles northwest (last measured in December 6, 2021).	California Department of Water Resources Water Data Library State Well No. 02S03W01D001S Local Well Name: Redlands Hghtshttps://wdl.water.ca.gov	
*Hydrogeologic Gradient	(primarily to the west).	to be parallel to topographic gradient	

^{*} The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources to develop a history of the previous uses of the site and surrounding area, in order to help identify RECs associated with past uses. Copies of selected historical documents are included in Appendix C.

3.1 Historical Topographic Maps, Aerial Photographs, Sanborn Maps

Readily available historical USGS topographic maps, selected historical aerial photographs (at approximately 10- to 15-year intervals) and historical fire insurance maps produced by the Sanborn Map Company were reviewed to evaluate land development and obtain information concerning the history of development on and near the site. Reviewed historical topographic maps and aerial photographs maps are summarized below.

Historical fire insurance maps produced by the Sanborn Map Company were requested from Environmental Data Resources, Inc. (EDR) to evaluate past uses and relevant characteristics of the site and surrounding properties. Based upon inquiries to the above-listed Sanborn provider, Sanborn maps were not available for the site.

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Topographic map:

- Redlands, California, published in **1899** and **1901**; El Casco, California photo revised in 1954 from **1952** aerial photograph (1:62,500)
- El Casco, California photo revised in 1953 from 1951 aerial photograph;
 photo revised in 1967 from 1966 aerial photograph; photo revised in 1979
 from 1976 aerial photograph; photo revised in 1996 from 1996 aerial photograph; published in 2012, 2015, and 2018 (1:24,000)
- Sunnymead, California photo revised in 1953 from **1951** aerial photograph; photo revised in 1967 from **1966** aerial photograph; photo revised in 1973 from **1973** aerial photograph; photo revised in 1980 from **1978** aerial photograph; published in **2012**, **2015**, and **2018** (1:24,000)
- Yucaipa, California photo revised in 1954 from **1952** aerial photograph; photo revised in 1967 from **1966** aerial photograph; photo revised in 1973 from **1973** aerial photograph; photo revised in 1980 from **1978** aerial photograph; photo revised in 1988 from **1985** aerial photograph; photo revised in 1996 from **1994** aerial photograph; published in **2012**, **2015**, and **2018** (1:24,000)
- Redlands, California photo revised in 1967 from **1966** aerial photograph; photo revised in 1973 from **1973** aerial photograph; photo revised in 1975 from **1975** aerial photograph; photo revised in 1980 from **1978** aerial photograph; photo revised in 1988 from **1985** aerial photograph; photo revised in 1996 from **1994** aerial photograph; published in **2012**, **2015**, and **2018** (1:24,000)

Aerial photograph:

- USDA, 1938, 1949, 1953, 1959, 1961, 1967, 1978, 1985, and 1989, 1"
 =500
- USGS. 1975. 1" =500"
- USGS/DOQQ, 1995, and 2002, 1" =500"
- USDA/NAIP, 2006, 2009, 2012, and 2016 1" =500"

Historical Maps and Aerial Photographs

Direction	Description
Site	Undeveloped vacant land (1899-2018).
North	Undeveloped vacant land (1899-1938); land to the northwest appears graded (1949-1953); residential homes developed abuts northwest (1959-2018); northern and northeastern adjoining properties appear graded (1978); a road appears developed as Helen Drive (1985); residential homes developed abuts north and northeast (1985-2018).

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Direction	Description	
East	Undeveloped vacant land (1899-1949); land abuts northeast appears graded (1949-1953); a road depicted as Kristen Court (1959); northeastern adjoining property developed with residential homes (1967-2018); a driveway (Helen Court) and a residential home developed abutting east to the site (1995-2018).	
South	Undeveloped vacant land (1899-1938); a road appears developed as Bruder Lane (1949-2018); residential home depicted (1975-2018).	
West	Undeveloped vacant land (1899-1901) water tower depicted southwest of the site (1938-2018).	

3.2 Historical City Directories

The EDR Digital Archive, Haines Criss-Cross Directory, and Luskey Brothers & Co. Publishers city directories used in this study were made available through EDR (selected years reviewed: 1992 through 2017) and were reviewed at approximate five-year intervals, if readily available. East State Street listings were not available prior to 1992. The current street address for the site was identified as South of Helen Drive.

Historical City Directories

Direction	Description
Site	No addresses reported
	13075 Helen Drive : Salvesen, John A (1992-1995); Farris, Terry A (2005-2014)
	13087 Helen Drive: Richey, Mark A (1992-2017); Silvergleid, Arthur J (2000); Lindemer, Curtis A (2005)
North	13039 Helen Drive : Slayyeh, Yaser A (2005-2017)
	13051 Helen Drive : Fairchild, James L (2005); Brickley, Tom M (2010-2014)
	30413-30515 East Sunset Drive: no listings
South	13202 Bruder Lane: no listings
East	13151 Helen Drive : Jutzy, Kenneth R (2005-2017)
Easi	31280 Helen Court: City of Redlands
West	No addresses reported

3.3 Site Ownership

Based on a review of information obtained from the San Bernardino County Assessor's Office online database at www.sbcounty.gov/ARC/Main/Assor/PropertyInformation, the site, located at South of Helen Drive, Redlands, San Bernardino, California, 92373, consists of an approximately 22-acre parcel identified by San Bernardino County Assessor parcel numbers (APNs): 0300-451-13, 0300-451-14, 0300-451-24, and 0300-451-25, currently owned by Macknet family members.

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3.4 Title Search

At the direction of the client, a title search was not included as part of the scope of services. Unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.5 Environmental Liens and Activity and Use Limitations

The EDR regulatory database report included a review of both Federal and State Engineering Control (EC) and Institutional Control (IC) databases. Based on a review of the database report, the site was not listed on the EC or IC databases. Please note that in addition to these federal and state listings, AULs can be recorded at the county and municipal level that may not be listed in the regulatory database report. Environmental lien and activity and use limitation records recorded against the site were not provided by the client. At the direction of the client, performance of a review of these records was not included as part of the scope of services and unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.6 Interviews Regarding Current and Historical Site Uses

The following individuals were interviewed regarding the current and historical use of the site.

Interviews

Interviewer	Name / Phone #	Title	Date/Time
Ms. Laura S.	a S. Mr. Mark Macknet / Site land owner		March 2, 2022 /
Hedman	(909) 363-6238	Site land owner	During the site visit

Terracon interviewed Mr. Mark Macknet, site land owner, during the site reconnaissance. Mr. Macknet indicated that he and his family have owned the site since the 1980's, and during that time, there have not been concerns with the site or the adjoining properties. Mr. Macknet stated that the site was partially graded at one point, but that their had not been any structures developed on-site. Mr. Macknet further stated he was not aware of any septic tanks, water wells, AST's or UST's associated with the site. Mr. Macknet indicated he was not aware of pending, past, and/or threatened environmental litigation and notices of possible violations of environmental law, liability and/or potential environmental concerns associated with site.

3.7 Prior Report Review

Terracon requested the client provide any previous environmental reports, permits, registrations, and geotechnical reports they are aware of for the site. Previous reports were not provided by the client to Terracon for review.

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4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated. The scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up-gradient, cross-gradient and down-gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

Federal Databases

Database	Description	Distance (miles)	Listings
CERCLIS	Comprehensive Environmental Response, Compensation, & Liability Information System	0.5	0
CERCLIS / NFRAP	Comprehensive Environmental Response, Compensation, & Liability Information System/No Further Remedial Action Planned	0.5	0
ERNS	Emergency Response Notification System	Site	0
FUDS	Formerly Used Defense Sites	1.0	0
IC / EC	Institutional Control/Engineering Control	Site	0
NPL	National Priorities List	1.0	0
NPL (Delisted)	National Priorities Delisted List	0.5	0
RCRA CORRACTS/ TSD	RCRA Corrective Action Activity	1.0	0
RCRA Generators	Resource Conservation and Recovery Act	Site and adjoining properties	0
RCRA NonGen / NLR	RCRA – Non-Generators / No Longer Regulated	0.25	0

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Database	Description	Distance (miles)	Listings
RCRA Non- CORRACTS/ TSD	RCRA Non-Corrective Action Activity	0.5	0
UXO	Unexploded Ordnance Site	1.0	0

State/Tribal Databases

Database	Description	Distance (miles)	Listings
CALSITES	CalSites Database	1.0	0
CALSITES (AWP)	Active Annual Workplan Sites	1.0	0
CA FID UST	Facility Inventory Database	0.25	0
CERS	CalEPA Regulated Site Portal Data	Site	0
CERS TANKS	California Environmental Reporting System (CERS) Tanks	0.25	
CERS HAZ WASTE	CERS HAZ Waste	0.25	0
CORTESE	"Cortese" Hazardous Waste & Substances Sites List	0.5	0
CHMIRS	California Hazardous Material Incident Report System	Site	0
CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	0.5	0
EDR HIST AUTO	EDR Exclusive Historical Auto Stations	0.25	0
EDR HIST CLEANER	EDR Exclusive Historical Cleaners	0.25	0
EDR MGP	EDR Proprietary Manufactured Gas Plants	1.0	0
DRYCEANERS	Cleaning Facilities	0.25	0
EMI	Emissions Inventory Data	Site	0
ENVIROSTOR	EnviroStor Database	1.0	1
FINDS	Facility Index System/Facility Registry System	Site	0
HAZNET	Facility and Manifest Data	Site	0
HIST CORTESE	Hazardous Waste & Substance Site List	0.5	0
HIST UST	Hazardous Substance Storage Container Database	0.25	0
HWTS	Hazardous Waste Tracking System	0.25	0
LUST	Leaking Underground Storage Tanks	0.5	0
San Ber. Co. Permit	San Bernardino County Permitted Facility	0.25	1
SWEEPS UST	Statewide Environmental Evaluation and Planning System UST Listing	0.25	0
SWF/LF	Solid Waste Facilities/Landfills	0.5	0
WIP	Well Investigation Program Case List	0.25	0

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Database	Description	Distance (miles)	Listings
AST / UST	Aboveground Storage Tank / Underground Storage Tank Facilities	Site and adjoining properties	0
VCP	Voluntary Cleanup Program	0.5	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The site was not listed in the regulatory database report.

The following table summarizes the site-specific information provided by the database and/or gathered by this office for identified facilities. Facilities within 500 feet of the site are listed in order of proximity to the site. Additional discussion for selected facilities follows the summary table.

Listed Facilities

Facility Name and	Estimated Distance /	Database	Is a REC, CREC, or HREC to the Site
Location	Direction/Gradient	Listings	
AT & T Mobility-ES0022- 02 (CM365) Redlands Water Tank 31280 B Helen Court	Adjacent / West-southwest / Down-gradient	HWTS, San Bern. Co. Permit	No, based on file review, status, and topographic gradient,

The remaining facilities listed in the database report do not appear to represent RECs to the site at this time based upon regulatory status, apparent topographic gradient, and/or distance from the site.

Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed twenty-four facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, none of these facilities were identified as the site or adjacent properties. These facilities are listed in the database report in Appendix D.

4.2 Local Agency Inquiries

Agency Contacted/	
Contact Method	Response
San Bernardino County Department of Public Health (DPH) / Environmental Health Services (EHS)	At the issuance of this report, a response has not been obtained from the DPH/EHS.
Fax: (909) 387-4323	

Citrus Center Redlands, California





Agency Contacted/ Contact Method	Response	
South Coast Air Quality Management District (SCAQMD) / online portal: http://www.aqmd.gov/nav/online-services/public-records	According to the SCAQMD, no records were found for the site, because they are unable to provide site information based on APN's or similar geographic site data.	
Santa Ana Regional Water Quality Control Board / Email: filereview8@waterboards.ca.gov	According to RWQCB File Review Desk, no records were found for the site, because they are unable to provide site information based on APN's or similar geographic site data.	
Department of Toxic Substances Control (DTSC) / Email: pubreqact@dtsc.ca.gov DTSC online EnviroStor Database, www.environstor.dtsc.ca.gov	According to the DTSC, no records were found associated with the site. Based on a review of the DTSC online EnviroStor Database no records were found associated with the site.	
Redland's City Clerk Office online portal: https://www.cityofredlands.org	At the issuance of this report, a response has not been obtained from the City of Redlands.	
San Bernardino County Fire Department / Email: mmolina@sbcfire.org	The San Bernardino County Fire Department informed Terracon that search fees apply to each parcel and/or address, which is beyond the scope of the ESA and a search request was not submitted. Based on a review of historical information and the regulatory database, the absence of this regulatory information does not represent a significant data gap.	

4.3 Local Area Knowledge

Based on a review of the California Geologic Energy management Division (CalGEM), https://www.conservation.ca.gov/calgem (formerly the California Department of Conservation Division of Oil, Gas, and Geothermal Resource Well Finder (DOGGR), there are no active or plugged oil production wells located at the site or adjoining properties.

5.0 SITE RECONNAISSANCE

5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. The site and adjoining properties are depicted on the Site Diagram, which is included in Exhibit 2 of Appendix A. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix B. Credentials of the individuals planning and conducting the site visit are included in Appendix E.

Citrus Center ■ Redlands, California
March 8, 2022 ■ Terracon Project No. CB217058



General Site Information

Site Reconnaissance	
Field Personnel	Laura S. Hedman
Reconnaissance Date	March 2, 2022
Weather Conditions	Mostly sunny / 77° F
Site Contact/Title	Mr. Mark Macknet / Site land owner
Site Utilities	
Drinking Water	City of Redlands
Wastewater	City of Redlands
Electric	Southern California Edison
Natural Gas	None

5.2 Overview of Current Site Occupants and Operations

The site is located at South of Helen Drive, Redlands, San Bernardino County, California 92373, and consists of an approximately 22-acres tract of generally vacant and undeveloped, densely vegetated land (chaparral), located in a residential neighborhood south of Helen Drive. The site is further identified by San Bernardino County Assessor parcel numbers (APNs): 0300-451-13, 0300-451-14, 0300-451-24, and 0300-451-25. At the time of the visual reconnaissance, the site was owned by the Macknet family members.

5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an "X") are discussed in more detail following the table.

Site Characteristics

Category	Item or Feature	Observed or Identified
	Emergency generators	
	Elevators	
	Air compressors	
Site Operations,	Hydraulic lifts	
Processes, and	Dry cleaning	
Equipment	Photo processing	
	Ventilation hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
	Heating and/or cooling systems	

Citrus Center ■ Redlands, California March 8, 2022 ■ Terracon Project No. CB217058



Category	Item or Feature	Observed or Identified
	Paint booths	
	Sub-grade mechanic pits	
	Wash-down areas or carwashes	
	Pesticide/herbicide production or storage	
	Printing operations	
	Metal finishing (e.g., electroplating, chrome plating, galvanizing, etc.)	
	Salvage operations	
	Oil, gas or mineral production	
	Other processes or equipment	
Aboveground	Aboveground storage tanks	
Chemical or Waste	Drums, barrels and/or containers ≥ 5 gallons	
Storage	MSDS or SDS	
	Underground storage tanks or ancillary UST equipment	
	Sumps, cisterns, French drains, catch basins and/or dry wells	
Underground	Grease traps	
Chemical or Waste Storage, Drainage	Septic tanks and/or leach fields	
or Collection Systems	Oil/water separators, clarifiers, sand traps, triple traps, interceptors	
	Pipeline markers	
	Interior floor drains	
Electrical Transformers/	Transformers and/or capacitors	
PCBs	Other equipment	
	Stressed vegetation	
	Stained soil	
	Stained pavement or similar surface	
	Leachate and/or waste seeps	
Releases or	Trash, debris and/or other waste materials	Х
Potential Releases	Dumping or disposal areas	
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	X
	Surface water bodies	

Citrus Center ■ Redlands, California
March 8, 2022 ■ Terracon Project No. CB217058



Category	Item or Feature	Observed or Identified
Other Notable Site Features	Quarries or pits	
	Wastewater lagoons	
	Wells	

Releases or Potential Releases

Trash, debris and/or other waste materials

At the time of the visual reconnaissance, Terracon observed miscellaneous household trash (clothing items, paper, plastics bags, paper cups), located on the southern portion of the site. Noxious odors or hazardous waste disposal was not observed in the vicinity of the miscellaneous household trash. Based on site observations, the miscellaneous household trash does not constitute a REC in connection with the site.

Exterior pipe discharges and/or other effluent discharges

At the time of the visual reconnaissance, Terracon observed a storm water discharge pipe (concrete), located on the central portion of the site. Noxious odors or hazardous waste disposal was not observed in the vicinity of the discharge pipe. Based on site observations, the discharge pipe does not constitute a REC in connection with the site.

6.0 ADJOINING PROPERTY RECONNAISSANCE

Visual observations of adjoining properties (from site boundaries) are summarized below.

Adjoining Properties

Direction	Description
North	Helen Drive followed by residential neighborhood (13039-13087 Helen Drive).
	Sunset Drive, further north, followed by a residential neighborhood (30413-30515 East Sunset Drive).
East	Kristen Court and Helen Court followed by residential neighborhood (13151 Helen Drive and 31280 Helen Court).
South	Bruder Lane followed by a residential home (13202 Bruder Lane), and undeveloped densely vegetated land (chaparral).
West	Vacant undeveloped densely vegetated land (chaparral) followed by a water tank.

RECs were not observed with the adjoining properties.

Citrus Center ■ Redlands, California
March 8, 2022 ■ Terracon Project No. CB217058



7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, additional services (e.g. asbestos sampling, lead-based paint sampling, wetlands evaluation, lead in drinking water testing, radon testing, vapor encroachment screening, etc.) were not conducted.

8.0 DECLARATION

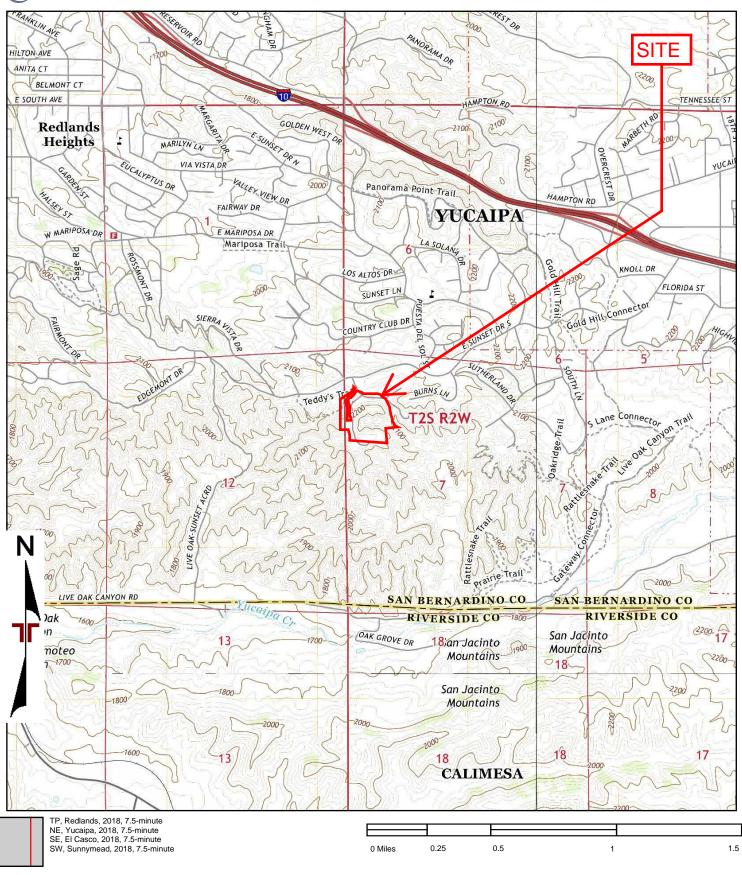
I, Carl A. Parten, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Carl A. Parten

Senior Principal / Office Manager III

APPENDIX A EXHIBIT 1 – TOPOGRAPHIC MAP EXHIBIT 2 – SITE DIAGRAM





Project Manager:	Project No.
JSV	CB227029
Drawn by:	Scale:
SHC	As Shown
Checked by:	File Name:
LSH	
Approved by:	Date:
CAP	2018

Terracon
1355 East Cooley Drive

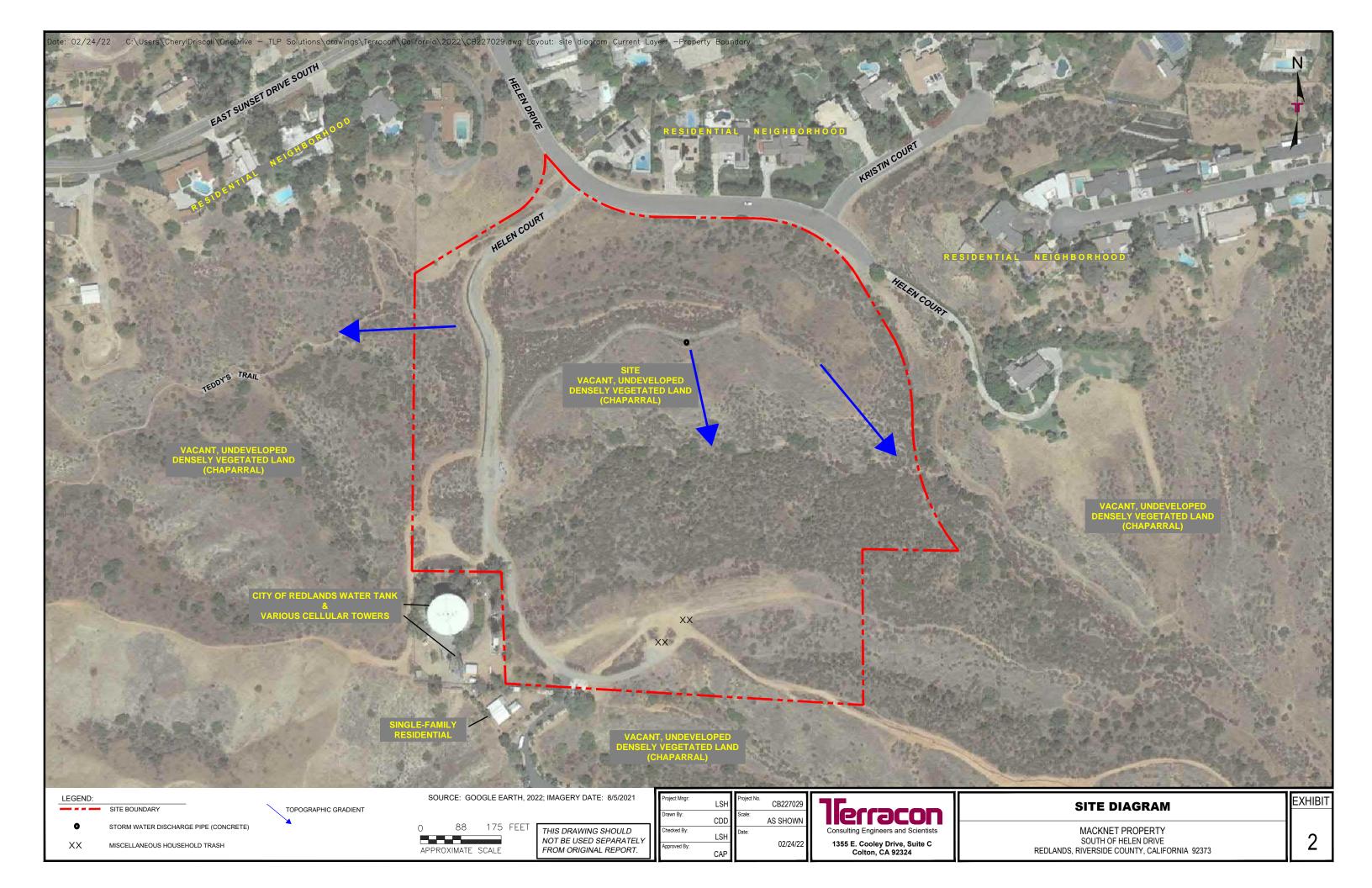
Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

2018 TOPOGRAPHIC MAP

Exhibit

1



APPENDIX B SITE PHOTOGRAPHS

Project Name: Macknet Property

Project No. CB227029 Photo Date: March 2, 2022





Photo #1 View of site facing south from the north-central portion of the site.



