

**SCS ENGINEERS**

## **Revised Remedial Action Plan for Site Closure**

**Former Masonite Facility**  
**300 Ford Road**  
**Ukiah, California**  
**(APNs 170-170-05, -04;**  
**170-190,-04, -05,-06, -09, -14, &-15)**

**File Number 01203377.01**

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**Submitted to:**

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**July 7, 2006**

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### LIMITATIONS/DISCLAIMER

This Revised Remedial Action Plan has been prepared for Masonite Corporation with specific application to soil clean up and groundwater sampling for the property located at 300 Ford Road, Ukiah, California (the "Property"). This report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. The conclusions contained herein are based on analytical data, and points of exploration. The nature and extent of subsurface conditions may and likely do vary between borings and/or points of exploration. No other warranty, either expressed or implied, is made as to the professional conclusions presented herein.

Access to the property and the surrounding area was limited by buildings, roadways, underground and above-ground utilities and other miscellaneous site and site vicinity features. Therefore, the field exploration and points of subsurface observation were somewhat restricted.

Changes in site use and conditions may occur due to man-made changes or variations in rainfall, temperature, water usage, or other factors. Additional information which was not available to the consultant at the time of this assessment or changes which may occur on the site or in the surrounding area may result in modification to the site that would impact the summary presented herein. This report is not a legal opinion.

We trust that this Revised Remedial Action Plan provides the information required at this time. Please contact the undersigned at (707) 546-9461 if you have any questions or comments regarding this submittal.



Linda Mackey-Taverner  
Vice President

*July 7, 2006*  
Date



Stephen Knuttel PG 7674  
CA registration fees paid through 07/31/07

*7. JUL, 2005*  
Date

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## LIST OF ACRONYMS

AS	=	Analytical Sciences
BTEX	=	benzene, toluene, ethylbenzene, total xylenes
bgs	=	below ground surface
cis-1,2-DCE	=	cis-1,2-dichloroethene
Cl	=	chloride
COC	=	Chemicals of Concern
1,1-DCA	=	1,1-dichloroethane
1,1-DCE	=	1,1-dichloroethene
HVOCs	=	halogenated volatile organic compounds
IP	=	International Paper
Ipb	=	isopropylbenzene
MCLs	=	Maximum Contaminant Levels
mg/kg	=	milligrams per kilogram
MNA	=	monitored natural attenuation
NA	=	not analyzed
Naph	=	naphthalene
NAPL	=	non aqueous phase liquid
n-Bb	=	n-butylbenzene
NCRWQCB	=	North Coast Regional Water Quality Control Board
ND	=	non-detect
n-Pb	=	n-propylbenzene
ORP	=	oxidation reduction potential
PAHs	=	poly aromatic hydrocarbons
PCE	=	tetrachloroethene
p-It	=	p-isopropyltoluene
RDL	=	Report Detection Limit
sec-Bb	=	sec-butylbenzene
SPH	=	separate phase hydrocarbons
SRS	=	Sensitive Receptor Survey
SVOCs	=	Semi-volatile Organic Compounds
TCA	=	1,1,1-trichloroethane
TCE	=	trichloroethene
1,2,4-Tmb	=	1,2,4-trimethylbenzene
1,3,5-Tmb	=	1,3,5-trimethylbenzene
TPH-d	=	total petroleum hydrocarbons in the diesel range
TPH-g	=	total petroleum hydrocarbons in the gasoline range
TPH-mo	=	total petroleum hydrocarbons in the motor oil range
TPH-fo	=	total petroleum hydrocarbons in the fuel oil range
trans-1,2-DCE	=	trans-1,2dichloroethene
µg/L	=	micrograms per liter
UN/DOT	=	United Nations/Department of Transportation
UST	=	underground storage tank
VOCs	=	Volatile Organic Compounds
WQOs	=	Water Quality Objectives

## **INTRODUCTION**

SCS Engineers (SCS) is pleased to present this Revised Remedial Action Plan (RAP) for the Former Masonite Site at 300 Ford Road in Ukiah, California in response to comments from the North Coast Regional Water Quality Control Board (NCRWQCB) dated February 1, 2006 (NCRWQCB, 2006a), March 8, 2006 (NCRWQCB, 2006b) and June 9, 2006 (NCRWQCB, 2006c). This Revised RAP is based findings from prior investigations by URS Corporation (URS, 2000, 2002, 2003), the Results of Remedial Site Investigation Activities (SCS, 2004c), and subsequent investigations (SCS, 2004a through 2004d, 2005a through 2005f, 2006a through 2006d; URS, 2004). This Revised RAP also includes data from the investigative soil removal actions conducted between May 1 and 5, 2006. The site is located as shown on Figure 1; general site features are as shown on Figure 2.

## **SITE DESCRIPTION**

The site is located at 300 Ford Road in Ukiah, California (Figure 1). The site lies northeast of the intersection of U.S. Highway 101 and North State Street approximately 1.5 miles north of the center of the town of Ukiah; the site originally included approximately 282 acres which is divided into the main plant site (approximately 68 acres), and several other areas to the east (approximately 214 acres). In April of 2003, approximately 166 acres of land east of the railroad tracks was sold. An additional approximately 48 acres to the north east of the railroad tracks is currently being sold and a separate request for closure is in process (Appendix D).

The Northwestern Pacific Railroad right-of-way bounds the site property on the east, agricultural and commercial property on the north and south, and commercial property and Highway 101 right-of-way to the west and southwest. East of the facility, across the Russian River, there is a mixture of agricultural, residential, and undeveloped land that rises sharply toward the crest of the Mayacamas Mountains. The topography of the site and off-site areas is nearly flat from the western edge of the main plant parcel to the bank of the Russian River where it drops approximately 50 feet to the river (Figure 2). Groundwater flow across the site is generally to the east towards the Russian River.

