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812 W. Wabash Avenue, Eureka, CA 95501-2138

Reference: 024045.105

August 28, 2026

Randall Marx
Sponsored Programs Administration
University Enterprises, Inc.
6000 J Street, MS 6111
Sacramento, CA 95819

Subject: DRAFT—Hydrogeologic Evaluation, Weott Community Services District, Weott California

Dear Randall Marx:

SHN has prepared this Hydrogeologic Evaluation for University Enterprises, Inc. (UEI) and the Weott Community Services District (WCSD) to evaluate the feasibility of developing groundwater as a municipal drinking-water source for the town of Weott in Humboldt County, California. The project location is shown on Figure 1 in Appendix 1.

1.0 Introduction

WCSD currently relies on surface-water sources located west of the South Fork Eel River within Humboldt Redwoods State Park. As part of ongoing planning for improvements to the community water system, the State Water Resources Control Board, Division of Drinking Water (DDW), requested that WCSD evaluate groundwater as a potential alternative drinking-water source.

This evaluation builds on previous work conducted for WCSD, including SHN's 2004 evaluation of the California State Parks (CSP) well, and incorporates additional well records, geologic and geotechnical information, water-quality data, and field reconnaissance conducted for the current project.

1.1 Purpose and Scope

The purpose of this evaluation is to characterize hydrogeologic conditions in the Weott area, evaluate available information regarding groundwater occurrence and production, and identify a preferred location for groundwater exploration.

SHN's evaluation included review of available geologic and groundwater information, water-well completion reports, previous investigations of the CSP well, California Department of Transportation (Caltrans) and SHN geotechnical explorations, and available water-quality information. SHN also



conducted a field reconnaissance to evaluate geomorphic conditions, bedrock exposures, access, and prospective test-well areas.

This evaluation is intended to support exploratory drilling and does not establish the sustainable yield or drinking-water suitability of a future production well. These characteristics will require evaluation through test-well installation, pumping tests, and water-quality testing.

2.0 Site Setting and Existing Conditions

Weott is located along the east side of the South Fork Eel River in southern Humboldt County. The community occupies a relatively narrow portion of the river valley between the South Fork Eel River and steep bedrock hillslopes to the east. Highway 101 generally follows the eastern side of the developed community. The study area and existing features are shown on Figure 2 (Appendix 1).

The developed area occupies a series of river terraces above the modern South Fork Eel River channel. The surrounding hillslopes are underlain predominantly by sedimentary bedrock of the Yager Formation, while Quaternary alluvial and terrace deposits occupy the river valley. Regional geologic conditions are shown on Figure 3 (Appendix 1), and mapped surficial deposits and geomorphic conditions are shown on Figure 4 (Appendix 1).

For purposes of this evaluation, two principal terrace surfaces are distinguished: an upper terrace occupied by much of developed Weott and a lower terrace closer to the South Fork Eel River. The existing CSP well is located on the lower terrace.

The terrace surfaces provide a useful geomorphic framework for evaluating groundwater occurrence but do not necessarily indicate the thickness of the underlying unconsolidated deposits. The contact between the alluvial deposits and underlying bedrock is not well defined across much of the study area and is expected to be irregular as a result of historic river incision, lateral migration, and subsequent alluvial filling. Consequently, the thickness of potentially water-bearing alluvial deposits may vary substantially over relatively short distances.

3.0 Review of Existing Information

SHN reviewed available information relevant to groundwater occurrence and development potential in the Weott area. The review included California Department of Water Resources (DWR) groundwater-basin information, available water-well records, previous investigation of the CSP well, and geotechnical subsurface information from Caltrans and SHN. The locations of the existing wells and subsurface explorations are shown on Figure 5 (Appendix 1).

3.1 DWR Groundwater Basin

Weott is located within the DWR Weott Town Area Groundwater Basin (Basin No. 1-31). DWR describes the approximately 3,650-acre basin as consisting primarily of Quaternary terrace deposits within the Eel



River and South Fork Eel River valleys, surrounded by older sedimentary bedrock. DWR identifies relatively little basin-specific information regarding water-bearing formations, groundwater levels, groundwater storage, or groundwater budgets.

The DWR basin designation provides useful regional context but does not define the local thickness, continuity, or productivity of the alluvial deposits at the scale necessary for locating a municipal groundwater source.

3.2 Existing Water Wells

Available records were reviewed for the CSP well and several private wells in and around Weott. Available information regarding well construction, lithology, groundwater levels, and reported yields is summarized in a table in Appendix 2, along with copies of the available well completion reports.

The private wells are generally located within the upland and hillslope areas surrounding Weott and are completed primarily within sedimentary bedrock. Reported yields for wells with available information are generally approximately 4 to 20 gallons per minute (gpm). These records demonstrate that groundwater occurs within the bedrock but do not indicate yields comparable to those desirable for a municipal supply.

The CSP well provides the best available information regarding groundwater-development potential within the river-valley deposits. The well is located on the lower terrace and was completed within predominantly sand-and-gravel deposits overlying sedimentary bedrock.

The CSP well was drilled in 2003 to an exploratory depth of approximately 140 feet and completed to approximately 100 feet, with perforations from approximately 60 to 80 feet. The well log indicates predominantly sand and gravel from approximately 35 to 95 feet and hard sedimentary bedrock beginning at approximately 100 feet. The reported static groundwater level was approximately 34 feet below ground surface.

SHN evaluated the CSP well in 2004 as a potential WCDSD drinking-water source. A 12-hour pumping test at approximately 100 gpm resulted in approximately 1.9 feet of drawdown. A subsequent 72-hour dry-season pumping test at approximately 160 gpm resulted in approximately 3.9 feet of drawdown. The testing demonstrated that the lower-terrace deposits can locally support substantially greater groundwater production than that reported for the surrounding bedrock wells.

Historical water-quality testing of the CSP well identified elevated levels of arsenic, iron, and manganese above primary and secondary maximum contaminant limits (MCLs) pursuant to Title 22 of the California Code of Regulations pertaining to drinking water standards. Three samples were collected from the CSP well during its development and testing. All three samples contained concentrations of arsenic between 10 to 12 micrograms per liter (ug/L). The primary MCL for arsenic for the protection of human health is 10 ug/L. All three samples contained concentrations of iron between 14,000 to 15,000 ug/L. The secondary MCL for iron is 300 ug/L for taste and odor standards. All three samples contained



concentrations of manganese between 800 to 980 ug/L. The secondary MCL for manganese is 50 ug/L for taste and odor standards. Available laboratory reports are provided in Appendix 3.

WCSD obtained a water sample from a privately owned residential well in the hills east of town (Figure 5, Appendix 1, APN 211 261 015). Water quality results from this well did not contain detectable levels of arsenic or iron, but did contain 250 ug/L of manganese (above the secondary MCL). Well completion reports can be found in Appendix 2.

3.3 Geotechnical Subsurface Information

Available Caltrans and SHN geotechnical explorations provide additional information regarding the thickness and character of unconsolidated deposits and depth to underlying bedrock. Copies of the relevant boring logs and profiles are provided in Appendix 4.

Three general Caltrans investigation areas are identified on Figure 5 (Appendix 1) as CT-1 through CT-3. CT-1 is associated with the Highway 101 overpass and provides subsurface information near the upper terrace. CT-2 is associated with a crib-wall investigation along State Route 254, and CT-3 consists of exploratory borings B-1 through B-7 along State Route 254.

CT-2 and CT-3 are both located at relatively low elevations adjacent to the South Fork Eel River. Although neither location is situated directly on the lower terrace surface, their elevations and river-adjacent positions are more comparable to the lower terrace than to the upper terrace occupied by much of Weott. The Caltrans explorations encountered variable sequences of sand, gravel, silt, and clay over sedimentary bedrock and demonstrate that the depth to bedrock varies across the river corridor.

Additional subsurface information is provided by three SHN geotechnical borings advanced for proposed WCSD water-storage tanks. These borings provide more detailed descriptions of shallow subsurface conditions than are generally available from water-well driller's logs. The borings encountered relatively thin surficial deposits over weathered Yager Formation bedrock consisting predominantly of siltstone, sandstone, and claystone. These data provide useful control on the shallow geology beneath the upland portion of Weott.

4.0 Geologic and Hydrogeologic Setting

4.1 Bedrock

The hills surrounding Weott are underlain predominantly by sedimentary rocks of the Yager Formation, consisting principally of sandstone, siltstone, and claystone. Groundwater within these materials is expected to occur primarily within fractures, bedding-plane openings, and weathered zones rather than through primary pore space.

Available private well records demonstrate that groundwater can be developed from the bedrock but generally indicate relatively modest yields. Based on these data and the character of the Yager Formation,



the surrounding bedrock hillslopes are not considered a favorable primary exploration target for the quantity of groundwater needed for a municipal supply.

4.2 Upper Terrace

The upper terrace is mapped as being underlain at least in part by older alluvial deposits and, therefore, remains a potential groundwater target. However, the available subsurface information indicates relatively shallow bedrock in portions of this area. Field observations also identified bedrock exposures along the terrace margins and within drainages incised into the terrace.

The thickness and continuity of potentially water-bearing deposits beneath the upper terrace are, therefore, uncertain. Importantly, the present terrace surface does not define the underlying bedrock geometry. Historic river incision and subsequent alluvial filling could have produced localized buried channels or bedrock lows containing thicker alluvial deposits that are not evident from surface topography.

4.3 Lower Terrace

The lower terrace represents the best demonstrated groundwater-producing setting in the study area. The CSP well encountered a substantial thickness of sand and gravel and demonstrated sustained pumping at approximately 160 gpm with relatively limited drawdown.

Although the Caltrans explorations at CT-2 and CT-3 demonstrate that bedrock can be relatively shallow in some lower-elevation river-adjacent locations, the CSP well confirms that substantially thicker alluvial deposits occur locally. This variability is consistent with an irregular bedrock surface beneath the valley.

Accordingly, the viability of a new well would depend on encountering sufficient saturated thickness of permeable alluvial deposits above the underlying bedrock.

4.4 Field Reconnaissance

SHN conducted a field reconnaissance of the study area on August 19, 2026, to evaluate terrace morphology, observable bedrock contacts, access, and prospective groundwater-exploration areas. Reconnaissance locations and the recommended test-well location are shown on Figure 6 (Appendix 1), and selected photographs are provided in Appendix 5.

The existing CSP well was observed on the lower terrace at Location 1. Location 2 is situated farther east on the same general terrace surface and was identified as a potentially favorable location for groundwater exploration. Field observations elsewhere included bedrock exposed in a road cut and drainage channel along the margins of the upper terrace, groundwater seepage associated with the bedrock contact, and exposures of alluvial material along the drainage. Bedrock exposures in the road cut and drainage farther east indicate that the bedrock surface rises toward the terrace margin, suggesting that the overlying alluvial deposits become progressively thinner in that direction.



These observations are consistent with the available subsurface information indicating that bedrock rises toward the upper terrace and adjoining hillslope and that the thickness of unconsolidated deposits varies across the valley.

4.5 Conceptual Hydrogeologic Model

Based on the available information, groundwater in the Weott area occurs principally within the river-valley alluvial deposits and fractured or weathered sedimentary bedrock.

The surrounding Yager Formation is considered a relatively low-yield groundwater source based on the available private well records. The upper terrace may contain productive groundwater locally where sufficient saturated alluvium is present, but the thickness and continuity of these deposits are uncertain.

The lower terrace provides the strongest evidence for a productive alluvial aquifer. The CSP well demonstrates that locally thick sand-and-gravel deposits can support groundwater production at rates potentially suitable for municipal use.

Groundwater within the terrace deposits likely receives recharge from precipitation and subsurface drainage from the surrounding uplands and may also be hydraulically connected to the South Fork Eel River. The degree of hydraulic connection with the river has not been established and will need to be evaluated as part of subsequent groundwater-source development.

5.0 Groundwater Development Evaluation

Based on the available information, the lower terrace is considered the most favorable area for additional groundwater exploration. The CSP well provides direct evidence that this setting can contain sufficiently thick and permeable sand-and-gravel deposits to support relatively high groundwater production.

The upper terrace remains a secondary exploration option because productive alluvial deposits may occur locally; however, their thickness and continuity are less certain. The surrounding hillslopes are considered less favorable because they are underlain predominantly by Yager Formation bedrock, and available bedrock wells have relatively modest, reported yields.

Groundwater quality is an additional consideration. Historical testing of the CSP well indicates that groundwater within the lower terrace may contain elevated concentrations of arsenic, iron, and manganese, which would require removal. Treatment processes to remove arsenic, iron, and manganese would require a different type of treatment than what WCSD currently uses to treat their spring water sources. Water quality at a new location cannot be reliably predicted from the CSP well and should be evaluated as part of the test-well program.



6.0 Test Well Siting Recommendations

Based on the available hydrogeologic information and field reconnaissance, SHN considers Location 2 shown on Figure 6 to be a potentially favorable location for further groundwater exploration and recommends that it be considered during planning for the next phase of investigation.

Location 2 is situated on the lower terrace within the same general hydrogeologic setting as the productive CSP well. The location is farther from the active South Fork Eel River channel than the CSP well, which may reduce the potential for hydraulic interaction with and impacts to surface water.

Location 2 also provides practical advantages for development of a potential municipal source. The site is located along Burgess Lane, an abandoned roadway that may provide an opportunity for access and/or a property agreement for a future well site. The location is also close to the existing WCSD B-line water transmission line, potentially simplifying connection of a future groundwater source to the existing system.

Location 2, therefore, provides a favorable combination of hydrogeologic potential, separation from the active river channel, potential access/property opportunities, and proximity to existing WCSD infrastructure.

SHN recommends advancing an exploratory boring at or near Location 2 through the unconsolidated deposits and sufficiently into underlying bedrock to characterize the complete alluvial section. If suitable saturated sand-and-gravel deposits are encountered, the boring should be completed as a test well. Final well depth and screened intervals should be selected based on conditions encountered during drilling.

Following well development, pumping and recovery testing should be conducted to evaluate well yield and aquifer response. Water-quality testing should be performed to support DDW evaluation of the potential source, with particular attention to constituents identified in previous testing of the CSP well. The potential hydraulic relationship between groundwater at the test well and the South Fork Eel River should also be evaluated as appropriate in coordination with DDW.

7.0 Conclusions and Recommendations

Available information indicates that groundwater development warrants further investigation as a potential WCSD municipal water source. The lower terrace is considered the most favorable hydrogeologic setting because the CSP well demonstrates that these deposits can locally support relatively high groundwater production. The upper terrace remains a potential secondary target but has greater uncertainty regarding alluvial thickness, while the surrounding Yager Formation bedrock is considered less favorable based on the relatively modest yields of existing bedrock wells.

SHN recommends advancing an exploratory boring/test well at Location 2. The location combines the demonstrated groundwater potential of the lower terrace with greater separation from the active river



channel, potential access/property opportunities associated with abandoned Burgess Lane, and proximity to the existing B-line water transmission line.

The test-well program should evaluate the thickness and character of the alluvial deposits, groundwater levels, well yield and aquifer response, groundwater quality, and potential hydraulic interaction with the South Fork Eel River. If testing demonstrates adequate groundwater quantity and acceptable or treatable water quality, the results can be used to support evaluation and design of a permanent municipal groundwater source.

8.0 Limitations

The conclusions and recommendations presented in this report are based on available published information, existing well records, historical pumping-test and water-quality information, geotechnical explorations, and field observations. Subsurface conditions can vary substantially over short distances, particularly where alluvial deposits overlie an irregular bedrock surface.

The presence, thickness, continuity, and hydraulic characteristics of water-bearing deposits at the recommended test-well location cannot be confirmed without exploratory drilling. Conditions at the CSP well demonstrate the groundwater-development potential of the lower terrace but do not establish the yield or water quality that will occur at another location.

This evaluation is intended to support groundwater exploration and preliminary test-well siting, and does not establish the capacity, sustainable yield, regulatory classification, or drinking-water suitability of a future municipal groundwater source.

9.0 References

California Department of Transportation (Caltrans). Various dates. *Logs of Test Borings and Subsurface Profiles, State Routes 101 and 254, Weott Area, Humboldt County, California.*

California Department of Water Resources (DWR). 2004. *California's Groundwater, Bulletin 118, Weott Town Area Groundwater Basin, Basin No. 1-31.* Last updated February 27, 2004.

SHN. (SHN). 2004. *Weott Water System Study: Evaluation of Existing and Proposed Drinking Water Sources.* Prepared for Weott Community Services District. Reference 004164. October 2004.

---. (SHN, 2017). *Geotechnical Investigation Report, Water Storage Tank Replacement.* Weott Community Services District, Weott, California.



Figures and Attachments

Appendix 1 – Figures

- Figure 1 Location Map
- Figure 2 Project Location and Existing Features
- Figure 3 Regional Geologic Map
- Figure 4 Geomorphology Map
- Figure 5 Existing Well and Boring Map
- Figure 6 Field Reconnaissance Map

Appendix 2 – Study Area and Existing Features

Appendix 3 – Water Quality Laboratory Test Reports

Appendix 4 – Geotechnical Boring Logs

Appendix 5 – Field Reconnaissance Photographs

Please call me at (707) 441-8855 if you have any questions.

Sincerely,

SHN

Jason Buck
Principal Engineering Geologist

JPB:ame

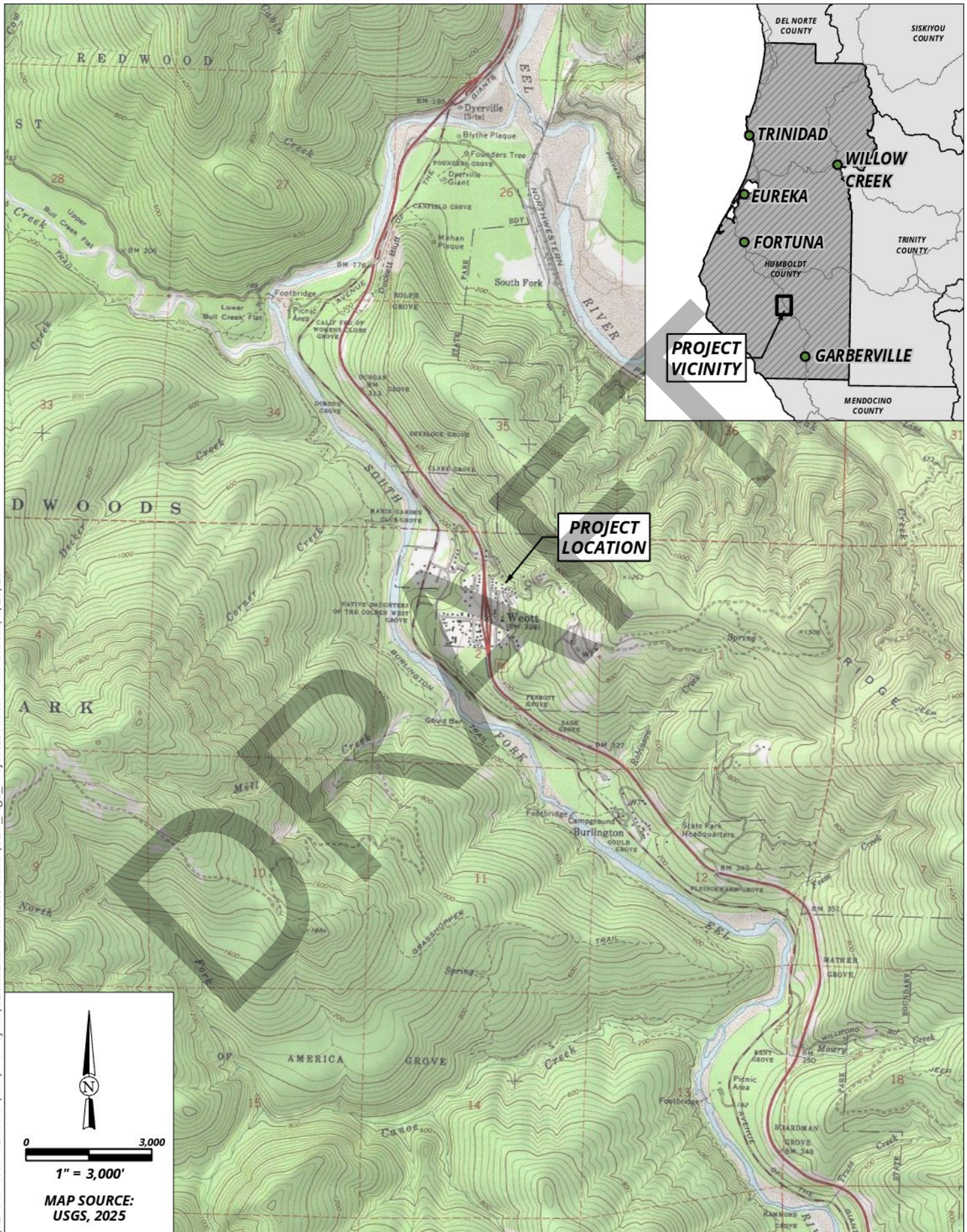


Appendix 1.