Photo #3 View of the south-central portion of the site (partially graded), facing west (with miscellaneous household trash visible).



Photo #5 View of adjacent property located to the north of the site (residential neighborhood and vacant vegetated land).



Photo #2 View of site facing southwest from the central portion of the site.



Photo #4 View of storm water drainage pipe (concrete), located on the central portion of the site.



Photo #6 View of adjacent property located to the east of the site (residential neighborhood and vacant densely vegetated land).

Project Name: Macknet Property Project No. CB227029 Photo Date: March 2, 2022





View of adjacent property located to the south-southeast of the site (vacant densely vegetated land). Photo #7



View of adjacent property located to the west of the site (vacant densely vegetated land). Photo #8

	APPENDIX C		
HISTORICAL DOCUMEN	ITATION AND (USER QUESTIO	NNAIRE

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

Inquiry Number: 6867268.4

February 22, 2022

EDR Historical Topo Map Report

with QuadMatch™



EDR Historical Topo Map Report

02/22/22

Site Name: Client Name:

Macknet Property Terracon

South of Helen Drive 1355 East Cooley Drive Redlands, CA 92373 Colton, CA 92324 EDR Inquiry # 6867268.4 Contact: Laura Hedman



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Terracon were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:	Coordinates:
ocaron results.	Coordinates.

P.O.# NA Latitude: 34.0157 34° 0' 57" North

Project: CB227029 **Longitude:** -117.136868 -117° 8' 13" West

 UTM Zone:
 Zone 11 North

 UTM X Meters:
 487362.86

 UTM Y Meters:
 3763905.21

Elevation: 2217.07' above sea level

Maps Provided:

 2018
 1967

 2015
 1954

 2012
 1953, 1954

 1996
 1901

 1988
 1899

 1979, 1980
 1975

 1973
 1980

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This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Redlands 2018 7.5-minute, 24000



Yucaipa 2018 7.5-minute, 24000



Sunnymead 2018 7.5-minute, 24000



El Casco 2018 7.5-minute, 24000

2015 Source Sheets



Redlands 2015 7.5-minute, 24000



Yucaipa 2015 7.5-minute, 24000



Sunnymead 2015 7.5-minute, 24000



El Casco 2015 7.5-minute, 24000

2012 Source Sheets



Redlands 2012 7.5-minute, 24000



Yucaipa 2012 7.5-minute, 24000



Sunnymead 2012 7.5-minute, 24000



El Casco 2012 7.5-minute, 24000



El Casco 1996 7.5-minute, 24000 Aerial Photo Revised 1996



Redlands 1996 7.5-minute, 24000 Aerial Photo Revised 1994



Yucaipa 1996 7.5-minute, 24000 Aerial Photo Revised 1994

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1988 Source Sheets



Redlands 1988 7.5-minute, 24000 Aerial Photo Revised 1985



Yucaipa 1988 7.5-minute, 24000 Aerial Photo Revised 1985

1979, 1980 Source Sheets



El Casco 1979 7.5-minute, 24000 Aerial Photo Revised 1976



Sunnymead 1980 7.5-minute, 24000 Aerial Photo Revised 1978



Yucaipa 1980 7.5-minute, 24000 Aerial Photo Revised 1978



Redlands 1980 7.5-minute, 24000 Aerial Photo Revised 1978

1975 Source Sheets



Redlands 1975 7.5-minute, 24000 Aerial Photo Revised 1975



Sunnymead 1973 7.5-minute, 24000 Aerial Photo Revised 1973



Redlands 1973 7.5-minute, 24000 Aerial Photo Revised 1973



Yucaipa 1973 7.5-minute, 24000 Aerial Photo Revised 1973

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1967 Source Sheets



Yucaipa 1967 7.5-minute, 24000 Aerial Photo Revised 1966



El Casco 1967 7.5-minute, 24000 Aerial Photo Revised 1966



Redlands 1967 7.5-minute, 24000 Aerial Photo Revised 1966



Sunnymead 1967 7.5-minute, 24000 Aerial Photo Revised 1966

1954 Source Sheets



Redlands 1954 15-minute, 62500 Aerial Photo Revised 1952

1953, 1954 Source Sheets



El Casco 1953 7.5-minute, 24000 Aerial Photo Revised 1951



Sunnymead 1953 7.5-minute, 24000 Aerial Photo Revised 1951



Yucaipa 1954 7.5-minute, 24000 Aerial Photo Revised 1952



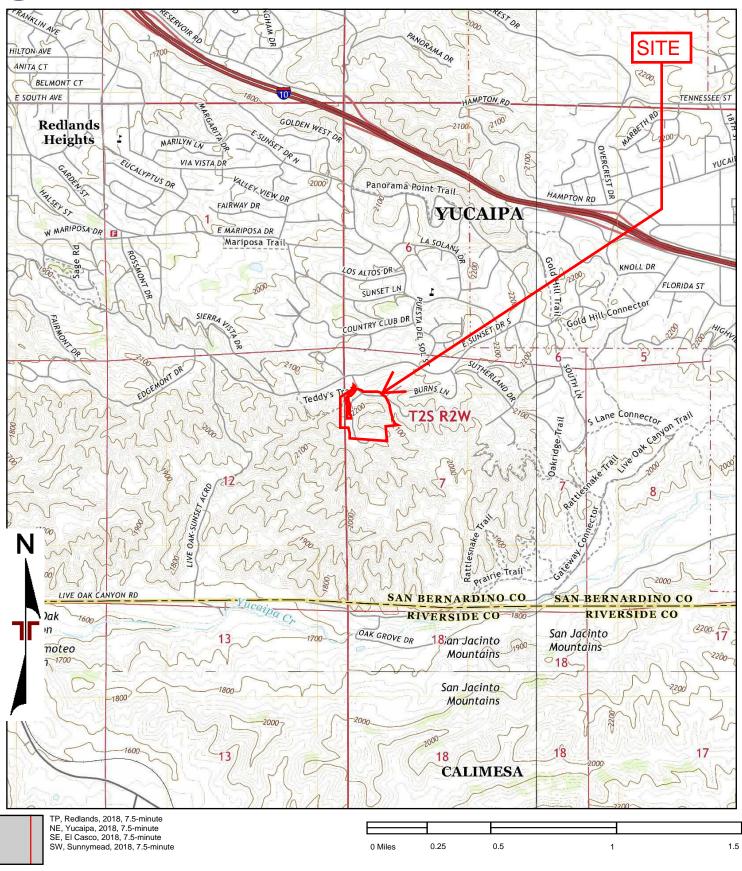
Redlands 1901 15-minute, 62500

This EDR Topo Map Report is based upon the following USGS topographic map sheets.



Redlands 1899 15-minute, 62500





Project Manager:	Project No.
JSV	CB227029
Drawn by:	Scale:
SHC	As Shown
Checked by:	File Name:
LSH	
Approved by:	Date:
CAP	2018

Terracon

1355 East Cooley Drive Colton, California 92324 2018 TOPOGRAPHIC MAP

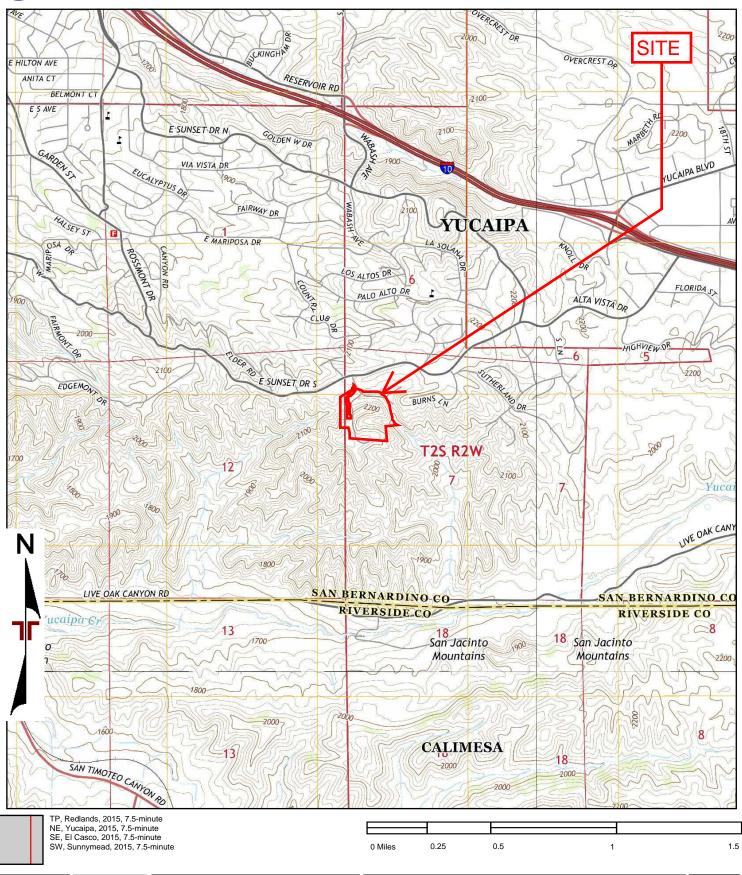
Macknet Property

South of Helen Drive

Redlands, San Bernardino County, California 92373

Appendix





Project Manager:	Project No.
JSV	CB227029
Drawn by:	Scale:
SHC	As Shown
Checked by:	File Name:
LSH	
Approved by:	Date:
CAB	2015

Terracon1355 East Cooley Drive

Colton, California 92324

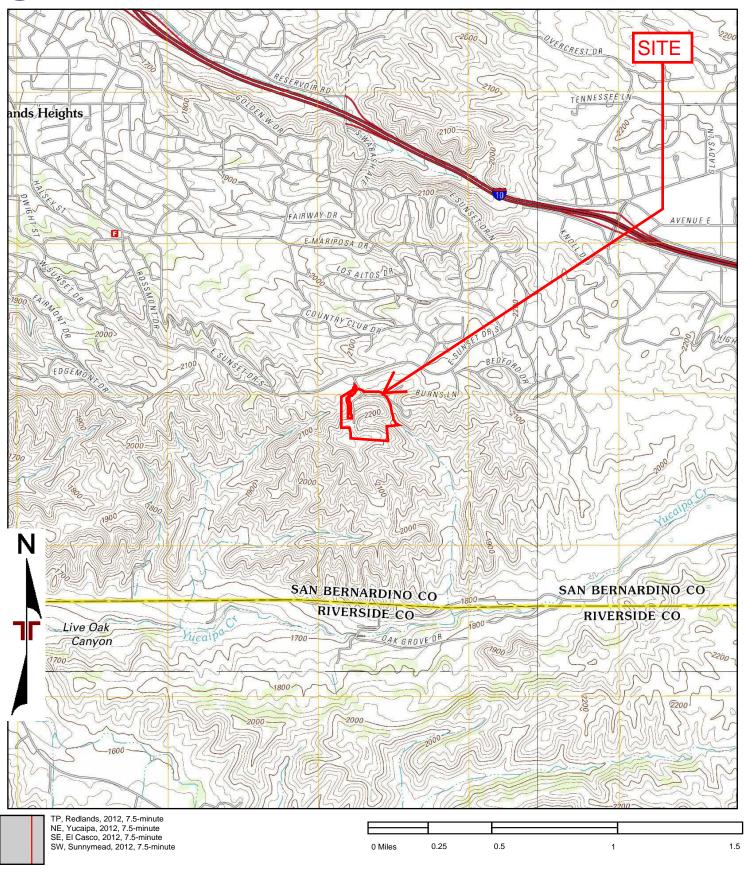
Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

2015 TOPOGRAPHIC MAP

С

page 8





Project Manager:
JSV

Drawn by:
SHC

Checked by:
LSH

Approved by:
CAP

Project No.
CB227029

Scale:
As Shown
File Name:
Date:
2012

lerracon

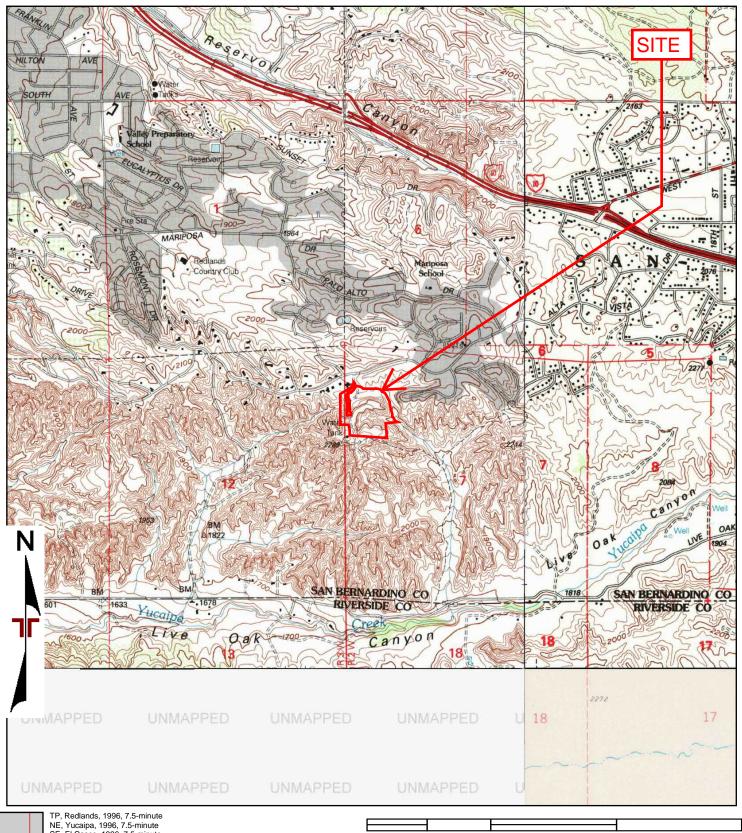
1355 East Cooley Drive Colton, California 92324 2012 TOPOGRAPHIC MAP

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

Appendix





TP, Redlands, 1996, 7.5-minute NE, Yucaipa, 1996, 7.5-minute SE, El Casco, 1996, 7.5-minute

0 Miles 0.25 0.5 1 1.5

Project Manager:	Project No.
JSV	CB227029
Drawn by:	Scale:
SHC	As Shown
Checked by:	File Name:
LSH	
Approved by:	Date:
CAP	1996

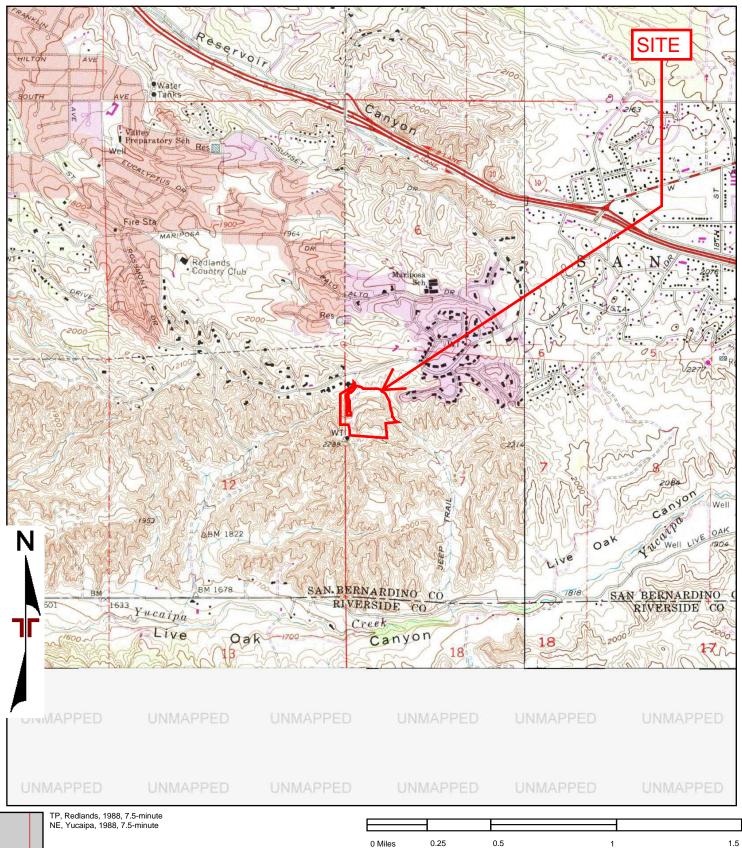
Terracon1355 East Cooley Drive

Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

1996 TOPOGRAPHIC MAP







LSH

Approved by:

CB227029
Scale:
As Shown
File Name:

Date:

1355 East Cooley Drive

Colton, California 92324

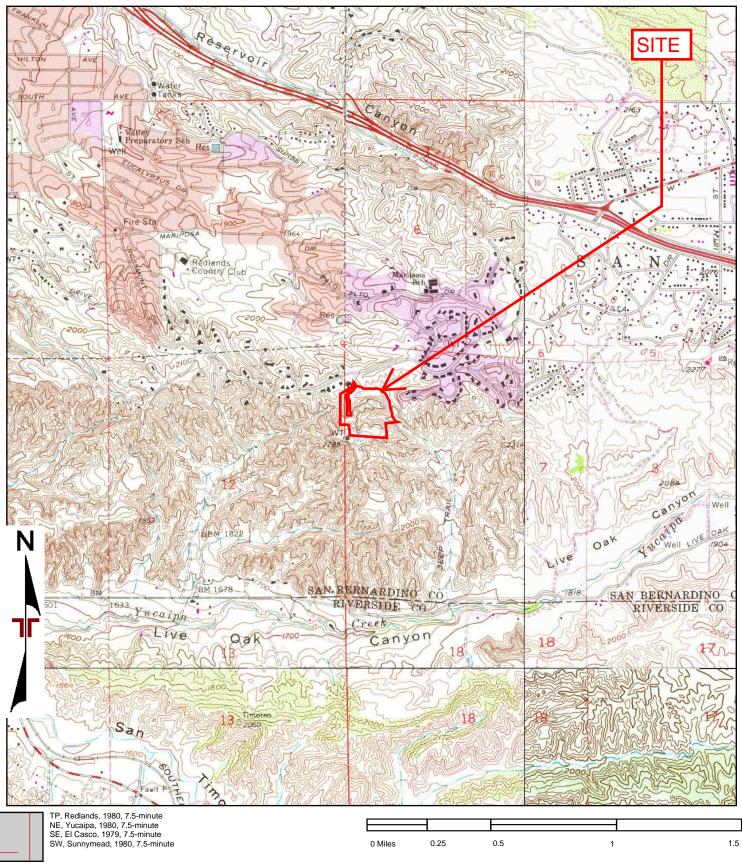
1988 TOPOGRAPHIC MAP

Macknet Property

South of Helen Drive

South of Helen Drive Redlands, San Bernardino County, California 92373 Appendix





 Project Manager:
 Project No.