## **SITE HISTORY**

Construction of the facility began in 1948 on land formerly used for agriculture. Most of the facility was constructed between 1948 and 1956. Major site improvements completed between 1956 and the present include the warehouse additions on the west and south sides of the site, the new coating plant, the #4 boiler, the molded press line, and the process water recycling system including the wastewater treatment ponds. Other improvements include upgrades to the production process and systems installed to prevent waste and reduce air emissions from the plant.

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The facility primarily produced hardboard and softboard products including siding, door facing, various styles of indoor wall and ceiling paneling.

The Molded Door Facing line was shut down permanently in 2000; the Exterior Siding and Softboard lines were shutdown in June 2001; and all softboard processing ceased in December 2001. No operations have occurred since that time. Subsequently, an auction was held and some equipment and buildings have been sold and removed. As discussed above, most of the land to the east of the railroad tracks was sold in 2003; the plant is scheduled for demolition in 2006.

After the facility was closed in 2001, investigations for environmental concerns were undertaken by URS and SCS. A historical summary of the Masonite facility and adjacent properties can be found in previous reports (SCS, 2003, 2004a, 2004b, 2004c, 2004d, 2005a, 2005b, 2005c, 2005d, 2005e, 2005f, 2006a, 2006b, and 2006c; URS, 2000, 2002, 2003, and 2004). To facilitate these environmental investigations, the Masonite site was divided into 14 Areas of Concern. Of these 14 Areas, the NCRWQCB has previously agreed with SCS and URS recommendations for no further environmental assessment in Areas 1, 2, 4, 7, 8, 9, 10, 11, 12, and 14 (NCRWQCB, 2005a, 2005b). Impacted soils have been removed from accessible locations within Area 6 (Figure 3, Table 1a) and no further environmental remedial actions are feasible prior to site demolition. Remaining environmental concerns on site within Areas 3, 5, 6, and offsite within Area 13 are associated with the documented impact to groundwater by halogenated volatile organic compounds (HVOCs) in the southern section of the main plant facility extending offsite to the east with groundwater flow (Figure 4) toward the Hop Barn Area (Figure 5). Additional groundwater assessment and monitoring is proposed (see below).

On August 25, 2004 at approximately 8:00 AM, a Rinehart tanker truck with an estimated 9,000-gallons of unleaded gasoline, rolled off the northbound Highway 101 off-ramp to North State Street in Ukiah, California and onto a paved section of the Site adjacent to the 101 Freeway off ramp (Figure 2). Approximately 4,500-gallons of gasoline were released onto California Department of Transportation, Masonite and North Coast Railroad Authority properties. Impacted soils associated with this release were excavated and removed from the site by APEX Envirotech, Inc. (APEX, 2005a). Subsequent to these remedial actions, APEX installed six monitoring wells (MW-1 through MW-6, referred to in this report as APEX-MW-1 through APEX-MW-6) to investigate groundwater conditions in the main area of the spill (APEX, 2005b). Apex has been monitoring these wells since their installation (APEX, 2005c, 2005d, 2005e, and 2006).

## **WELL DECOMMISSIONING**

As discussed in the February 22, 2006 meeting between Masonite, International Paper (IP), the NCRWQCB, and SCS, soil removal work was to be conducted in Area 6. Prior to the start of assessment excavation activities in Area 6, monitoring wells MUF-A06-04 and MUF-A06-05 were decommissioned in accordance with State and local regulations on March 7, 2006 to facilitate assessment activities and soil removal. The monitoring wells were decommissioned by over drilling the boreholes and removing the entire PVC well casings. All well materials including the seals and filter packs were drilled out to the total depth of the wells, which were both approximately 15.5 feet. The boreholes were then backfilled to the bottom of the proposed excavation depths with a low permeability material (bentonite slurry) by the licensed C-57 well driller and in accordance with the California Well Standards, Bulletin 74-90. DWR 188 Well Completion Reports were prepared and submitted for these wells (SCS, 2006b).

## **AREA 6 SURFACE SOIL REMOVAL FOR ASSESSMENT SAMPLING**

In accordance with directives from the NCRWQCB (NCRWQCB, 2006a, 2006b), SCS removed the surface features and fill material during the week of May 1 to 5, 2006 in the previously proposed area for excavation indicated on Figure 3 of the original Remedial Action Plan for Site Closure (SCS, 2006a). As the previously proposed areas and approximate depths of excavation were based on soil analytical results from borings MUF-A06-01, MUF-A06-04, and MUF-A06-05 (SCS, 2004c), additional sampling and/or investigative trenching was warranted to further assess the amount of impacted soil present. As impacted soils were previously identified during drilling by subjective evidence, surface scraping and sampling was initiated to assess the extent of possible excavations and to determine if extensive remedial excavation was required.

After the surface soils were removed to the approximate sample depths indicated on Figure 3, samples were collected from exposed soils which exhibited no visual and olfactory indications of impact. The soil samples were collected for analysis by directly shoveling soil into sample tubes. The sample tube ends were covered with Teflon® tape and sealed with plastic caps. The soil samples were collected following SCS' Standard Soil and Water Sampling Procedures and QA/QC Protocol. The soil sample tubes were then labeled and stored under refrigerated conditions until they were transported under Chain-of-Custody documentation to a California Department of Health Services certified analytical laboratory, for the requested analysis.

The soil samples collected from the excavation areas were analyzed for total petroleum hydrocarbons in the diesel range (TPH-d) and in the motor oil range (TPH-mo) by EPA Method 8015M. Selected soil samples collected from the excavation area around monitoring well MUF-A06-05 were also analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Results from the soil assessment/removal sampling are shown on Figure 3 and summarized in Table 1a; analytical laboratory reports are presented in Appendix A.