Figures

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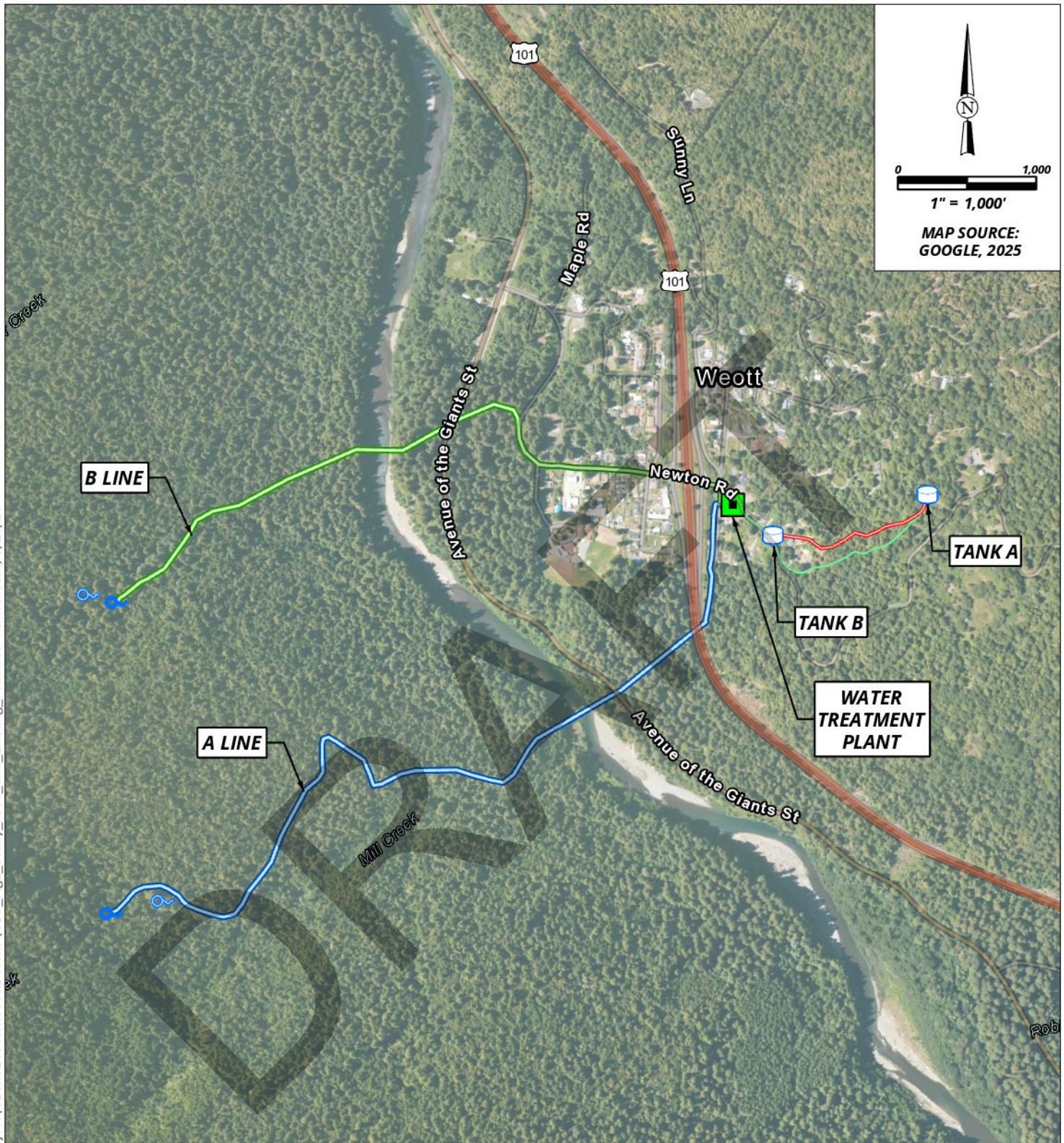


Weott Community Services District
Hydrogeologic Evaluation
200 Lum St., Weott, California

Project Location Map **Figure**

August 2026 - 024045.105

1



EXPLANATION

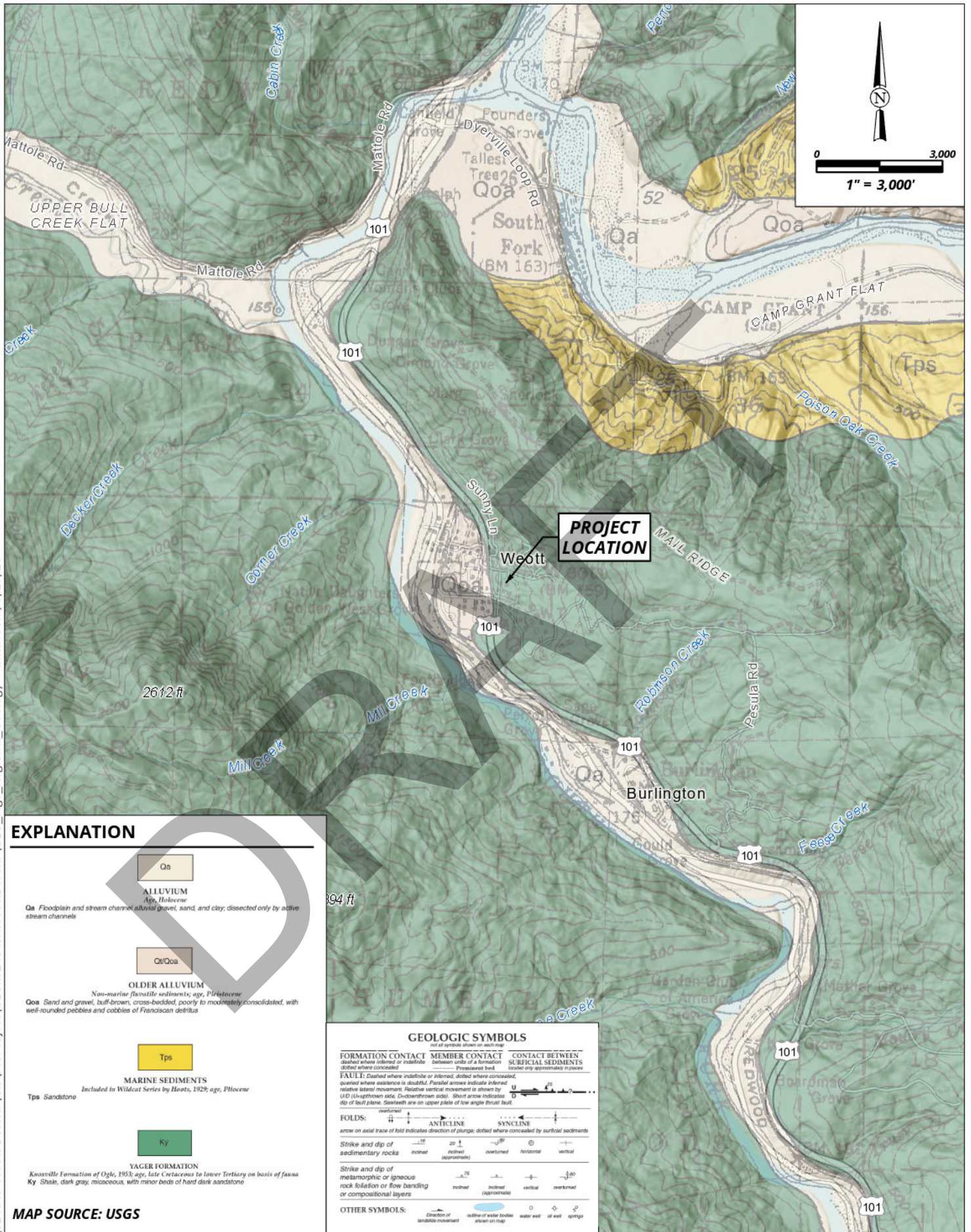
- | | | |
|--|--|--|
|  B SPRING ALTERNATE SOURCE |  TANK A OVERFLOW TO TANK B |  WATER TREATMENT PLANT (WTP) |
|  B SPRING |  WTP TO TANK A |  WATER STORAGE TANK |
|  A SPRING ALTERNATE SOURCE |  B LINE | |
|  A SPRING |  A LINE | |



Weott Community Services District
Hydrogeologic Evaluation
200 Lum St., Weott, California

**Study Area and
Existing Features**
August 2026 - 024045.105

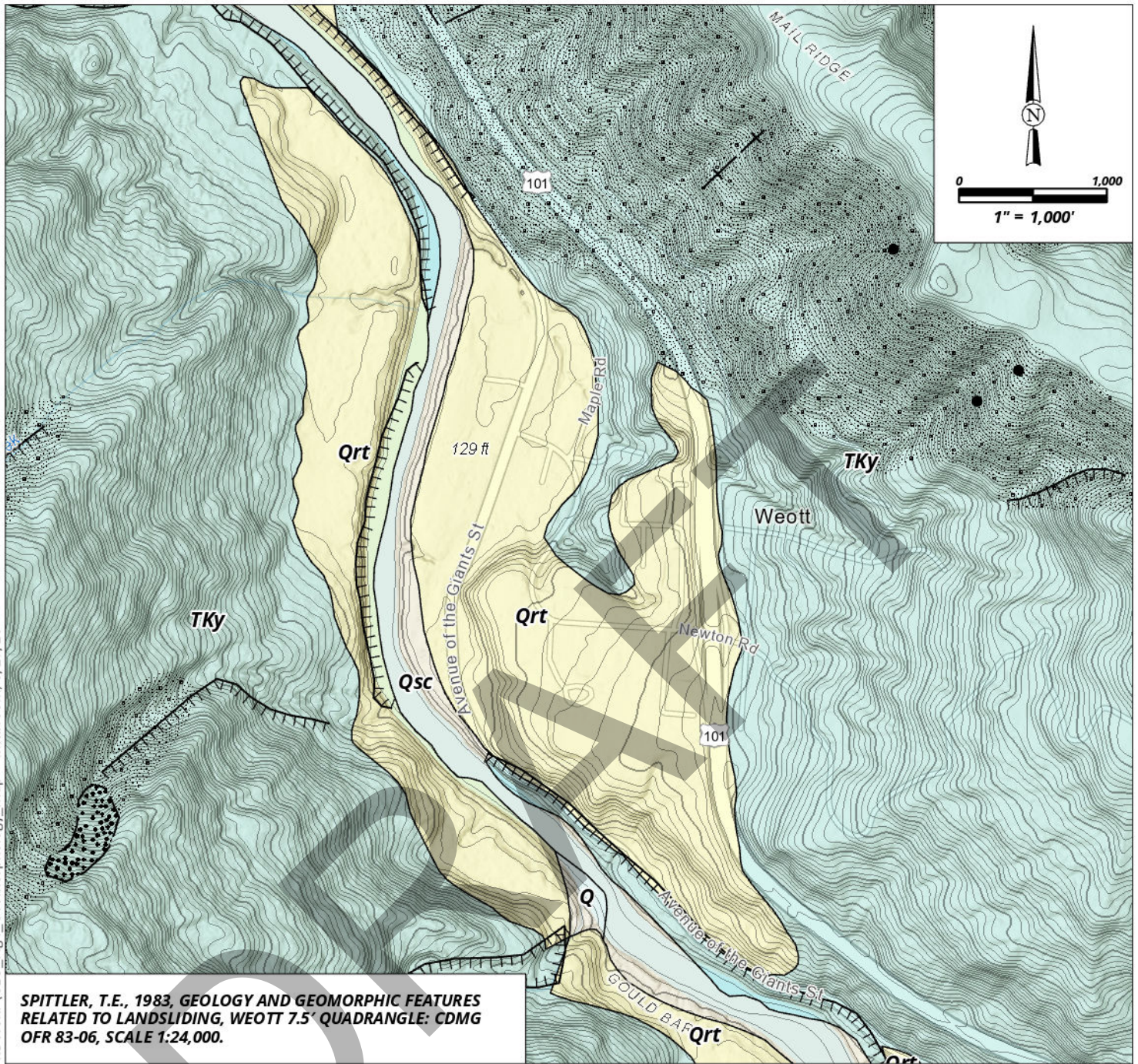
**Figure
2**



Weott Community Services District
Hydrogeologic Evaluation
200 Lum St., Weott, California

Regional Geologic Map
Dibblee, T.W., Jr., 2008
August 2026 - 024045.105

Figure
3



EXPLANATION

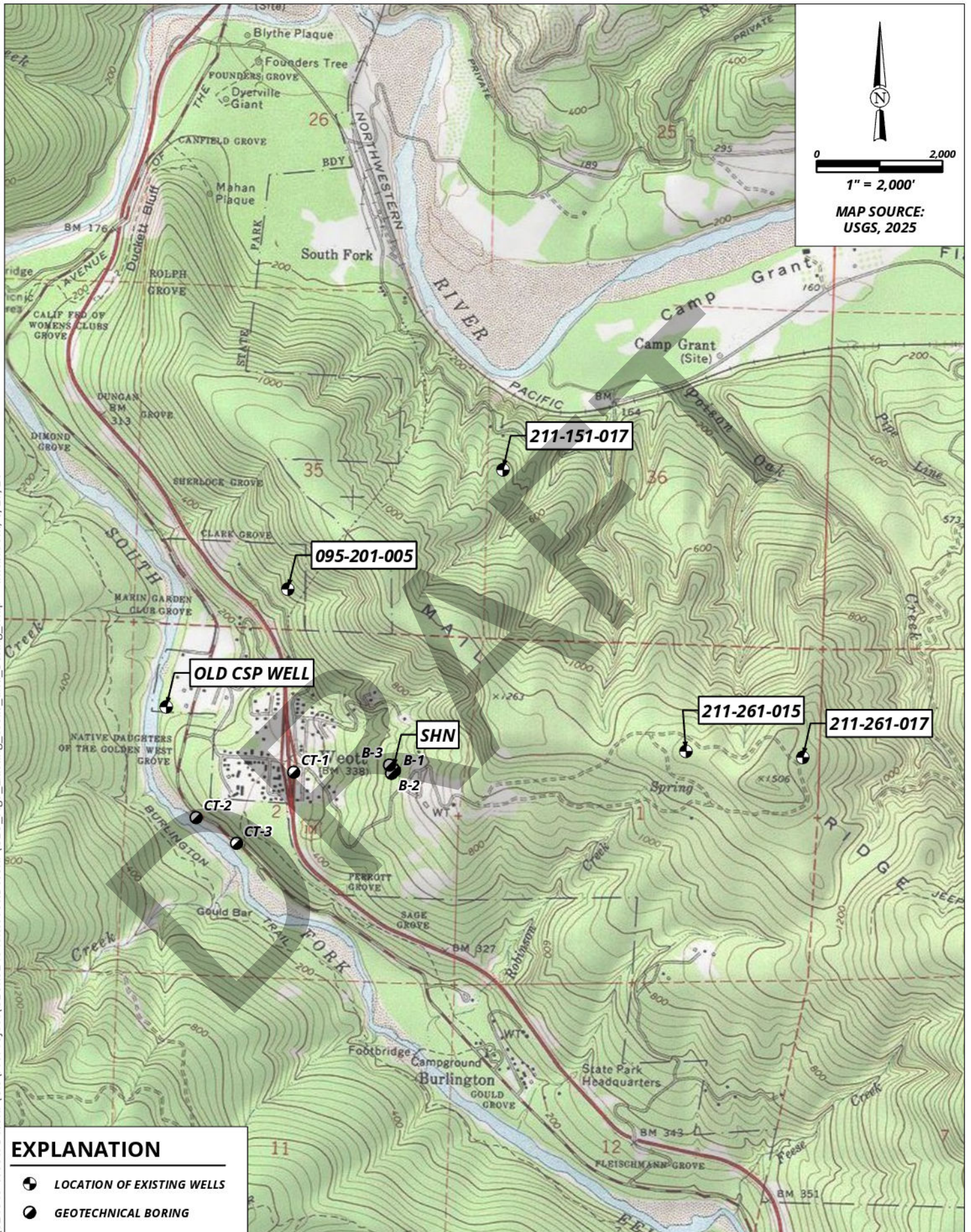
— KNOWN LOCATION	DEBRIS SLIDE DORMANT	QRT - ALLUVIAL TERRACE DEPOSITS (HOLOCENE-PLEISTOCENE): SAND AND GRAVEL LOCATED ABOVE PRESENT-DAY STREAMS AND CREEKS FORMING FLAT BENCHES ADJACENT TO THOSE STREAMS AND CREEKS.
• ACTIVE SLIDE: TOO SMALL TO DELINEATE AT THIS SCALE.	TRANSLATIONAL/ROTATIONAL DORMANT	QSC - STREAM/RIVER CHANNEL DEPOSITS (HOLOCENE): STREAM CHANNEL DEPOSITS OF SAND AND GRAVEL.
GORGE	DEBRIS SLIDE AMPHITHEATER/SLOPE	TKY - YAGER? (LOCAL MAPPING USAGE): UNIT LABEL USED ON SOME SHEETS FOR EOCENE YAGER EQUIVALENTS; CHECK QUAD PAMPHLET.
— LINEAMENT	Q - ALLUVIUM (HOLOCENE): UNCONSOLIDATED SAND, SILT, GRAVEL, AND CLAY DEPOSITED BY STREAMS IN CANYON BOTTOMS.	
+ TORRENT TRACK (APPROXIMATE)		
GORGE		



Weott Community Services District
Hydrogeologic Evaluation
200 Lum St., Weott, California

Geomorphology Map
Spittler (1983)
August 2026 - 024045.105

Figure
4



EXPLANATION

- LOCATION OF EXISTING WELLS
- GEOTECHNICAL BORING

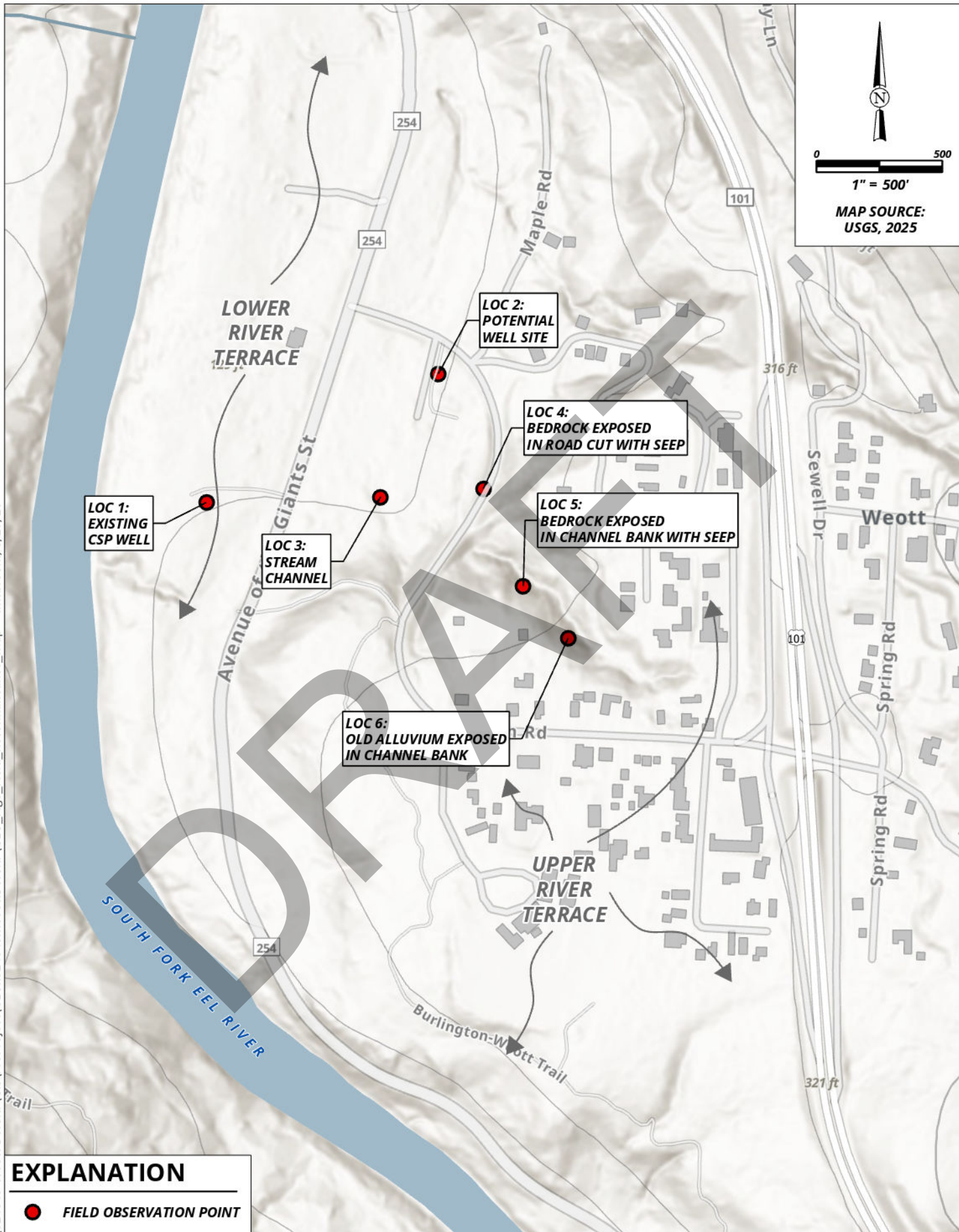


Weott Community Services District
Hydrogeologic Evaluation
200 Lum St., Weott, California

Existing Well and Boring Map Figure

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5



EXPLANATION

● **FIELD OBSERVATION POINT**



Weott Community Services District
Hydrogeologic Evaluation
200 Lum St., Weott, California

Field Reconnaissance Map

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Figure

6

Appendix 2.