 JSV
 CB227029

 Drawn by:
 SCale:

 SHC
 As Shown

 Checked by:
 LSH

 Approved by:
 Date:

 1979, 1980

Terracon

1355 East Cooley Drive Colton, California 92324 1979, 1980 TOPOGRAPHIC MAP

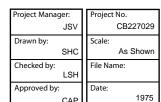
Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

Appendix







1355 East Cooley Drive

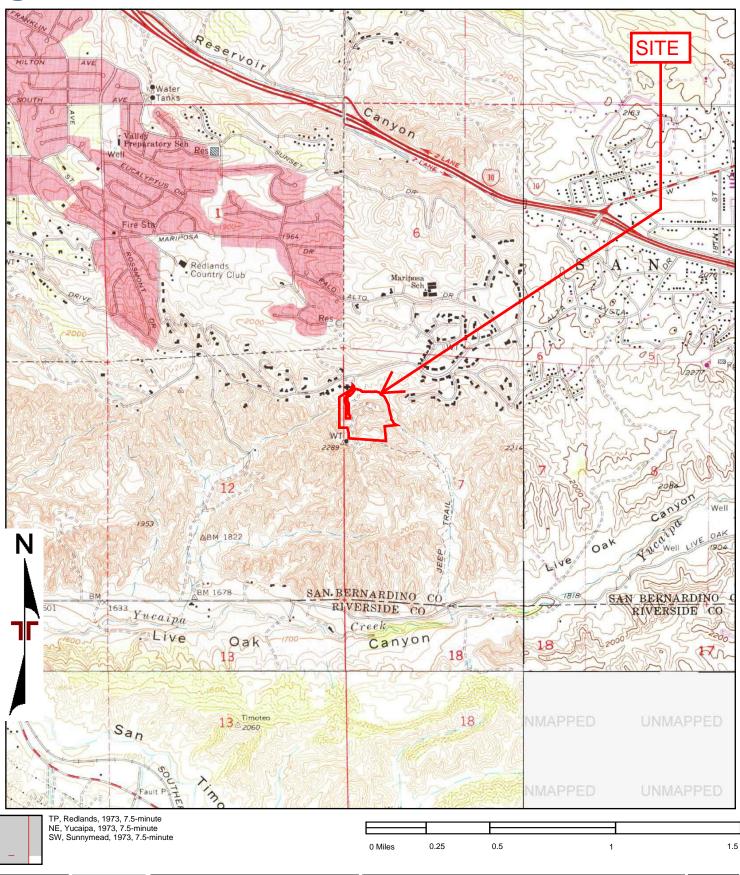
Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

1975 TOPOGRAPHIC MAP

Appendix





Project Manager:	Project No.	
JSV	CB227029	
Drawn by:	Scale:	
SHC	As Shown	
Checked by:	File Name:	
LSH		
Approved by:	Date:	
CAP	1973	

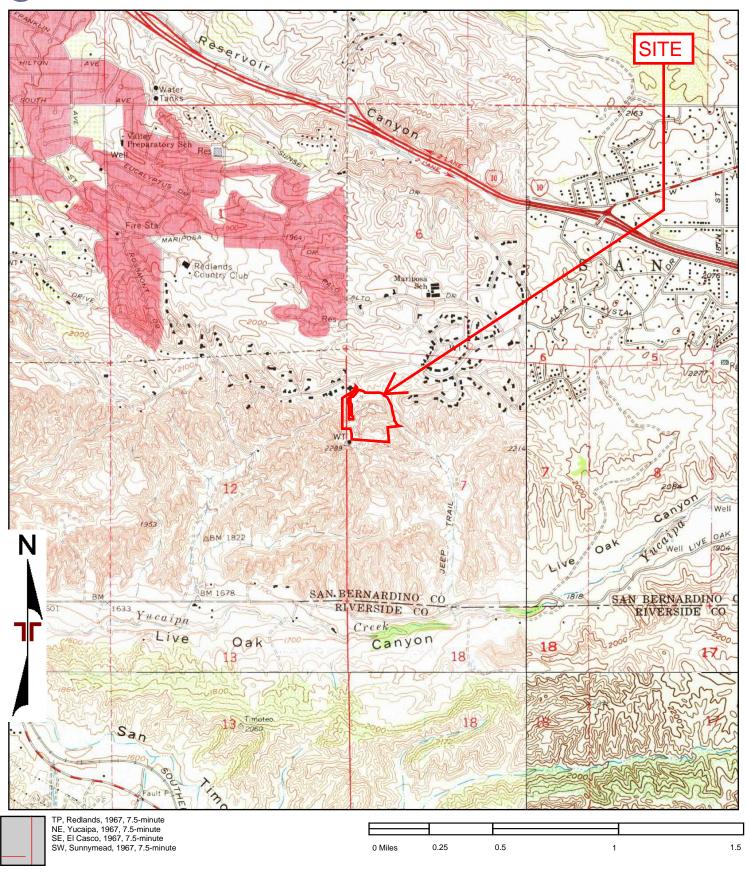
Terracon
1355 East Cooley Drive

Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

1973 TOPOGRAPHIC MAP





Project Manager:	Project No.
JSV	CB227029
Drawn by:	Scale:
SHC	As Shown
Checked by:	File Name:
LSH	
Approved by:	Date:
CAP	1967

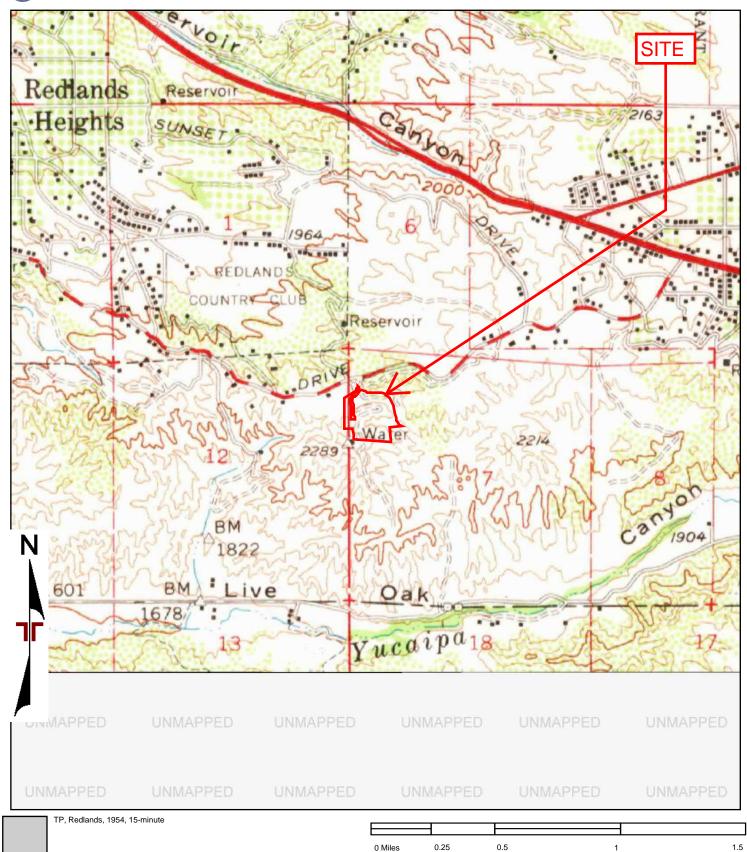
Terracon

1355 East Cooley Drive Colton, California 92324 1967 TOPOGRAPHIC MAP

Macknet Property

South of Helen Drive Redlands, San Bernardino County, California 92373 Appendix





Project Manager:
JSV

Drawn by:
SHC

Checked by:
LSH

Approved by:
Date:
1954

Terracon
1355 East Cooley Drive

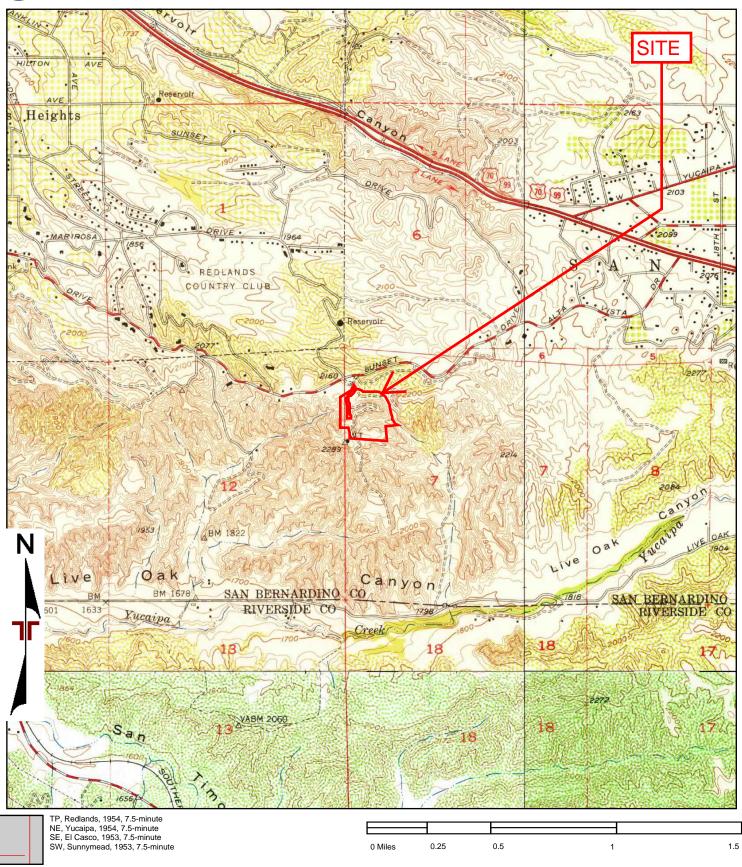
Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

1954 TOPOGRAPHIC MAP

Appendix





Project Manager:
JSV CB227029

Drawn by:
SHC Approved by:
CAP Toject No.
CB227029

Scale:
As Shown
File Name:
Date:
1953, 1954

Terracon

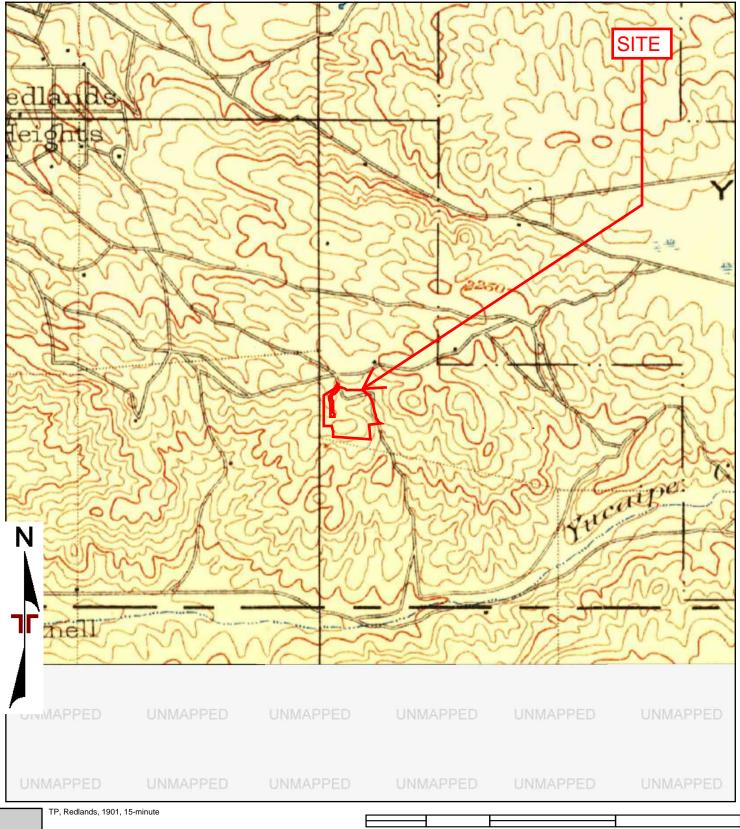
1355 East Cooley Drive Colton, California 92324 1953, 1954 TOPOGRAPHIC MAP

Redlands, San Bernardino County, California 92373

Macknet Property South of Helen Drive

C







0.25 0.5 0 Miles

Project Manager:	Project No.		
JSV	CB227029		
Drawn by:	Scale:		
SHC	As Shown		
Checked by:	File Name:		
LSH			
Approved by:	Date:		
CAP	1901		

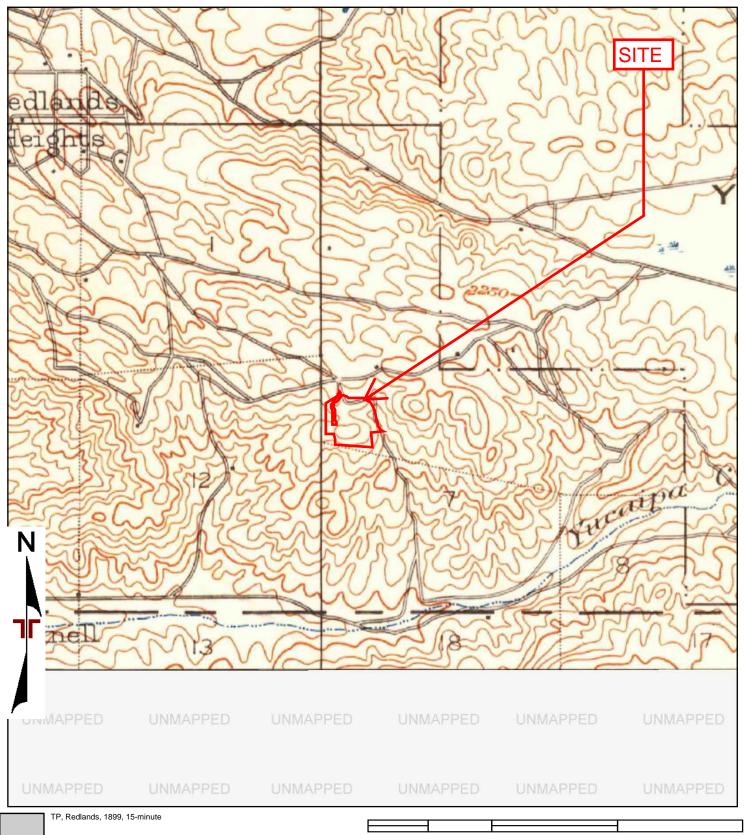
1355 East Cooley Drive Colton, California 92324

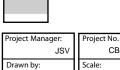
1901 TOPOGRAPHIC MAP

Macknet Property South of Helen Drive

Redlands, San Bernardino County, California 92373







Drawn by: SHC Scale: As Shown
Checked by: LSH
Approved by: CAP 1899

Terracon

1355 East Cooley Drive Colton, California 92324

1899 TOPOGRAPHIC MAP

Macknet Property
South of Helen Drive

0.5

0.25

0 Miles

Redlands, San Bernardino County, California 92373

Appendix

Macknet Property

South of Helen Drive Redlands, San Bernardino County, California 92373

Inquiry Number: 6867268.8

February 22, 2022

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

02/22/22

Site Name: Client Name:

Macknet Property Terracon

South of Helen Drive 1355 East Cooley Drive Redlands, CA 92373 Colton, CA 92324 EDR Inquiry # 6867268.8 Contact: Laura Hedman



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1995	1"=500'	Acquisition Date: January 01, 1995	USGS/DOQQ
1989	1"=500'	Flight Date: August 15, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1978	1"=500'	Flight Date: September 20, 1978	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1967	1"=500'	Flight Date: July 15, 1967	USDA
1961	1"=500'	Flight Date: June 14, 1961	USDA
1959	1"=500'	Flight Date: October 15, 1959	USDA
1953	1"=500'	Flight Date: February 16, 1953	USDA
1949	1"=500'	Flight Date: May 23, 1949	USDA
1938	1"=500'	Flight Date: August 09, 1938	USDA

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 Project Manager:
 JSV
 CB227029

 Drawn By:
 Scale:
 As Shown

 Checked By:
 LSH
 File Name:

2016

Approved By:

1355 East Cooley Drive

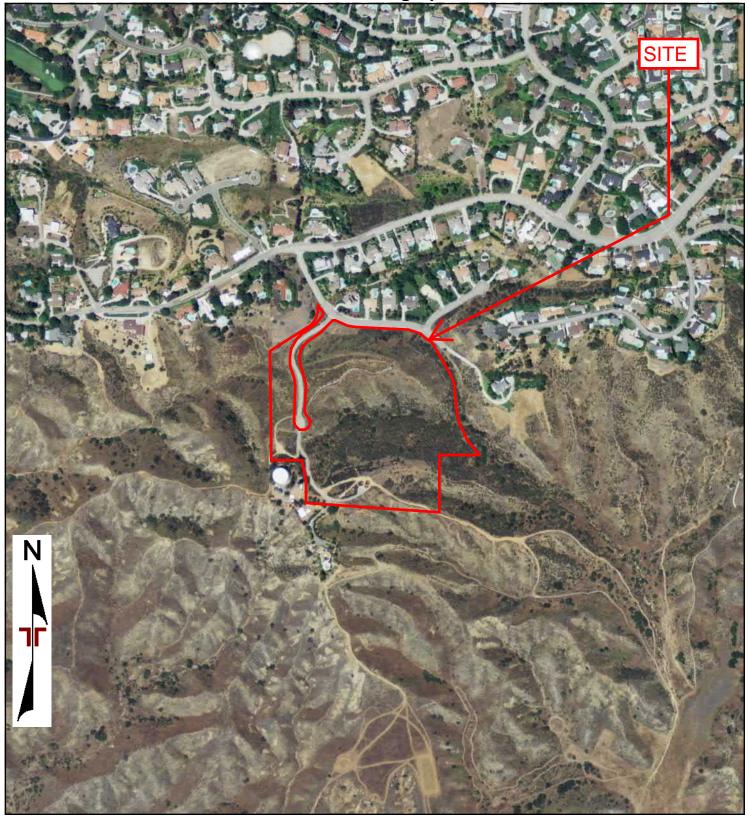
Colton, California 92324

2016 AERIAL PHOTOGRAPH

Macknet Property

South of Helen Drive Redlands, San Bernardino County, California 92373 Appendix





2012

Terracon

1355 East Cooley Drive Colton, California 92324 2012 AERIAL PHOTOGRAPH

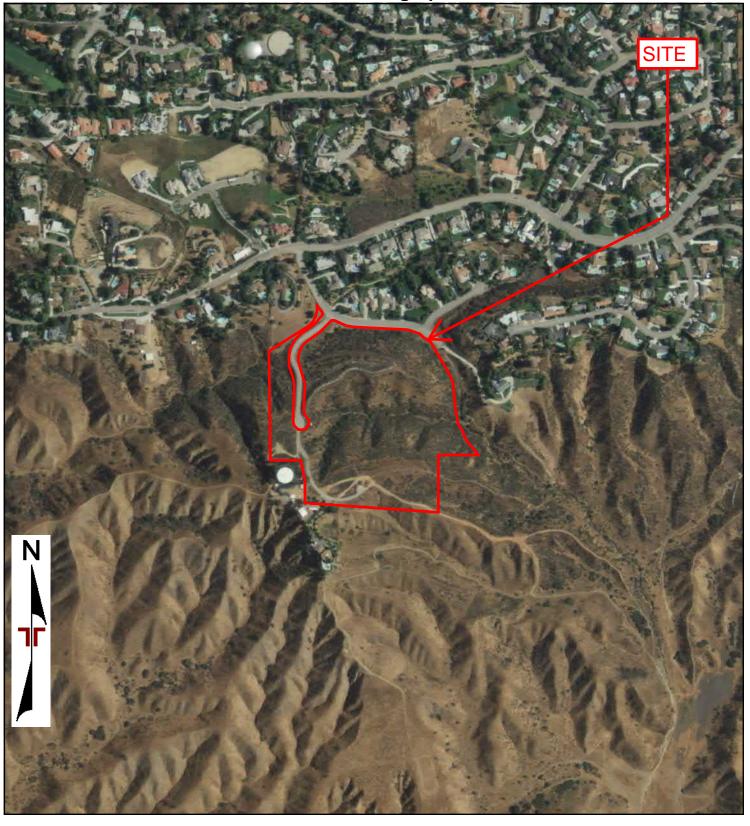
Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

Appendix

С





Project Manager:	Project No:	
JSV	CB227029	
Drawn By:	Scale:	
SHC	As Shown	
Checked By:	File Name:	
LSH		
Approved By:	Date:	
CAP	2009	

lerracon

1355 East Cooley Drive Colton, California 92324

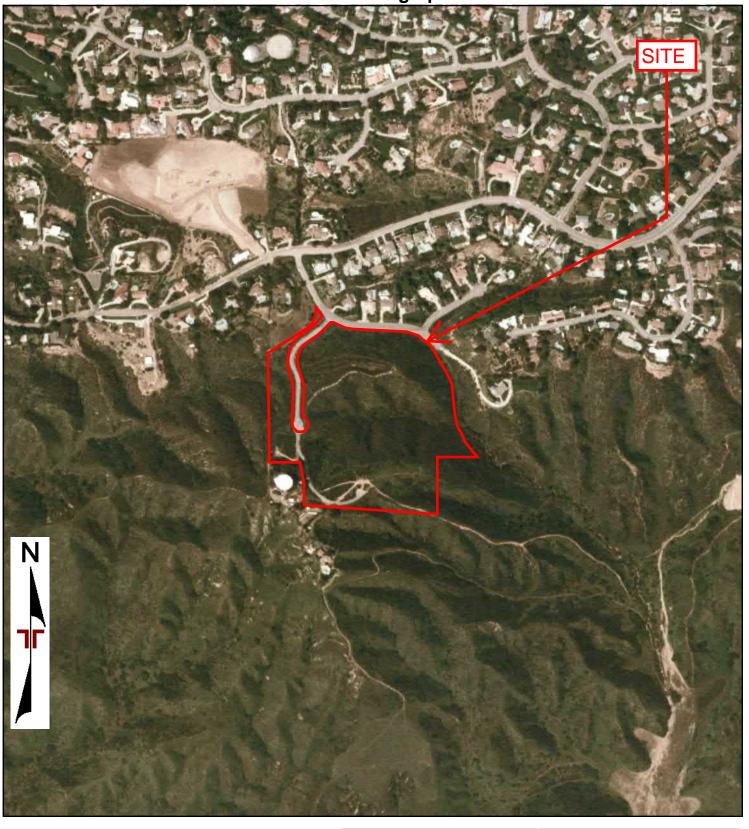
2009 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

С





lerracon

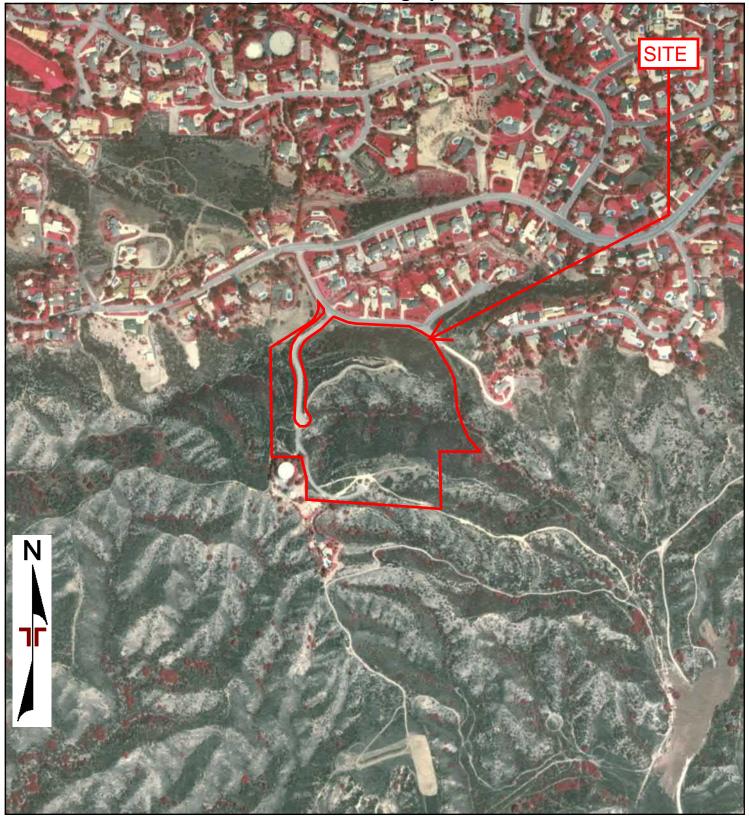
1355 East Cooley Drive Colton, California 92324 2006 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