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Soils removed from the remediated areas were analyzed as required for off-site disposal (Table 1b). The impacted soil was loaded into trucks and transported to the Forward Landfill in Manteca, CA. The impacted groundwater which was pumped from the initial phase of the excavation pit was loaded into tanker trucks and transported to the Seaport Environment Facility in Redwood City, CA (Table 1b). Linseed oil (Appendix A, Analytical Sciences Report # 6050117), that entered the excavation from the surrounding buildings/pipelines, was removed from the excavation pit water to the extent feasible using absorbent pads and drummed. Copies of laboratory analytical results for waste disposal, waste disposal manifests, and waste acceptance documentation are presented in Appendix B.

Based on the results of confirmation samples collected from the bottoms and sidewalls of the remediated areas, all impacted soils from the previously identified areas (Figure 3) were removed to the extent feasible (Table 1a). Soil samples from the eastern half of the MUF-A06-05 excavation and sampling area could not be collected for analyses because the excavation continued below groundwater (approximately 5 feet bgs) to approximate depths of 9 to 11 feet bgs and loose gravel conditions were encountered. However, available soil sampling analytical results from monitoring wells MUF-A06-05 and MUF-A06-06 at depths of 10.5 and 16.0 feet bgs, respectively, (Table 1a) which are within and downgradient (Table 2) of the excavation area support visual observation (non discolored mud and gravel) from the excavation that the bottom of the impact was successfully removed to the extent feasible.

No further remedial soil excavation is proposed for Area 6 as all assessment samples were below target clean-up concentrations (non detect) for chemicals of concern, with the exception of impacted soils identified on the south and east sidewalls of the MUF-A06-05 remediated area which extend under the Main Production Facility to the area near monitoring well MUF-A06-06; the identified soil impacted in MUF-A06-06 at 11.0 feet bgs (Table 1a) is most likely attributed to groundwater contact as the impact was only noted within the approximately 5 feet of saturated soils within this well. These impacted soils between the corner of the building and monitoring well MUF-A06-06 can not be excavated without demolition of the building. The remediated areas were therefore backfilled and compacted. Compaction was administered using construction equipment onsite; the compaction test reporting from SHN Engineering is presented in Appendix B.

#### **REPLACEMENT OF MONITORING WELL MUF-A06-05**

Monitoring well MUF-A06-05 was decommissioned on March 7, 2006 in accordance with state and local regulations prior to assessment sampling and soil removal work in Area 6. The NCRWQCB stated that this well would need to be replaced for continued evaluation of MNA (NCRWQCB, 2006b). The February 21, 2006 results from monitoring well MUF-A06-05 were non detect for all chemicals of concern (Table 3). The results from this well also indicate a clear declining trend to non detect levels (Table 3). Based on findings from the assessment sampling and excavation, the location of monitoring well MUF-A06-05 was determined to be near the

upgradient extent of the impacted area. As the excavated area around monitoring well MUF-A06-05 was not yet backfilled and additional assessment was warranted to the southeast under the Main Production Facility during the excavation activities, monitoring well MUF-A06-05 was replaced with monitoring well MUF-A06-06 approximately 25 feet to the southwest (Figure 3). Verbal concurrence with this assessment strategy was received from the NCRWQCB during their oversight of the assessment and removal activities.

The boring for monitoring well MUF-A06-06 was drilled with 8-inch diameter hollow stem augers. Soil samples for lithologic descriptions were collected at 5 foot intervals as determined by the field geologist. A boring log for this hole is presented in Appendix D.

After the boring was drilled and sampled, the hole was completed as a monitoring well. The monitoring well completion diagram is presented in Appendix D. The monitoring well is constructed of 2-inch Schedule 40 flush-threaded PVC material. The screened length for the well is approximately 10 feet and extends from approximately 5 to 15 feet below ground surface (bgs). Blank casing extends from the surface to the top of the screened interval. A 0.020 slot screen with #2/12 sand was used for the well. The sand filter pack was placed approximately 2 feet above the top of the screened interval, with an approximately 2 foot thick bentonite seal placed on top of the sand filter. A cement/bentonite seal was then placed from the top of the bentonite seal to the surface. The blank well casing extends up to just below grade and the well is fitted with a waterproof locking cap. The well is protected by a traffic-rated watertight circular vault with the lid installed slightly above grade for drainage.

All drilling and sampling equipment was properly steam-cleaned or washed to prevent cross contamination vertically within the boring. The small sampling equipment was washed in a detergent solution and rinsed to prevent the mixing of material between sampling runs.

Soil cuttings were placed on plastic and stored on site pending disposal with the excavated soil stockpiled from the assessment/ removal actions. All rinsate and steam cleaning water is stored on site pending disposal.

A DWR 188 form for the newly installed well has been submitted to the State Department of Water Resources; a copy of this report is presented in Appendix D.

### **MONITORING WELL MUF-A-06-06 DEVELOPMENT AND SAMPLING**

The monitoring well was developed after construction on May 4, 2006. The well was developed using a surge block and a submersible field portable, groundwater purging pump. The well was surged and pumped until the water was largely sediment free. A development log is presented in Appendix D.

After development, the well was allowed to stabilize. An initial groundwater sample was collected using a disposable bailer, and transferred into the appropriate containers supplied by

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the laboratory for analysis. The samples were labeled, stored under refrigerated conditions, and transported under Chain-of-Custody to AS. AS is a State certified laboratory for the analyses requested. All samples were collected following Standard Soil and Water Sampling Procedures and QA/QC Protocol.

### **MONITORING WELL MUF-A06-06 RESULTS**

The results of the initial testing of monitoring well MUF-A06-06 are summarized in Table 3. Concentrations of TPH-d were reported at 6,900 µg/L; all EPA Method 8260 parameters were reported at <5.0 µg/L. A copy of the analytical report for the initial sampling event is presented in Appendix A.