Study Area and Existing Features

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Table 2-1. Summary of Existing Water Wells and Available Hydrogeologic Data

Well / Location	Hydrogeologic Setting / Materials	Total Depth (ft bgs)	First Water (ft bgs)	Static Water Level (ft bgs)	Screen / Perforations (ft bgs)	Reported Yield / Pumping Rate	Water Quality
State Parks Well	Lower terrace; sand and gravel over sedimentary bedrock	100 ¹	NR	34	60–80	100 gpm during 12-hour pumping test ²	Elevated iron and manganese; arsenic 0.010–0.012 mg/L
407 N. Sunny Ln. (APN 095-201-005)	Hillslope; thin surficial deposits over shale/bedrock	160	60	90	NR	4 gpm; air-lift estimate	No data available
1735 Dyerville Loop Rd. (APN 211-151-017)	Hillslope; sandstone and shale	220	113	90	80–220	6 gpm; air-lift estimate	No data available
Newton Rd. (APN 211-261-017)	Hillslope; sandstone and shale	165	100	100	100–165	10 gpm; air-lift estimate	No data available
000 Newton Rd. (APN 211-261-015)	Hillslope; predominantly bedrock	~130 ³	140	140	140–180	20 gpm; air-lift estimate	No data available

Notes: bgs = below ground surface; gpm = gallons per minute; NR = not reported or not legible in available records.

1. The State Parks boring was advanced to approximately 140 feet; the completed well depth was approximately 100 feet.

2. The 2004 SHN study reports a 12-hour pumping test at approximately 100 gpm with about 1.9 feet of drawdown.

3. The available completion report for APN 211-261-015 is poorly reproduced; values that could not be read with reasonable confidence are reported as NR.

Humboldt County indicated that water-quality information was not available for the four private wells provided for this evaluation.



TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page ____ of ____

Owner's Well No. _____

Date Work Began 6-10-03 Ended 7-1-03

No. **445384**

Local Permit Agency Humboldt

Permit No. _____

Permit Date _____

DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE _____ (SPECIFY)

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE		DESCRIPTION <i>Describe material, grain size, color, etc.</i>
Ft.	to Ft.	
0	5	Brown silty clay + wood
5	35	Brown silty clay
35	40	Brown sand + clay
40	50	Brown sand (wet) with pec Gravel $\frac{1}{16}$ - $\frac{1}{8}$ "
50	80	Blue gravel $\frac{1}{16}$ $\frac{1}{8}$ $\frac{1}{2}$ $\frac{3}{4}$ 1" gravel
80	95	Blue clay + gravel
95	99	Cemented blue gravel
99	100	hard blue clay
100	140	Blue shell hard

TOTAL DEPTH OF BORING 140 (Feet)

TOTAL DEPTH OF COMPLETED WELL 100 (Feet)

WELL OWNER

Name Calif. Dept. Parks & Rec.

Mailing Address P.O. Box 2006

CITY EUREKA STATE Calif. ZIP 95602

WELL LOCATION

Address _____

City West

County Humboldt

APN Book _____ Page _____ Parcel _____

Township _____ Range _____ Section _____

Latitude _____ Longitude _____

DEG. MIN. SEC. NORTH DEG. MIN. SEC. WEST

LOCATION SKETCH

WEST SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

☒ NEW WELL

☐ MODIFICATION/REPAIR

____ Deepen

____ Other (Specify) _____

☐ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) - (✓)

☐ MONITORING

WATER SUPPLY

____ Domestic

☒ Public

____ Irrigation

____ Industrial

____ "TEST WELL"

____ CATHODIC PROTECTION

____ OTHER (Specify) _____

DRILLING METHOD Rotary **FLUID** gel

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 39.41' (Ft.) & DATE MEASURED 6-30-03

ESTIMATED YIELD 100+ (GPM) & TEST TYPE Driller

TEST LENGTH 12 (Hrs.) TOTAL DRAWDOWN 2 (Ft.)

* May not be representative of a well's long-term yield.

DEPTH FROM SURFACE			BORE HOLE DIA. (Inches)	CASING(S)							ANNULAR MATERIAL						
				TYPE (≤)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE					
Ft.	to	Ft.	BLANK	SCREEN	CON- DUCTOR	FILL PIPE									Ft.	to	Ft.
0	20	14	X				steel	8 5/8	250		0	50	✓				
20	60	14	X				PVC	8 5/8	160		50	100					see gravel
60	80	14		X			PVC	8	160	→ .032							
80	100	14	X				PVC	8	160								

ATTACHMENTS (✓)

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil Water Chemical Analyses

☐ Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Rich Well Drilling

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 1251 Rail Road Mckinleyville, Ca 95519

Signed Stuart W. Decker DATE SIGNED 7-1-03 C.S.7.2 LICENSE NUMBER 721799

File Original with DWR

JUL 03 2017

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. xxxxxxxx 0347153

Page 1 of 1

Owner's Well Number

Date Work Began 06/17/17

Date Work Ended 06/27/17

Local Permit Agency Humboldt County Division of Environmental Health

Permit Number 16/17-1127

Permit Date 05/15/17

DWR Use Only - Do Not Fill In

015/02E-35

State Well Number/Site Number

Latitude N Longitude W

APN/IRS/Other

Geologic Log

Orientation		☐ Vertical	☐ Horizontal	☐ Angle	Specify
Drilling Method		Drilling Fluid			
Depth from Surface		Description			
Feet	to Feet	Describe material, grain size, color, etc			
0	15	BROWN ROCK			
15	25	BROWN SILT			
25	30	BROWN CLAY			
30	35	GREY SHELL			
35	40	BROWN SHELL/ROCK			
40	45	CLAY/BROWN ROCK			
45	50	GREY SHELL			
50	55	BROWN SHELL/ROCK			
55	60	BROWN SHELL/ROCK			
60	120	GREY SHELL			
120	135	WHITE ROCK			
135	160	GREY/BLACK SHELL			

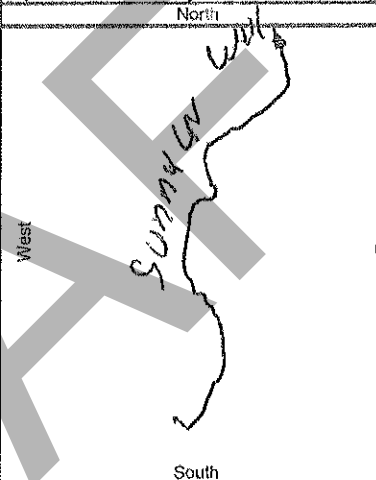
Well Owner

Well Location

Address 407 N. SUNNY LANE
 City WEOTT County Humboldt
 Latitude Dec. Min. Sec. N Longitude Dec. Min. Sec. W
 Datum Dec. Lat. Dec. Long.
 APN Book 095 Page 201 Parcel 005
 Township Range Section

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Activity

- ☒ New Well
- ☐ Modification/Repair
 - ☐ Deepen
 - ☐ Other
- ☐ Destroy

Planned Uses

- ☐ Water Supply
 - ☐ Domestic ☐ Public
 - ☐ Irrigation ☐ Industrial
- ☐ Cathodic Protection
- ☐ Dewatering
- ☐ Heat Exchange
- ☐ Injection
- ☐ Monitoring
- ☐ Remediation
- ☐ Sparging
- ☐ Test Well
- ☐ Vapor Extraction
- ☐ Other

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Water Level and Yield of Completed Well

Depth to first water 60' (Feet below surface)
 Depth to Static
 Water Level 90' (Feet) Date Measured 06/26/17
 Estimated Yield * 4 (GPM) Test Type Air Lift
 Test Length 4.0 (Hours) Total Drawdown (Feet)
 *May not be representative of a well's long term yield.

Casings

Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size
Feet to Feet	(inches)			(Inches)	(Inches)		If Any (Inches)
20	6"		Low Carbon Steel	1/4"	6 5/8"		

Annular Material

Depth from Surface	Fill	Description
Feet to Feet		
130	Bentonite	Bentonite Chips

Attachments

- ☐ Geologic Log
- ☐ Well Construction Diagram
- ☐ Geophysical Log(s)
- ☐ Soil/Water Chemical Analyses
- ☐ Other

Attach additional information, if it exists

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name 3D Drilling

Person, Firm or Corporation

P.O. Box 1285

Rock Springs

WY 82902

Signed

Chad Packer

City

State

Zip

C-57 Licensed Water Well Contractor

Date Signed

10015033

C-57 License Number

WCR2017-001434

Well Owner (must remain confidential pursuant to Water Code 13752)				Planned Use and Activity	
Name				Activity	New Well
Mailing Address				Planned Use	Water Supply Domestic
City	REDCREST	State	CA	Zip	95569

Year	Location
------	----------

Address			APN 211-151-017		
City			County Humboldt	Township	
Latitude			Longitude		Range
Deg.	Min.	Sec.	Deg.	Min.	Sec.
Dec. Lat. 40.33457			Dec. Long. 123.90985		Section
Vertical Datum			Horizontal Datum WGS84		Baseline Meridian
Location Accuracy			Location Determination Method		Ground Surface Elevation
					Elevation Accuracy
					Elevation Determination Method

Borehole Information

Orientation	Vertical	Specify
Drilling Method	Direct Rotary	Drilling Fluid
		Air
Total Depth of Boring	220	Feet
Total Depth of Completed Well	220	Feet

Water Level and Yield of Completed Wall

Depth to first water	113	(Feet below surface)	
Depth to Static			
Water Level	90	(Feet)	Date Measured 05/19/2017
Estimated Yield*	6		Test Type Air Lift
Test Length	4		Total Drawdown 130 (Feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	28	SOFT SANDSTONE
28	53	SHALE SANDSTONE MIX
53	85	SHALE
85	102	TREES AND SHALE
102	196	SOFT GREEN BLUE SANDSTONE
196	220	SHALE

Casinos

Casing #	Depth from Surface		Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size (if any) (inches)	Description
	Feet to	Feet								
1	0	80	Blank	PVC	OD: 5.563 in. SDR: 21 Thickness: 0.265 in.	0.265	5.563			
1	80	220	Screen	PVC	OD: 5.563 in. SDR: 21 Thickness: 0.265 in.	0.265	5.563	Miller Slots	0.032	

RECEIVED

MAY 24 2017

HUMBOLDT CO. DIVISION
OF ENVIRONMENTAL HEALTH

Page 1 of 2

ENTERED

5-24-17

Annual Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	20	Bentonite	Other Bentonite		Sanitary Seal
20	220	Filter Pack	Other Gravel Pack	3/8 Inch	Pea Gravel

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	220	10

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name		FISCH DRILLING	
Person, Firm or Corporation			
3150 JOHNSON ROAD		HYDESVILLE	CA 95547
Address		City	State Zip
Signed 		05/23/2017	683865
C-57 Licensed Water Well Contractor		Date Signed	C-57 License Number

17. 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825

Scan.pdf - Location Map

DWR Use Only

Site Number / State Well Number	
Latitude Deg/Min/Sec	Longitude Deg/Min/Sec

TRS:

APN:

File Original with DWR

State of California
Well Completion Report

APN 211-261-017

Click to Get a New Log Number

Page _____ of _____

Owner's Well Number _____

Date Work Began 4-10-18

Date Work Ended 4-10-18

Local Permit Agency _____

Permit Number 17/18 1619 Permit Date 3-20-18

Geologic Log

Orientation ☒ Vertical ☐ Horizontal ☐ Angle Specify _____
Drilling Method Rotary Drilling Fluid _____

Depth from Surface Description
Feet to Feet Describe material, grain size, color, etc.

0	10	Loose Brn Soil
10	25	FRAC Brn Rock
25	50	" "
50	85	" Sandstone
85	100	Blue "
100	140	FRAC Shale w/ quarts
140	165	FRANISIAN Shale

Total Depth of Boring _____ Feet

Total Depth of Completed Well 165 Feet

Well Owner

Well Location

Address Newton Rd
City Weott County Humboldt
Latitude _____ N Longitude _____ W
Datum _____ Dec. Lat. _____ Dec. Long. _____
APN Book _____ Page _____ Parcel 211261017
Township _____ Range _____ Section _____

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

South

West East
Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

- ☒ New Well
☐ Modification/Repair
☐ Deepen
☐ Other
☐ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

- ☐ Water Supply
☒ Domestic ☐ Public
☐ Irrigation ☐ Industrial
☐ Cathodic Protection
☐ Dewatering
☐ Heat Exchange
☐ Injection
☐ Monitoring
☐ Remediation
☐ Sparging
☐ Test Well
☐ Vapor Extraction
☐ Other

Water Level and Yield of Completed Well

Depth to first water 100 (Feet below surface)
Depth to Static _____
Water Level 100 (Feet) Date Measured 4-10-18
Estimated Yield * 10 (GPM) Test Type AIR 1 ft
Test Length 1 (Hours) Total Drawdown _____ (Feet)
*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	100	12"	F 480	PVC	1/60	5"	BLANK
100	165	"	"	"	"	Perf	.030

Annular Material

Depth from Surface Feet to Feet	Fill	Description
0	20	Bentonite
20	165	3/8" Pea

Attachments

- ☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief
Name Richard Enterprises
Person, Firm or Corporation
649 Bear Creek Rd Gardenville CA 95542
Address City State Zip
Signed [Signature] Date Signed 4-2-18 C-57 License Number 403708
C-57 Licensed Water Well Contractor

ENTERED
5-4-18

**QUADRUPLICATE
For Local Requirements**

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page 1 of 1

Owner's Well No. 1087877

Date Work Began 5-11-17, Ended 5-11-17

Local Permit Agency Humboldt

Permit No. 16/17 0939

Permit Date 12/11/17

DWR USE ONLY — DO NOT FILL IN

APN 211-261-015

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION () ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE (SPECIFY)

DRILLING METHOD Rotary FLUID

DESCRIPTION

Describe material, grain size, color, etc.

DEPTH FROM SURFACE
Ft. to Ft.

0 90

90 140

140 160

160 180

180 200

200 220

220 240

240 260

260 280

280 300

300 320

320 340

340 360

360 380

380 400

400 420

420 440

440 460

460 480

480 500

500 520

520 540

540 560

560 580

580 600

600 620

620 640

640 660

660 680

680 700

700 720

720 740

740 760

760 780

780 800

800 820

820 840

840 860

860 880

880 900

900 920

920 940

940 960

960 980

980 1000

1000 1020

1020 1040

1040 1060

1060 1080

1080 1100

1100 1120

1120 1140

1140 1160

1160 1180

1180 1200

1200 1220

1220 1240

1240 1260

1260 1280

1280 1300

1300 1320

1320 1340

1340 1360

1360 1380

1380 1400

1400 1420

1420 1440

TOTAL DEPTH OF BORING 140 (Feet)

TOTAL DEPTH OF COMPLETED WELL 140 (Feet)

WELL OWNER

Name

Mailing

CITY

Address

City

County

APN Book

Page

Parcel

Township

Range

Section

Lat

DEG.

MIN.

SEC.

N

Long

DEG.

MIN.

SEC.

W

LOCATION SKETCH

NORTH

ACTIVITY ()

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

USES ()

WATER SUPPLY

Domestic

Irrigation

Public Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDICATION

OTHER (SPECIFY)

WEST SOUTH
Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 140 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 140 (Ft.) & DATE MEASURED 5-11-17

ESTIMATED YIELD * 20 (GPM) & TEST TYPE Flow Test

TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)

* May not be representative of a well's long-term yield.

DEPTH FROM SURFACE			BORE-HOLE DIA. (Inches)	CASING (S)							DEPTH FROM SURFACE			ANNULAR MATERIAL			
				TYPE ()				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS				SLOT SIZE IF ANY (Inches)	TYPE		
Ft.	to	Ft.	BLANK	SCREEN	CON- DUCTOR	FILL PIPE										CE- MENT ()	BEN- TONITE ()
0	140	9'	✓				140	5	inc/160				✓				
140	180			✓						.032					3/8 Pea		

ATTACHMENTS ()

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analyses
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bushnell Enterprises
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS

CITY

STATE

ZIP

Signed

C-57 LICENSED WATER WELL CONTRACTOR

DATE SIGNED

C-57 LICENSE NUMBER

Appendix 3.

Water Quality Laboratory Test Reports

DRAFT

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 03/07/22

Sample ID No. 0306716-1

Laboratory

Signature Lab

Name: NORTH COAST LABS

Director:

Name of Sampler: Stuart Dickey

Employed By: Rich Well Drilling

Date/Time Sample

Date/Time Sample

Date Analyses

Collected: 03/06/30/1000

Received @ Lab: 03/06/30/1717

Completed: 03/07/11

System

System

Name: WEOTT C.S.D.

Number: 1200553

Name or Number of Sample Source: New Well

User ID: ATT

Station Number:

Date/Time of Sample: |03|06|30|1000|

Laboratory Code: 3334 *

YY MM DD TTTT

YY MM DD *

Date Analysis completed: |03|07|11| *

Submitted by:

Phone #:

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO ₃) (mg/L)	00900	110	
	mg/L	Calcium (Ca) (mg/L)	00916	13	
	mg/L	Magnesium (Mg) (mg/L)	00927	19	
	mg/L	Sodium (NA) (mg/L)	00929	10	
	mg/L	Potassium (K) (mg/L)	00937		

Total Cations Meq/L Value: 2.65

	mg/L	Total Alkalinity (AS CaCO ₃) (mg/L)	00410	140	
	mg/L	Hydroxide (OH) (mg/L)	71830	< 1.0	
	mg/L	Carbonate (CO ₃) (mg/L)	00445	< 1.0	
	mg/L	Bicarbonate (HCO ₃) (mg/L)	00440	140	
*	mg/L+	Sulfate (SO ₄) (mg/L)	00945	1.1	.5
*	mg/L+	Chloride (Cl) (mg/L)	00940	5.7	
45	mg/L	Nitrate (as NO ₃) (mg/L)	71850	ND	2.0
2	mg/L	Fluoride (F) (Natural-Source)	00951	0.25	.1

Total Anions Meq/L Value: 2.49

Std.Units+	PH (Laboratory) (Std.Units)	00403	6.4	
*** umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	260	
**** mg/L+	Total Filterable Residue@180C (TDS) (mg/L)	70300	180	
15 Units	Apparent Color (Unfiltered) (Units)	00081		
3 TON	Odor Threshold at 60 C (TON)	00086		1.
5 NTU	Lab Turbidity (NTU)	82079		
0.5 mg/L+	MBAS (mg/L)	38260	< 0.050	

* 250-500-600

** 0.6-1.7

*** 900-1600-2200

**** 500-1000-1500

M.L.	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
1000	ug/L	Aluminum (Al) (ug/L)	01105	100	50.0
6	ug/L	Antimony (ug/L)	01097	ND	6.0
50	ug/L	Arsenic (As) (ug/L)	01002	10	2.0
1000	ug/L	Barium (Ba) (ug/L)	01007	210	100.0
4	ug/L	Beryllium (ug/L)	01012	ND	1.0
5	ug/L	Cadmium (Cd) (ug/L)	01027	ND	1.0
	ug/L	Chromium (Total Cr-CrVI screen) (ug/L)	A-044	ND	1.0
1000	ug/L+	Copper (Cu) (ug/L)	01042	ND	50.0
300	ug/L+	Iron (Fe) (ug/L)	01045	14000	100.0
	ug/L	Lead (Pb) (ug/L)	01051	ND	5.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	800	20.0
2	ug/L	Mercury (Hg) (ug/L)	71900	ND	1.0
100	ug/L	Nickel (ug/L)	01067	20	10.0
50	ug/L	Selenium (Se) (ug/L)	01147	ND	5.0
100	ug/L+	Silver (Ag) (ug/L)	01077	ND	10.0
2	ug/L	Thallium (ug/L)	01059	ND	1.0
5000	ug/L	Zinc (Zn) (ug/L)	01092	ND	50.0

+ Indicates Secondary Drinking Water Standards

laboratory comments and description of any additional components found:

Corrosivity -1.7

The reporting limits for aluminum and nickel were raised due to the turbidity

of the sample.