С





2002 AERIAL PHOTOGRAPH

 Project Manager:
 JSV
 CB227029

 Drawn By:
 Scale:
 As Shown

 Checked By:
 LSH
 File Name:

2002

Approved By:

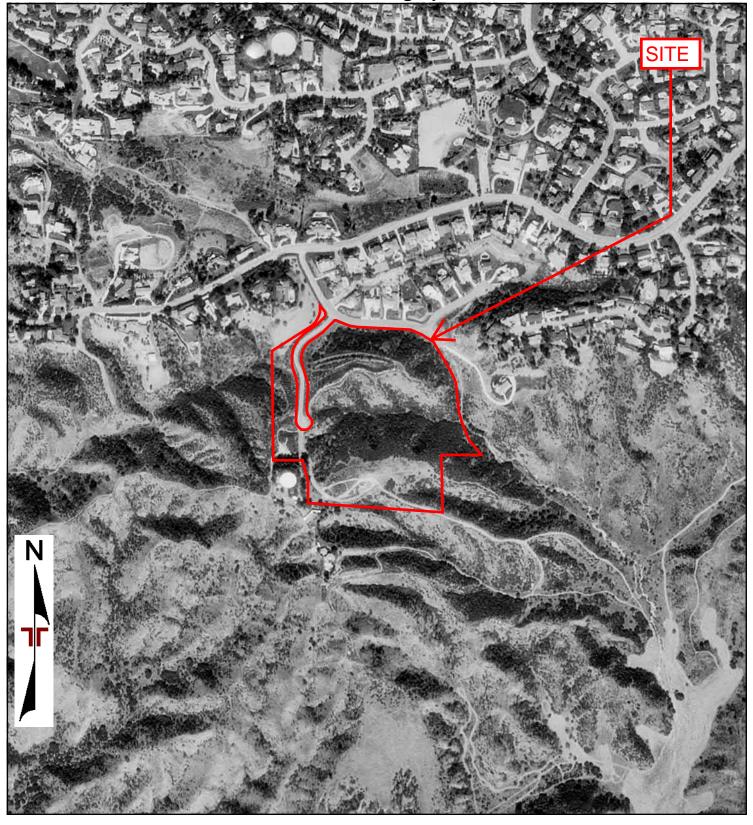
1355 East Cooley Drive

Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

Appendix





 Project Manager.
 Project No:

 JSV
 CB227029

 Drawn By:
 Scale:

 SHC
 As Shown

 Checked By:
 File Name:

1995

Approved By:

Tierracon

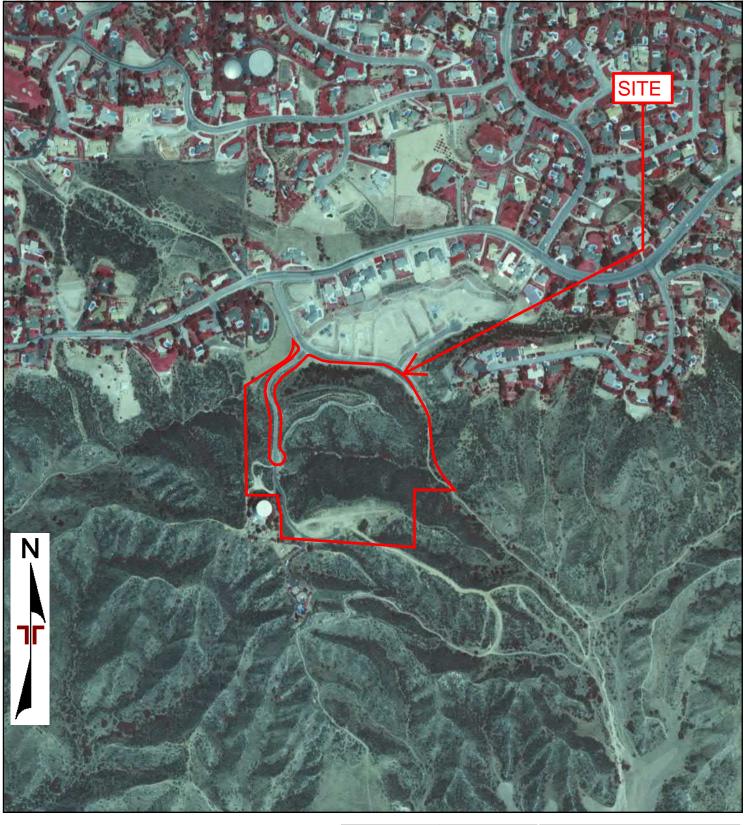
1355 East Cooley Drive Colton, California 92324 1995 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373







 Project Manager:
 JSV
 Project No:
 CB227029

 Drawn By:
 SHC
 Scale:
 As Shown

 Checked By:
 LSH
 File Name:

 Approved By:
 Date:

1989

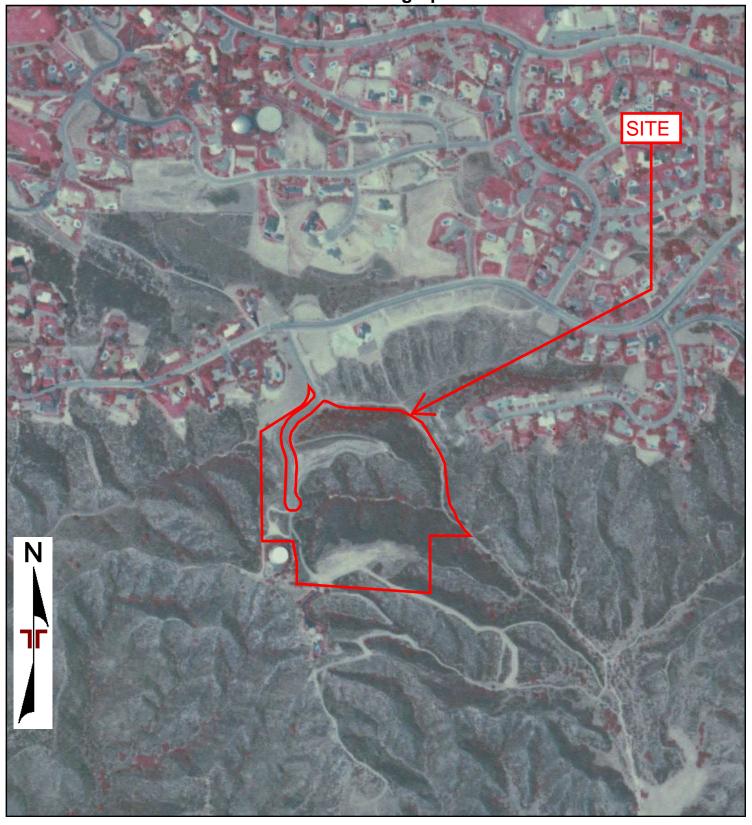
lerracon

1355 East Cooley Drive Colton, California 92324 1989 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373





 Project Manager.
 JSV
 Project No:
 CB227029

 Drawn By:
 SHC
 Scale:
 As Shown

 Checked By:
 LSH
 File Name:
 Date:

 Approved By:
 CAP
 1985

lerracon

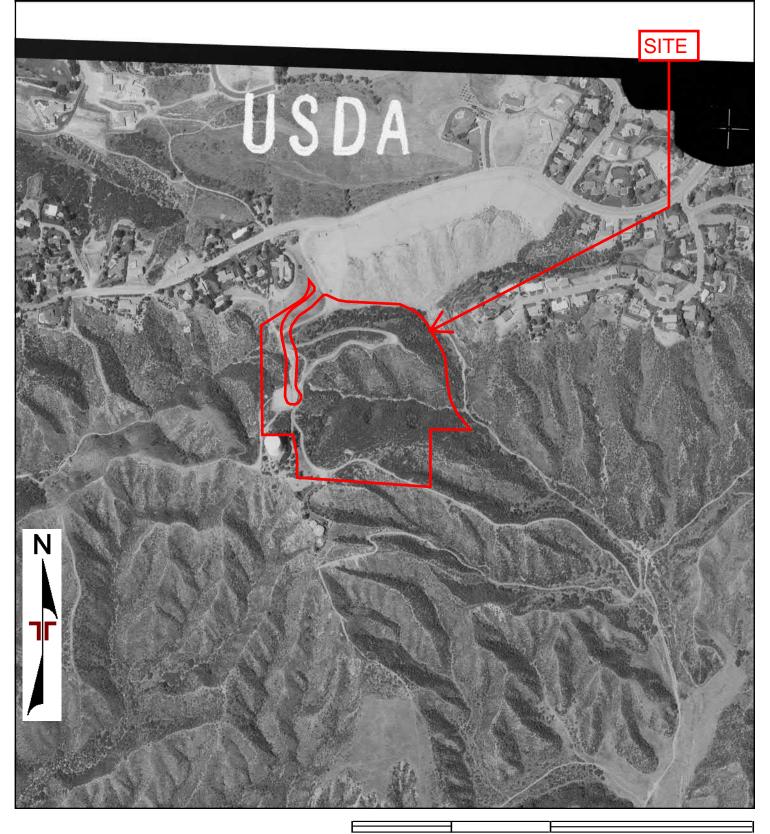
1355 East Cooley Drive Colton, California 92324 1985 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

С





 Project Manager:
 JSV
 Project No:

 Drawn By:
 Scale:
 As Shown

 Checked By:
 File Name:

LSH | Date:

CAP | 1978

Terracon

1355 East Cooley Drive Colton, California 92324 1978 AERIAL PHOTOGRAPH

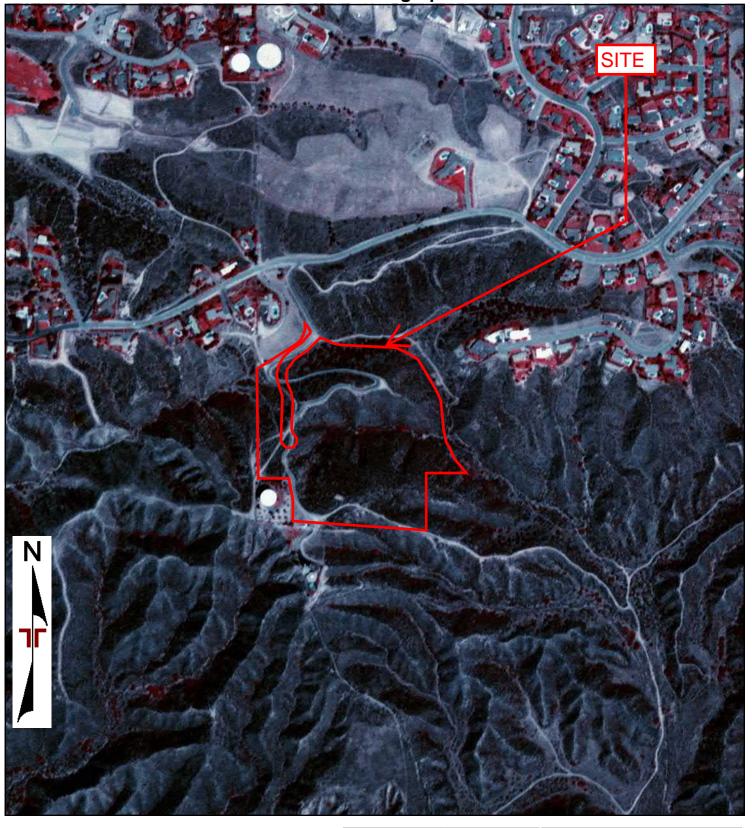
Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

Appendix

С





 Project Manager:
 JSV
 Project No:

 JSV
 CB227029

 Drawn By:
 Scale:
 As Shown

 Checked By:
 File Name:

Date:

1975

Approved By:

1355 East Cooley Drive

Colton, California 92324

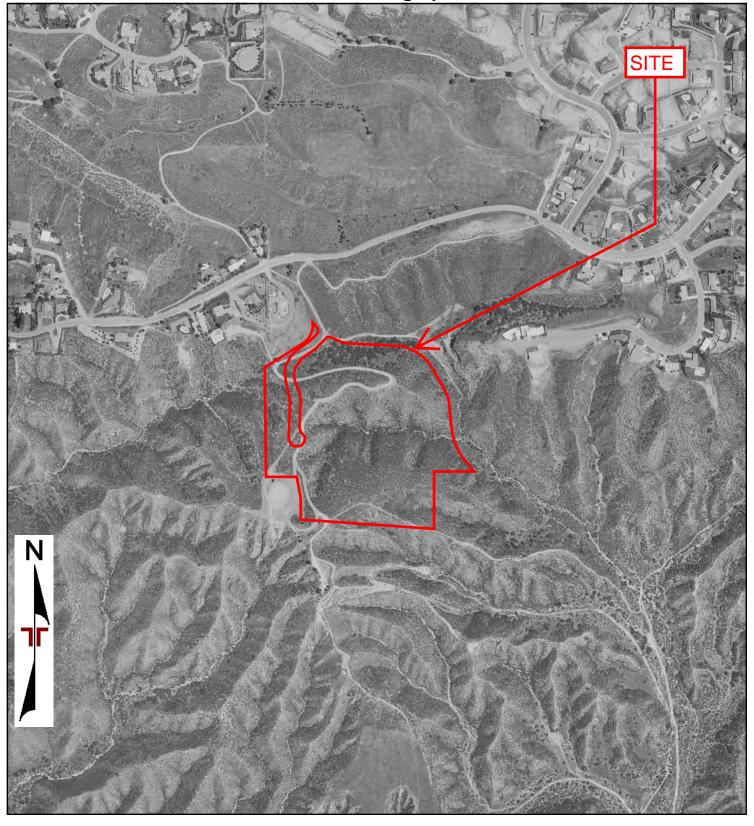
1975 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

C





Project Manager:
JSV

Drawn By:
SHC
Checked By:
LSH

Project No:
CB227029

Scale:
As Shown
File Name:

1967

Approved By:

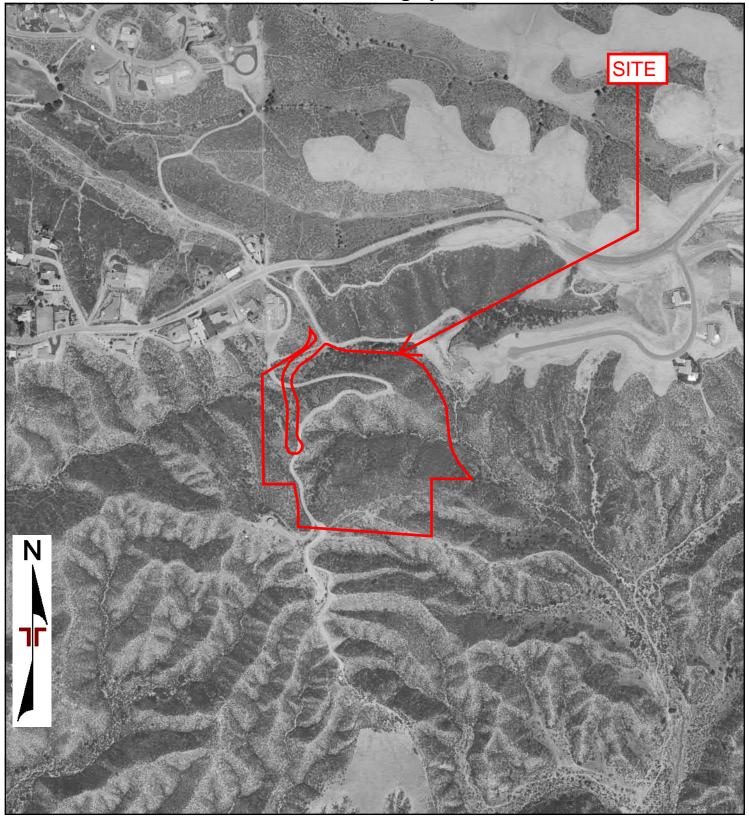
lerracon

1355 East Cooley Drive Colton, California 92324 1967 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373





 Project Manager:
 JSV
 CB227029

 Drawn By:
 SHC
 As Shown

 Checked By:
 LSH
 File Name:

1961

Approved By:

1355 East Cooley Drive

Colton, California 92324

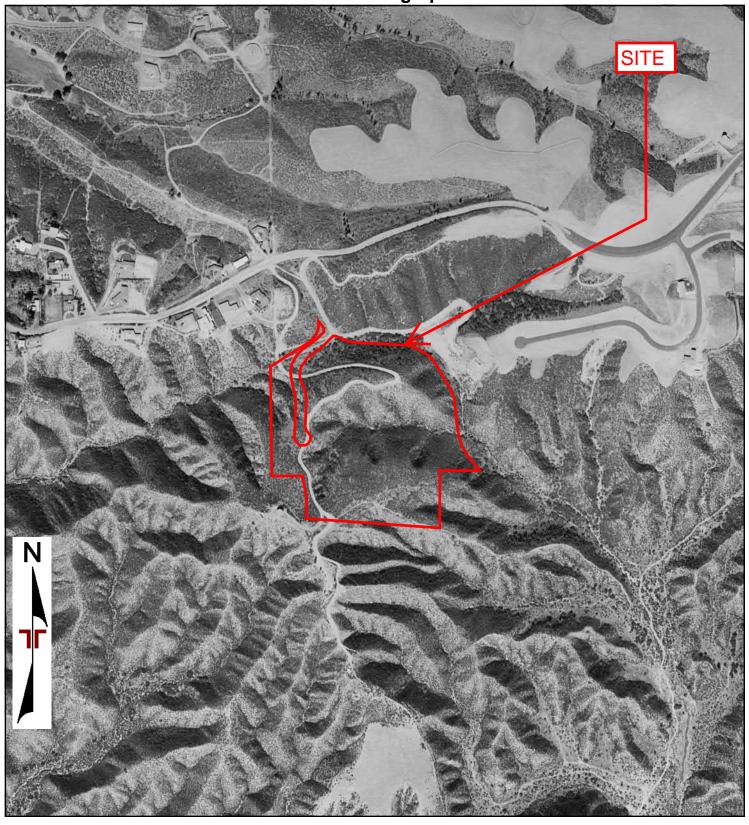
Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373

1961 AERIAL PHOTOGRAPH

 \sim





0 Feet 500

1959

Project Manager

Approved By:

1355 East Cooley Drive

Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

1000

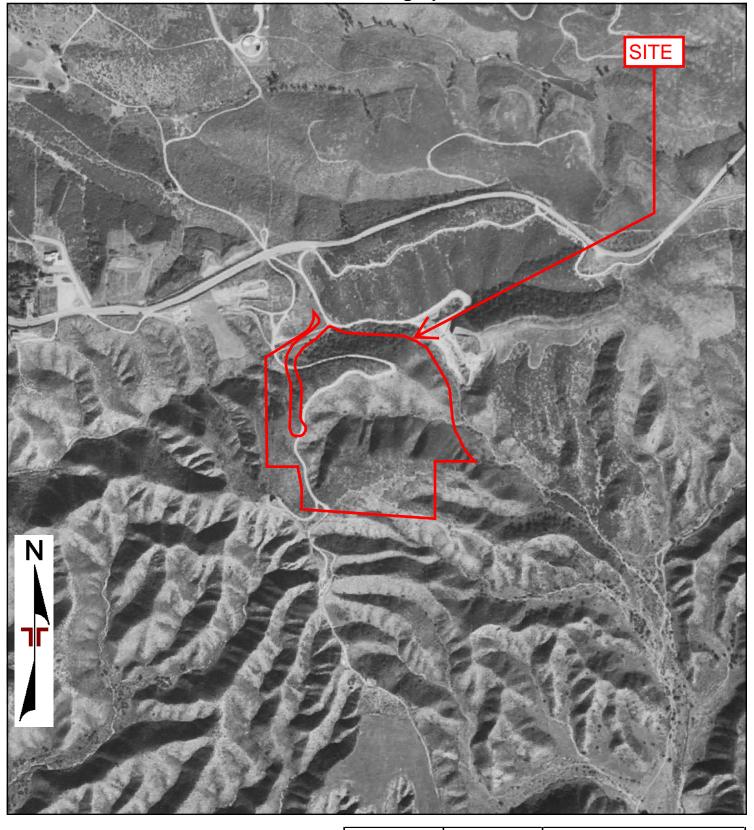
1959 AERIAL PHOTOGRAPH

Appendix

2000

 \sim





 Project Manager:
 JSV
 Project No:
 CB227029

 Drawn By:
 SHC
 Scale:
 As Shown

 Checked By:
 LSH
 File Name:
 LSH

 Approved By:
 Date:
 1953

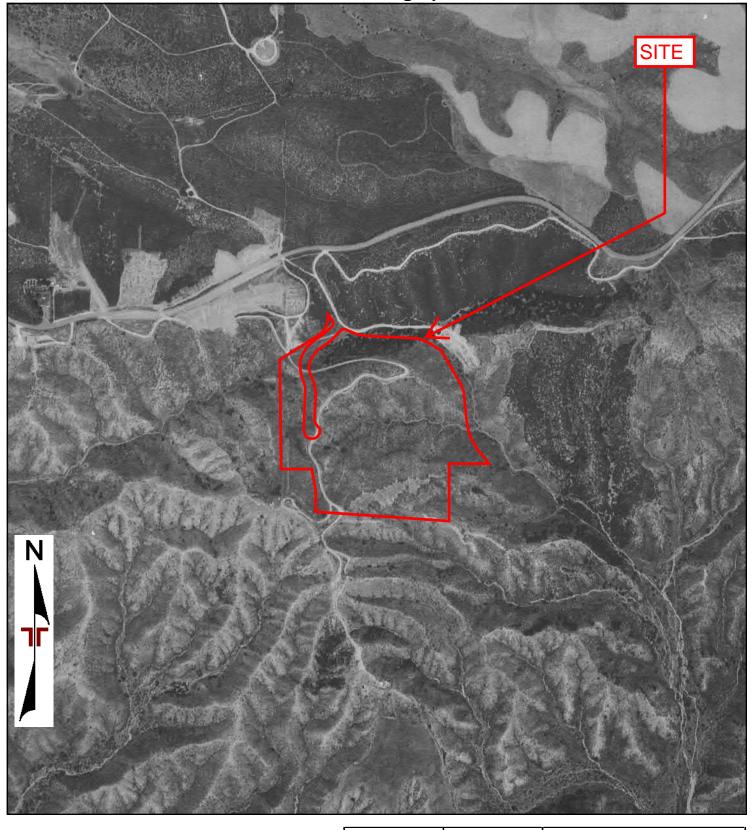
Terracon

1355 East Cooley Drive Colton, California 92324 1953 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373





 Project Manager.
 JSV
 Project No:
 CB227029

 Drawn By:
 SHC
 Scale:
 As Shown

 Checked By:
 LSH
 File Name:
 LSH

 Approved By:
 CAP
 Date:
 1949

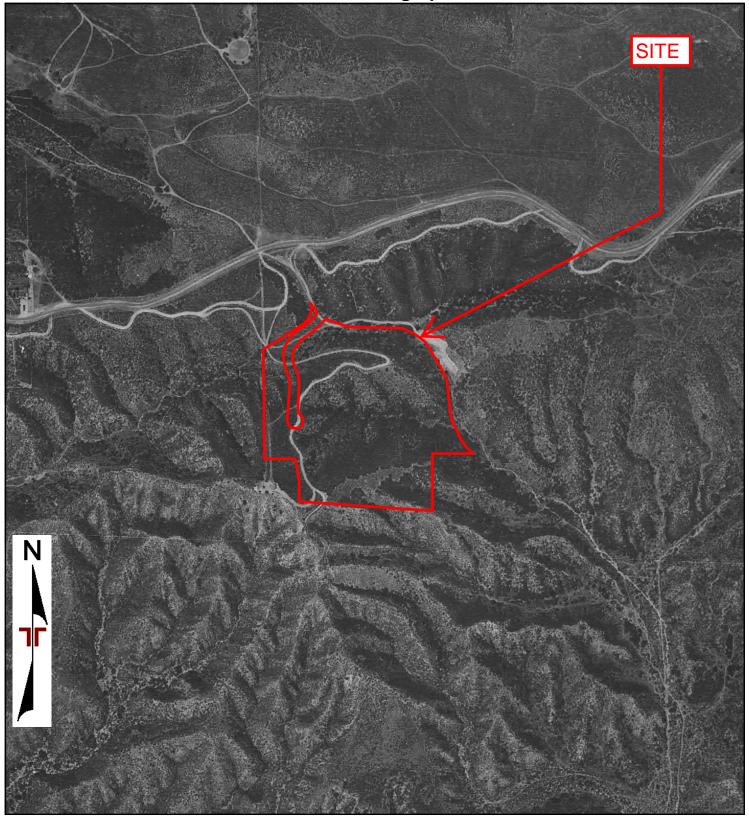
Terracon

1355 East Cooley Drive Colton, California 92324 1949 AERIAL PHOTOGRAPH

Macknet Property
South of Helen Drive

Redlands, San Bernardino County, California 92373





1938 AERIAL PHOTOGRAPH

 Project Manager:
 JSV
 Project No:

 JSV
 CB227029

 Drawn By:
 Scale:
 As Shown

 Checked By:
 File Name:

1938

Approved By:

1355 East Cooley Drive

Colton, California 92324

Macknet Property
South of Helen Drive
Redlands, San Bernardino County, California 92373

Appendix

Macknet Property

South of Helen Drive

Redlands, San Bernardino County, California 92373

Inquiry Number: 6867268.5

February 23, 2022

The EDR-City Directory Image Report



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Findings

City Directory Images

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Brad street. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	Target Street	Cross Street	<u>Source</u>
2017	$\overline{\checkmark}$	$\overline{\checkmark}$	EDR Digital Archive
2014	$\overline{\checkmark}$		EDR Digital Archive
2010	$\overline{\checkmark}$		EDR Digital Archive
2005	$\overline{\checkmark}$		EDR Digital Archive
2000	$\overline{\checkmark}$		EDR Digital Archive
1995	$\overline{\checkmark}$		EDR Digital Archive
1992	$\overline{\checkmark}$		EDR Digital Archive
1986			Haines Criss-Cross Directory
1980			Haines Criss-Cross Directory
1976			Haines Criss-Cross Directory
1971			Haines Criss-Cross Directory
1965			Luskey Brothers & Co. Publications

FINDINGS

TARGET PROPERTY STREET

South of Helen Drive Redlands, CA 92373

<u>Year</u>	CD Image	<u>Source</u>	
HELEN DR			
2017	pg A2	EDR Digital Archive	
2014	pg A3	EDR Digital Archive	
2010	pg A4	EDR Digital Archive	
2005	pg A5	EDR Digital Archive	
2000	pg A6	EDR Digital Archive	
1995	pg A7	EDR Digital Archive	
1992	pg A8	EDR Digital Archive	
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1976	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source
1965	-	Luskey Brothers & Co. Publications	Street not listed in Source

6867268-5 Page 2

FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
HELEN CT			
2017	pg. A1	EDR Digital Archive	
2014	-	EDR Digital Archive	Street not listed in Source
2010	-	EDR Digital Archive	Street not listed in Source
2005	-	EDR Digital Archive	Street not listed in Source
2000	-	EDR Digital Archive	Street not listed in Source
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1976	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source
1965	-	Luskey Brothers & Co. Publications	Street not listed in Source

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Target Street	Cross Street	<u>Source</u>
-	✓	EDR Digital Archive

HELEN CT 2017

31280	CITY OF REDLANDS

	TILLETT BIX 2017
10000	0.400/511.140/50.4
13039	SLAYYEH, YASER A
13063	RUNGCHARASSAENG, KITICHAI
12007	DICHEY MADIZA
13087	RICHEY, MARK A
13151	JUTZY, KENNETH R

		HELEN DR	2014	
13039 13051 13063 13075 13087 13151	LINDEMER, CURTIS A FARRIS, TERRY A RICHEY, MARK A			

	TIEEEN DIX	2010
13039	OCCUPANT UNKNOWN,	
13051	BRICKLEY, TOM M	
13075	FARRIS, TERRY A	
	DIOUEY MARKA	
13087	RICHEY, MARK A	
13151	JUTZY, KENNETH R	

	HELEN DR	2005
SLAYYEH, YASER A FAIRCHILD, JAMES L LINDEMER, CURTIS A FARRIS, TERRY A RICHEY, MARK A JUTZY, KENNETH R		

13039 13051 13063	OCCUPANT UNKNOWN, OCCUPANT UNKNOWN, SILVERGLEID, ARTHUR J
13075 13087	

13075 13087	SALVESEN, JOHN A RICHEY, MARK

13075 13087	SALVESEN, JOHN A RICHEY, MARK A

Client/User Required Questionnaire

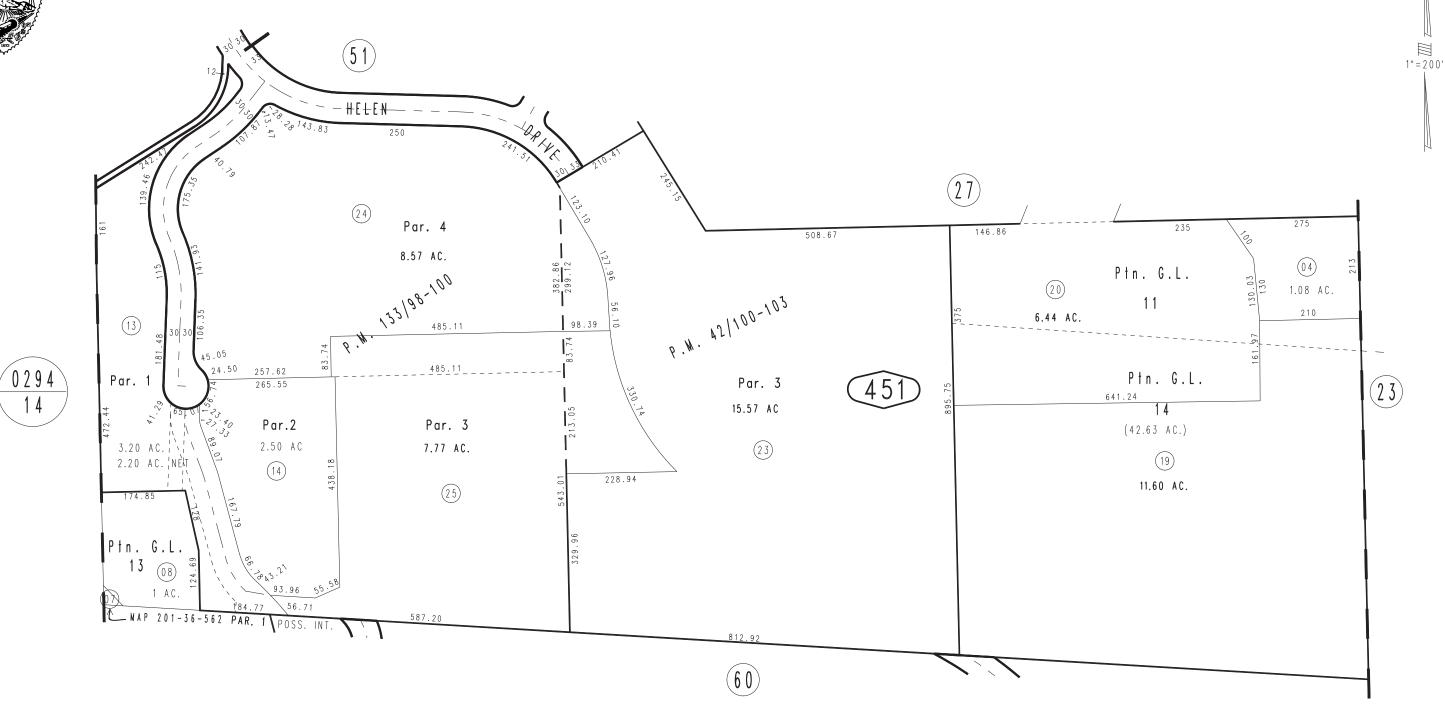


Person Completing Questionnaire	Name: Veronica Medina Company: City of Redlands	Phone: (909) 798-7584 x 6 Email: vmedina@cityofredlands.org		
Site Name	Macknet Property	, ,		
Site Address	South of Helen Drive, Redlands, California			
Point of Contact for Access Name: Mark Macknet Company: Phone: (909) 363-6238 Email: mmacknet@mac.com				
Access Restrictions or Special Site Requirements?	_X_NoYes (If yes, please explain)			
Confidentiality Requirements?	X_NoYes (If yes, please explain)			
Current Site Owner	Name:Mark Macknet, Dale Macknet, Cathy Mack Company:	net Phone (1909) 363-6238 (Mark)/ (1909) 214-7771 (Cathy) Email: mmacknet@mac.com / dmacknet@gmail.com / cmacknet@hotmail.com		
Current Site Operator	Name: See "Current Site Owner" Company:	Phone: Email:		
Reasons for ESA (e.g., financing, acquisition, lease, etc.)	The City is looking into purchasing the site with th existing water reservoir (white circle near the corn placed within the subject property.	e purpose of removing and replacing the er of property. The new reservoir will be		
Anticipated Future Site Use	Reservoir location			
Relevant Documents?	Please provide Terracon copies of prior F Environmental Permits or Audit documents, Geotechnical Investigations, Site Surveys, reports or documents.	Underground Storage Tank documents,		
	ASTM User Questionnaire			
Revitalization Act of 2001 (the "Brown provide this information to the environidentify recognized environmental conditions."	wner Liability Protections (LLPs) offered by the fields Amendments"), the user must respondental professional may result in significant distinct resulting in a determination that "all a as such, the user has an obligation to answer	d to the following questions. Failure to data gaps, which may limit our ability to ppropriate inquiry" is not complete. This		
recorded against the property under fed	ecords (or judicial records where appropriate) deral, tribal, state, or local law (40 CFR 312.2 and send Terracon a copy of the title records	5)?		
(AULs), such as engineering controls, I have been filed or recorded against the	ecords (or judicial records where appropriate) and use restrictions, or institutional controls property under federal, tribal, state, or local and send Terracon a copy of the title records	that are in place at the property and/or law (40 CFR 312.26)?		
	dge or experience related to the site or nearb			
	s the current or former occupants of the site of			
	e chemicals and processes used by this type			
X No Yes (If yes, explain below		•		
4) Do you have actual knowledge of a lower purchase price because contamination is known or believed to be present at the site (40 CFR 312.29)?				
X_NoYesNot applicable (If yes or Not applicable, explain below)				
5) Are you aware of commonly known or reasonably ascertainable information about the site that would help the				
environmental professional to identify conditions indicative of releases or threatened releases (40 CFR 312.30)? X_NoYes (If yes, explain below)				
	rience related to the site, are there any obvio	ous indicators that point to the presence		
or likely presence of contamination at the site (40 CFR 312.31)? X_NoYes (If yes, explain below)				
Comments or explanations:				

5011



THIS MAP IS FOR THE PURPOSE OF AD VALOREM TAXATION ONLY.



REVISED

07/28/15 GW 07/31/15 GW 10/02/15 KC 10/21/15 KC

Property Information Management System

San Bernardino County
Office of the Assessor



OWNERSHIP HISTORY REPORT FOR PARCEL 0300-451-13-0000



Parcel 0300451130000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 1.501 TO 3.500 ACRES

Land Type SINGLE FAMILY

RESIDENTIAL

District SAN BERNARDINO

Resp Group REAL PROPERTY

Resp Unit RES ZONE(MAX 14

UTS)&USE EX HPC/MHM(1-

14 UTS,CHURC

Ownership History

Owner Name: MACKNET, CATHY A

R/I JOINT TENANCY

Type OTHER OWNER

% Int 33.3333000

Acquisition Date 07/27/2020

Document Date 07/27/2020

Inactive Date NONE

Owner Name: MACKNET, KENNETH D II

R/I JOINT TENANCY

% Int 33.3333000

Type BILLED OWNER

Acquisition Date 07/27/2020

Document Date 07/27/2020

Inactive Date NONE

Document Numbers

Document Numbers

20200256178



Owner Name: MACKNET, MARK R

R/I JOINT TENANCY

Document Numbers

20200256178

% Int 33.3333000

Type JOINT MAIL OWNER

Acquisition Date 07/27/2020

Document Date 07/27/2020

Inactive Date NONE

Owner Name: MACKNET, ELAINE

R/I SOLE OWNER

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 04/02/2018

Document Date 07/27/2020

Inactive Date 07/26/2020

Document Numbers

20200256177

Owner Name: MACKNET, ELAINE

R/I SPOUSAL

% Int 50.0000000

Type JOINT MAIL OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 07/26/2020

Document Numbers

20160185616

Owner Name: MACKNET, KENNETH D

R/I SPOUSAL

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 04/01/2018

Document Numbers



Owner Name: MACKNET, K D DEFINED BENEFIT PENSION

R/I SOLE OWNER

Document Numbers

% Int 100.0000000

890000000000

Type BILLED OWNER

Acquisition Date 02/20/1986

Document Date 03/01/1988

Inactive Date 05/11/2016

Property Information Management System

San Bernardino County
Office of the Assessor



OWNERSHIP HISTORY REPORT FOR PARCEL 0300-451-14-0000



Parcel 0300451140000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 1.501 TO 3.500 ACRES

Land Type SINGLE FAMILY

RESIDENTIAL

District SAN BERNARDINO

Resp Group REAL PROPERTY

Resp Unit RES ZONE(MAX 14

UTS)&USE EX HPC/MHM(1-

14 UTS, CHURC

Ownership History

Owner Name: MACKNET, CATHY A

R/I JOINT TENANCY

Type OTHER OWNER

% Int 33.3333000

Acquisition Date 07/27/2020

Document Date 07/27/2020

Inactive Date NONE

Owner Name: MACKNET, KENNETH D II

R/I JOINT TENANCY

% Int 33.3333000

Type BILLED OWNER

Acquisition Date 07/27/2020

Document Date 07/27/2020

Inactive Date NONE

Document Numbers

Document Numbers

20200256180



Owner Name: MACKNET, MARK R

R/I JOINT TENANCY

% Int 33.3333000

Type JOINT MAIL OWNER

Acquisition Date 07/27/2020

Document Date 07/27/2020

Inactive Date NONE

Owner Name: MACKNET, ELAINE

R/I SOLE OWNER

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 04/02/2018

Document Date 07/27/2020

Inactive Date 07/26/2020

Owner Name: MACKNET, ELAINE

R/I SPOUSAL

% Int 50.0000000

Type JOINT MAIL OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 07/26/2020

Owner Name: MACKNET, KENNETH D

R/I SPOUSAL

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 04/01/2018

Document Numbers

20200256180

Document Numbers

20200256179

Document Numbers

Document Numbers

20160185615



Owner Name: MACKNET, K D DEFINED BENEFIT PENSION

R/I SOLE OWNER

Document Numbers

% Int 100.0000000

890000000000

Type BILLED OWNER

Acquisition Date 02/20/1986

Document Date 03/01/1988

Inactive Date 05/11/2016

Property Information Management System

San Bernardino County
Office of the Assessor



OWNERSHIP HISTORY REPORT FOR PARCEL 0300-451-24-0000



Parcel 0300451240000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type SINGLE FAMILY

RESIDENTIAL

District SAN BERNARDINO

Resp Group REAL PROPERTY

Resp Unit RES ZONE(MAX 14

UTS)&USE EX HPC/MHM(1-

14 UTS, CHURC

Ownership History

Owner Name: MACKNET, CATHY A

R/I JOINT TENANCY

% Int 33.3333000

Type OTHER OWNER

Acquisition Date 07/27/2020

Document Date 02/16/2021

Inactive Date NONE

Owner Name: MACKNET, KENNETH D II

R/I JOINT TENANCY

% Int 33.3333000

Type BILLED OWNER

Acquisition Date 07/27/2020

Document Date 02/16/2021

Inactive Date NONE

Document Numbers

Document Numbers

20200256182 20210073621

20200256182



Owner Name: MACKNET, MARK R

R/I JOINT TENANCY

% Int 33.3333000

Type JOINT MAIL OWNER

Acquisition Date 07/27/2020

Document Date 02/16/2021

Inactive Date NONE

Document Numbers

20200256182 20210073621

Owner Name: MACKNET, ELAINE

R/I SOLE OWNER

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 04/02/2018

Document Date 02/10/2021

Inactive Date 07/26/2020

Document Numbers

20210066183

Owner Name: MACKNET, ELAINE

R/I SPOUSAL

% Int 50.0000000

Type JOINT MAIL OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 07/26/2020

Document Numbers

20160185617

Owner Name: MACKNET, KENNETH D

R/I SPOUSAL

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 04/01/2018

Document Numbers



Owner Name: MACKNET, K D DEFINED BENEFIT PENSION

R/I SOLE OWNER

% Int 100.0000000

Type BILLED OWNER

Acquisition Date 02/20/1986

Document Date 07/22/2015

Inactive Date 05/11/2016

Document Numbers

Property Information Management System

San Bernardino County
Office of the Assessor



OWNERSHIP HISTORY REPORT FOR PARCEL 0300-451-25-0000



Parcel 0300451250000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status ASSESSED BY COUNTY

Use Code VACANT

Land Access PUBLIC PAVED

Size 7.001 TO 14.000 ACRES

Land Type SINGLE FAMILY

RESIDENTIAL

District SAN BERNARDINO

Resp Group REAL PROPERTY

Resp Unit RES ZONE(MAX 14

UTS)&USE EX HPC/MHM(1-

14 UTS, CHURC

Ownership History

Owner Name: MACKNET, ELAINE

R/I SOLE OWNER

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 04/02/2018

Document Date 07/27/2020

Inactive Date NONE

Owner Name: MACKNET, ELAINE

R/I SPOUSAL

% Int 50.0000000

Type JOINT MAIL OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date NONE

Document Numbers

20200256181

Document Numbers



Owner Name: (DEED ERR) MACKNET, CATHY A

R/I JOINT TENANCY

Document Numbers

% Int 33.3333000

20200256182 20210073621

Type OTHER OWNER

Acquisition Date 07/27/2020

Document Date 02/16/2021

Inactive Date 07/26/2020

Owner Name: (DEED ERR) MACKNET, KENNETH D II

R/I JOINT TENANCY

Document Numbers

% Int 33.3333000

20200256182 20210073621

Type BILLED OWNER

Acquisition Date 07/27/2020

Document Date 02/16/2021

Inactive Date 07/26/2020

Owner Name: (DEED ERR) MACKNET, MARK R

R/I JOINT TENANCY

Document Numbers

% Int 33.3333000

20200256182 20210073621

Type JOINT MAIL OWNER

Acquisition Date 07/27/2020

Document Date 02/16/2021

Inactive Date 07/26/2020

Owner Name: (ERR) MACKNEYT, ELAINE

R/I SOLE OWNER

Document Numbers

% Int 50.0000000

Type BILLED OWNER

Acquisition Date 04/02/2018

Document Date 07/27/2020

Inactive Date 04/01/2018



Owner Name: MACKNET, KENNETH D

R/I SPOUSAL

Document Numbers

% Int 50.0000000

20160185618

Type BILLED OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 04/01/2018

Owner Name: (ERR) MACKNEYT, ELAINE

R/I SPOUSAL

Document Numbers

% Int 50.0000000

20160185618

Type JOINT MAIL OWNER

Acquisition Date 05/12/2016

Document Date 05/12/2016

Inactive Date 05/11/2016

Owner Name: MACKNET, K D DEFINED BENEFIT PENSION

R/I SOLE OWNER

Document Numbers

% Int 100.0000000

20150311466

Type BILLED OWNER

20150311470

Acquisition Date 02/20/1986

Document Date 07/22/2015

Inactive Date 05/11/2016

APPENDIX D ENVIRONMENTAL DATABASE INFORMATION

Macknet Property

South of Helen Drive

Redlands, San Bernardino County, California 92373

Inquiry Number: 6867268.2s

February 22, 2022

The EDR Radius Map™ Report with GeoCheck®



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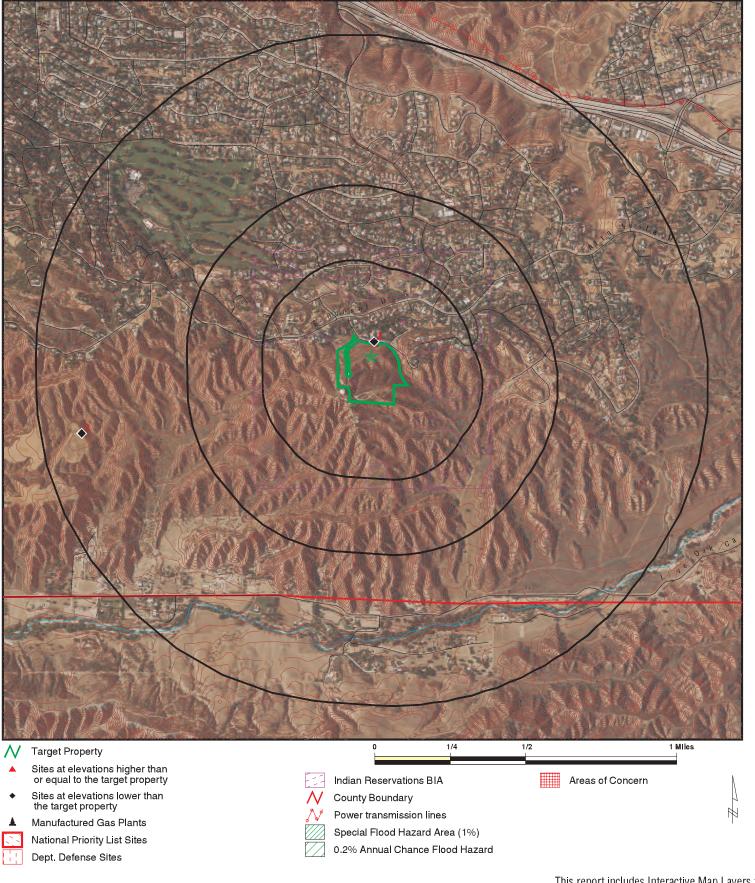
MAPPED SITES SUMMARY

Target Property Address: SOUTH OF HELEN DRIVE REDLANDS, CA 92373

Click on Map ID to see full detail.