## **REVISED REMEDIAL ACTION PLAN**

The former Masonite Facility is scheduled for demolition in 2006. A property transfer is pending for the Site. SCS and Masonite request NCRWQCB expedite review and approval of this Revised RAP at the earliest possible date. The approval of the Revised RAP will provide a clear indication of the remaining work required by the NCRWQCB.

The NCRWQCB has previously concurred with recommendations by SCS and Masonite in other areas of the former Masonite site and SCS and Masonite understand that the items listed below are the outstanding issues remaining before a No Further Action letter (case closure) can be issued:

1. Submittal of a List of Potentially Interested Parties for Site Closure;
2. HVOC Area - Continued Monitoring and Sampling to Demonstrate the Effectiveness of Monitored Natural Attenuation (MNA);
3. Rinehart Spill Area - Continued Monitoring and Sampling to Demonstrate the Effectiveness of MNA;
4. Completion of the excavation of diesel impacted soil and assessing and remediating any remaining groundwater impact in Area 6.
5. Submittal of a Soil and Groundwater Management Plan for Site Demolition Activities.

### **POTENTIALLY INTERESTED PARTIES FOR SITE CLOSURE**

A list of potentially interested parties for site closure has been prepared from available information listed in the Mendocino County's assessor's property files. Appendix D includes a tabular summary of potentially interested parties and Figure D-1 shows the locations of the adjacent properties.

### **HVOC AREA**

#### **Monitored Natural Attenuation (MNA) Evaluation**

As part of the monitoring activities for the HVOC Area, the following selected monitoring wells were sampled for geochemical indicators of natural biodegradation/attenuation (or MNA) during the last three monitoring events of 2005

1. MUF-BG-03 (upgradient),
2. MUF-A03-06 and MUF-A13-05 (plume center),
3. MUF-A13-01 (plume side), and
4. MUF-A13-03 (downgradient).

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Parameter evaluation conducted over the past three monitoring events indicates that MNA is an appropriate remedial alternative for the low levels of HVOCs present in groundwater underlying the site. The results of past groundwater monitoring for MNA parameters (Table 4) indicates that conditions appear favorable for natural biodegradation/attenuation processes to remediate residual HVOC concentrations in the impacted area. Continued groundwater monitoring is proposed on a quarterly basis for an additional year (February, May, August, and November of 2006) to further evaluate MNA as a viable remedial alternative and establish HVOC degradation trends.

### **Well Sampling and Reporting**

The wells will be opened and the groundwater levels will be measured. The wells will be allowed to remain open for 5 to 10 minutes after which the water levels will be measured again. This process will continue until stable readings are obtained in the wells ( $\pm 0.02$  feet in each well). After the wells have stabilized and water level measurements have been made, the wells will be pumped or bailed until approximately 3 to 5 wetted well casing volumes, or at least 5 gallons of groundwater have been removed, whichever is greater, or until the well goes dry, and until successive measurements of pH, temperature, conductivity, turbidity, and dissolved solids/oxygen have generally stabilized ( $\pm 10\%$ ). Measurements will be taken at regular intervals during purging. After purging is completed, the wells will be sampled in the order purged. This sequence will allow for maximum recovery, anticipated to be at least 80% of the original well volume. In high permeability areas, recovery typically approaches 100%. If a well remains dry after purging, it will be allowed to remain open for at least two hours after which an attempt will be made to sample the well. If the well is still dry, an attempt will be made to sample the well on the next day with out additional purging.

Groundwater samples will then be collected using a separate disposable bailer for each well, and transferred to the appropriate containers supplied by the laboratory. The water generated by development and sampling will be stored at the site in an on-site water storage tank, pending characterization and disposal.

### **Laboratory Analysis**

Groundwater samples for the project monitoring wells and the Sawyer irrigation well will be analyzed by EPA Method 8260B for HVOCs. Monitoring well MUF-A06-06 will also be analyzed for TPH-g, TPH-d, TPH-mo, and the full EPA Method 8260B list of compounds; an initial analysis of poly-aromatic hydrocarbons (PAHs) by EPA Method 8270BN. Monitoring wells MUF-BG-03, MUF-A03-06, MUF-A13-01, MUF-A13-03, and MUF-A13-05 will be also analyzed for MNA parameters in water as Total Alkalinity, pH, Hardness, Free CO<sub>2</sub> (EPA Method 300), Calcium, Nitrate, Sulfate, Chloride (EPA Method 6010), Magnesium, Manganese (SM2320B), Iron, Ferrous Iron (SM4500), Dissolved Oxygen, Oxidation Reduction Potential (SM3500) and Methane (EPA Method 8015M). Analytical parameters for groundwater sampling are summarized in Table 5.

## **RINEHART SPILL AREA**

### **Monitored Natural Attenuation Evaluation**

As part of the continuing monitoring activities within the Rinehart Spill Area of the Masonite site, APEX and SCS are cooperating in a joint effort on Masonite's behalf to bring the site towards closure. As part of this effort, APEX will continue to sample and analyze monitoring wells (APEX-MW-1 through APEX-MW-6) for TPH-g and BETX and evaluate geochemical parameters for MNA. SCS will continue monitoring efforts elsewhere at the site.

Parameter evaluation conducted over the past monitoring events indicates that MNA is a potentially viable remedial alternative for the low levels of petroleum hydrocarbons remaining in groundwater (Table 6). Further groundwater monitoring has been proposed by APEX and groundwater sampling and analyses is continuing on a quarterly basis. A summary of all monitoring wells present on the Masonite Site and adjacent properties is presented in Table 7.

### **CONTINUED AREA 6 IMPACTED SOIL REMOVAL AFTER DEMOLITION**

During demolition of the Main Production Facility building, the remaining petroleum impacted soils adjacent to the MUF-A06-05 excavation area (Figure 3) will be removed to the extent feasible. The impacted soils between the corner of the Main Production Facility building in Area 6 and monitoring well MUF-A06-06 could not be excavated during the initial excavation pending demolition of the building. The NCRWQCB will be provided five days notice prior to the start of excavation activities.