Date: 11-Jul-03

WorkOrder: 0306716

ANALYTICAL REPORT

Client Sample ID: Ca Dept of Parks & Rec

Received: 6/30/03

Collected: 6/30/03 10:00

Lab ID: 0306716-01A

Test Name: Alkalinity

Reference: Std. Meth. 18th Ed. 2320 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Alkalinity	140	1.0	mg/L CaCO ₃	1.0		7/1/03

Test Name: Conductivity

Reference: Std. Meth. 18th Ed. 2510

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Conductivity	260	1.0	µmhos/cm	1.0		7/1/03

Test Name: Corrosivity Calculation

Reference: Std. Meth. 18th Ed. 2330 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Corrosivity	-1.7	N/A	N/A	1.0		7/11/03

Test Name: F, SO₄, Cl, NO₃, NO₂

Reference: EPA 300.0

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Nitrate (as Nitrogen)	ND	0.10	mg/L	1.0		7/1/03
Fluoride	0.25	0.10	mg/L	1.0		7/1/03
Chloride	5.7	0.10	mg/L	1.0		7/1/03
Sulfate	1.1	0.50	mg/L	1.0		7/1/03

Test Name: Forms of Alkalinity

Reference: Std. Meth. 18th Ed. 2320 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Bicarbonate	140	1.0	mg/L CaCO ₃	1.0		7/11/03
Carbonate	ND	1.0	mg/L CaCO ₃	1.0		7/11/03
Hydroxide	ND	1.0	mg/L CaCO ₃	1.0		7/11/03

Test Name: pH

Reference: Std. Meth. 18th Ed. 4500 H+ B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
pH	6.4	N/A	pH Units	1.0		6/30/03

Test Name: Total Dissolved Solids

Reference: EPA 160.1

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Total Dissolved Solids	180	10	mg/L	1.0		7/1/03

Client Sample ID: Ca Dept of Parks & Rec

Received: 6/30/03

Collected: 6/30/03 10:00

Lab ID: 0306716-01B

Test Name: Antimony

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Antimony	ND	6.0	µg/L	1.0	7/1/03	7/8/03

Date: 11-Jul-03

WorkOrder: 0306716

Test Name: Arsenic

Parameter

Arsenic

Reference: EPA 200.9

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
10	2.0	µg/L	1.0	7/1/03	7/2/03

Test Name: Cadmium

Parameter

Cadmium

Reference: EPA 200.9

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	1.0	µg/L	1.0	7/1/03	7/1/03

Test Name: Chromium

Parameter

Chromium

Reference: EPA 200.9

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	1.0	µg/L	1.0	7/1/03	7/8/03

Test Name: Hardness

Parameter

Hardness

Reference: EPA 200.7

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
110	7.0	mg/L CaCO ₃	1.0	7/1/03	7/11/03

Test Name: ICAP Metals with Acid Digestion

Reference: EPA 200.7

Parameter

Aluminum
Barium
Beryllium
Calcium
Copper
Iron
Magnesium
Manganese
Nickel
Silver
Sodium
Zinc

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	100	µg/L	1.0	7/1/03	7/8/03
210	5.0	µg/L	1.0	7/1/03	7/8/03
ND	1.0	µg/L	1.0	7/1/03	7/8/03
> 13,000	1,000	µg/L	1.0	7/1/03	7/8/03
ND	10	µg/L	1.0	7/1/03	7/8/03
14,000	100	µg/L	1.0	7/1/03	7/8/03
19,000	250	µg/L	1.0	7/1/03	7/8/03
800	2.0	µg/L	1.0	7/1/03	7/8/03
ND	20	µg/L	1.0	7/1/03	7/8/03
ND	10	µg/L	1.0	7/1/03	7/8/03
10,000	1,000	µg/L	1.0	7/1/03	7/8/03
ND	20	µg/L	1.0	7/1/03	7/8/03

Test Name: Lead

Parameter

Lead

Reference: EPA 200.9

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	5.0	µg/L	1.0	7/1/03	7/7/03

Test Name: Mercury

Parameter

Mercury

Reference: EPA 245.1

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	1.0	µg/L	1.0	7/9/03	7/11/03

Test Name: Selenium

Parameter

Selenium

Reference: EPA 200.9

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	5.0	µg/L	1.0	7/1/03	7/9/03

Test Name: Thallium

Parameter

Thallium

Reference: EPA 200.9

<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
ND	1.0	µg/L	1.0	7/1/03	7/2/03

Date: 11-Jul-03

WorkOrder: 0306716

ANALYTICAL REPORT

Client Sample ID: Ca Dept of Parks & Rec

Received: 6/30/03

Collected: 6/30/03 10:00

Lab ID: 0306716-01C

Test Name: Apparent Color

Reference: Std. Meth. 18th Ed. 2120 B

Parameter

Result

Limit

Units

DF

Extracted

Analyzed

Color

20

(15)

3.0

C.U.

1.0

7/1/03

Test Name: Odor

Reference: EPA 140.1

Parameter

Result

Limit

Units

DF

Extracted

Analyzed

Odor

ND

1.0

TON

1.0

7/1/03

Test Name: Turbidity

Reference: EPA 180.1

Parameter

Result

Limit

Units

DF

Extracted

Analyzed

Turbidity

18

(5)

0.050

NTU

1.0

7/1/03

Client Sample ID: Ca Dept of Parks & Rec

Received: 6/30/03

Collected: 6/30/03 10:00

Lab ID: 0306716-01D

Test Name: Surfactants - MBAS

Reference: Std. Meth. 18th Ed. 5540 C

Parameter

Result

Limit

Units

DF

Extracted

Analyzed

MBAS

ND

0.050

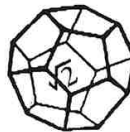
mg/L

1.0

7/2/03

7/2/03

DRAFT

**NORTH COAST
LABORATORIES LTD.**

____ URGENT
____ PRIORITY
____ ROUTINE

FACSIMILE TRANSMISSIONDATE 9-22-04

TO: _____
NAME: SHW
LOCATION: _____
ATTN: Andy
FAX: _____
PHONE: _____

FROM: _____
NAME: **NORTH COAST LABORATORIES**
LOCATION: **5680 WEST END RD**
ARCATA, CA 95521-9202
FROM: 816
FAX: **(707) 822-6831**
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**NORTH COAST
LABORATORIES LTD.**

September 22, 2004

Weott C.S.D.
P.O. Box 218
Weott, CA 95571-0218

Order No.: 0409006
Invoice No.: 44990
PO No.:
ELAP No. 1247-Expires July 2006

Attn: Charles Roecklein

RE: 004164, Weott CSD Water System Study

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	Well #1
01B	Well #1
01C	Well #1
01D	Well #1
01F	Well #1

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

North Coast Laboratories, Ltd.**Date:** 22-Sep-04

CLIENT: Weott C.S.D.
Project: 004164, Weott CSD Water System Study
Lab Order: 0409006

CASE NARRATIVE

Total Dissolved Solids (TDS):

Due to trace contamination of the method blank the reporting limit was raised to 20 mg/L.

DRAFT



Date: 22-Sep-04

WorkOrder: 0409006

ANALYTICAL REPORT

Client Sample ID: Well #1

Received: 9/1/04

Collected: 9/1/04 9:12

Lab ID: 0409006-01A

Test Name: Alkalinity

Reference: Std. Meth. 19th Ed. 2320 B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Alkalinity	130	1.0	mg/L CaCO ₃	1.0		9/14/04

Test Name: Chloride, sulfate, fluoride, bromide

Reference: EPA 300.0

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Chloride	4.7	0.10	mg/L	1.0		9/2/04
Sulfate	1.8	0.50	mg/L	1.0		9/2/04

Test Name: Conductivity

Reference: Std. Meth. 19th Ed. 2510

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Conductivity	260	1.0	µmhos/cm	1.0		9/7/04

Test Name: Corrosivity Calculation (@20°C)

Reference: Std. Meth. 19th Ed. 2330 B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Corrosivity	-1.4	N/A	N/A	1.0		9/22/04

Test Name: Forms of Alkalinity

Reference: Std. Meth. 19th Ed. 2320 B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Bicarbonate	130	1.0	mg/L CaCO ₃	1.0		9/19/04
Carbonate	ND	1.0	mg/L CaCO ₃	1.0		9/19/04
Hydroxide	ND	1.0	mg/L CaCO ₃	1.0		9/19/04

Test Name: pH

Reference: Std. Meth. 19th Ed. 4500 H+ B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
pH	6.7	N/A	pH Units	1.0		9/1/04

Test Name: Total Dissolved Solids

Reference: EPA 160.1

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Total Dissolved Solids	170	20	mg/L	1.0		9/8/04

Client Sample ID: Well #1

Received: 9/1/04

Collected: 9/1/04 9:12

Lab ID: 0409006-01B

Test Name: Apparent Color

Reference: Std. Meth. 19th Ed. 2120 B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Color	10	3.0	C.U.	1.0		9/1/04

Test Name: Odor

Reference: EPA 140.1

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Odor	ND	1.0	TON	1.0		9/1/04

Page 1 of 3

Date: 22-Sep-04

WorkOrder: 0409006

Test Name: Turbidity

ANALYTICAL REPORT

Reference: EPA 180.1

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Turbidity	32	0.050	NTU	1.0		9/2/04

Client Sample ID: Well #1

Received: 9/1/04

Collected: 9/1/04 9:12

Lab ID: 0409006-01C

Test Name: Antimony

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Antimony	ND	8.0	µg/L	1.0	9/7/04	9/9/04

Test Name: Arsenic

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Arsenic	11	2.0	µg/L	1.0	9/7/04	9/13/04

Test Name: Cadmium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Cadmium	ND	1.0	µg/L	1.0	9/7/04	9/14/04

Test Name: Chromium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Chromium	ND	1.0	µg/L	1.0	9/7/04	9/15/04

Test Name: Hardness

Reference: EPA 200.7 (calc)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Hardness	120	7.0	mg/L CaCO3	1.0	9/7/04	9/22/04

Test Name: ICAP Metals

Reference: EPA 200.7

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Aluminum	ND	50	µg/L	1.0	9/7/04	9/21/04
Barium	220	1.0	µg/L	1.0	9/7/04	9/21/04
Beryllium	ND	1.0	µg/L	1.0	9/7/04	9/21/04
Calcium	14,000	50	µg/L	1.0	9/7/04	9/21/04
Copper	ND	5.0	µg/L	1.0	9/7/04	9/21/04
Iron	15,000	15	µg/L	1.0	9/7/04	9/21/04
Magnesium	20,000	50	µg/L	1.0	9/7/04	9/21/04
Manganese	980	1.0	µg/L	1.0	9/7/04	9/21/04
Nickel	ND	10	µg/L	1.0	9/7/04	9/21/04
Potassium	ND	5,000	µg/L	1.0	9/7/04	9/21/04
Silver	ND	10	µg/L	1.0	9/7/04	9/21/04
Sodium	10,000	100	µg/L	1.0	9/7/04	9/21/04
Zinc	31	10	µg/L	1.0	9/7/04	9/21/04

Test Name: Lead

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
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Page 2 of 3

Date: 22-Sep-04

WorkOrder: 0409006

ANALYTICAL REPORT

Lead	7.2	5.0	µg/L	1.0	9/7/04	9/13/04
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Test Name: Selenium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Selenium	ND	5.0	µg/L	1.0	9/7/04	9/8/04

Test Name: Thallium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Thallium	ND	1.0	µg/L	1.0	9/7/04	9/15/04

Client Sample ID: Well #1

Received: 9/1/04

Collected: 9/1/04 9:12

Lab ID: 0409006-01D

Test Name: Total Organic Carbon

Reference: Std. Meth. 19th Ed. 5310 C

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Total Organic Carbon	0.35	0.30	mg/L	1.0		9/14/04

Client Sample ID: Well #1

Received: 9/1/04

Collected: 9/1/04 9:12

Lab ID: 0409006-01F

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		9/4/04
Benzene	ND	0.50	µg/L	1.0		9/4/04
Toluene	ND	0.50	µg/L	1.0		9/4/04
Ethylbenzene	ND	0.50	µg/L	1.0		9/4/04
m,p-Xylene	NU	0.50	µg/L	1.0		9/4/04
o-Xylene	ND	0.50	µg/L	1.0		9/4/04
Surrogate: Cis-1,2-Dichloroethylene	86.7	85-115	% Rec	1.0		9/4/04

Test Name: TPH as Gasoline

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas	ND	50	µg/L	1.0		9/4/04

North Coast Laboratories, Ltd.

Date: 22-Sep-04

CLIENT: Wcoit C.S.D.

Work Order: 0409006

Project: 004164, Wcoit CSD Water System Study

QC SUMMARY REPORT

Method Blank

Sample ID: MB-12068A	Batch ID: 12068	Test Code: ANTIMW	Units: µg/L	Analysis Date: 9/10/04 2:42:00 PM	Prep Date:
Client ID:	Run ID: INAA2_040909A	SeqNo: 448414			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Antimony	ND	5.0			

Sample ID: MB-12068A	Batch ID: 12068	Test Code: ARSENW	Units: µg/L	Analysis Date: 9/13/04 3:28:00 PM	Prep Date:
Client ID:	Run ID: INAA2_040911A	SeqNo: 448192			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Arsenic	ND	2.0			

Sample ID: MB-97204	Batch ID: R30834	Test Code: BTXEW	Units: µg/L	Analysis Date: 9/3/04 10:31:11 PM	Prep Date:
Client ID:	Run ID: ORGCS_040903B	SeqNo: 447998			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
MTBE	ND	3.0			
Benzene	ND	0.50			
Toluene	ND	0.50			
Ethylbenzene	ND	0.50			
m,p-Xylene	ND	0.50			
o-Xylene	ND	0.50			
Cis-1,2-Dichloroethylene	0.848	0.1C	1.00	0	84.8%

Sample ID: MB-12068A	Batch ID: 12068	Test Code: CADMIW	Units: µg/L	Analysis Date: 9/14/04 5:52:00 PM	Prep Date:
Client ID:	Run ID: INAA2_040914A	SeqNo: 448597			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Cadmium	ND	1.0			

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Method Blank

CLIENT: Wcoit C.S.D.
 Work Order: 0409006
 Project: 004164, Wcoit CSD Water System Study

Sample ID: MB-12068A Batch ID: 12068 Test Code: CHROMW Units: µg/L Analysis Date: 9/15/04 11:32:00 AM Prep Date: 9/7/04
 Client ID: Run ID: INAA2_040915A SeqNo: 449820

Analyte Result Limit SPK value SPK Ref Val % Rec Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual
 Chromium ND 1.0

Sample ID: MBLK 080204 Batch ID: R10841 Test Code: ICIOW Units: mg/L Analysis Date: 9/2/04 11:38:32 AM Prep Date:
 Client ID: Run ID: INIC2_040902B SeqNo: 447891

Analyte Result Limit SPK value SPK Ref Val % Rec Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual
 Chloride ND 0.10
 Sulfate ND 0.50 J

Sample ID: MB-12068P Batch ID: 12068 Test Code: ICPW Units: µg/L Analysis Date: 9/21/04 4:02:00 PM Prep Date:
 Client ID: Run ID: INICP1_040921A SeqNo: 451998

Analyte Result Limit SPK value SPK Ref Val % Rec Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual
 Aluminum ND 50
 Barium ND 1.0
 Beryllium ND 1.0
 Calcium ND 50
 Copper ND 5.0
 Iron ND 15
 Magnesium ND 50
 Manganese ND 1.0
 Nickel ND 10
 Potassium ND 5,000
 Silver ND 5.0
 Sodium ND 100
 Zinc ND 10

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

QC SUMMARY REPORT

Method Blank

CLIENT: Weott C.S.D.

Work Order: 0409006

Project: 004164, Weott CSD Water Systems Study

Sample ID: MB-12068A	Batch ID: 12068	Test Code: LEADUW	Units: µg/L	Analysis Date: 9/13/04 6:25:00 PM	Prep Date:
Client ID:	Run ID: INAA2_040913D	SeqNo: 449477			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Lead	ND	5.0			
Sample ID: MB-12068A	Batch ID: 12068	Test Code: SELENN	Units: µg/L	Analysis Date: 9/13/04 8:46:00 PM	Prep Date:
Client ID:	Run ID: INAA2_040908B	SeqNo: 448254			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Selenium	ND	5.0			
Sample ID: MBLK	Batch ID: R30927	Test Code: TDS	Units: mg/L	Analysis Date: 9/8/04	Prep Date:
Client ID:	Run ID: WC_040808G	SeqNo: 448168			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Total Dissolved Solids	1600	20			
Sample ID: MB-12068A	Batch ID: 12068	Test Code: THALW	Units: µg/L	Analysis Date: 9/15/04 5:36:00 PM	Prep Date:
Client ID:	Run ID: INAA2_040915B	SeqNo: 449188			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Thallium	ND	1.0			
Sample ID: MBLK	Batch ID: R30985	Test Code: TOCW	Units: mg/L	Analysis Date: 9/14/04	Prep Date:
Client ID:	Run ID: WC_040914K	SeqNo: 449747			
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Total Organic Carbon	ND	0.30			

Qualifier: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT
Method Blank

CLIENT: Weott C.S.D.
Work Order: 0409006
Project: 004164, Weott CSD Water System Study

Sample ID: MB-9/2/04 Batch ID: R30833 Test Code: TPHCGW Units: µg/L Analysis Date: 9/3/04 10:31:11 PM Prep Date
Client ID: Run ID: ORGC8_040903A SeqNo: 447585
Analyte: Result: Limit: SPK value SPK Ref Val % Rec Low Limit High Limit RPD Ref Val %RPD RPD Limit Qual
TPHC Gas VD 50

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 22-Sep-04

CLIENT: Weott C.S.D.