MAP				RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
1	AT&T MOBILITY - ES00	31280 B HELEN CT	San Bern. Co. Permit, CERS, HWTS	Lower	27, 0.005, North
2	SO CAL GAS/SAN BERNA	SO. CNR RIALTO BTWN	ENVIROSTOR, VCP	Lower	4560, 0.864, WSW

OVERVIEW MAP - 6867268.2S

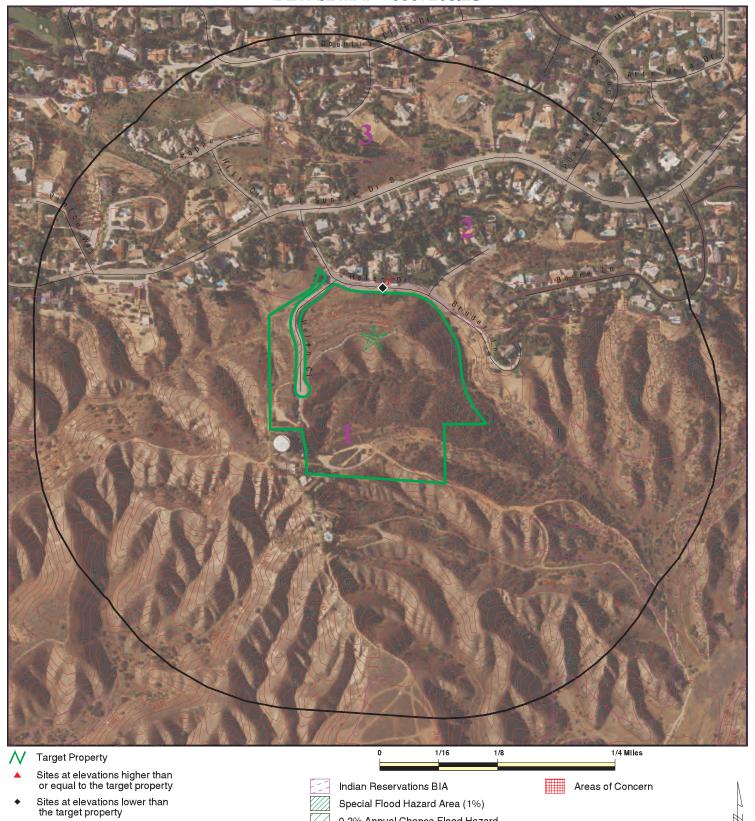


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Macknet Property ADDRESS: South of Helen Drive Redlands CA 92373 LAT/LONG: 34.0157 / 117.136868 CLIENT: CONTACT: Terracon Laura Hedman INQUIRY#: 6867268.2s DATE: February 22, 2022 9:26 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 6867268.2S



Sensitive Receptors National Priority List Sites Dept. Defense Sites

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Macknet Property ADDRESS: South of Helen Drive Redlands CA 92373 LAT/LONG: 34.0157 / 117.136868

Manufactured Gas Plants

CLIENT: CONTACT: Terracon Laura Hedman INQUIRY#: 6867268.2s DATE: February 22, 2022 9:28 am

0.2% Annual Chance Flood Hazard

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted	
STANDARD ENVIRONMENT	TAL RECORDS								
Lists of Federal NPL (Su	perfund) site	s							
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0	
Lists of Federal Delisted NPL sites									
Delisted NPL	1.000		0	0	0	0	NR	0	
Lists of Federal sites subject to CERCLA removals and CERCLA orders									
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0	
Lists of Federal CERCLA	A sites with N	FRAP							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0	
Lists of Federal RCRA fa undergoing Corrective A									
CORRACTS	1.000		0	0	0	0	NR	0	
Lists of Federal RCRA To	SD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0	
Lists of Federal RCRA g	enerators								
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0	
Federal institutional con engineering controls reg									
LUCIS US ENG CONTROLS US INST CONTROLS	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0	
Federal ERNS list									
ERNS	TP		NR	NR	NR	NR	NR	0	
Lists of state- and tribal (Superfund) equivalent s	sites								
RESPONSE	1.000		0	0	0	0	NR	0	
Lists of state- and tribal hazardous waste facilitie	es								
ENVIROSTOR	1.000		0	0	0	1	NR	1	
Lists of state and tribal landfills and solid waste disposal facilities									
SWF/LF	0.500		0	0	0	NR	NR	0	

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal l	eaking storag	ge tanks						
LUST INDIAN LUST CPS-SLIC	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Lists of state and tribal registered storage tanks								
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
Lists of state and tribal	-	anup sites						
INDIAN VCP VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Lists of state and tribal l	brownfield sit	es						
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	ITAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	Solid							
WMUDS/SWAT SWRCY HAULERS INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 TP 0.500 0.500 0.500 0.500		0 0 NR 0 0 0	0 0 NR 0 0 0	0 0 NR 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0 0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL HIST Cal-Sites SCH CDL Toxic Pits CERS HAZ WASTE US CDL AQUEOUS FOAM PFAS	TP 1.000 0.250 TP 1.000 0.250 TP TP 0.500		NR 0 0 NR 0 0 NR NR NR	NR 0 0 NR 0 0 NR NR NR	NR 0 NR NR 0 NR NR NR	NR 0 NR NR 0 NR NR NR	NR NR NR NR NR NR NR	0 0 0 0 0 0 0
Local Lists of Registered	_	iks						
SWEEPS UST HIST UST CERS TANKS	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS LIENS 2 DEED	TP TP 0.500		NR NR 0	NR NR 0	NR NR 0	NR NR NR	NR NR NR	0 0 0
Records of Emergency Release Reports								
HMIRS CHMIRS LDS MCS SPILLS 90	TP TP TP TP TP		NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS	0.250 1.000 1.000 0.500 TP TP TP 0.250 TP TP TP 1.000 TP		0 0 0 0 RR 0 RR NR 0 RR NR RR RR RR NR NR NR NR NR NR NR NR	0 0 0 0 RR 0 RR 0 R R N R R R R R R R R	NO O O R R R R R O O O O R R N N N N O O O O	NO	NR R R R R R R R R R R R R R R R R R R	
US AIRS US MINES ABANDONED MINES FINDS DOCKET HWC ECHO UXO	TP 0.250 0.250 TP TP TP 1.000		NR 0 0 NR NR NR 0	NR 0 0 NR NR NR 0	NR NR NR NR NR NR	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM CA BOND EXP. PLAN Cortese CUPA Listings DRYCLEANERS EMI ENF Financial Assurance HAZNET ICE HIST CORTESE HWP HWT MINES MWMP NPDES San Bern. Co. Permit PEST LIC PROC Notify 65 UIC UIC GEO WASTEWATER PITS WDS WIP MILITARY PRIV SITES PROJECT WDR CIWQS CERS NON-CASE INFO OTHER OIL GAS PROD WATER PONDS SAMPLING POINT WELL STIM PROJ	0.250 1.000 0.500 0.250 0.250 TP TP TP TP TP 0.500 1.000 0.250 TP 0.250 TP 0.500 1.000 TP 0.500 TP 0.500 TP TP 0.500 TP		00000 R R R R R O 0 0 0 0 R 1 R O 0 R R O R O R R R R R R R R R R R R	00000RRRRR00000RORORORORNORRNRRRRRRRRRR	NOORRRANDOORRA	NONE NEW NEW NEW NEW NEW NEW NEW NEW NEW N		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
HWTS MINES MRDS	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Go	vt. Archives							
RGA LF	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals		0	1	0	0	1	0	2

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

AT&T MOBILITY - ES0022-02 (CM365) REDLANDS WATER T San Bern. Co. Permit S127126892

North 31280 B HELEN CT CERS N/A

< 1/8 REDLANDS, CA 92373 HWTS

0.005 mi. 27 ft.

Relative: San Bern. Co. Permit:

Lower Name: AT&T MOBILITY-ES0022-02 (CM365) REDLANDS WATER TANK (USID50979)

Actual: Address: 31280 HELEN CT B
2137 ft. City,State,Zip: REDLANDS, CA 92373
Region: SAN BERNARDINO

Facility ID: FA0010602

Owner: New Cingular Wireless PCS, LLC dba AT&T Mobility

Permit Number: PT0040563

Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL

Facility Status: ACTIVE Expiration Date: 04/30/2022

Name: AT&T MOBILITY-ES0022-02 (CM365) REDLANDS WATER TANK (USID50979)

Address: 31280 HELEN CT B
City,State,Zip: REDLANDS, CA 92373
Region: SAN BERNARDINO

Facility ID: FA0010602

Owner: New Cingular Wireless PCS, LLC dba AT&T Mobility

Permit Number: PT0018878

Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES

Facility Status: INACTIVE Expiration Date: 04/30/2012

CERS:

Name: AT&T MOBILITY - ES0022-02 (CM365) REDLANDS WATER TANK (USID50979)

Address: 31280 B HELEN CT City, State, Zip: REDLANDS, CA 92373

Site ID: 573070 CERS ID: 10866640

CERS Description: Chemical Storage Facilities

Affiliation:

Affiliation Type Desc: Document Preparer

Entity Name: Peter Burnell, Sigma Consultants, Inc.

Affiliation Phone:

Affiliation Type Desc: CUPA District

Entity Name: San Bernardino County Fire

Affiliation Address: 620 South E Street
Affiliation City: San Bernardino

Affiliation State: CA

Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Environmental Contact

Entity Name: AT&T EH&S Hotline - Option #1
Affiliation Address: 308 S. Akard St., 17th Floor

Affiliation City:

Affiliation State:

Affiliation Zip:

Affiliation Phone:

Dallas

TX

75202

Affiliation Type Desc: Facility Mailing Address

Direction Distance

Elevation Site Database(s) EPA ID Number

AT&T MOBILITY - ES0022-02 (CM365) REDLANDS WATER TANK (USID5 (Continued)

S127126892

EDR ID Number

Entity Name: Mailing Address

Affiliation Address: 308 S. Akard St., 17th Floor

Affiliation City:

Affiliation State:

TX

Affiliation Zip:

Affiliation Phone:

TX

T5202

Affiliation Type Desc: Parent Corporation Entity Name: AT&T Mobility

Affiliation Phone:

Affiliation Type Desc: Legal Owner

Entity Name: New Cingular Wireless PCS, LLC dba AT&T Mobility

Affiliation Address: 308 S. Akard St., 17th Floor

Affiliation City: Dallas Affiliation State: TX

Affiliation Country: United States
Affiliation Zip: 75202

Affiliation Phone: (214) 464-1712,

Affiliation Type Desc: Identification Signer Entity Name: Jeremy McGrue

Entity Title: National EPCRA Manager

Affiliation Phone:

Affiliation Type Desc: Operator
Entity Name: AT&T Mobility
Affiliation Phone: (800) 566-9347,

HWTS:

Name: NEW CINGULAR WIRELESS PCS LLC

 Address:
 31280 HELEN CT #B

 City, State, Zip:
 REDLANDS, CA 92373

 EPA ID:
 CAL000461621

 Create Date:
 04/06/2021

 Last Act Date:
 04/06/2021

Mailing Address: 308 S AKARD ST 17TH FLR

Mailing City, State, Zip: DALLAS, TX 75202

Owner Name: NEW CINGULAR WIRELESS PCS LLC

Owner Address: 308 S AKARD ST 17TH FLR

Owner City, State, Zip:
Contact Name:
Contact Address:

DALLAS, TX 75202
EH&S WASTE TEAM
308 S AKARD ST 17TH FLR

City,State,Zip: DALLAS, TX 75202

NAICS:

EPA ID: CAL000461621

Create Date: 2021-04-06 11:46:25.760

NAICS Code: 517911

NAICS Description: Telecommunications Resellers Issued EPA ID Date: 2021-04-06 11:46:25.76000

Facility Name: NEW CINGULAR WIRELESS PCS LLC

Facility Address: 31280 HELEN CT #B

Facility City: REDLANDS
Facility State: CA
Facility Zip: 92373

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

2 SO CAL GAS/SAN BERNARDINO 2 (RIALTO) ENVIROSTOR S106568284
WSW SO. CNR RIALTO BTWN D & ARROWHEAD VCP N/A

1/2-1 SAN BERNARDINO, CA 92401

0.864 mi. 4560 ft.

Relative: ENVIROSTOR:

 Lower
 Name:
 SO CAL GAS/SAN BERNARDINO 2 (RIALTO)

 Actual:
 Address:
 SO. CNR RIALTO BTWN D & ARROWHEAD

1932 ft. City, State, Zip: SAN BERNARDINO, CA 92401

Facility ID: 36490110
Status: No Further Action
Status Date: 06/30/2000
Site Code: 400342
Site Type: Voluntary Cleanup

Site Type: Voluntary Cleanup Site Type Detailed: Voluntary Cleanup

Acres: 6
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Safouh Sayed
Supervisor: Robert Senga
Division Branch: Cleanup Cypress

Assembly: 40 Senate: 23

Special Program: Voluntary Cleanup Program

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Responsible Party Latitude: 34.01205 Longitude: -117.1536

APN: NONE SPECIFIED

Past Use: MANUFACTURED GAS PLANT

Potential COC: TPH-gas

Confirmed COC: NONE SPECIFIED

Potential Description: SOIL

Alias Name: SO CAL GAS - SAN BERNARDINO

Alias Type: Alternate Name

Alias Name: SO CAL GAS - SAN BERNARDINO/RIALTO

Alias Type: Alternate Name

Alias Name: SO CAL GAS/SAN BERNARDINO 2 (ARROWHEAD)

Alias Type: Alternate Name

Alias Name: SOUTHERN CALIFORNIA GAS

Alias Type: Alternate Name

Alias Name: SOUTHERN CALIFORNIA GAS COMPANY

Alias Type: Alternate Name

Alias Name: TOWN GAS SITE 2 - SAN BERNARDINO

 Alias Type:
 Alternate Name

 Alias Name:
 110033615764

 Alias Type:
 EPA (FRS #)

 Alias Name:
 400342

Alias Type: Project Code (Site Code)

Alias Name: 36490110

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE

Completed Document Type: Standard Voluntary Agreement

Completed Date: 11/08/1996

Comments: A Consent Order was signed by The Gas Co and DTSC to address

Direction Distance

Elevation Site Database(s) EPA ID Number

SO CAL GAS/SAN BERNARDINO 2 (RIALTO) (Continued)

S106568284

EDR ID Number

Supplemental Investigation, and the preparation and the implementation of a Removal Action Workplan for the site

Completed Area Name: PROJECT WIDE

Completed Document Type: Standard Voluntary Agreement

Completed Date: 08/20/1993

Completed Area Name: PROJECT WIDE

Completed Document Type: Remedial Investigation / Feasibility Study

Completed Date: 05/10/1999

Comments: The Remedial Investigation/Feasibility Study (RI/FS) consists of soil

investigation and groundwater monitoring. The major chemicals of potential concern are carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) in the soil. The objective of this project is to remediate

the site by removing contaminated soils.

Completed Area Name: PROJECT WIDE

Completed Document Type: Removal Action Completion Report

Completed Date: 06/30/2002

Comments: The removal of contaminated soil has been completed and a removal

action report has been submitted.

Completed Area Name: PROJECT WIDE

Completed Document Type: Removal Action Workplan

Completed Date: 06/28/1999

Comments: The objective of this project is to remediate the site by removing

contaminated soils. The selected remedial action consists of removing contaminated soil to a depth of 12 feet bgs. Excavated areas will be

backfilled with clean imported soil.

Completed Area Name: PROJECT WIDE

Completed Document Type: Preliminary Endangerment Assessment Report

Completed Date: 08/31/1994

Completed Area Name: PROJECT WIDE

Completed Document Type: Site Characterization Workplan

Completed Date: 08/08/1997

VCP:

Name: SO CAL GAS/SAN BERNARDINO 2 (RIALTO)
Address: SO. CNR RIALTO BTWN D & ARROWHEAD

City, State, Zip: SAN BERNARDINO, CA 92401

Facility ID: 36490110
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED

Acres: 6
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: Safouh Sayed
Supervisor: Robert Senga
Division Branch: Cleanup Cypress

Site Code: 400342 Assembly: 40

Direction Distance

Elevation Site Database(s) EPA ID Number

SO CAL GAS/SAN BERNARDINO 2 (RIALTO) (Continued)

S106568284

EDR ID Number

Senate: 23

Special Programs Code: Voluntary Cleanup Program

Status: No Further Action Status Date: 06/30/2000

Restricted Use: NO

Funding: Responsible Party
Lat/Long: 34.01205 / -117.1536
APN: NONE SPECIFIED

Past Use: MANUFACTURED GAS PLANT

Potential COC: 30025

Confirmed COC: NONE SPECIFIED

Potential Description: SOIL

Alias Name: SO CAL GAS - SAN BERNARDINO

Alias Type: Alternate Name

Alias Name: SO CAL GAS - SAN BERNARDINO/RIALTO

Alias Type: Alternate Name

Alias Name: SO CAL GAS/SAN BERNARDINO 2 (ARROWHEAD)

Alias Type: Alternate Name

Alias Name: SOUTHERN CALIFORNIA GAS

Alias Type: Alternate Name

Alias Name: SOUTHERN CALIFORNIA GAS COMPANY

Alias Type: Alternate Name

Alias Name: TOWN GAS SITE 2 - SAN BERNARDINO

 Alias Type:
 Alternate Name

 Alias Name:
 110033615764

 Alias Type:
 EPA (FRS #)

 Alias Name:
 400342

Alias Type: Project Code (Site Code)

Alias Name: 36490110

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE

Completed Document Type: Standard Voluntary Agreement

Completed Date: 11/08/1996

Comments: A Consent Order was signed by The Gas Co and DTSC to address

Supplemental Investigation, and the preparation and the implementation of a Removal Action Workplan for the site

Completed Area Name: PROJECT WIDE

Completed Document Type: Standard Voluntary Agreement

Completed Date: 08/20/1993

Completed Area Name: PROJECT WIDE

Completed Document Type: Remedial Investigation / Feasibility Study

Completed Date: 05/10/1999

Comments: The Remedial Investigation/Feasibility Study (RI/FS) consists of soil

investigation and groundwater monitoring. The major chemicals of potential concern are carcinogenic polycyclic aromatic hydrocarbons (C-PAHs) in the soil. The objective of this project is to remediate

the site by removing contaminated soils.

Completed Area Name: PROJECT WIDE

Completed Document Type: Removal Action Completion Report

Completed Date: 06/30/2002

Comments: The removal of contaminated soil has been completed and a removal

action report has been submitted.

Map ID MAP FINDINGS Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SO CAL GAS/SAN BERNARDINO 2 (RIALTO) (Continued)

S106568284

PROJECT WIDE Completed Area Name:

Completed Document Type: Removal Action Workplan

Completed Date: 06/28/1999

Comments: The objective of this project is to remediate the site by removing

> contaminated soils. The selected remedial action consists of removing contaminated soil to a depth of 12 feet bgs. Excavated areas will be

backfilled with clean imported soil.