After the Main Production Facility is demolished in Area 6, surface soils will be removed to the approximate depths similar to the previous excavation, unless laboratory results indicate that it is not necessary (Figure 3). Samples will be collected from exposed soils on the sidewalls and bottom of the excavation or as directed by the NCRWQCB. The soil samples will be collected for analysis by stainless steel sample tubes. The sample tube ends will be covered with Teflon<sup>®</sup> tape and sealed with plastic caps. The soil samples will be collected following SCS' Standard Soil and Water Sampling Procedures and QA/QC Protocol. The soil sample tubes will then be labeled and stored under refrigerated conditions until they are transported under Chain-of-Custody documentation to a California Department of Health Services certified analytical laboratory, for the requested analysis.

The soil samples collected from the continuation of the MUF-A06-05 excavation areas will be analyzed for total petroleum hydrocarbons in the diesel range (TPH-d) by EPA Method 8015M and in the gasoline range (TPH-g) by EPA Method 8021. Selected soil samples collected from the excavation area around monitoring well MUF-A06-05 will also be analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. The excavation of impacted soils will

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continue to the extent feasible or until levels of TPH-g and TPH-d are below laboratory MDLs of less than 5 milligrams per kilogram (mg/kg) for TPH-d and less than 1 mg/kg for TPH-g.

Soils removed from the continued remediation areas will be characterized as necessary for the receiving facility prior to off-site disposal. It is anticipated that the impacted soil will be transported to a certified disposal facility or on site treatment, with approval of the NCRWQCB. The excavations are anticipated to extend below groundwater. If impacted groundwater is encountered it will be pumped into storage tanks prior to characterization and offsite disposal at a certified disposal facility.

As with the eastern half of the MUF-A06-05, excavation bottom soil samples may not be collected for analyses if the excavation extends below groundwater greater and loose gravel conditions are encountered. If possible, soil sampling analytical results from the replacement well(s) for MUF-A06-06 and subjective observation (non discolored mud and gravel) from the excavation will be used to assess whether impacted soil was successfully removed.

The soil impact identified in monitoring well MUF-A06-06 at 11.0 feet bgs (Table 1a) is attributed to impacted groundwater contact. The impact soil appeared to be confined to the approximately 5 feet of saturated soils encountered in this well. If this well is required to be removed in order complete the soil remediation, it will be decommissioned in accordance with applicable State and local regulations by a C-57 licensed well driller. A work plan to address the residual groundwater impact will be prepared and submitted to the NCRWQCB within 45-day of completion of the soil remedial activities.

The remediated area will then be backfilled and compacted, with approval of the NCRWQCB and in accordance with the applicable grading permit requirements. Compaction will be administered using on-site construction equipment and a compaction test reporting will be presented.

## **SUBMITTAL OF A GROUNDWATER MANAGEMENT PLAN**

A groundwater management plan will be provided under separate cover.

## **CLOSURE**

At least five days notice will be given to the NCRWQCB prior to the start of any demolition activities, impacted soil removal in Area 6, or groundwater monitoring events. A report of groundwater monitoring activity will be submitted to the NCRWQCB after all analytical results are received.

Groundwater monitoring will continue at the former Masonite facility until residual chemical levels do not exceed Maximum Contaminant Levels (MCLs) or Water Quality Objectives (WQOs) or a demonstration can be made that these objectives will likely be reached through MNA within an acceptable timeframe. Based on the analytical data collected to date, SCS and Masonite are proposing that if analytical data over the next year demonstrate a declining trend in the concentrations of COCs and/or that it can be demonstrated that natural attenuation is occurring, that site closure should be granted. If an impact continues to be detected in the Sawyer property irrigation well, SCS recommends this well will be decommissioned or an activated carbon filtration system will be installed on the well.