Work Order: 0409006

Project: 004164, Weott CSD Water System Study

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-12068A	Batch ID: 12068	Test Code: ANTIHW	Units: µg/L	Analysis Date: 9/20/04 2:45:30 PM	Prep Date:
Client ID:	Run ID:	INAA2_040903A		SeqNo: 448415	
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Antimony	21.30	6.0	20.0	0	106%
				LowLimit	HighLimit
				85	115
				RPD Ref Val	RPD Limit
				0	0

Sample ID: LCS-12068A	Batch ID: 12068	Test Code: ARSENW	Units: µg/L	Analysis Date: 9/13/04 3:45:00 PM	Prep Date:
Client ID:	Run ID:	INAA2_040911A		SeqNo: 449195	
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
Arsenic	20.73	2.0	20.0	0	104%
				LowLimit	HighLimit
				85	115
				RPD Ref Val	RPD Limit
				0	0

Sample ID: LCS-0493	Batch ID: R30834	Test Code: BTXIEW	Units: µg/L	Analysis Date: 9/20/04 5:13:47 PM	Prep Date:
Client ID:	Run ID:	ORGCB_040903B		SeqNo: 447597	
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
MTBE	37.95	3.0	40.0	0	94.9%
Benzene	4.952	0.50	5.00	0	99.0%
Toluene	4.983	0.50	5.00	0	99.7%
Ethylbenzene	4.946	0.50	5.00	0	98.9%
m,p-Xylene	9.863	0.50	10.0	0	98.6%
o-Xylene	4.975	0.50	5.00	0	99.5%
Cis-1,2-Dichloroethylene	1.03	0.10	1.00	0	103%
				LowLimit	HighLimit
				85	115
				RPD Ref Val	RPD Limit
				0	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted/recovery limits
R - RPD outside accepted/recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

CLIENT: Wcott C.S.D.
 Work Order: 0409006
 Project: 004164, Wcott CSD Water System Study

Sample ID: LCSD-04493	Batch ID: R30834	Test Code: BTXEW	Units: ug/L	Analysis Date: 9/14/04 3:55:38 AM	Prep Date:						
Client ID:	Run ID:	ORGc8_040903B		SeqNo: 447606							
Analyte	Result	Limit	SPK value	SPX Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	37.11	3.0	40.0	0	92.8%	85	115	38.0	2.24%	15	
Benzene	4.671	0.50	5.00	0	93.4%	85	115	4.95	5.34%	15	
Toluene	4.637	0.50	5.00	0	92.7%	85	115	4.98	7.20%	15	
Ethylbenzene	4.641	0.50	5.00	0	92.8%	85	115	4.95	6.35%	15	
m,p-Xylene	9.305	0.50	10.0	0	93.0%	85	115	9.86	5.33%	15	
o-Xylene	4.678	0.50	5.00	0	93.6%	85	115	4.97	6.15%	15	
Cis-1,2-Dichloroethylene	0.999	0.10	1.00	0	99.5%	85	115	1.03	3.35%	15	

Sample ID: LCS-12068A		Batch ID: 12068	Test Code: CADNIW		Units: µg/L	Analysis Date: 9/14/04 5:58:00 PM		Prep Date:			
Client ID:		Run ID:	INAA2_040914A			SeqNo: 449598					
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	3.910	1.0	4.00	0	97.8%	85	115	0			

Sample ID: LCS-12068A	Batch ID: 12068	Test Code: CHROMW	Units: µg/L	Analysis Date: 9/15/04 11:37:00 AM	Prep Date: 9/7/04						
Client ID:	Run ID:	INAA2_040915A		SeqNo: 449921							
Analyte	Result	Limit:	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.13	1.0	10.0	0	101%	85	115	0			

Sample ID: LCS 09020402	Batch ID: R30841	Test Code: ICIONW	Units: mg/L	Analysis Date: 9/20/04 11:54:10 AM	Prep Date:						
Client ID:	Run ID:	INIC2_040902B		SeqNo: 447692							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Qual
Chloride	1.077	0.10	1.00	0	102%	90	110	0			
Sulfate	9.803	0.50	10.0	0	98.0%	90	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

CLIENT: West C.S.D.

Work Order: 0409006

Project: 004164, West CSD Water System Study

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-12068P	Batch ID: 12068	Test Code: ICPW	Units: µg/L	Analysis Date: 9/21/04 4:05:00 PM	Prep Date:						
Client ID:	Run ID:	SeqNo:									
	INICP1_040927A	451039									
Analyte	Result	Limit	SPK value	SPK RefVal	% Rec	Low Limit	High Limit	RPD RefVal	%RPD	RPDLimit	Qual
Aluminum	460.8	50	500	0	92.2%	85	115	0			
Barium	467.8	1.0	500	0	93.6%	85	115	0			
Beryllium	462.8	1.0	500	0	92.6%	85	115	0			
Calcium	9.502	50	0.000	0	95.8%	85	115	0			
Copper	461.9	5.0	500	0	92.4%	85	115	0			
Iron	457.8	15	500	0	91.6%	85	115	0			
Magnesium	9.465	50	10.000	0	94.6%	85	115	0			
Manganese	457.3	1.0	500	0	93.5%	85	115	0			
Nickel	456.4	10	500	0	91.7%	85	115	0			
Potassium	9.673	5.000	10.000	0	96.7%	85	115	0			
Silver	48.76	5.0	50.0	0	97.5%	85	115	0			
Sodium	9.502	100	10.000	0	95.0%	85	115	0			
Zinc	477.6	10	500	0	95.5%	85	115	0			

Sample ID: LCS-12068A		Batch ID: 12088		Test Code: LEADUW		Units: µg/L		Analysis Date: 9/13/04 6:31:00 PM		Prep Date:	
Client ID:		Run ID: INAA2_040913D		SeqNo: 449478							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	39.39	5.0	40.0	0	98.5%	85	115	0			

Sample ID: LCS-12068A	Batch ID: 12068	Test Code: SELEWV	Units: µg/L	Analysis Date: 9/8/04 9:05:00 PM	Prep Date:					
Client ID:	Run ID: INAA2_040908B	SeqNo: 448257								
Analyte	Result	Limit	SPK value	% Rec	LowLimit	HighLimit	RPD RefVal	%RPD	R²DLimit	Qual
Selenium	22.16	5.0	20.0	0	111%	85	115	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT
Laboratory Control Spike

Laboratory Control Spike

Weott C.S.D.

Work Order: 0409006

Project: 004164, Weott CSD Water System Study

Sample ID: LCS-12068A	Batch ID: 12068	Test Code: THALW	Units: µg/L	Analysis Date: 9/15/04 5:41:00 PM	Prep Date:
Client ID:	Run ID: INAA32_0409195			SqNo: 449889	
Analyte	Result	Limit	SPK value	SPK RefVal	% Rec
Thallium	20.72	1.0	20.0	0	104%
				LowLimit	HighLimit
				RPD RefVal	%RPD
				RPD Limit	RPD Limit
					Qual

Sample ID: LCS	Batch ID: R30985	Test Code: TOCw	Units: mg/L	Analysis Date: 9/14/04	Prep Date:
Client ID:	Run ID: WC_040974K			SqNo: 443748	
Analysis	Result	Limit	SPK value	% Rec	% RPD
Total Organic Carbon	4.610	0.30	5.00	92.2%	0
			SPK Ref Val	HighLimit	RPD Ref Val
			0	85	115
				LowLimit	RPD Limit

Sample ID: LCSD	Batch ID: R30995	Test Code: TOCW	Units: ng/L	Analysis Date: 9/14/04	Prep Date:
Client ID:	Run ID: WC_040914K	SeqNo: 443743			
Analyte	Result	Limit	SPK value	% Rec	% RPD
			SPK RelVal	RPD RelVal	RPD Limit
Total Organic Carbon	4.565	0.30	5.00	0	91.3%
				115	4.61
				85	115
					0.983%
					10

Sample ID: LCS-0404	Batch ID: R30833	Test Code: TPHC3W	Units: µg/L	Analysis Date: 9/20/24 8:39:03 PM				Prep Date:			
Client ID:		Run ID: ORGC8_04093A		SeqNo: 447594							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas	528.4	50	500	0	105%	81	126	0			

Sample ID:	LCSD-04484	Batch ID:	R30B33	Test Code:	TPHGW	Units:	µg/L	Analysis Date:	9/4/04 4:31:38 AM	Prep Date:
Client ID:		Run ID:	ORGC8_0409CA	SeqNo:	447593					
Analyte	Result	Limit	SPK value	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PHC Gas	517.6	50	500	104%	81	126	526	1.69%	15	

Qualifiers:

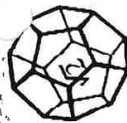
ND - Not Detected at the Reporting Limit

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

S - Spike Recovery outside accepted recover

B - Analyte detected in the associated Method Blank



NORTH COAST
LABORATORIES LTD.

5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6331

Chain of Custody

1

0409006

LABORATORY NUMBER: []

Attention: CHARLES BOECKLEIN

Results & Invoice to: STW

Address: 812 W. WABASH

ENRICA, CA 95061

Phone: 707-441-8851

Copies of Report to:

Sampler (Sign & Print): E. S. H. 12

PROTECT INFORMATION

Project Number:

Project Name: WATERING

Project Name: Yacv

[illegible]

DATE/TIME	RECEIVED BY (Sgt)	DATE/TIME	ABINQUISHED BY (Sgt & P/M)
9/1/05		9/1/05	Stallz Jennifer Stalte
13.00			

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

**NORTH COAST
LABORATORIES LTD.**

URGENT
PRIORITY
ROUTINE

FACSIMILE TRANSMISSIONDATE 9-24-04

Andy

TO:
NAME: SHN
LOCATION: _____

FROM:
NAME: NORTH COAST LABORATORIES
LOCATION: 5680 WEST END RD
ARCATA, CA 95521-9202

ATTN: Charles Roeklein
FAX: _____
PHONE: _____

FROM: Ellen
FAX: (707) 822-6831
PHONE: (707) 822-4649

Total number of pages including cover sheet 6

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please call our telephone number above.

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**NORTH COAST
LABORATORIES LTD.**

September 23, 2004

Weott C.S.D.
P.O. Box 218
Weott, CA 95571-0218

Order No.: 0409095
Invoice No.: 45013
PO No.:
ELAP No. 1247-Expires July 2006

Attn: Bryan Smith

RE: 004164, Weott CSD Water System Study

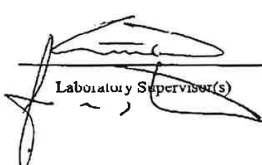
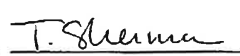
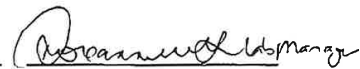
SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	Well #1
01B	Well #1
01C	Well #1
01F	Well #1
01I	Well #1

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY
Laboratory Supervisor(s)
QA Unit
Jesse G. Chaney, Jr.
Laboratory Director

North Coast Laboratories, Ltd.**Date:** 23-Sep-04

CLIENT: Weott C.S.D.
Project: 004164, Weott CSD Water System Study
Lab Order: 0409095

CASE NARRATIVE

Total Dissolved Solids (TDS):

Due to trace contamination of the method blank the reporting limit was raised to 20 mg/L.

DRAFT



Date: 23-Sep-04

WorkOrder: 0409095

ANALYTICAL REPORT

Client Sample ID: Well #1

Received: 9/3/04

Collected: 9/3/04 10:30

Lab ID: 0409095-01A

Test Name: Alkalinity

Reference: Std. Meth. 19th Ed. 2320 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Alkalinity	130	1.0	mg/L CaCO ₃	1.0		9/14/04

Test Name: Chloride, sulfate, fluoride, bromide

Reference: EPA 300.0

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Chloride	4.7	0.10	mg/L	1.0		9/14/04
Sulfate	1.5	0.50	mg/L	1.0		9/14/04

Test Name: Conductivity

Reference: Std. Meth. 19th Ed. 2510

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Conductivity	280	1.0	µmhos/cm	1.0		9/7/04

Test Name: Corrosivity Calculation (@20°C)

Reference: Std. Meth. 19th Ed. 2330 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Corrosivity	-1.6	N/A	N/A	1.0		9/23/04

Test Name: Forms of Alkalinity

Reference: Std. Meth. 19th Ed. 2320 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Bicarbonate	130	1.0	mg/L CaCO ₃	1.0		9/19/04
Carbonate	ND	1.0	mg/L CaCO ₃	1.0		9/19/04
Hydroxide	ND	1.0	mg/L CaCO ₃	1.0		9/19/04

Test Name: pH

Reference: Std. Meth. 19th Ed. 4500 H+ B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
pH	0.5	N/A	pH Units	1.0		9/3/04

Test Name: Total Dissolved Solids

Reference: EPA 160.1

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Total Dissolved Solids	180	20	mg/L	1.0		9/8/04

Client Sample ID: Well #1

Received: 9/3/04

Collected: 9/3/04 10:30

Lab ID: 0409095-01B

Test Name: Apparent Color

Reference: Std. Meth. 19th Ed. 2120 B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Color	ND	3.0	C.U.	1.0		9/3/04

Test Name: Odor

Reference: EPA 140.1

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Odor	ND	1.0	TON	1.0		9/3/04

Page 1 of 3

Date: 23-Sep-04

WorkOrder: 0409095

Test Name: Turbidity

ANALYTICAL REPORT

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Turbidity	14	0.050	NTU	1.0		9/3/04

Reference: EPA 180.1

Client Sample ID: Well #1

Received: 9/3/04

Collected: 9/3/04 10:30

Lab ID: 0409095-01C

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		9/14/04
Benzene	ND	0.50	µg/L	1.0		9/14/04
Toluene	ND	0.50	µg/L	1.0		9/14/04
Ethylbenzene	ND	0.50	µg/L	1.0		9/14/04
m,p-Xylene	ND	0.50	µg/L	1.0		9/14/04
o-Xylene	ND	0.50	µg/L	1.0		9/14/04
Surrogate: Cis-1,2-Dichloroethylene	96.2	85-115	% Rec	1.0		9/14/04

Test Name: TPH as Gasoline

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas	ND	50	µg/L	1.0		9/14/04

Client Sample ID: Well #1

Received: 9/3/04

Collected: 9/3/04 10:30

Lab ID: 0409095-01F

Test Name: Total Organic Carbon

Reference: Std. Meth. 19th Ed. 5310 C

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Total Organic Carbon	0.36	0.30	mg/L	1.0		9/9/04

Client Sample ID: Well #1

Received: 9/3/04

Collected: 9/3/04 10:30

Lab ID: 0409095-01II

Test Name: Antimony

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Antimony	ND	6.0	µg/L	1.0	9/7/04	9/9/04

Test Name: Arsenic

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Arsenic	12	2.0	µg/L	1.0	9/7/04	9/13/04

Test Name: Cadmium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
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Page 2 of 3

Date: 23-Sep-04

WorkOrder: 0409095

ANALYTICAL REPORT

Cadmium

ND

1.0

µg/L

1.0

9/7/04

9/14/04

Test Name: Chromium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Chromium	ND	1.0	µg/L	1.0	9/7/04	9/15/04

Test Name: Hardness

Reference: EPA 200.7 (calc)

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Hardness	110	7.0	mg/L CaCO ₃	1.0	9/7/04	9/22/04

Test Name: ICAP Metals

Reference: EPA 200.7

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Aluminum	ND	50	µg/L	1.0	9/7/04	9/21/04
Barium	210	1.0	µg/L	1.0	9/7/04	9/21/04
Beryllium	ND	1.0	µg/L	1.0	9/7/04	9/21/04
Calcium	14,000	50	µg/L	1.0	9/7/04	9/21/04
Copper	ND	5.0	µg/L	1.0	9/7/04	9/21/04
Iron	14,000	15	µg/L	1.0	9/11/04	9/21/04
Magnesium	19,000	50	µg/L	1.0	9/7/04	9/21/04
Manganese	930	1.0	µg/L	1.0	9/7/04	9/21/04
Nickel	ND	10	µg/L	1.0	9/7/04	9/21/04
Potassium	ND	5,000	µg/L	1.0	9/7/04	9/21/04
Silver	ND	10	µg/L	1.0	9/7/04	9/21/04
Sodium	10,000	100	µg/L	1.0	9/7/04	9/21/04
Zinc	34	10	µg/L	1.0	9/7/04	9/21/04

Test Name: Lead

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Lead	ND	5.0	µg/L	1.0	9/7/04	9/13/04

Test Name: Selenium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Selenium	ND	5.0	µg/L	1.0	9/7/04	9/8/04

Test Name: Thallium

Reference: EPA 200.9

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Thallium	ND	1.0	µg/L	1.0	9/7/04	9/15/04

Private Well Sample Results



July 01, 2026

Weott C.S.D.
P.O. Box 218
Weott, CA 95571-0218

Attn: Dan Arreguin

Order No. 2605411
Invoice No. 189067
PO No.
ELAP No. 1247
ELAP Exp. July 2026

RE: Metals Testing

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	Well Water

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

Flag = Explanation in Case Narrative

All solid results are expressed on a wet-weight basis unless otherwise noted.

Approved for release by:

A handwritten signature in black ink, appearing to read "Brett Soutiere", positioned above a horizontal line.

Brett Soutiere, Client Services Manager

NO.	COM	PAGES	FILE	DURATION	X/R	IDENTIFICATION	DATE	TIME	DIAGNOSTIC
01	OK	001	248	00:00'42	RCV	FAX	SEP-23	04:02	0150270377000
02	OK	002	249	00:00'42	RCV	530 221 0135	SEP-23	08:29	0150270377000
03	OK	002/002	250	00:00'39	XMT	19167724330	SEP-23	08:43	0840470377000
04	OK	002	252	00:00'45	RCV	707 459 1884	SEP-23	08:49	0150270377000
05	495	005	253	00:02'00	RCV	971044440	SEP-23	08:52	0050270377000
06	420	000		00:00'41	RCV		SEP-23	09:09	0010260200000
07	OK	002/002	254	00:00'55	XMT	8264455	SEP-23	09:14	0840470277000
08	OK	004	001	00:01'29	RCV	971044440	SEP-23	09:16	0150270377000
09	OK	003/003	002	00:01'14	XMT	9846631	SEP-23	09:44	0840470377000
10	OK	002	004	00:00'56	RCV		SEP-23	09:51	0110260272000
11	OK	001	005	00:00'28	RCV	707 459 1884	SEP-23	10:09	0150270377000
12	OK	001	006	00:00'41	RCV	PPG-310-524-0724	SEP-23	10:28	0150270377000
13	OK	002	007	00:01'32	RCV	443 5627	SEP-23	11:02	0150270377000
14	OK	001/001	008	00:00'28	XMT	19858097806	SEP-23	11:18	0800470377000
15	OK	002	010	00:00'50	RCV	707 444 8249	SEP-23	11:32	0150270377000
16	OK	004/004	011	00:01'51	XMT	8409229	SEP-23	11:48	0840470377000
17	OK	001/001	013	00:00'37	XMT	15302210135	SEP-23	12:31	F840470377000
18	OK	001/001	015	00:00'30	XMT	15417741386	SEP-23	12:52	2840470377000
19	OK	002	017	00:01'42	RCV	530 221 0135	SEP-23	13:30	0150270377000
20	OK	004	018	00:01'58	RCV	707 441 1993	SEP-23	14:28	0150270377000
21	OK	018	019	00:04'40	RCV	7078226831	SEP-23	14:49	0150270377000
22	OK	001	020	00:00'38	RCV	5412669496	SEP-23	15:40	0150270377000
23	OK	002	021	00:00'49	RCV	9167290903	SEP-23	16:04	0150270377000
24	OK	001	022	00:00'39	RCV	CELSOC	SEP-23	18:05	0150270377000
25	OK	001	023	00:00'27	RCV	4448330	SEP-24	08:06	0150270377000
26	OK	002	024	00:00'55	RCV	714 992 2094	SEP-24	08:51	0150270377000
27	OK	002/002	025	00:00'44	XMT	4415777	SEP-24	09:10	0840470377000
28	OK	006	027	00:08'29	RCV	707 443 2891	SEP-24	09:14	0150270577000
29	OK	001/001	028	00:00'27	XMT	4430547	SEP-24	09:23	0840470377000
30	OK	008	030	00:02'03	RCV	707 459 1884	SEP-24	09:31	0150270377000
31	OK	003	031	00:01'19	RCV	5412669496	SEP-24	09:46	0150270377000
32	OK	007	032	00:02'11	RCV	7078226831	SEP-24	10:23	0150270377000

-SHIN EUREKA

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- ***** -

707 441 8877- *****

Date: 01-Jul-2026

WorkOrder: 2605411

ANALYTICAL REPORT

Client Sample ID: Well Water

Received: 05/26/2026

Lab ID: 2605411-01A

Collected: 05/26/2026 12:00

Test Name: Hardness (calculation)

Reference: SM 2340 B, 1997, 2011, & 2021. (calc.)