Completed Area Name: PROJECT WIDE

Completed Document Type: Preliminary Endangerment Assessment Report

Completed Date: 08/31/1994

Completed Area Name: PROJECT WIDE

Completed Document Type: Site Characterization Workplan

Completed Date: 08/08/1997 Count: 24 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CITY OF REDLANDS	1015730681	REDLANDS SMUDGE POT TANKS SITE	100 FEET WEST OF REDLANDS BLVD	92373	SEMS
REDLANDS	S107538054		CHURCH ST (N OF BROCKTON AVE)	92374	CDL
REDLANDS	S126984123	CHURCH STREET LANDFILL	N END OF CHURCH ST., N OF PION	92373	SWF/LF
REDLANDS	S107530470		2.5 MI N OF BRUANT RD ON STATE	92373	CDL
REDLANDS	1003877955	UNIVERSAL RUNDEL	OPAL AVE-300 FT. N OF SAN BERN	92373	SEMS-ARCHIVE
REDLANDS	S107540561		SAN BERNARDINO AVENUE (W OF WA		CDL
REDLANDS	1003879085	REDLANDS FARMING CO	SAN BERNARDINO AVE E OF TEXAS	92373	SEMS-ARCHIVE
SAN BERNARDINO COUNT	S107538721		HIGHWAY 138 E OF HIGHWAY 2		CDL
SAN BERNARDINO COUNT	S107538848		HWY 18, 3 MILES NO OF WATERMAN		CDL
SAN BERNARDINO COUNT	S107538905		IN 9100 BLOCK OF DESOTO, APPRO		CDL
SAN BERNARDINO COUNT	S107539748		ON BUCKWHEAT ROAD, NORTH OF JU		CDL
SAN BERNARDINO COUNT	S107538165		CORNER OF HWY 247 & 18 AND 76		CDL
SAN BERNARDINO COUNT	S107538260		DALE EVANS RD, W OF CORWIN RD		CDL
SAN BERNARDINO COUNT	S107538579		GLEN HELEN PARKWAY, 1 MI E OF		CDL
SAN BERNARDINO COUNT	S107539873		ON HIGHWAY 395, 2 MILES NORTH		CDL
SAN BERNARDINO COUNT	S107539885		ON HWY 138, 1 1/2 MI W OF HWY		CDL
SAN BERNARDINO COUNT	S107539471		N I-215, SOUTH OF PALM EXIT		CDL
SAN BERNARDINO COUNT	S107532438		3 1/2 MI E OF BEAR VALLEY & HW		CDL
SAN BERNARDINO COUNT	1016139697	CIMA ROAD MINE WASTE SITE	1 MIL W OF INTE. 15 OFF CIMA R		SEMS
SAN BERNARDINO COUNT	S107540201		PALM MEADOWS DR (X-E OF TIPPIC		CDL
SAN BERNARDINO COUNT	S107540506		ROAD INO9, 3/2 MI E OF HWY 330		CDL
SAN BERNARDINO COUNT	S107540087		ON STATE HIGHWAY 173, ~2 MILES		CDL
SAN BERNARDINO COUNT	S107533643		4 MI W OF KOALA RD ON CRIPPON		CDL
SAN BERNARDINO COUNT	S107526653		10 MI W OF YATES WELL RD OFF R		CDL

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	•	Former Fire Training Facility Assessments Listing	State Water Resources Control Board	12/01/2019	08/19/2021	10/28/2021
-	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	09/20/2021	09/21/2021	12/08/2021
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2019	01/20/2021	04/08/2021
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	10/18/2021	10/19/2021	01/12/2022
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	10/18/2021	10/19/2021	01/12/2022
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	10/18/2021	10/19/2021	01/12/2022
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	09/30/2021	10/19/2021	01/12/2022
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	11/30/2021	11/30/2021	02/16/2022
	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	09/20/2021	09/21/2021	12/08/2021
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	CUPA LIVERMORE-PLEASANTOI	· · · · · · · · · · · · · · · · · · ·	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	11/30/2021	11/30/2021	02/16/2022
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	11/29/2021	11/29/2021	02/14/2022
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	11/17/2021	11/18/2021	02/07/2022
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	08/27/2021	09/01/2021	11/19/2021
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2019	06/10/2021	08/27/2021
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	11/10/2021	11/11/2021	02/03/2022
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	10/25/2021	10/26/2021	01/14/2022
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	10/05/2021	10/06/2021	12/29/2021
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	11/18/2021	11/19/2021	02/07/2022
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	09/14/2021	11/11/2021	11/23/2021
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2019	04/15/2020	07/02/2020
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	11/15/2021	11/15/2021	02/03/2022
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	10/04/2021	10/05/2021	12/22/2021
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	07/13/2021	07/14/2021	10/06/2021
CA	ICE	ICE	Department of Toxic Subsances Control	11/15/2021	11/15/2021	02/03/2022
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	09/07/2021	09/07/2021	11/29/2021
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	08/25/2021	09/03/2021	11/22/2021
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
-	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
-	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
-	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
-	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
-	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
-	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
-	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
-	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
-	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	MINES	Mines Site Location Listing	Department of Conservation	09/07/2021	09/07/2021	11/29/2021
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	11/18/2021	11/30/2021	02/17/2022
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	03/12/2021	03/16/2021	06/01/2021
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	11/09/2021	11/09/2021	01/27/2022
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	11/30/2021	11/30/2021	02/17/2022
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	09/07/2021	09/08/2021	12/01/2021
CA	PROC	Certified Processors Database	Department of Conservation	11/29/2021	11/29/2021	02/11/2022
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	10/25/2021	10/26/2021	01/14/2022
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	11/04/2021	11/05/2021	01/24/2022
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	10/25/2021	10/26/2021	01/14/2022
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victory	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	11/08/2021	11/09/2021	01/28/2022
CA	SWRCY	Recycler Database	Department of Conservation	09/07/2021	09/08/2021	11/29/2021
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	06/03/2021	06/03/2021	08/25/2021
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	09/07/2021	09/07/2021	11/29/2021
CA	UST	Active UST Facilities	SWRCB	09/07/2021	09/07/2021	11/30/2021
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	08/18/2021	09/08/2021	12/03/2021
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	10/25/2021	10/26/2021	01/14/2022
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	02/11/2021	07/01/2021	09/29/2021
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	09/07/2021	09/08/2021	12/01/2021
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA		Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/14/2021	09/15/2021	12/15/2021
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2019	09/15/2021	12/14/2021

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2019	12/01/2020	02/09/2021
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2021	10/13/2021	01/10/2022
US	CORRACTS	Corrective Action Report	EPA	09/13/2021	09/15/2021	10/12/2021
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/06/2021	05/21/2021	08/11/2021
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	Delisted NPL	National Priority List Deletions	EPA	10/20/2021	11/05/2021	11/29/2021
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	01/01/2022	01/04/2022	01/10/2022
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR. Inc.	0.70.72022	0.70.72022	0.7.072022
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/13/2021	09/21/2021	12/15/2021
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	05/25/2021	06/24/2021	09/20/2021
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	10/14/2021	11/05/2021	02/01/2022
US	FINDS	Facility Index System/Facility Registry System	EPA	05/05/2021	05/18/2021	08/17/2021
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	10/26/2021	11/16/2021	02/08/2022
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	11/15/2021	11/15/2021	02/01/2022
	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	07/26/2021	07/27/2021	10/22/2021
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	09/12/2021	09/13/2021	09/28/2021
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/28/2021	06/11/2021	09/07/2021
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	EPA Region 10	10/12/2021	11/15/2021	02/08/2022
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/28/2021	06/22/2021	09/20/2021
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	10/12/2021	11/15/2021	02/08/2022
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	EPA Region 6	10/12/2021	11/15/2021	02/08/2022
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	•	10/12/2021	11/15/2021	02/08/2022
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	EPA Region 7 EPA Region 8	10/12/2021	11/15/2021	02/08/2022
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land Leaking Underground Storage Tanks on Indian Land	<u> </u>	10/12/2021	11/15/2021	02/08/2022
US			Environmental Protection Agency		12/03/2021	
	INDIAN DESERV	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998		01/24/2008
US	INDIAN LIST B4	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/14/2021	11/15/2021	02/08/2022
US	INDIAN LIST R4	Underground Storage Tanks on Indian Land	EPA Region 10	10/12/2021	11/15/2021	02/08/2022
US	INDIAN LIST RE	Underground Storage Tanks on Indian Land	EPA Region 4	05/28/2021	06/22/2021	09/20/2021
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/06/2021	06/11/2021	09/07/2021
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	10/12/2021	11/15/2021	02/08/2022
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	10/12/2021	11/15/2021	02/08/2022
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	10/12/2021	11/15/2021	02/08/2022
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	10/12/2021	11/15/2021	02/08/2022

INDIAN VCP RT	St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
S. LEAD SMELTER Lead Smelter Sites Environmental Protection Agency 10/20/2021 11/28/	US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
LEAD SMELTER 2 Lead Smelter Sites	US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
UENS 2	US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	10/20/2021	11/05/2021	11/29/2021
US LUCIS Land Use Control Information System Department of the Navy 1/11/5/2021 1/16/2021 2/00/2022 2/00/2022 2/00/2022 2/00/2022 2/00/2022 2/00/2022 0/20/2021 1/19/2021 0/20/2021 0/20/2021 0/20/2021 0/20/2021 0/20/2021 1/19/2021 0/20/2021 1/19/2021 0/20/2021 1/19/2021 1/19/2021 0/20/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021 1/19/2021	US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US MINES MRDS Mineral Resources Data System USGS 0.406/2018 10/21/2019 10/24/2019 US MINES VIOLATIONS MSHA Violation Assessment Data DOL, Mine Safety & Health Admi 06(30/2021) 70/11/2021 08/24/2021 11/13/2021 US NPL Material Licensing Tracking System Nuclear Regulatory Commission 07/29/2021 08/24/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 08/24/2021 11/13/2021 11/13/2021 11/13/2020 09/22/2014 11/13/2020 03/30/1994 03/30/1994 03/30/1994 03/30/1994 03/30/1994 03/30/1994 03/30/1994 09/17/200	US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	10/20/2021	11/05/2021	11/29/2021
US MINES MRDS Mineral Resources Data System USGS 0.406/2018 10/21/2019 10/24/2019 US MINES VIOLATIONS MSHA Violation Assessment Data DOL, Mine Safety & Health Admi 06(30/2021) 70/11/2021 08/24/2021 11/13/2021 US NPL Material Licensing Tracking System Nuclear Regulatory Commission 07/29/2021 08/24/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 11/13/2021 08/24/2021 11/13/2021 11/13/2021 11/13/2020 09/22/2014 11/13/2020 03/30/1994 03/30/1994 03/30/1994 03/30/1994 03/30/1994 03/30/1994 03/30/1994 09/17/200	US	LUCIS	Land Use Control Information System	Department of the Navy	11/15/2021	11/16/2021	02/08/2022
US MINES VIOLATIONS MSHA Violation Assessment Data DOL, Mine Safety & Health Admi 06/30/2021 07/28/2021 08/24/2021 US MPL National Priority List EPA 10/20/2021 10/20/2021 11/19/2021 US NPL NPL National Priority List EPA 10/20/2021 11/19/2021 11/29/2021 US NPL NPL NPL National Priority List EPA 10/26/19/201 11/29/2021 11/29/2021 US NPL N		MINES MRDS			04/06/2018	10/21/2019	10/24/2019
MLTS	US	MINES VIOLATIONS	· · · · · · · · · · · · · · · · · · ·	DOL, Mine Safety & Health Admi	06/30/2021	07/01/2021	09/28/2021
US NPL LIENS	US	MLTS	Material Licensing Tracking System		07/29/2021	08/24/2021	11/19/2021
US OD Open Dump Inventory	US	NPL					
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US US MINES Mines Master Index File Department of Labor, Mine Safety and Health A 11/02/2021 11/22/2021 02/14/2022	US	US MINES				11/22/2021	
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US UXO	US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2020	01/11/2022	02/14/2022

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	11/11/2021	11/12/2021	02/01/2022
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	10/29/2021	01/19/2022
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2020	11/30/2021	02/18/2022
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish and Wildlife			
US	Topographic Map	Current USGS 7.5 Minute Topographic Map	U.S. Geological Survey			
US	Oil/Gas Pipelines	24	Endeavor Business Media			
US	Electric Power Transmission Line D	pata	Endeavor Business Media			
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STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MACKNET PROPERTY SOUTH OF HELEN DRIVE REDLANDS, CA 92373

TARGET PROPERTY COORDINATES

Latitude (North): 34.0157 - 34^o 0' 56.52" Longitude (West): 117.136868 - 117^o 8' 12.72"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 487362.6 UTM Y (Meters): 3763710.8

Elevation: 2221 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 12014994 REDLANDS, CA

Version Date: 2018

Northeast Map: 12015002 YUCAIPA, CA

Version Date: 2018

Southeast Map: 12014838 EL CASCO, CA

Version Date: 2018

Southwest Map: 12015927 SUNNYMEAD, CA

Version Date: 2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

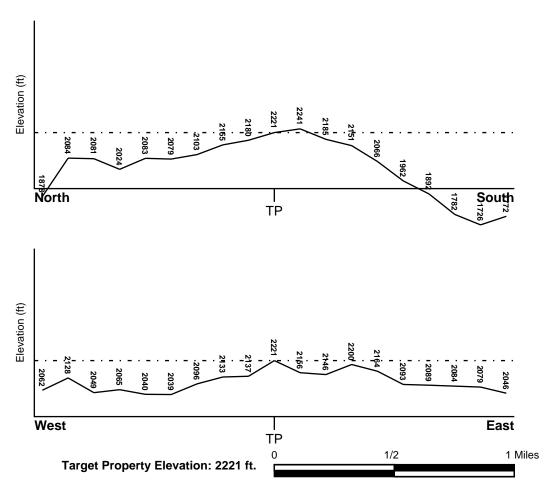
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property FEMA Source Type

06071C8719H FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

06071C8740H FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property Data Coverage

NOT AVAILABLE YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

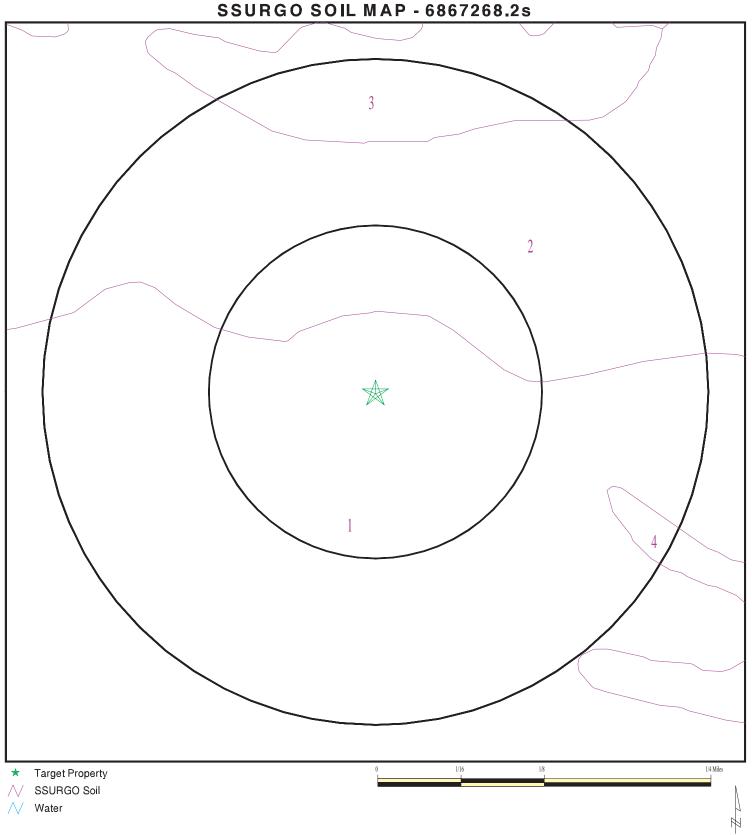
GEOLOGIC AGE IDENTIFICATION

Era: Cenozoic Category: Stratifed Sequence

System: Quaternary Series: Quaternary

Code: Q (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).



SITE NAME: Macknet Property
ADDRESS: South of Helen Drive
Redlands CA 92373
LAT/LONG: 34.0157 / 117.136868

CLIENT: Terracon CONTACT: Laura Hedman INQUIRY #: 6867268.2s DATE: February 22, 2022 9:29 am

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Saugus

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information							
	Воц	ındary		Classi	fication	Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec		
1	0 inches	7 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 4 Min: 1.4	Max: Min:	
2	7 inches	40 inches	loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 4 Min: 1.4	Max: Min:	
3	40 inches	44 inches	weathered bedrock	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 4 Min: 1.4	Max: Min:	

Soil Map ID: 2

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information Saturated **Boundary** Classification hydraulic conductivity **Soil Reaction** Layer Upper Lower Soil Texture Class **AASHTO Group Unified Soil** (pH) micro m/sec 1 0 inches 22 inches sandy loam Granular **COARSE-GRAINED** Max: 42 Max: 7.8 SOILS, Sands, Min: 6.6 materials (35 Min: 14 pct. or less Sands with fines, Silty Sand. passing No. 200), Silty, or Clayey Gravel and Sand. 2 22 inches loam COARSE-GRAINED Max: 42 Max: 7.8 31 inches Granular materials (35 SOILS, Sands, Min: 14 Min: 6.6 Sands with fines, pct. or less passing No. Silty Sand. 200), Silty, or Clayey Gravel and Sand. 3 31 inches 53 inches sandy clay loam Granular COARSE-GRAINED Max: 42 Max: 7.8 materials (35 SOILS, Sands, Min: 14 Min: 6.6 Sands with fines, pct. or less passing No. Silty Sand. 200), Silty, or Clayey Gravel and Sand. COARSE-GRAINED 4 53 inches 59 inches sandy loam Granular Max: 42 Max: 7.8 materials (35 SOILS, Sands, Min: 14 Min: 6.6 pct, or less Sands with fines. passing No. Silty Sand. 200), Silty, or Clayey Gravel and Sand.

Soil Map ID: 3

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

> 0 inches

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Depth to Watertable Min:

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Soil Layer Information Saturated **Boundary** Classification hydraulic conductivity Layer Upper Lower Soil Texture Class **AASHTO Group Unified Soil Soil Reaction** (pH) micro m/sec 1 0 inches 22 inches sandy loam Silt-Clay **COARSE-GRAINED** Max: 42 Max: 7.8 SOILS, Sands, Min: 6.6 Materials (more Min: 14 than 35 pct. Sands with fines, passing No. Silty Sand. 200), Silty Soils. COARSE-GRAINED 2 22 inches 31 inches Silt-Clay Max: 42 Max: 7.8 loam Materials (more SOILS, Sands, Min: 14 Min: 6.6 than 35 pct. Sands with fines, passing No. Silty Sand. 200), Silty Soils. 3 31 inches COARSE-GRAINED Max: 42 Max: 7.8 53 inches Silt-Clay sandy clay loam Materials (more SOILS, Sands, Min: 6.6 Min: 14 than 35 pct. Sands with fines, passing No. Silty Sand. 200), Silty Soils. COARSE-GRAINED Max: 7.8 4 53 inches 59 inches sandy loam Silt-Clay Max: 42 Materials (more SOILS, Sands, Min: 14 Min: 6.6 than 35 pct. Sands with fines, passing No. Silty Sand. 200), Silty Soils.

Soil Map ID: 4

Soil Component Name: Hanford

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information						
	Вои	ındary		Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	1 .		
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6
2	11 inches	59 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

LOCATION MAP ID WELL ID FROM TP

No Wells Found

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID LOCATION FROM TP

No PWS System Found

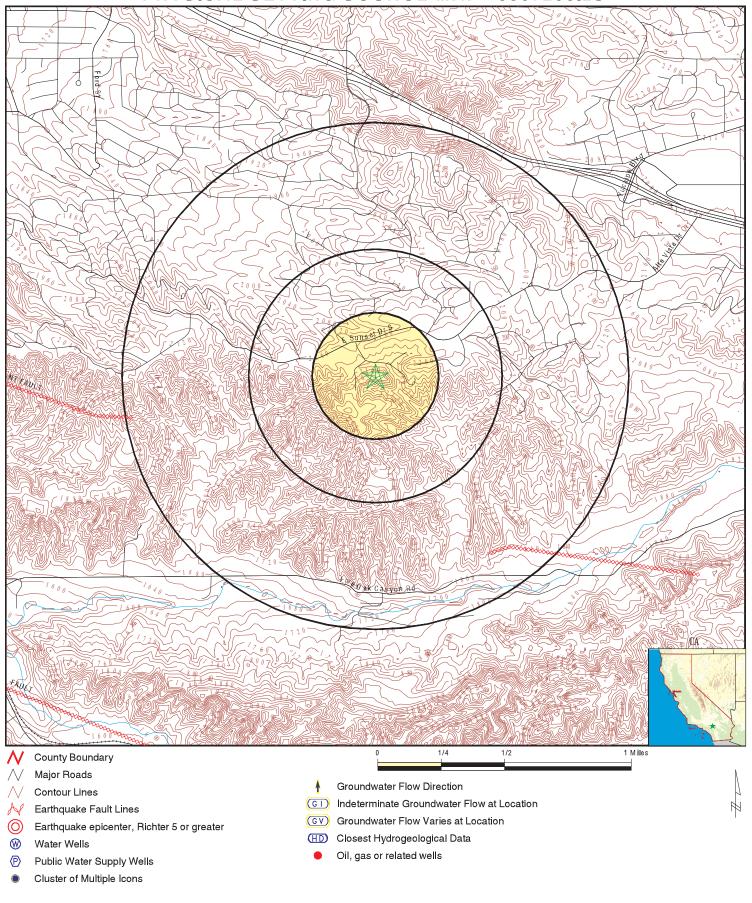
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID WELL ID FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 6867268.2s



SITE NAME: Macknet Property ADDRESS: South of Helen Drive Redlands CA 92373

34.0157 / 117.136868

LAT/LONG:

CLIENT: Terracon CONTACT: Laura Hedman INQUIRY #: 6867268.2s

DATE: February 22, 2022 9:29 am

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92373	29	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	0.678 pCi/L Not Reported	100% Not Reported	0% Not Reported	0% Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558 Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX E CREDENTIALS

Laura Hedman

Staff Geologist

PROFESSIONAL EXPERIENCE

Ms. Hedman is a staff geologist in Terracon's Colton, CA office, Environmental Department. Ms. Hedman's professional experience includes Environmental Services, Phase I Environmental Site Assessments (ESAs), Limited Site Investigations (LSIs), soil and groundwater sampling, and groundwater monitoring projects. She has conducted site assessments on office facilities, warehouses, manufacturing facilities, automotive dealerships, restaurants, medical offices, telecommunication towers, vacant, and agricultural land. She prepares environmental site assessment reports; researches city directories and regulatory agency files; and reviews aerial photographs and topographic maps. In addition, she assists the Senior Project Manager in Phase I Environmental Site Assessments.

PROJECT EXPERIENCE

Office Buildings/Medical Office Building - California

Project Manager and Environmental Site Assessments on office properties, which includes multi-story financial, educational, medical office buildings, and a 95,000-square-foot community hospital.

Warehouse Buildings/Logistical Centers – California

Project Manager and Environmental Site Assessment on warehouses and logistical centers, which includes commercial facilities with 1.2 million-square-foot warehousing space.

Restaurants/Retail Buildings - California

Project Manager and Environmental Site Assessment on family-style restaurants, and retail lease spaces.

Auto Dealership/Automotive Service- California

Project Manager and Environmental Site Assessment on automotive dealerships, automotive maintenance facilities, and automotive collision repair centers.

Undeveloped/Vacant/Agricultural - California

Project Manager and Environmental Site Assessments on undeveloped, vacant, and agricultural land; from less than one-acre- to over 200-acre parcel of land.