*Mr. Hunt*  
*July 7, 2006*  
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- SCS, 2005b. Results of 2005 1<sup>st</sup> Semi-Annual Groundwater Monitoring and Sampling Event, Former Masonite Facility 300 Ford Road, Ukiah, CA, June 23
- SCS, 2005c. Results of Additional Site Investigation Activities, 300 Ford Road, Ukiah, CA, August 17.
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*July 7, 2006*  
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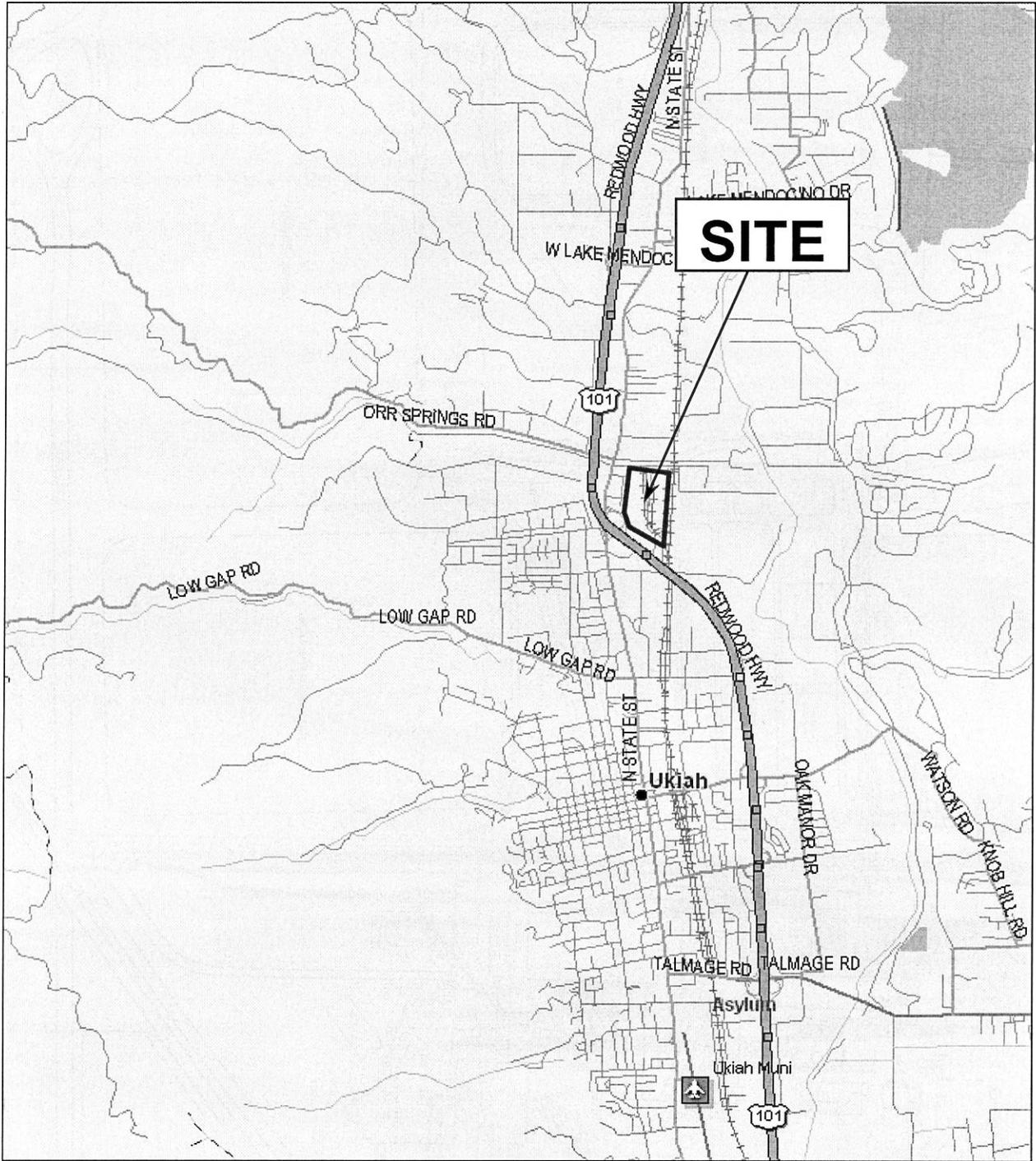
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## Figures



Source of Base Map: DeLorme 2006®



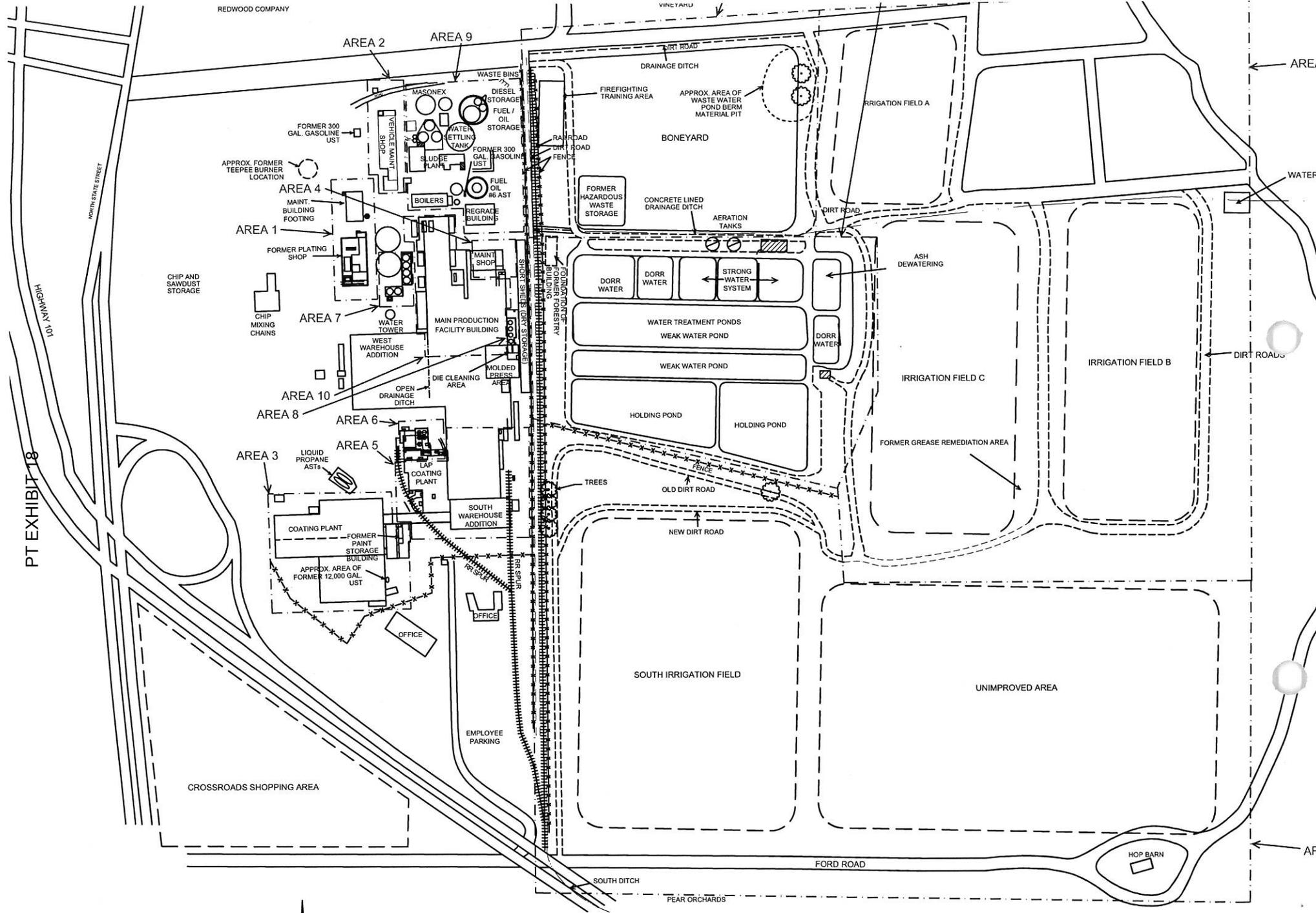
<b>SCS ENGINEERS</b>		
ENVIRONMENTAL CONSULTANTS		
3645 WESTWIND BOULEVARD SANTA ROSA, CA 95403 PH. (707) 546-9461 FAX (707) 544-5769		
PROJ. NO:	TAKEN BY:	FILE:
01203377.00		3377.00 SiteLoc
DATE:	CREATED BY:	APP. BY:
5/10/06	JM	SK