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
Hardness	120		1.0	mg/L CaCO3	1.0	06/03/2026	06/29/2026 00:00

Test Name: ICP-OES Metals

Reference: EPA 200.7, Rev 4.4

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
Antimony	ND		10	µg/L	1.0	06/03/2026	06/08/2026 13:44
Arsenic	ND		10	µg/L	1.0	06/03/2026	06/08/2026 13:44
Barium	160		1.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Beryllium	ND		1.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Cadmium	ND		5.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Calcium	36,000		100	µg/L	1.0	06/03/2026	06/08/2026 13:44
Chromium	ND		5.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Cobalt	ND		5.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Copper	ND		2.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Iron	ND		50	µg/L	1.0	06/03/2026	06/08/2026 13:44
Lead	ND		5.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Magnesium	7,500		100	µg/L	1.0	06/03/2026	06/08/2026 13:44
Manganese	250		1.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Molybdenum	ND		10	µg/L	1.0	06/03/2026	06/08/2026 13:44
Nickel	ND		5.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Selenium	ND		20	µg/L	1.0	06/03/2026	06/08/2026 13:44
Thallium	ND		10	µg/L	1.0	06/03/2026	06/08/2026 13:44
Vanadium	ND		1.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Zinc	38		5.0	µg/L	1.0	06/03/2026	06/08/2026 13:44
Silver	ND		10	µg/L	1.0	06/03/2026	06/10/2026 22:34

Test Name: Mercury

Reference: EPA 245.1 Rev 3.0 (1994)

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Prepared</u>	<u>Analyzed</u>
Mercury	ND		1.0	µg/L	1.0	06/05/2026	06/05/2026 14:21

Microbac Laboratories, Inc. - Arcata

Date: 07/01/2026

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Method Blank

Sample ID: MB-47953		Batch ID: 47953		Test Code: 200.7X		Units: µg/L		Analysis Date 06/04/2026 16:57		Prep Date: 06/03/2026	
Client ID:		Run ID: OES3_260604A		SeqNo: 1869588							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	10									

Sample ID: MB-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date 06/08/2026 13:20	Prep Date: 06/03/2026						
Client ID:	Run ID: OES3_260608A	SeqNo: 1870003									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	10									
Arsenic	ND	10									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	5.0									
Calcium	ND	1,000									
Chromium	ND	5.0									
Cobalt	ND	5.0									
Copper	ND	5.0									
Iron	ND	50									
Lead	ND	5.0									
Magnesium	ND	1,000									
Manganese	ND	2.0									
Molybdenum	ND	10									
Nickel	ND	5.0									
Selenium	ND	20									
Thallium	ND	10									
Vanadium	ND	5.0									
Zinc	ND	10									

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Method Blank

Sample ID: MB-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date 06/10/2026 22:25				Prep Date: 06/03/2026			
Client ID:		Run ID: OES3_260610B		SeqNo: 1870673							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	10									

Sample ID: MB-47963	Batch ID: 47953	Test Code: HARDNW	Units: mg/L CaCO3	Analysis Date 06/05/2026 00:00				Prep Date: 06/03/2026			
Client ID:		Run ID: WC_260605B		SeqNo: 1871447							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness	ND	1.0									

Sample ID: MB-47972	Batch ID: 47972	Test Code: MERCW	Units: µg/L	Analysis Date 06/05/2026 14:10				Prep Date: 06/05/2026			
Client ID:		Run ID: CVAA2_260605A		SeqNo: 1869938							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1.0									

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Microbac Laboratories, Inc. - Arcata

Date: 07/01/2026

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 2605411-01A MS		Batch ID: 47972		Test Code: MERCW		Units: µg/L		Analysis Date 06/05/2026 14:24		Prep Date: 06/05/2026	
Client ID: Well Water		Run ID: CVAA2_260605A				SeqNo: 1869942					
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.203	1.0	5.00	0	104%	70	130	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Microbac Laboratories, Inc. - Arcata

Date: 07/01/2026

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date 06/04/2026 17:00	Prep Date: 06/03/2026						
Client ID:		Run ID: OES3_260604A		SeqNo: 1869589							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	131.2	10	125	0	105%	85	115	0			

Sample ID: LCSD-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date 06/04/2026 17:02	Prep Date: 06/03/2026						
Client ID:		Run ID: OES3_260604A		SeqNo: 1869590							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	131.5	10	125	0	105%	85	115	131	0.2%	20	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date: 06/08/2026 13:22	Prep Date: 06/03/2026						
Client ID:	Run ID: OES3_260608A	SeqNo: 1870004									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	1,012	10	1,000	0	101%	85	115	0			
Arsenic	978.3	10	1,000	0	97.8%	85	115	0			
Barium	998.6	1.0	1,000	0	99.9%	85	115	0			
Beryllium	982.3	1.0	1,000	0	98.2%	85	115	0			
Cadmium	979.5	5.0	1,000	0	97.9%	85	115	0			
Calcium	9,981	1,000	10,000	0	99.8%	85	115	0			
Chromium	990.3	5.0	1,000	0	99%	85	115	0			
Cobalt	1,012	5.0	1,000	0	101%	85	115	0			
Copper	982.1	5.0	1,000	0	98.2%	85	115	0			
Iron	985.3	50	1,000	0	98.5%	85	115	0			
Lead	992.3	5.0	1,000	0	99.2%	85	115	0			
Magnesium	9,883	1,000	10,000	0	98.8%	85	115	0			
Manganese	974.2	2.0	1,000	0	97.4%	85	115	0			
Molybdenum	979.0	10	1,000	0	97.9%	85	115	0			
Nickel	993.1	5.0	1,000	0	99.3%	85	115	0			
Selenium	967.5	20	1,000	0	96.7%	85	115	0			
Thallium	979.9	10	1,000	0	98%	85	115	0			
Vanadium	988.3	5.0	1,000	0	98.8%	85	115	0			
Zinc	1,005	10	1,000	0	100%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: LCSD-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date: 06/08/2026 13:24	Prep Date: 06/03/2026						
Client ID:	Run ID: OES3_260608A	SeqNo: 1870005									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	1,021	10	1,000	0	102%	85	115	1,010	0.9%	20	
Arsenic	986.5	10	1,000	0	98.6%	85	115	978	0.8%	20	
Barium	1,005	1.0	1,000	0	100%	85	115	999	0.6%	20	
Beryllium	987.5	1.0	1,000	0	98.8%	85	115	982	0.5%	20	
Cadmium	985.0	5.0	1,000	0	98.5%	85	115	980	0.6%	20	
Calcium	10,040	1,000	10,000	0	100%	85	115	9,980	0.6%	20	
Chromium	994.0	5.0	1,000	0	99.4%	85	115	990	0.4%	20	
Cobalt	1,017	5.0	1,000	0	102%	85	115	1,010	0.5%	20	
Copper	987.9	5.0	1,000	0	98.8%	85	115	982	0.6%	20	
Iron	989.6	50	1,000	0	99%	85	115	985	0.4%	20	
Lead	997.9	5.0	1,000	0	99.8%	85	115	992	0.6%	20	
Magnesium	9,955	1,000	10,000	0	99.5%	85	115	9,880	0.7%	20	
Manganese	985.6	2.0	1,000	0	98.6%	85	115	974	1.2%	20	
Molybdenum	986.2	10	1,000	0	98.6%	85	115	979	0.7%	20	
Nickel	998.5	5.0	1,000	0	99.8%	85	115	993	0.5%	20	
Selenium	968.0	20	1,000	0	96.8%	85	115	968	0.0%	20	
Thallium	985.1	10	1,000	0	98.5%	85	115	980	0.5%	20	
Vanadium	993.8	5.0	1,000	0	99.4%	85	115	988	0.6%	20	
Zinc	1,009	10	1,000	0	101%	85	115	1,000	0.4%	20	

Sample ID: LCS-47953		Batch ID: 47953		Test Code: 200.7X		Units: µg/L		Analysis Date 06/10/2026 22:27		Prep Date: 06/03/2026	
Client ID:		Run ID: OES3_260610B		SeqNo: 1870674							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	121.8	10	125	0	97.5%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Weott C.S.D.
Work Order: 2605411
Project: Metals Testing

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: LCSD-47953	Batch ID: 47953	Test Code: 200.7X	Units: µg/L	Analysis Date: 06/10/2026 22:29	Prep Date: 06/03/2026						
Client ID:		Run ID: OES3_260610B		SeqNo: 1870675							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	123.1	10	125	0	98.5%	85	115	122	1.0%	20	
Sample ID: LCS-47963	Batch ID: 47953	Test Code: HARDNW	Units: mg/L CaCO3	Analysis Date: 06/05/2026 00:00	Prep Date: 06/03/2026						
Client ID:		Run ID: WC_260605B		SeqNo: 1871448							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness	65.62	1.0	66.2	0	99.2%	80	120	0			
Sample ID: LCSD-47963	Batch ID: 47953	Test Code: HARDNW	Units: mg/L CaCO3	Analysis Date: 06/05/2026 00:00	Prep Date: 06/03/2026						
Client ID:		Run ID: WC_260605B		SeqNo: 1871449							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hardness	66.06	1.0	66.2	0	99.9%	80	120	65.6	0.7%	20	
Sample ID: LCS-47972	Batch ID: 47972	Test Code: MERCW	Units: µg/L	Analysis Date: 06/05/2026 14:14	Prep Date: 06/05/2026						
Client ID:		Run ID: CVAA2_260605A		SeqNo: 1869939							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.210	1.0	5.00	0	104%	85	115	0			
Sample ID: LCSD-47972	Batch ID: 47972	Test Code: MERCW	Units: µg/L	Analysis Date: 06/05/2026 14:17	Prep Date: 06/05/2026						
Client ID:		Run ID: CVAA2_260605A		SeqNo: 1869940							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.217	1.0	5.00	0	104%	85	115	5.21	0.1%	20	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Login Checklist for workorder: 2605411 by Brett

5/27/2026 4:25:47 PM

- Is the Chain of Custody (COC) present, and all entries permanent and legible? ☒ Yes ☐ No
- Is the COC filled out with all pertinent information? (including system source #s) ☒ Yes ☐ No
- Is the COC signed and dated? ☒ Yes ☐ No
- Are sample temperature(s) recorded? ☒ Yes ☐ No ☐ NA
- Are sample temperature(s) between 0 °C and 6 °C? ☐ Yes ☐ No ☒ NA
- Are samples preserved and/or checked? ☒ Yes ☐ No ☐ NA
- Are sample labels legible and consistent with the COC? ☒ Yes ☐ No
- Are appropriate sample containers used? ☒ Yes ☐ No
- For zero headspace samples (volatiles), are there bubbles pea-sized or larger (~1/4")? ☐ Yes ☐ No ☒ NA
- Is there sufficient sample volume for all requested analyses, including MS/MSDs? ☒ Yes ☐ No
- Have the scientists been notified of any expiring or RUSH samples? ☐ Yes ☐ No ☒ NA

Samples Preserved at Lab? ☐ Yes ☒ No

Preserved for: ☒ COG ☐ Tot PO4 ☐ AMM ☐ TKN ☐ TOC
☐ O&G ☐ Metals ☐ 531 ☐ 608 ☐ Other:

Preservative: ☐ H2SO4 ☐ H3PO ☐ HCl ☐ HNO3
☐ MCAA ☐ NaOH ☐ Na2S2O ☐ Other:

Final pH: ☒ <2 ☐ <3 ☐ <4 ☐ <5 ☐ >=5 and <=9 ☐ <12 ☐ >=12

608 pH taken: ☐ Yes ☐ No Low pH Strips - Manf: Cat: Lot:

Res. CL present ☐ Yes ☐ No High pH Strips - Manf: Cat: Lot:

5-in-1 Strips - Manf: Cat: Lot:

Login Review by Brett

7/1/2026 10:47:36 AM

- Are the Reporting addresses correct? ☒ Yes ☐ No ☐ NA
- Is the date received correct? ☒ Yes ☐ No ☐ NA
- Is the due date correct? ☒ Yes ☐ No ☐ NA
- Is the Report To line correct? ☒ Yes ☐ No ☐ NA
- Is the Order Name correct? ☒ Yes ☐ No ☐ NA
- Is the Purchase Order Number (PO#) entered? ☐ Yes ☐ No ☒ NA
- Do sample IDs match the COC? ☒ Yes ☐ No
- Do sample collection dates and times match the COC? ☒ Yes ☐ No ☐ NA
- Are the correct tests and analytes logged in? ☒ Yes ☐ No
- If the sample temperature was > 6 °C, was "Temp" case narrative added? ☐ Yes ☐ No ☒ NA
- If short HT tests have expired, was the appropriate case narrative added? ☐ Yes ☐ No ☒ NA
- Does the pricing match the quote or contract or routine prices? ☒ Yes ☐ No ☐ NA
- Are subcontract chains present? ☐ Yes ☐ No ☒ NA
- Are the deliverables marked correctly on the folder? (SF, EDD, etc.) ☐ Yes ☐ No ☒ NA



5680 West End Road, Arcata, CA 95521-9202 | P: 707-822-4649 F: 707-822-6831 | arcata.cs@microbac.com

CHAIN OF CUSTODY RECORD

Number **2605411**

Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C) **10.2°C**Therm ID **T110**

Holding Time

Samples Received on Ice? ☒ Yes ☐ No ☐ N/ACustody Seals Intact? ☐ Yes ☐ No ☒ N/A

Lab Report Address

Client Name: **Weott CSD**Address: **Bx 218**City, State, Zip: **Weott CA 95571**Contact: **Dan Arreavin**Telephone No.: **707 223 4569**Send Report via: ☒ Mail ☐ Fax ☐ e-mail (address) **snash101@yahoo.com**

Project:

Sampled by (PRINT):

Invoice Address

Client Name:

Address:

City, State, Zip:

Contact:

Telephone No.:

Location:

Sampler Signature:

Turnaround Time

☐ Routine (10 business days)☐ RUSH* (notify lab)

(needed by)

Report Type

☒ Results Only ☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDDSend Invoice via: ☒ Mail ☐ Fax ☐ e-mail (address)per Client K6
5/26/26

PO No.:

Compliance Monitoring? ☒ Yes ☐ No☐ Agency/Program

Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID

Client Sample ID

Well Water

Date Collected

5/26

Time Collected

12:00

No. of Containers

1

Matrix

GN

Grab / Comp

G

Preservative Types **

1**FE
MN
CA
M
17
X**

Additional Notes

1200553Possible Hazard Identification
Comments☒ Hazardous ☐ Non-Hazardous ☐ Radioactive

Sample Disposition

☒ Dispose as appropriate ☐ Return ☐ Archive

Relinquished By (signature)

Dan Arreavin

Relinquished By (signature)

Date/Time

5/26/26 3:00

Date/Time

Date/Time

Received By (signature)

Received By (signature)

Received By (signature)

Date/Time

5/26/26 15:03

Date/Time

Date/Time



Humboldt County Public Health Laboratory

529 "I" Street, Eureka, CA 95501

Ph: 707-268-2179 / Fx: 707-445-7640

Laboratory Director: Pepper Stockton, PhD, HCLD(ABB)

ELAP Certification # 2033

WATER ANALYSIS

Laboratory Specimen #: W260546

Sample Location: WEOTT C.S.C

Submitter:

MICROBAC LABORATORIES, INC

5680 WEST END RD

ARCATA, CA 95521

Contact:

Phone: (707)822-4649

Bill To: CLIENT ACCOUNT

Address:

S.NASH101@YAHOO.COM

TEST WELL

PO BOX 218 WEOTTCSD.CA@GMAIL.COM

WEOTT, CA 95571

Phone:

707-946-2367

PWSID:

WATER SAMPLE INFORMATION

Collected By: DAN ARREGUIN

Reason for Testing: ROUTINE

Chlorine Residue: NONE

Sampling Source: OTHER

Collected Date/Time: 06/02/2026, 12:00

Received Date/Time: 06/02/2026, 15:22

Test Start Date/Time: 06/02/2026, 1606

Test End Date/Time: 06/03/2026, 1624

Comments:

OTHER:WELL

SAMPLE RECEIVED IN CLIENT PROVIDED BOTTLE AT CLIENT'S REQUEST.

QC WAS PERFORMED AT MICROBAC LABORATORIES INC. ELAP #1247

Test

WATER ANALYSIS QT 2K, POTABLE

QT 2K, SM 9223, COLILERT 24HR

TOTAL COLIFORM MPN

QT 2K, SM 9223, E. COLI COLILERT 24HR

E. COLI MPN

Result

ABSENT

<1

ABSENT

<1

Units

MPN / 100 ML

MPN / 100 ML

REPORTED BY: JESSICA REYNOLDS

LABORATORY TECHNICIAN II

Drinking Water Test Results Interpretation:

Total coliform is a group of bacteria common in the environment from plant and soil material. Although most coliform bacteria are harmless, the presence of any coliforms in drinking water suggests the possible presence of disease-causing bacteria, parasites, or viruses. Total coliform bacteria in tap water indicate possible problems in the water treatment system or in the pipes that distribute the water. The bacteria E. coli is part of the total coliform group. E. coli is associated with human or animal wastes. E. coli in drinking water is a strong indication of recent sewage or animal waste contamination. E. coli may pose a health risk to people, especially children under the age of five, the elderly and people who are immune compromised.

Under the Safe Drinking Water Act, the Environmental Protection Agency (EPA) states there should be no bacteria in drinking water.

For more information contact:

Humboldt County Division of Environmental Health: 445-6215

Safe Drinking Water Hotline: 1-800-426-4791

Visit the EPA website: www.epa.gov/safewater/index.html

*** Final Report ***



PUBLIC HEALTH BRANCH

PUBLIC HEALTH LABORATORY

PEPPER STOCKTON, LABORATORY DIRECTOR, ELAP CERTIFICATION #2033

529 I STREET, EUREKA, CA 95501 (707) 268-2179

HOURS: MONDAY THROUGH FRIDAY, 08:30 am TO 12 noon AND 1 TO 5 pm

W260546

Test: QT2K Sub#: 513
Loc: TEST WELL**BACTERIAL WATER FORM**

***** NO WATER SAMPLES ACCEPTED ON FRIDAY *****

Sample will be rejected if temperature upon receipt shows evidence of freezing (Temperature $\leq 0.0^{\circ}\text{C}$) or exceeds room temperature (Temperature $> 25.0^{\circ}\text{C}$), unless the time since sample collection has been less than two hours.

SUBMITTER NAME: Microbac Laboratories, Inc.		DATE SAMPLED: 6/2/2026	TIME SAMPLED: 12.00
ADDRESS REPORT SENT: 5680 West End. Rd		SAMPLED BY: Dan Arreguin	BOTTLE NUMBER: 602A
CITY: Arcata	ZIP CODE: 95521		
PHONE # 707-822-4649	CELL# N/A		
☐ FAX TO:	☒ EMAIL TO: Arcata.CS@microbac.com	# OF CONNECTIONS:	RESIDUAL CHLORINE: ☒ CHECK HERE IF NONE
LOCATION OF SAMPLE / ADDRESS: Weott CSD Test Well		RESULTS TO: ☐ ENVIRONMENTAL HEALTH ☐ REDDING -SWRCB ☐ OTHER	
PWSID #: N/A			
REASON: ☐ OTHER ☐ REPEAT ☐ REPLACEMENT ☒ ROUTINE		COMMENTS: IDEXX MZ184V	
SAMPLE TYPE: ☐ DRINKING WATER ☐ SPRING/CREEK ☐ RECREATIONAL ☒ OTHER WELL		TEST REQUESTED: ☐ ENUMERATION, COLILERT QUANTI-TRAY 51, QT51 (SM 9223 COLILERT 24H) ☒ ENUMERATION, COLILERT QUANTI-TRAY 2000, QT2K (SM 9223 COLILERT 24H) ☐ ENUMERATION, ENTEROLERT (SM 9223 ENTEROLERT 24H) ☐ PRESENCE / ABSENCE (SM 9223 COLILERT 24H) ☐ OTHER:	
***** Lab Use Only *****			
☐ Check here if temperature blank used		Bottle #	
Temperature of water upon receipt:		Temperature Control	
Date and time received and Initials: <i>W 6/2/26 @ 1522</i>		☐ SN: 112008318 LAB	
☐ PAID		☐ SN: 221368888 B/Y	
RECEIPT #		☒ BILL <i>ST</i>	
☐ DEH			
COMMENTS:			

VERSION: 08-2023

COPY



5680 West End Road, Arcata, CA 95521-9202 | P: 707-822-4649 F: 707-822-6831 | arcata.cs@microbac.com

CHAIN OF CUSTODY RECORD

Number **2606041**

Instructions on back

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C) **8.6**

Therm ID **100**

Holding Time **8h**

Samples Received on Ice? ☒ Yes ☐ No ☐ N/A

Custody Seals Intact? ☐ Yes ☐ No ☒ N/A

Lab Report Address

Client Name: **Weott CSD**

Address: **DAN**

City, State, Zip:

Contact:

Telephone No.: **707-946-2367**

Send Report via: ☐ Mail ☐ Fax ☐ e-mail (address)

Project:

Sampled by (PRINT):

Invoice Address

Client Name:

Address:

City, State, Zip:

Contact:

Telephone No.:

Location:

Sampler Signature:

Turnaround Time

☐ Routine (10 business days)

☐ RUSH* (notify lab)

(needed by)

Report Type

☒ Results Only ☐ Level 1 ☐ Level 2 ☒ Level 3 ☐ Level 4 ☐ EDD

Send Invoice via: ☐ Mail ☐ Fax ☐ e-mail (address)

PO No.:

Compliance Monitoring? ☐ Yes ☐ No
☐ Agency/Program

Sampler Phone No.:

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO₃, (2) H₂SO₄, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID

Client Sample ID

Well sample

Date Collected

6/2/26

Time Collected

12:00

No. of Containers

1

Matrix

SW

Grab / Comp

G

Preservative Types **

8

X Q/T

Additional Notes

Possible Hazard Identification
Comments

S. Nash 101@yahoo.com

☐ Hazardous ☐ Non-Hazardous ☐ Radioactive

Relinquished By (signature)

[Signature]
Relinquished By (signature)

Relinquished By (signature)

Sample Disposition

☒ Dispose as appropriate ☐ Return ☐ Archive

Date/Time

6/2/26 1:13
Date/Time

Date/Time

Received By (signature)

[Signature]
Received By (signature)

Received By (signature)

Date/Time

6/2/26 13:13
Date/Time

Date/Time

Appendix 4.