EDUCATION

Bachelor of Science, Geology/Earth Science, University of California, Riverside, 2016

Mount San Jacinto College Associate of Science, Geographic Information Systems (GIS), May 2014

CERTIFICATIONS

Geologist in Training (Fundamental of Geology), June 2017

PROFESSIONAL TRAINING

40-Hour OHSA HAZWOPER

24-Hour AHERA Asbestos Abatement Building Inspector

40-Hour AHERA Asbestos Supervisor Training

WORK HISTORY

Terracon, Colton, California Staff Geologist January 2018 to Present

United States Army, Master Sergeant, Retired; Recruiting Battalion Operations Senior NonCommissioned Officer/ Senior Career Counselor August 1988 to February 2011

Carl A. Parten

Office Manager, Senior Principal

PROFESSIONAL EXPERIENCE

Mr. Parten has 32 years of experience in environmental consulting in multiple regional regulatory districts throughout the United States. His professional experience includes comprehensive site investigations and remediation studies for Industrial and Hazardous Waste sites, municipal solid waste landfill sites and underground storage tank (UST) facilities.

He has successfully managed and obtained regulatory closure of over 30 Voluntary Cleanup Program (VCP) sites and leaking underground storage tank (LUST) facilities, and coordinated UST removal and closure for numerous facilities in multiple states throughout the United States. Mr. Parten continues to serve as a technical lead with Terracon and he possesses extensive experience in the installation of monitor wells, aquifer characterization, sensitive receptor surveys, risk-based assessments, vapor intrusion (VI) evaluations, and soilgas assessments. Additionally, he has extensive experience in comprehensive soil and groundwater investigations on industrial facilities and municipal solid waste (MSW) landfill facilities, including evaluation of landfill gas/methane impacts. He has prepared and implemented corrective action work plans for remediation of chlorinated hydrocarbons at dry cleaner facilities and petroleum hydrocarbons at LUST facilities, MSW landfill facilities, and managed and implemented groundwater pump and treat, non-aqueous phase liquid (NAPL) recovery, and duel-phase vapor extraction systems for the recovery of petroleum hydrocarbons. Additionally, Mr. Parten developed work plans and implemented the remediation of heavy metals and poly-nuclear aromatic hydrocarbons (PAHs).

PROJECT EXPERIENCE

Kaiser Permanente, AV Behavioral Health, Lancaster, California Provided QA/QC for the Phase I ESA for the potential Kaiser Permanente AV Behavioral Health Building that consisted of a 29,245-square-foot (SF) single-story building with a mezzanine, in a multi-tenant commercial/retail shopping center on an approximately 6.12-acre parent tract. Our scope of services included the site



EDUCATIONBachelor of Science, Geology, Sul Ross State University, Alpine, Texas, 1994

Additional Courses: University of Houston TCEQ Texas Risk Reduction Program: Mod. I, II, and III Roadmap to Remediation CAPM Refresher Course, Texas A&M University TNRCC Hazardous Waste Seminar TNRCC PST Risk Assessments Seminar **TNRCC Pollution Prevention** Workshop API Risk/Exposure Assessment Contaminant Fate and Transport Modeling in Risk Assessment Environmental Hydrology / Soil Science

REGISTRATIONS

Licensed Professional Geoscientist (P.G.), I.D. # 221, Texas Board of Professional Geoscientists 2003 (current)

Registered Professional Geologist (P.G.), I.D. # 004037; State of Tennessee, May 1996 (current)

TCEQ Corrective Action Project Manager, CAPM #01091 (current)

40 Hour OSHA Hazardous Waste Site & Waste Management Training

AFFILIATIONS

BDA/Orange County Groundwater Resource Assoc. Geological Society of America



reconnaissance and soil and soil vapor sampling. Provided QA/QC review of the report before we sent it to the client.

Kaiser Permanente, Primary Care Medical Office Building, Wildomar, California

Project Manager for the Phase I ESA for the potential Kaiser Permanente Primary Care Medical Office Building consisted of an approximately 36-acre tract of generally vacant land. Provided QA/QC review of the report before we sent it to the client.

Industrial Warehouse Facility - La Palma, California

Phase I ESA, comprehensive subsurface investigation and delineation of volatile organic compounds (VOCs), petroleum hydrocarbons TPH) in soil, groundwater and vapor to characterize environmental site conditions and development of response actions. Soil remediation, soil vapor extraction of VOCs, and waste characterization/disposal of impacted environmental media at a large warehouse facility. Active monitoring and additional response actions are on-going. Consulting services included preparation of investigation reports, response action work plans, client interaction and litigation support.

Industrial Warehouse Facility / Demolition / Soil Management - Los Angeles / Union Crossing - California

Phase I ESA, Limited Site Investigation, soil management plan / remediation of impacted soils, underground storage tank / structures management and support services, investigation and delineation of volatile organic compounds (VOCs), petroleum hydrocarbons TPH) in soil, and waste characterization and disposal of impacted environmental media. Consulting services included preparation of investigation reports, response action work plans, client interaction and construction management support.

Industrial Facility – Union City, California

Subsurface investigation and delineation of heavy metals and polynuclear aromatic hydrocarbons (PAHs) in soil to facilitate the development of response actions and waste characterization/disposal of impacted environmental media at a large industrial facility with over sixty years of operations. Consulting services included preparation of investigation reports, response action work plans, and client/regulatory interaction.

Industrial Facility - Land-use Change/Private School, Los Angeles, CA

Environmental consulting services including Phase I Environmental Site Assessments (ESA) due diligence support, subsurface investigation activities to evaluate environmental media including soil, groundwater, soil gas and indoor / outdoor air. Services included a land-use change from an industrial facility to a private school. Prepared environmental investigation reports, regulatory interaction, corrective action design and work plan for management of environmental media.

USARC Facility – Mare Island, California

Environmental team leader for evaluation of an existing 32-acre military facility, Mare Island in California. The teaming effort included the preparation of a Technical Assessment report on the facility to provide



USAR a decision making and programming tool to establish future restoration and replacement upgrades to the facility. The report included an evaluation of existing conditions of the site and facilities with respect to current mission and identified construction costs required to comply with USAR facility standards, Anti-Terrorism/Force Protection requirements, handicapped accessibility regulations, and current building codes. Conceptual costs for related improvements and environmental mitigation were presented.

Major Department Store Commercial Retail Portfolio

Environmental team lead for evaluating environmental site conditions and due diligence review, including overseeing Phase I Environmental Site Assessments and Phase II Environmental Site Investigations for over fifty retail facilities with automotive maintenance across California. Findings from subsurface investigations were used to support regulatory closure of select facilities to facilitate a real estate transaction across the United States.

Automated Fuel Dispensing Facilities - Camp Pendleton, California

Project scope included environmental and geotechnical investigations at six fueling existing/proposed facilities within Camp Pendleton, California. The project consisted of construction of new buildings, canopies, pavements, retaining walls, slopes, and installation of underground storage tanks (USTs), and other site facilities. Served as the primary client point of contact and environmental technical leader.

Mixed-Use High-rise Building, West Hollywood, California

Conducted comprehensive investigation and assisted the client through enrolling and interacting with the DTSC / VCP regarding chlorinated solvent and heavy metal-impacted soil and groundwater. Provided construction management oversight to manage impacted soils and assisted the client in waste disposition, permitting and regulatory compliance interaction. A total of 52,000 cubic yards of soil was removed from the site and disposed at an off-site facility, prior to the construction of a \$170M high-rise multi-use complex. Terracon's support services allowed for significant savings in construction, on an expedited timeline in concert with the construction schedule.

Underground Storage Tank and Soil Remediation - Regional Water Board, Squaw Valley, CA

Terracon assisted a private developer with the regulatory closure of an underground storage tank (UST) site located in Squaw Valley, California. The abandoned 10,000-gallon UST was responsible for a release of heavy waste oils to the ground surface and banks of a creek. Following disposal of the UST, approximately 70 cubic yards of petroleum-impacted soils were excavated and properly disposed. Interaction with the Regional Water Board and Public Notification resulted in the issuance of case closure.

Retail Shopping Center – Former Dry Cleaners Facility – DTSC, Fremont, CA

Conducted extensive site investigation activities to evaluate the magnitude and extent of chlorinated solvents identified in the vicinity of a former dry cleaners' facility, including an evaluation of groundwater, soil, soil-gas and indoor vapors as a result of a chlorinated solvent plume. Mr. Parten provided direct support and interaction with client, client legal team and DTSC representatives to manage the closure



process, including the preparation of work plans and environmental investigation reports, risk-based human health evaluation, and response actions.

Soil Remediation – Riverside County Regulatory Oversight, Telecommunications Site, Perris, CA Terracon assessed the magnitude and extent of a surficial release of petroleum hydrocarbons, developed a work plan, approved by overseeing agency, and conducted remediation, removal and legal disposal of 80 cubic yards of non-hazardous soil.

Municipal Landfill – VCP Site

Successfully oversaw and managed the engineering design and construction quality assurance for the closure and restoration of a high-profile MSW landfill in accordance with regulatory standards, subsequent to significant investigation activities. The remedy consisted of removal and consolidation of wastes and construction of LFG recovery trenches to prevent migration of landfill gas. The remedy utilized engineering controls and removal of impacted media. Project management responsibilities included coordination with Local, State and Federal officials, public/neighborhood communications, and interaction with attorneys, and management of project budgets that exceeded \$4.5 million over seven years. Terracon continues to provide post closure care monitoring and O&M for the site.

Department of Transportation Contract - TX

Successfully managed a two-year environmental services contract with the Texas Department of Transportation (TxDOT) and coordinated multiple Terracon offices to provide geographic coverage of environmental consulting service throughout Texas. Mr. Parten was the liaison to TxDOT for the performance of environmental consulting services, and provided senior technical review of environmental investigations, Phase I ESAs, removal of underground storage tanks, remediation of affected media and waste management, asbestos and lead-based paint investigations, and management of financial metrics and budgets in strict conformance with negotiated fees and procedures under a \$2,000,000 contract.

City-Operated LUST Facilities

Provided senior project management of 14 City operated LUST facilities through coordination of investigation, regulatory reporting and response actions in the pursuit of closure. Mr. Parten was responsible for managing all site activities, evaluation of data, reporting, communicating with local and state officials, and management of budget and schedule requirements.

Municipal Property

Provided senior project management and technical review of several properties, including the remediation of metals and PAH-impacted soils, using a combination of excavation and removal and in-place stabilization. Work was performed under the EPA Brownfields Program and the Voluntary Cleanup Program. The \$1.2 million-dollar remediation project was part of a high-profile downtown parks and recreation redevelopment project that successfully established LEED Certified public parks in areas once occupied by commercial and industrial property. Mr. Parten was responsible for managing all site



activities, evaluation of data, reporting, communicating with local and state officials, and management of budget and schedule requirements.

Retail Shopping Center - VCP Site

Conducted extensive site investigation activities to evaluate the magnitude and extent of chlorinated solvents identified in the vicinity of a former dry cleaners' facility. The chlorinated solvent plume was defined to drinking water standards and was delineated to a creek channel nearly 1,200 feet from the source property. Based on site investigation results, assisted the property owner in entering the site into the VCP, and managed and implemented response actions and treatment of affected media utilizing a combination of source-removal/excavation (750 cubic yards) within the building interiors, hydrogen-releasing compound (HRC®) treatment of backfill, and HRC injection into the underlying soil and groundwater across the site. Treatment technology effectively remediated affected soils and significantly reduced contaminant levels within the on-site source areas. Additional response actions were conducted to reduce on-site groundwater contamination levels through HRC injection at over 250 locations. Monitored natural attenuation and groundwater monitoring was performed for a period of approximately four years. Mr. Parten assisted the client in the establishment of a deed restriction (Municipal Setting Designation) that restricted the use of groundwater on the site. Mr. Parten interacted with City and State officials and prepared and submitted multiple reports documenting site activities and managed a project budget totaling \$1,200,000.

Additional Project Experience

Under the direction and senior technical review by Mr. Parten, final site closure has been obtained for over thirty VCP, Innocent Owner/Operator Program, LUST, and Industrial and Hazardous Waste facilities in multiple states across the United States. Additionally, Mr. Parten has coordinated and managed the removal of dozens of underground storage tank (UST) systems and remediation of contaminated soil and groundwater. Mr. Parten has provided expert testimony on multiple projects and is a primary point of contact interacting with environmental attorneys and regulatory agencies.



Todd G. McFarland, PG, CHG

DEPARTMENT MANAGER

PROFESSIONAL EXPERIENCE

Mr. McFarland has over 21 years of experience as a professional geologist and hydrogeologist, in over 200 site characterization and remediation projects throughout California. He is an environmental Department Manager for Terracon's Colton office. Mr. McFarland has been involved with environmental investigations, well design and construction, aquifer testing, Phase I and II ESAs, including agricultural, petroleum, and industrial properties; and remediation design and mitigation for commercial, industrial and LUST/LUFT projects.

Mr. McFarland's expertise includes hydrogeology, Phase I & II Environmental Assessments, Hazardous Waste Site Investigations, LUST/LUFT Site Investigation and Remediation (soil, vapor, and groundwater) Hydrogeology, Contaminant Fate & Transport, Well Design and Construction, Remedial Strategy and Design, California UST Cleanup Fund, Triad Approach Investigation Methods, and high resolution site characterization (HRSC).

PROJECT EXPERIENCE

Charis Corporation/US Army, Aquifer and Well Evaluation, Fort Irwin, California Project Geologist for the identification, assessment and testing of domestic and agricultural wells associated with the expansion of Ft. Irwin military base. Responsible for field mapping, staff and logistics coordination, subcontractor management, well pumping, mine shaft mapping and collection of samples for heavy metal analytical testing.

Bechtel, Mountain View Power Plant Expansion Project, Loma Linda, California Project Geologist support for pump test and analytical testing of new production well within the Bunker Hill Basin. Sampling and testing of water for Title 22, perchlorate and TCE to determine well viability, and ability to discharge surplus water to Santa Ana River.

Herzog, Rail Line Rehabilitation Project, San Bernardino, California

Project Geologist for compliance monitoring, soil sampling and remediation management of soils during rail line rehabilitation. Project work conducted for BNSF under their oversight and safety management guidelines. Managed daily soil screening, mobile laboratory analysis oversight and directed soil excavation and segregation for offsite disposal of hydrocarbon and solvent impacted soils.

Amtrak, 8th Street Amtrak Yard ROW Investigation, Los Angeles, California

Project Geologist for Phase I & II assessments along ROWs within the active rail yard for proposed ROW exchange. Project work included drilling and soil sampling adjacent to active rail lines associated with train maintenance and wash rack. Reporting and recommendations for soil remediation options.



EDUCATION

Bachelor of Science, Hydrogeology, Northern Arizona University, 1998

AA, Art/Architecture, Pasadena City College, 1992

REGISTRATIONS

California Professional Geologist, PG #7685

California Certified Hydrogeologist, CHG #979

CERTIFICATIONS

GIS Certification, University of California, Riverside, 2017

40-Hour OSHA Hazardous Materials Training

8-Hour OSHA Supervisory and Confined Space Training

8-Hour LPS/OSHA Refresher (current)

CPR/First Aid Certified (current)

LPS 8-Hour Training Certification, 5/2006

16-Hour Chevron EMC CSOC Training, 11/2007

Defensive Driving Course, 6/2006

DOT-Basic HazMat Training, 5/2007

Title 22 California-Hazardous Waste Generator Training, 5/2007

Lean Six Sigma Training, 3/2011

Cost Engineering and Cost Loaded Scheduling and Training, 4/2011 & 3/2012

WORK HISTORY

Terracon Consultants, Inc., Department Manager, 2018-Present

AECOM, Sr. Project Manager/Sr. Hydrogeologist, 2013-2018

HFA, Sr. Geologist/Sr. Project Manager, 2009-2013, Assoc. Geologist/Sr. Geologist/Project Manager/Office Manager, 2004-2009

Geo-Cal, Inc., Project Geologist, 2003 – 2004

CHJ, Inc., Staff Geologist, 1998-2003

Chevron and ExxonMobil, Service Station and Terminal Facility Management, Southern and Northern California

Project/Senior Geologist and Project Manager for portfolio of underground storage tank facilities. Managed schedule, costs and project work for numerous retail service station and bulk tank facilities. Scoped and executed assessment and remedial efforts targeted to model and remove contaminants. Geological logging and drilling oversight for the installation of numerous shallow and deep monitoring wells within unconsolidated and over-consolidated soils. Develop and execute aquifer, soil vapor extraction, and air sparge testing to determine feasibility of remedial options. Prepare conceptual site models to evaluate project data and develop remedial action plans and human health risk assessments. Collaborate with engineers to design, build and execute remedial systems for treatment of petroleum impacted soil and groundwater. Responsible for direct interaction with client and regulators to develop and execute strategies.

Chevron EMC, MTBE Groundwater Plume Investigation and Remediation, San Juan Capistrano California

Senior Geologist and Project Manager for two underground storage tank facilities that allegedly affected the City's water production supply. Scoped and executed assessment and remedial efforts targeted to model and remove benzene and MTBE. Installed and operated in-situ soil and groundwater remedial systems. Geological logging and drilling oversight for the installation of numerous shallow and deep monitoring and remediation wells. Testing and evaluation of City's production wells. Attend and participate in public hearings, plan and participate in planning and design review meetings. Conduct client meetings and provide project details to client's legal team.

Confidential Client, Crafton-Redlands Perchlorate Plume Investigation, Mentone, California

Project Geologist for underground storage tank facility. Geological logging and drilling oversight for the installation of deep monitoring wells within the Crafton-Redlands Plume using rotary casing hammer and sonic drilling rigs. Collection of soil and groundwater samples to evaluation aquifer for petroleum hydrocarbons, including MTBE and perchlorate. Conduct soil vapor extraction pilot testing for in-situ soil remediation of hydrocarbon impacts.

City of Rialto, Landfill Investigation and Post-Closure Monitoring, Rialto, California. Project Geologist for landfill closure and post-closure investigations and monitoring. On going monitoring of water quality beneath and surrounding the boundary limits of landfill. Statistical analysis and reporting of water quality data to determine trends and stability post-closure.

City of Los Angeles, Community Park Development, Lead Removal, California

Project Geologist for development of a community park. Planned, coordinated, and conducted assessment and remediation of aerial deposited lead within a residential community. Conducted lead dust monitoring, excavation activities and verification sampling and reporting.

City of Blythe, Citywide Commingled Plume Investigation, Blythe, California

Project Manager for city wide commingled plume assessment and remedial cleanup of 7 commingled plumes (over 30 individual sites) related to petroleum releases to groundwater. Conducted large-scale site assessment, well installation and remedial actions including soil vapor extraction, dual-phase extraction, free-product extraction and soil excavation. Managed complex financial contract and UST Cleanup Fund reimbursement. Responsible for direct interaction with client (City), UST Cleanup Fund and California's Water Board to develop and execute strategies.

AFCEC, Industrial Waste Line Removal and Vapor Intrusion Risk Assessment, Former Norton Air Force Base, San Bernardino, California

Senior hydrogeologist for evaluation of soil and soil vapor sampling. Conducted closure report review, human health risk assessment modeling and evaluation, and closure recommendations. Evaluation and reporting resulted in obtaining closure from DTSC.

APPENDIX F DESCRIPTION OF TERMS AND ACRONYMS

Term/Acronym	Description
	Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or binding agents in construction materials. Exposure to asbestos, as well as ACM, has been documented to cause lung diseases including asbestosis (scarring of the lung), lung cancer and mesothelioma (a cancer of the lung lining).
ACM	Regulatory agencies have generally defined ACM as a material containing greater that one (1) percent asbestos, however some states (e.g. California) define ACM as materials having 0.1% asbestos. In order to define a homogenous material as non-ACM, a minimum number of samples must be collected from the material dependent upon its type and quantity. Homogenous materials defined as non-ACM must either have 1) no asbestos identified in all of its samples or 2) an identified asbestos concentration below the appropriate regulatory threshold. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. Point counting is an analytical method to statistically quantify the percentage of asbestos in a sample. The asbestos component of ACM may either be friable or non-friable. Friable materials, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure and have a higher potential for a fiber release than non-friable ACM. Non-friable ACM are materials that are firmly bound in a matrix by plastic, cement, etc. and, if handled carefully, will not become friable.
	Federal and state regulations require that either all suspect building materials be presumed ACM or that an asbestos survey be performed prior to renovation, dismantling, demolition, or other activities that may disturb potential ACM. Notifications are required prior to demolition and/or renovation activities that may impact the condition of ACM in a building. ACM removal may be required if the ACM is likely to be disturbed or damaged during the demolition or renovation. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with state rules and NESHAP. Additionally, OSHA regulations for work classification, worker training and worker protection will apply.
AHERA	Asbestos Hazard Emergency Response Act
AST	Aboveground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
BGS	Below Ground Surface
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CESQG	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations

Term/Acronym	Description
CREC	Controlled Recognized Environmental Condition is defined in ASTM E1527-13 as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report."
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative datasharing effort between EPA, DOT, and the National Response Center.
ESA	Environmental Site Assessment
FRP	Fiberglass Reinforced Plastic
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clean Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
HREC	Historical Recognized Environmental Condition is defined in ASTM E1527-13 as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time of the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition."

Term/Acronym	Description
IC/EC	A listing of sites with institutional and/or engineering controls in place. IC include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. EC include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.
ILP	Innocent Landowner/Operator Program
LQG	Large Quantity Generators
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
MSDS	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been analyzed to confirm the presence or absence of asbestos.
PCB	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability, stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act, prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.
pCi/L	picoCuries per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.

Term/Acronym	Description
Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in picoCuries per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ('cradle to grave"). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste. CESQG are those that generate less than 100 kg/month of non-acutely hazardous waste.
RCRA CORRACTS/TS Ds	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.
RCRA Non- CORRACTS/TS Ds	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA Violators List	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.
REC	Recognized Environmental Conditions are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment. De minimis conditions are not recognized environmental conditions."
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small Quantity Generator
SWF/LF	State and/or Tribal database of Solid Waste/Landfill facilities. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.

Term/Acronym	Description
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically
	regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey
USNRCS	United States Department of Agriculture-Natural Resource Conservation Service
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E1527-13, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.
VOC	Volatile Organic Compound
	Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The <u>Corps of Engineers Wetlands Delineation Manual</u> (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present.
Wetlands	The federal Clean Water Act which regulates "waters of the US," also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U.S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.