**SITE LOCATION MAP**

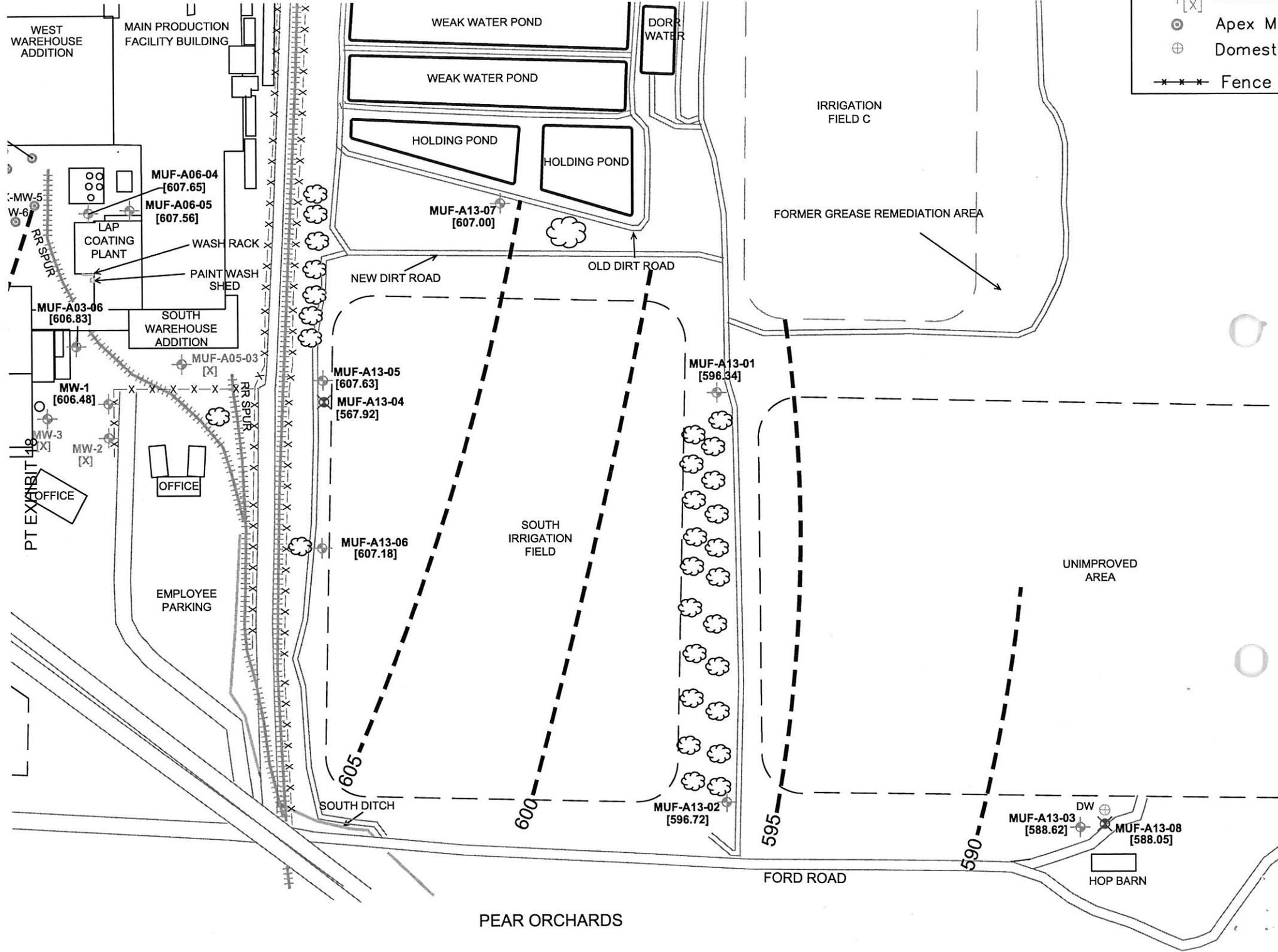
FORMER MASONITE FACILITY  
300 FORD ROAD  
UKIAH, CALIFORNIA

APPROX. SCALE (MILES)
0      .5      1
FIGURE:
<b>1</b>

PT EXHIBIT 18







- [X] \_\_\_\_\_
- ● Apex M
- ⊕ Domest
- - - - Fence

WEST WAREHOUSE ADDITION  
MAIN PRODUCTION FACILITY BUILDING

MUF-A06-04 [607.65]  
MUF-A06-05 [607.56]  
LAP COATING PLANT  
WASH RACK  
PAINT WASH SHED

MUF-A03-06 [606.83]  
SOUTH WAREHOUSE ADDITION

MW-1 [606.48]  
MW-3 [X]  
MW-2 [X]  
OFFICE  
OFFICE

EMPLOYEE PARKING

WEAK WATER POND  
WEAK WATER POND  
HOLDING POND  
HOLDING POND  
DORR WATER

MUF-A13-07 [607.00]

NEW DIRT ROAD  
OLD DIRT ROAD

MUF-A13-05 [607.63]

MUF-A13-04 [567.92]

MUF-A13-06 [607.18]