Geotechnical Boring Logs

DRAFT



Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: WCD Tank Replacement

JOB NUMBER: 016272

LOCATION: East Edge Proposed H2O Tanks

DATE DRILLED: 12/1/16

GROUND SURFACE ELEVATION: 3,006' (Project Datum)

TOTAL DEPTH OF BORING: 51.5'

EXCAVATION METHOD: CME-55 4" Solid Flight Augers (Taber)

SAMPLER TYPE: MCS & SPT w/Auto Hammer

LOGGED BY: G. Vadurro, CEG 2554

GROUNDWATER ELEVATION: 2,098' (Project Datum)

**BORING
NUMBER
B-1**

DEPTH (FT)	BULK SAMPLES SS SAMPLES	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	U.C. (tsf) by P.P.	% Passing 200	REMARKS
0.0			GM		SILTY GRAVEL, medium dense, non-plastic fines, fine gravel (FILL).						
8		8	ML						4		Slope colluvium.
11		11	GM		GRAVELLY SILT with SAND, very stiff, moist, yellowish brown, moist, medium dry strength, non-plastic fines; contains angular siltstone rock fragments.	17	105				
-5.0		17							>4.5		
		17				14	110				
		15									
		11	CL		LEAN CLAY, very stiff, wet, bluish gray, medium dry strength, weak cementation, low plasticity, consistency of residual soil; contains weathered sandstone rock fragments; becomes gleyed, wet at 8 feet.	21	105		4		Weathered bedrock residual soil.
-10.0		15									
		13									
		9									
		16				27	102				
		18									
-15.0		8			SILTSTONE, dense, dry, grayish brown, moderate cementation, strong field strength; disaggregates with extreme finger pressure; sample appears fractured from hammer blow.				>4.5		Yager Fm. bedrock.
		21									
		28									
-20.0		9			SILTSTONE, medium dense, dry, dark gray, weak cementation, laminated, moderate field strength, non-plastic, disaggregates with moderate finger pressure.				>4.5		
		10				13	122				
		14									
-25.0		9			SAME; becomes slightly clayey.						
		7									
		11									
-30.0											

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

BORING LOG

Page Number 1 of 2



Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: WCD Tank Replacement

JOB NUMBER: 016272

LOCATION: East Edge Proposed H2O Tanks

DATE DRILLED: 12/1/16

GROUND SURFACE ELEVATION: 3,006' (Project Datum)

TOTAL DEPTH OF BORING: 51.5'

EXCAVATION METHOD: CME-55 4" Solid Flight Augers (Taber)

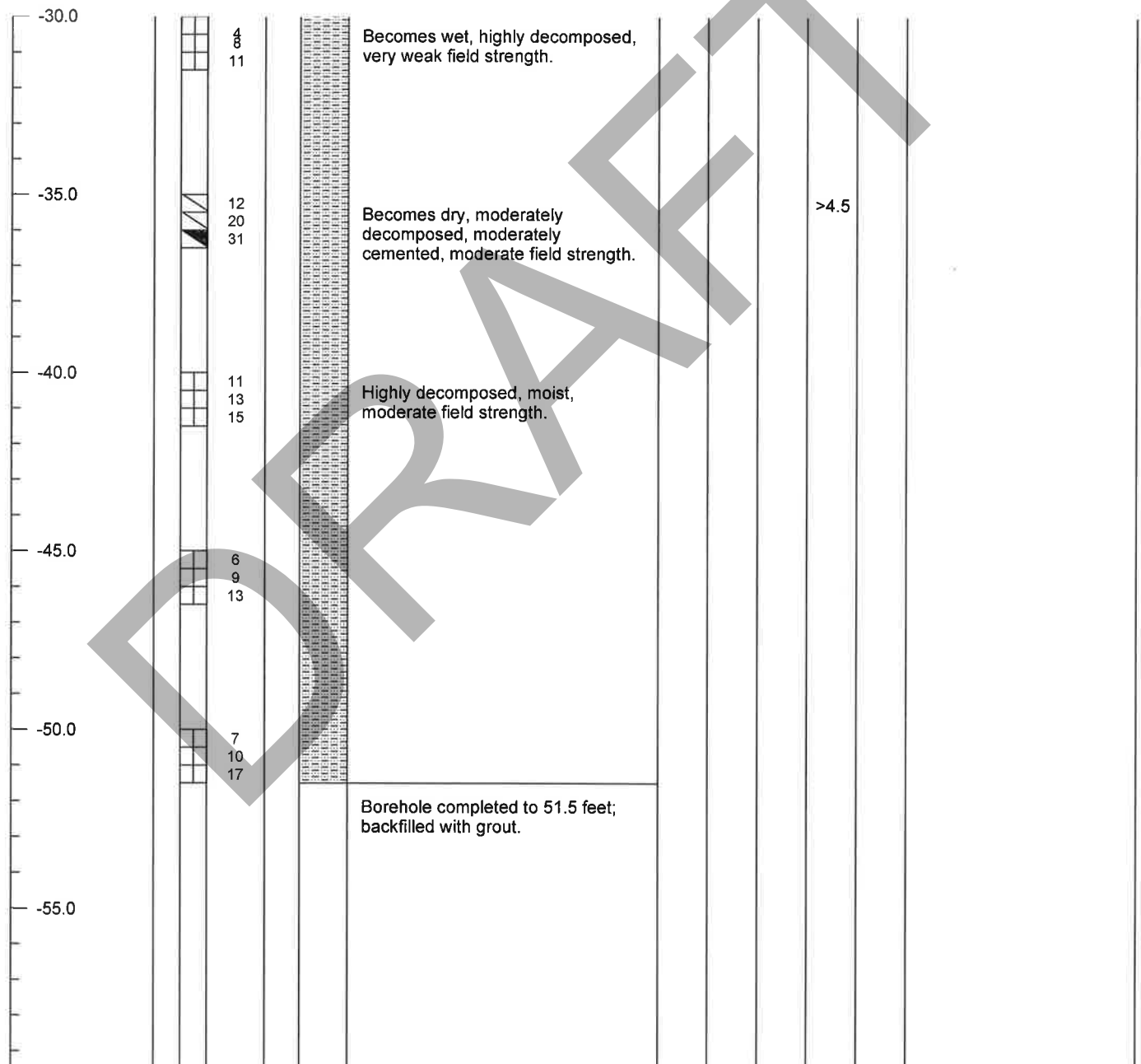
SAMPLER TYPE: MCS & SPT w/Auto Hammer

LOGGED BY: G. Vadurro, CEG 2554

GROUNDWATER ELEVATION: 2,098' (Project Datum)

BORING
NUMBER
B-1

DEPTH (FT)	BULK SAMPLES	SS SAMPLES	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Cor. (psf)	U.C. (tsf) by P.P.	% Passing 200	REMARKS
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Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Weott Community Services District

JOB NUMBER: 016272

LOCATION: Southwest Edge Proposed H2O Tank

DATE DRILLED: 12/2/16

GROUND SURFACE ELEVATION: 3004' (Project Datum)

TOTAL DEPTH OF BORING: 71.5'

EXCAVATION METHOD: 4" Solid Flights & Rotary wash

SAMPLER TYPE: SPT & MCS w/Auto Hammer

LOGGED BY: G. Vadurro, CEG 2554

GROUNDWATER ELEVATION: 2089' (Project Datum)

**BORING
NUMBER
B-2**

DEPTH (FT)	BULK SAMPLES	SS SAMPLES	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	U.C. (tsf) by P.P.	% Passing 200	REMARKS
0.0						SILTY GRAVEL, loose, fine gravel (FILL).						Drilled to 6' w/solid flight augers.
			1	CL		SILTY LEAN CLAY, soft, wet, low strength, low plasticity (FILL).						Perched groundwater at 1'.
			3	ML		Becomes stiff.						
-5.0			2									
			3									
			6									
			5	ML		SILT, stiff to very stiff, moist, dark grayish brown, medium dry strength, no cementation, low plasticity; contains few angular rock fragments.						Native slope colluvium.
			7									
			9									
-10.0			21	GM		SILTY GRAVEL, dense, moist, no cementation, non-plastic fines.	15	120				Hole caved at 5'; drove casing to 6' and switched to mud rotary.
			32									
			33									
-15.0			10			SILTSTONE, very stiff, wet, grayish brown, highly decomposed, weak field strength; consistency of fine grained soil.						Weathered bedrock residual soil (Yager Fm.)
			10									
			10									
-20.0			14			SILTSTONE, dense, moist, dark gray, moderate field strength, moderately decomposed; contains few weathered rock fragments.	9	135				
			19									
			22									
-25.0			12			SANDSTONE, medium dense, wet, fine to medium grained, weak field strength, highly decomposed; disaggregates with moderate finger pressure.						Approximately 200 gallons of fluid loss.
			14									
			14									
-30.0			11									Lost return circulation from 30-40'.
			12									
			11									
-35.0												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

BORING LOG

Page Number 1 of 2



Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Weott Community Services District

JOB NUMBER: 016272

LOCATION: Southwest Edge Proposed H2O Tank

DATE DRILLED: 12/2/16

GROUND SURFACE ELEVATION: 3004' (Project Datum)

TOTAL DEPTH OF BORING: 71.5'

EXCAVATION METHOD: 4" Solid Flights & Rotary wash

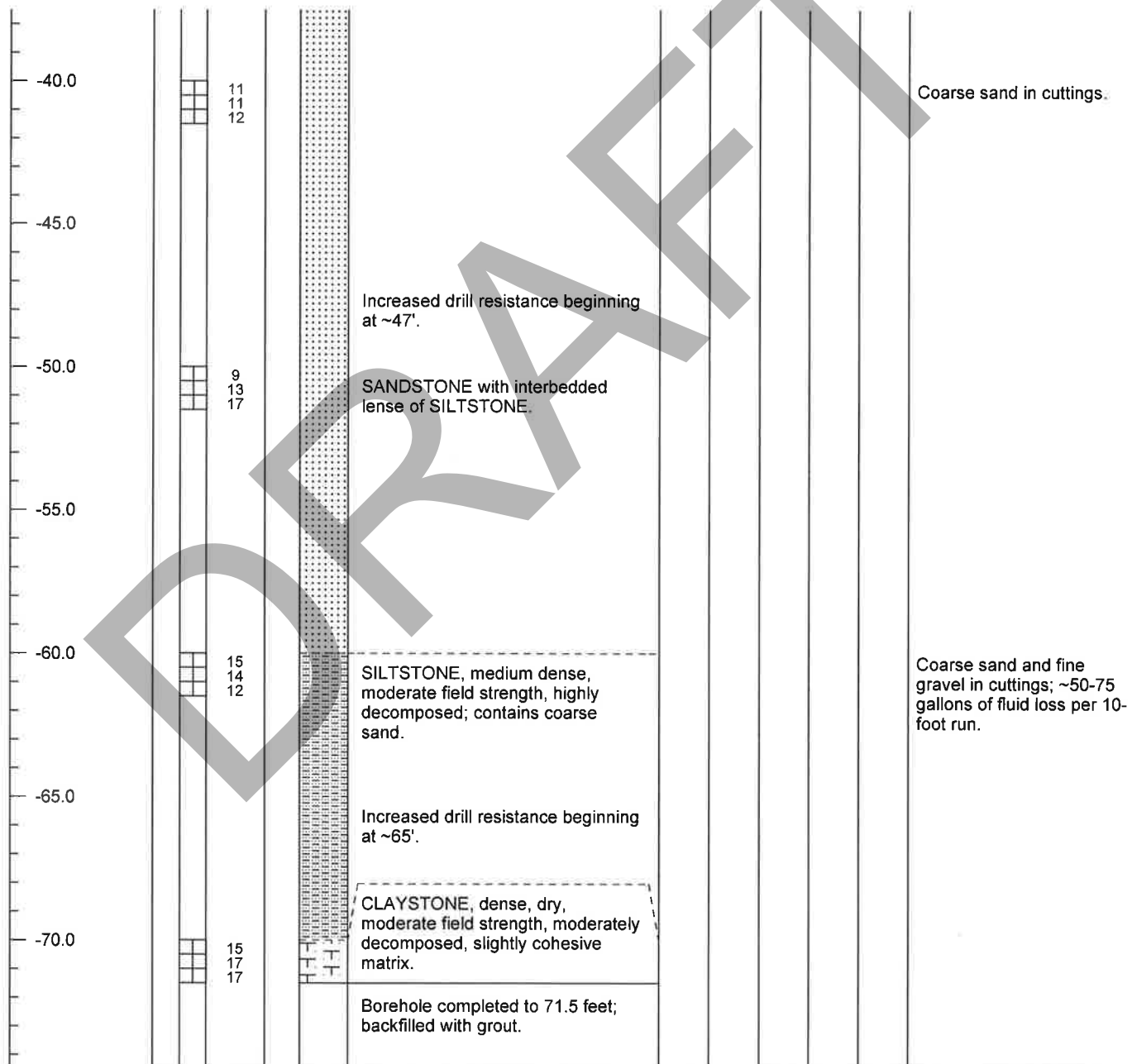
SAMPLER TYPE: SPT & MCS w/Auto Hammer

LOGGED BY: G. Vadurro, CEG 2554

GROUNDWATER ELEVATION: 2089' (Project Datum)

**BORING
NUMBER
B-2**

DEPTH (FT)	BULK SAMPLES	SS SAMPLES	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	U.C. (tsf) by P.P.	% Passing 200	REMARKS
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812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Weott Community Services District

JOB NUMBER: 016272

LOCATION: Northwest Edge Proposed H2O Tank

DATE DRILLED: 12/2/16

GROUND SURFACE ELEVATION: 3005' (Project Datum)

TOTAL DEPTH OF BORING: 41.5'

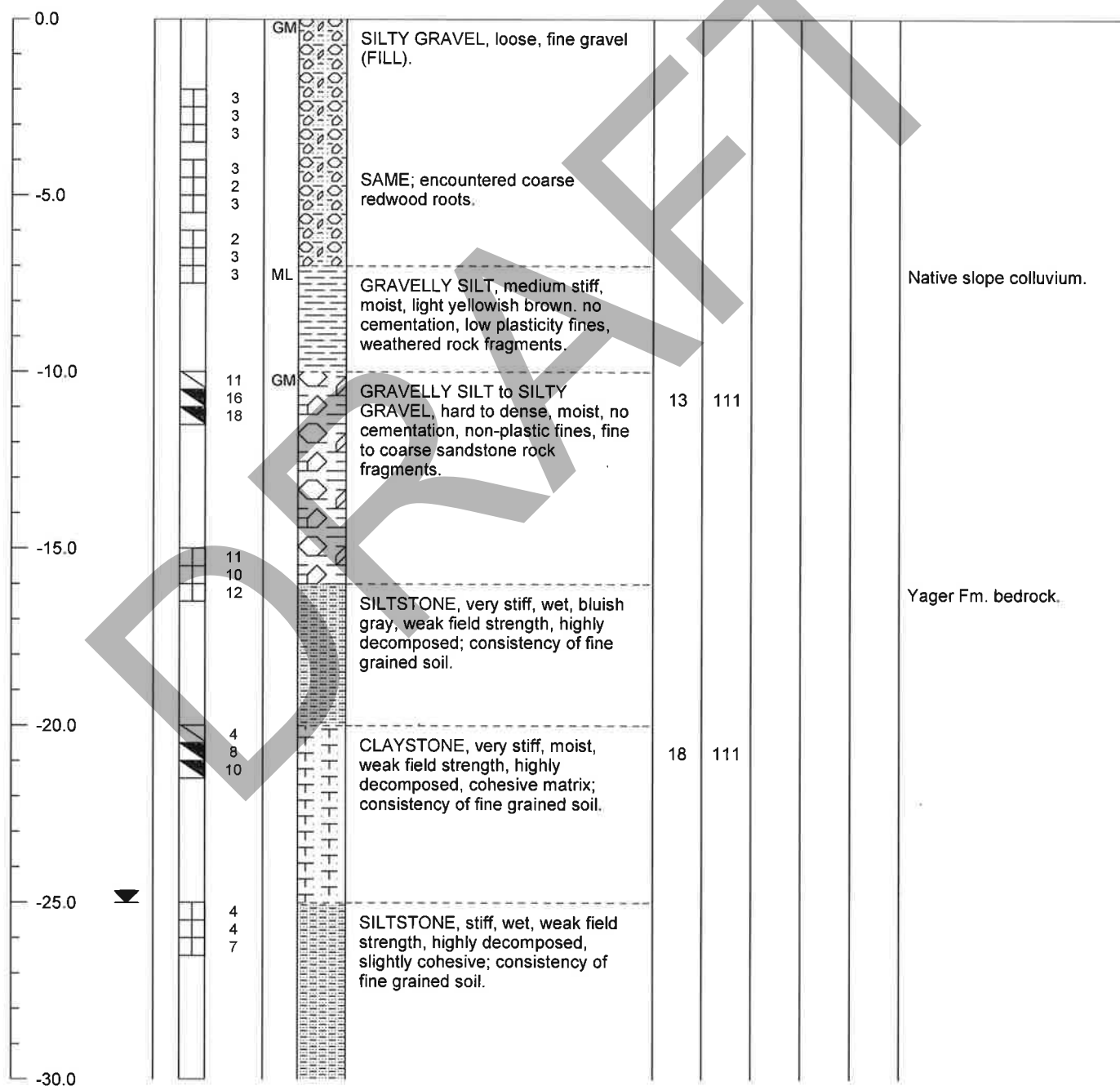
EXCAVATION METHOD: 4" Solid Flight Augers

SAMPLER TYPE: SPT & MCS w/Auto Hammer

LOGGED BY: G. Vadurro, CEG 2554

GROUNDWATER ELEVATION: 2080' (Project Datum)

**BORING
NUMBER
B-3**

[illegible]

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

BORING LOG



Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Weott Community Services District

JOB NUMBER: 016272

LOCATION: Northwest Edge Proposed H2O Tank

DATE DRILLED: 12/2/16

GROUND SURFACE ELEVATION: 3005' (Project Datum)

TOTAL DEPTH OF BORING: 41.5'