MUF-A13-01 [596.34]

MUF-A13-02 [596.72]

MUF-A13-03 [588.62]

MUF-A13-08 [588.05]

HOP BARN

IRRIGATION FIELD C

FORMER GREASE REMEDIATION AREA

SOUTH IRRIGATION FIELD

UNIMPROVED AREA

SOUTH DITCH

FORD ROAD

PEAR ORCHARDS

PT EXHIBIT 18

RR SPUR

RR SPUR

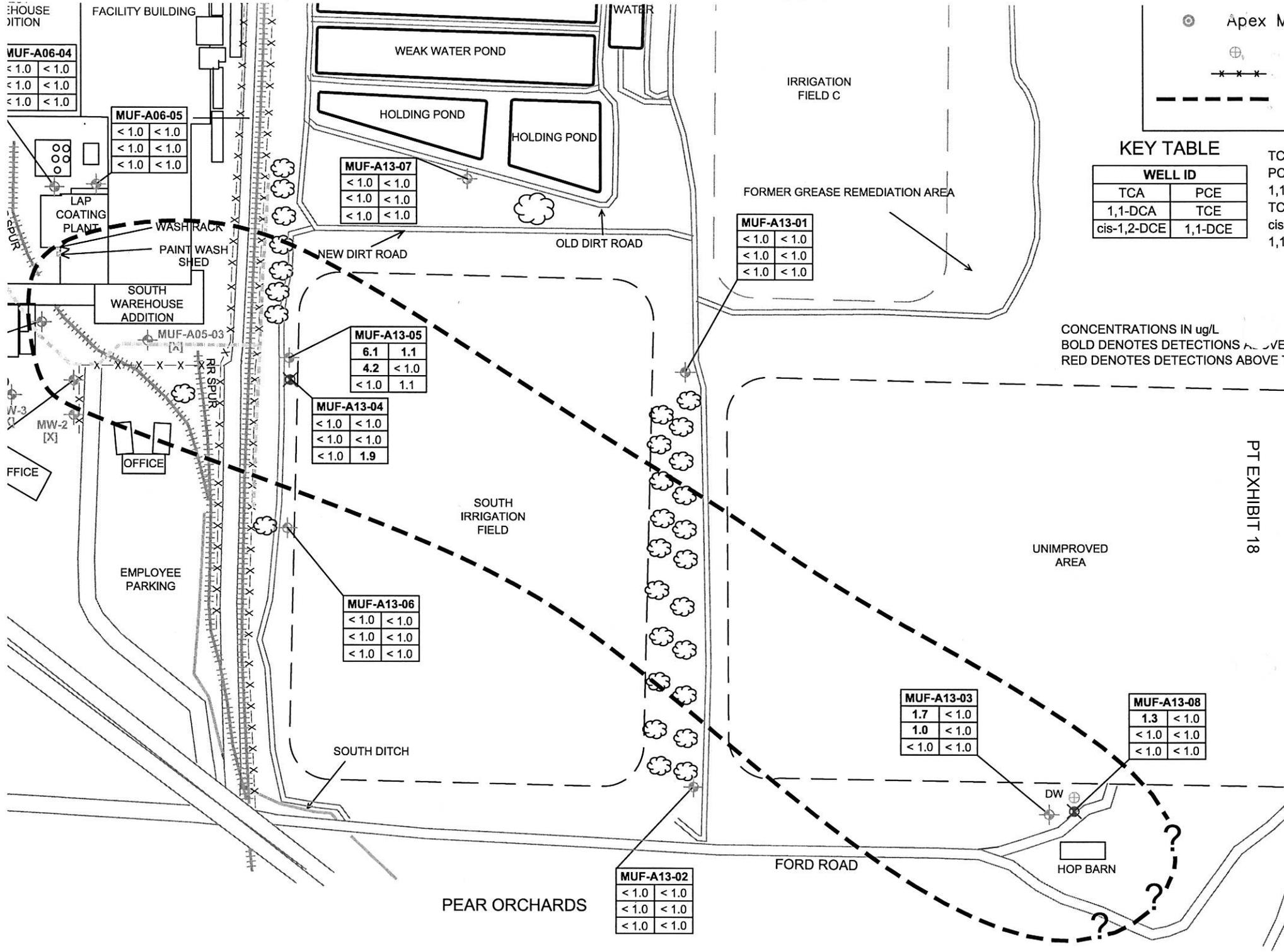
605

600

595

590

DW



HOUSE  
ITION

MUF-A06-04
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< 1.0 < 1.0
< 1.0 < 1.0

FACILITY BUILDING

MUF-A06-05
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< 1.0 < 1.0
< 1.0 < 1.0

HOLDING POND

MUF-A13-07
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< 1.0 < 1.0
< 1.0 < 1.0

FORMER GREASE REMEDIATION AREA

MUF-A13-01
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< 1.0 < 1.0
< 1.0 < 1.0

SOUTH IRRIGATION FIELD

MUF-A13-05
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<b>4.2</b> < 1.0
< 1.0 1.1

OFFICE

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< 1.0 1.9

EMPLOYEE PARKING

MUF-A13-06
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< 1.0 < 1.0

PEAR ORCHARDS

MUF-A13-03
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< 1.0 < 1.0

HOP BARN

MUF-A13-08
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< 1.0 < 1.0
< 1.0 < 1.0

PEAR ORCHARDS

MUF-A13-02
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< 1.0 < 1.0
< 1.0 < 1.0

KEY TABLE

WELL ID	
TCA	PCE
1,1-DCA	TCE
cis-1,2-DCE	1,1-DCE

TC  
PC  
1,1-  
TCI  
cis-  
1,1-

CONCENTRATIONS IN ug/L  
BOLD DENOTES DETECTIONS ABOVE  
RED DENOTES DETECTIONS ABOVE T

PT EXHIBIT 18

## Tables