EXCAVATION METHOD: 4" Solid Flight Augers

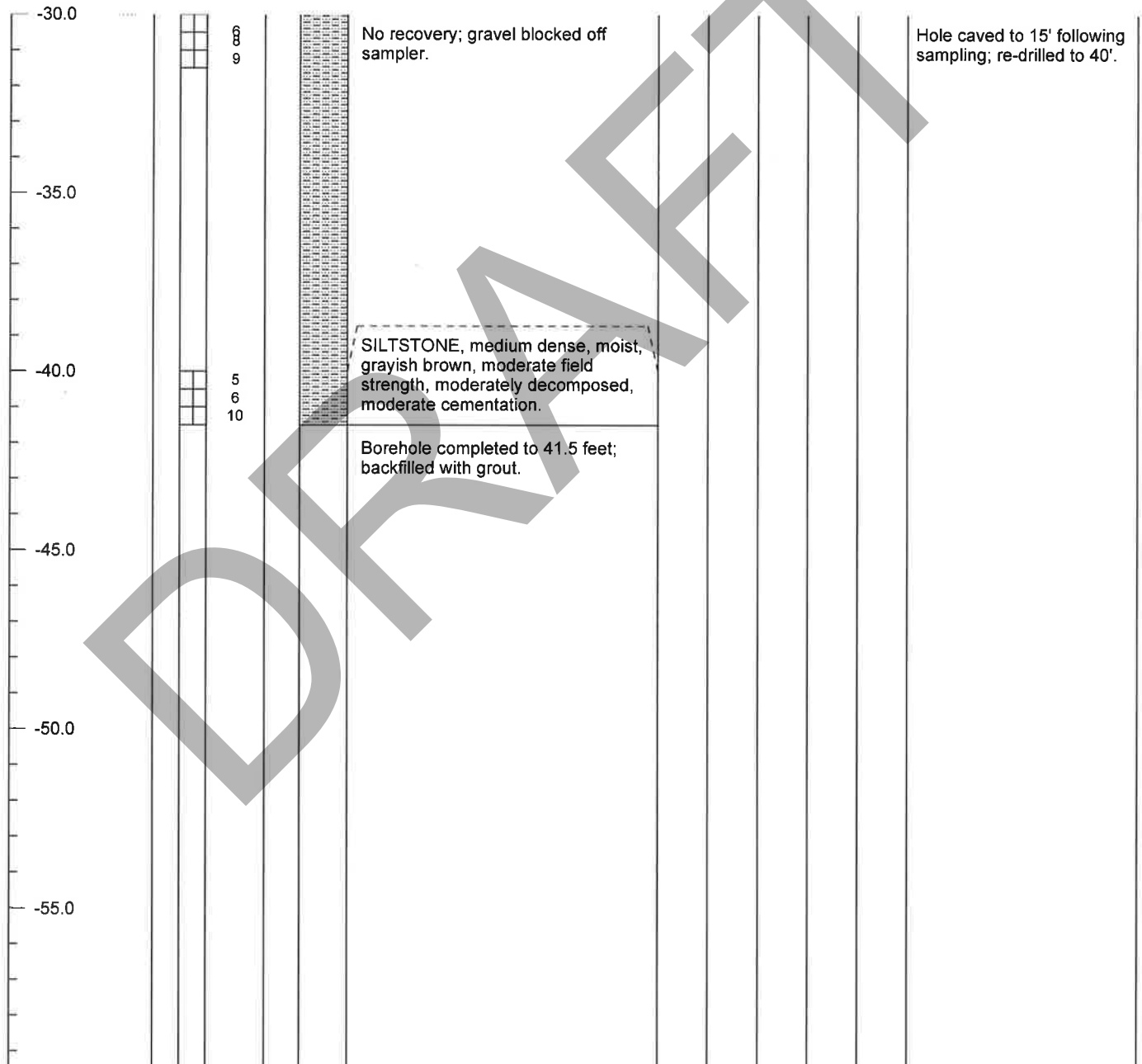
SAMPLER TYPE: SPT & MCS w/Auto Hammer

LOGGED BY: G. Vadurro, CEG 2554

GROUNDWATER ELEVATION: 2080' (Project Datum)

**BORING
NUMBER
B-3**

DEPTH (FT)	BULK SAMPLES	SS SAMPLES	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	U.C. (tsf) by P.P.	% Passing 200	REMARKS
---------------	--------------	------------	-------------------	------	---------	-------------	------------	-------------------	-----------------	--------------------	---------------	---------



State
of
CaliforniaLOG OF
EXPLORATORY BORING

E.A. No. 01-339601

DATE 12/2/96

BORING No.

LOCATION HUN-254-12.7

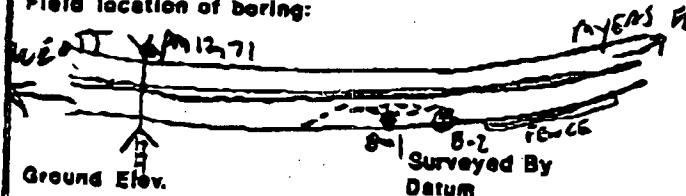
B-1

PROJECT FILL FAILURE

LOGGED BY DMV DRILLER EC, TE

Sheet 1/2

Field location of boring:



Drilling method ALO-ROTARY

Hole dia. 4 1/2"

Casing installation data 80 FT. SI CASING (B-1)
B-2, 60 FT. SI CASING, B-2 NO BORING LOG

Type of Sample	Blows/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
		B-1, 9 FT LT. & PM 12.71-93 FT				
		B-2, 13 FT LT. & PM 12.71-122 FT				
		(B-2, NO BORING LOG)				
1.4" 5	60, -	SAMPLE (1) ON ROCK	2			ASPHALT + FILL MIX (FILL)
		PERM LAYER (0.8 FT)	4			
1.4" 5	3.3	SAMPLE (2)	6			
		PERM LAYER	8			
1.4" 5	12.15	SAMPLE (3)	10			PERM LAYER (FOR DRAINAGE TO ENCL 4)
		ADD 20 FT CASING THIS PERM LAYER	12			
1.4" 5	18.20	SAMPLE (4)	14			
			16			
1.4" 5	10.19	SAMPLE (5)	18			
			20			
1.4" 5	20.29	SAMPLE (6)	22			
			24			
1.4" 5	59, -	SAMPLE (7)	26			
			28			
1.4" 5	51, -	SAMPLE (8)	30			
			32			
			34			
			36			
			38			
			40			
			42			
			44			
			46			
			48			
			50			
			52			
			54			
			56			
			58			
			60			
			62			
			64			
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			68			
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			74			
			76			
			78			
			80			
			82			
			84			
			86			
			88			
			90			
			92			
			94			
			96			
			98			
			100			

SILTSTONE GRAY DECOMPOSED & V. INTENSELY WEATHERED MECHANICALLY, V. INTENSELY FRACTURED, VERY SOFT AND SOFT

LOG OF EXPLORATORY BORING		E.A. No. <u>33960</u>		DATE <u>12/3/96</u>		BORING No. <u>B-1</u>	
State of <u>California</u>		LOCATION <u>MDM-254-12.7</u>		PROJECT <u>FILL FAILURE</u>		LOGGED BY <u>DWV</u> DRILLER	
Field location of boring:		Drilling method		Hole dia.		Sheet <u>2/2</u>	
Ground Elev.		Surveyed By Datum		Casing installation data			
Type of Sample	Blows/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level	
		SILTSTONE	48			Time	
		SILTSTONE	50			Date	
			52			DESCRIPTION	
			54				
1.0" 51-1		SAMPLE (Q)	56			SAND, AS PROVE?	
(100+)		SILTSTONE CUTTINGS	58				
			60				
			62				
			64				
			66				
		V. Hard Drilled	68				
			70				
			72				
			74				
			76				
			78				
			80				
			82				
			84				
			86				
			88				
			90				

CALTRANS

State
of
CaliforniaLOG OF
EXPLORATORY BORINGE.A. No. 01-335601DATE 2/20/97

BORING No

B-3LOCATION DT-Hum-259-12.7PROJECT ROADWAY FAILURELOGGED BY DVV DRILLER EC, SESheet 10

Field location of boring:



Ground Elev.

Drilling method MMD - ROTARYHole dia. 4 1/2"

Casing installation date _____

Type of Sample Blows/ft. or Pressure PSI REMARKS
B-3, 7.5 FT. LT. & Pm. 12.71 - 38 FT.
SCARP @ 1.5' inside

Water level

Time

Date

DESCRIPTION

Type of Sample	Blows/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
			2			
			4			
1.4" S	5, 19, 12	SAMPLE (1)	6			BRN. SILTY, SAND & GRAVEL TO CLAYEY SILT w/ BARNED CLASTS ARE SUB-ANGULAR & PRIMARILY COMPOSED OF SILTSTONE & SANDSTONE, WET
			8			
1.4" S	3, 6, 12	SAMPLE (2)	10			BRN. SILTY, SANDY, GRAVEL, SUB-ANGULAR TO SUB-ROUND CLASTS COMPOSED OF SILTSTONE & SANDSTONE, WET
			12			
1.4" S	5, 8, 13	SAMPLE (3)	14			DR. GRAY CLAYEY, SILT, V. MOIST
			16			
			18			
1.4" S	7, 14, 15	SAMPLE (4)	20			RUST BRN. SILTY, SANDY, GRAVEL SUB-ANGULAR TO SUB-ROUND CLASTS ARE COMPOSED OF SILTSTONE & SANDSTONE, WET
			22			
			24			
1.4" S	10, 9, 8	SAMPLE (5)	26			
			28			
1.4" S	17, 24, 35	SAMPLE (6)	30			RUST BRN. SILTY, SANDY, GRAVEL SUB-ANGULAR TO SUB-ROUND CLASTS ARE COMPOSED OF SILTSTONE & SANDSTONE, WET
			32			
			34			
1.4" S	12, 11, 22	SAMPLE (7)	36			
			38			
1.4" S	21, 25, 31	SAMPLE (8)	40			BRN. SILTY, SANDY, GRAVEL SUB-ANGULAR TO SUB-ROUND CLASTS ARE COMPOSED OF SILTSTONE & SANDSTONE, WET
			42			
1.4" S	20, --	SAMPLE (9) (END)	44			SILTSTONE GRAY & DR. GRAY, COMPOSED OF V. INTERMEDIATE WEATHERED, V. INTENSELY DISINTEGRATED, V. SOFT TO SOFT. RQD = 0

CALTRANS State of California		LOG OF EXPLORATORY BORING			E.A. No. <u>01-339601</u> DATE <u>2/20/57</u> LOCATION <u>OT-Hum-254-R, 7</u> PROJECT <u>ROADWAY FAILURE</u> LOGGED BY <u>DWJ</u> DRILLER <u>E.L.T.</u>		BORING B-3 Sheet <u>2</u>
Field location of boring:					Drilling method _____ Casing installation date _____ Hole dia. _____		
Ground Elev. _____		Surveyed By _____ Datum _____					
Type of Sample	Blows/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION	
			48				
		1.4' S.G. - - SAMPLE (10)	50			SILTSTONE, GRAY TO DK. GRAY, DISCONTINUOUSLY V. INTERMEDIATELY WEATHERED, V. INTENSIVELY FRAGMENTED, V. SOFT TO SOET, P.Q.D. 20	
		(E 100)	52				
			54				
		1.4' S.G. - - SAMPLE (11)	56				
			58				
			60				
					Bgt H @ 55'		

CALTRANS

State
of
CaliforniaLOG OF
EXPLORATORY BORING

E.A. No. 01-335601

DATE 2/28/57

BORING

LOCATION OT-Hum-254-17.7

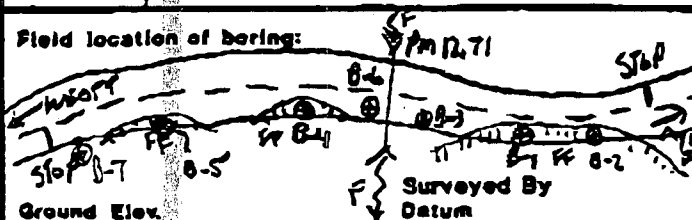
D-4

PROJECT Roadway Failure

LOGGED BY M.V. DRILLER E.C. TO

Sheet 11

Field location of boring:



Ground Elev.

Drilling method MWD - Rotary

Hole dia. 4 1/2"

Casing installation data 46 Ft. 31 inches,
Hole cased

Type of Sample	Blows/ft. of Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level	Time	Date	DESCRIPTION
		B-4, 10 Ft. LT. & Am. 12.71 + 55.5							
		REMARKS							
		ALONG 10 FT. LT. OF &							
		TOP 5 FT. BROKEN	2						PAVEMENT & ROAD BASE
		GRAVEL, FILL	4						
		FAILURE INSTALLED							
		4.5 FT. (PSH 15")							
1.4" S	3.54	SAMPLE (1)	6						LOOSE BRN. GRAVELLY, SANDY, SILT, WET
			8						
			10						COMPACT BRN. SILTY CLAY TO GRAVELLY
1.4" S	9.15	SAMPLE (2)	12						SILT, ANGULAR GLASS ARE COMPACT
			14						OF SILTSTONE & SANDSTONE, WET
			16						
1.4" S	9.21	SAMPLE (3)	18						DENSE, BRN. HIGH CLAY CONTENT SILT, WET
			20						
			22						COMPACT BRN. FINE SAND W/ GRAVEL
1.4" S	8.11	SAMPLE (4)	24						SUB-ANGULAR TO SUB-ROUND GLASS
			26						FINE PRIMARILY COMPOSED OF SILTSTONE &
			28						SANDSTONE, WET
			30						
1.4" S	12.27	SAMPLE (5)	32						V. DENSE BRN. SILTY FINE SAND
			34						W/ GRAVEL LAYERS, ANGULAR TO SUB-ROUND
		LONG CURVE @ 27°	36						GLASS ARE COMPACT OF SILTSTONE &
			38						SANDSTONE, WET
1.4" S	21.32	SAMPLE (6)	40						
			42						
			44						
1.4" S	15.20	SAMPLE (7)	46						DENSE, BRN. SILTY SANDY, GRAVEL
			48						SUB-ANGULAR TO SUB-ROUND GLASS ARE
			50						COMPACT OF SILTSTONE & SANDSTONE, WET
1.4" S	12.28	SAMPLE (8)	52						
			54						
1.4" S	R.F.	SAMPLE (9)	56						SILTSTONE

CALTRANS State of California		LOG OF EXPLORATORY BORING		E.A. No. <u>OI-339691</u> DATE <u>2/28/57</u>		BORING NO. <u>B-4</u>	
				LOCATION <u>OI-Hum - 254-127</u>			
				PROJECT <u>Roadway GRILLAGE</u>			
				LOGGED BY <u>DVV DRILLER E.C.TC.</u>		Sheet <u>2/</u>	
Field location of boring:				Drilling method _____ Hole dia. _____			
Ground Elev. _____ Surveyed By Datum _____				Casing installation date _____ _____ _____			
Type of Sample	Blows/ft. or Pressure PSI	REMARKS	Depth	Sample	Water level	Time	Date
			48		DESCRIPTION SILTSTONE GRAY TO DK. GRAY, DECOMPOSED TO V. INTENSELY WEATHERED. V. EXTENSIVELY FRACTURED, Y. SOFT TO SPT., RQD=0		
		1.415 39.70 = SAMPLE (10)	50				
			52				
			54				
			56				
			58				
			60				
			62				
			64				
			66				
			68				
			70				
			72				
			74				
			76				
			78				
			80				
			82				
			84				
			86				
			88				
			90				
			92				
			94				
			96				
			98				
			100				

Boh @ Site

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LOG OF EXPLORATORY BORING

E.A. No. 01-339601DATE 3/25/57

BORING No.

LOCATION ST-HUM-254-72.7B-5PROJECT ROADWAY FAILURELOGGED BY DM DRILLER EL, JR, SSSheet 1

Field location of boring:

SEE B-4 FOR LOCATION SKETCH

Drilling method MUD-ROTARYHole dia. 4 1/2"Casing installation date 70 FT. SE casing

Ground Elev.

Surveyed By
Datum

Type of Sample	Blows/ft. or Pressure, PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level	Time	Date	DESCRIPTION
		BS, 10 FT. LT. & PM 12.71 + 102 FT							
		REMARKS							
		Sharp 9 FT LT. of &							
1.4" S	7.7 @ (15)	SAMPLE (1)	6						SLIGHTLY COMPACT BRN. GRAVELLY SILT, CLASTS ARE SUB-ANGULAR TO SUB-ROUNDED AND COMPOSED OF SILTSTONE & SANDSTONE, WET
1.4" S	7.1 @ (15)	SAMPLE (2)	10						
1.4" S	18.27 @ (30)	SAMPLE (3)	16						DENSE BRN. SILTY SANDY GRAVEL. THE ANGULAR CLASTS ARE COMPOSED OF SILTSTONE & SANDSTONE. SOME INTERBEDDED GRAVELLY SILT, WET
1.4" S	8.16 @ (28)	SAMPLE (4)	20						DENSE BRN. F.T.C. SAND, WET
1.4" S	14.20 @ (42)	SAMPLE (5)	26						
1.4" S	20.30 @ (64)	SAMPLE (6)	32						DENSE BRN. SILTY GRAVEL. CLASTS ARE SUB-ANGULAR TO SUB-ROUNDED & COMPOSED OF SILTSTONE & SANDSTONE, WET
1.4" S	18.16 @ (33)	SAMPLE (7)	36						COMPACT BRN. F.T.C. SAND W/SCATTERED GRAVEL. CLASTS ARE SUB-ANGULAR TO SUB-ROUNDED SILTSTONE & SANDSTONE, WET
1.4" S	18.28 @ (64)	SAMPLE (8) ON ROCK	40						DENSE BRN. SILTY SANDY GRAVEL. CLASTS ARE ANGULAR & COMPOSED OF SILTSTONE, WET
1.4" S	13.0 @ (31)	SAMPLE (9) 11' 10" LONG	44						

CALTRANS State of California		LOG OF EXPLORATORY BORING			E.A. No. 01-339601 LOCATION OT-HUM-254-127 PROJECT ROADWAY FAILURES LOGGED BY ONW DRILLER		DATE 2/25/97 BORING No. B-5 Sheet 3/1	
Field location of boring:					Drilling method _____ Hole dia. _____			
Ground Elev. _____ Surveyed By _____ Datum _____					Casing installation date _____ _____			
Type of Sample	Blow/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level		
						Time		
						Date		
						DESCRIPTION		
						SILTSTONE GRAY TO V. DK. GRAY, DE COMPOSED TO V. INTENSELY WEATHERED, V. INTENSELY FRACTURED, V. SOFT TO SEET, RQD 30		
1.4" 1/2 - Sample (10)	(E 150)	V. Firm	48					
			50					
			52					
			54					
			56					
			58					
1.4" 1/2 - Sample (11)	(E 165)	V. Firm	60					
			62					
			64					
			66					
			68					
			70					
					Box 70°			

LOG OF EXPLORATORY BORING

CALTRANS
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E.A. No. 01-335601DATE 2/26/57

BORING No.

B-6LOCATION St. Hum - 254 - 12.7PROJECT ROADWAY FAILURELOGGED BY DNV DRILLER EGTE SSSheet 1/2

Field location of boring:

SEE B-4 FOR LOCATION SKETCH

Drilling method man. RotaryHole dia. 4 1/2"

Casing installation date

Ground Elev.

Surveyed By
Datum

Type of Sample	Blows/H. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level	Time	Date	DESCRIPTION
		B-6, 8.5 FT., LT. & AM 12.71 + 17.5 FT							
1.4" S	12.7.12	SAMPLE (1)	2		0.0				
	(13)		4		0.0				
			6		0.0				SLIGHTLY COMPACT, GRAY TO BRN., SILTY, LAMIN. SANDSTONE SUB-ANGULAR TO SUB-ROUNDED GRAIN. ARE IMPREGNATED OF SILTSTONE & SAND W/ST
			8		0.0				
1.4" S	12.12.4	SAMPLE (2)	10		0.0				COMPACT, BRN., SILTY SAND. GRAVEL, CLAYS ARE ANGULAR TO SUB-ANGULAR AND COMPOSED OF SILTSTONE & SANDSTONE, W/ST
	(16)		12		0.0				
			14		1.0				SLIGHTLY COMPACT, CLAYEY SILT, w/ SCATTERED SUB-ROUNDED SILTSTONE & SANDSTONE GRAVEL, W/ST
1.4" S	6.5.7	SAMPLE (3)	16		1.0				
	(17)		18		1.0				COMPACT BR. BRN. F. TO C. SAND w/ SCATTERED SUB-ANGULAR TO SUB-ROUNDED, SILTSTONE, & SANDSTONE GRAVEL & SILENT SILTY, F. TO C. SAND LAMIN. W/ST
1.4" S	10.2.4	SAMPLE (4)	20		1.0				
	(21)		22		1.0				DENSE, /SAME AS ABOVE: 4
			24		2.0				
1.4" S	15.3.28	SAMPLE (5)	26		2.0				
	(61)		28		2.0				DENSE BRN. SILTY, SANDY, GRAVEL, CLAYS ARE SUB-ANGULAR TO SUB-ROUNDED AND COMPOSED OF SILTSTONE & SANDSTONE, W/ST
1.4" S	19.20.21	SAMPLE (6)	30		0.0				
	(41)		32		0.0				
			34		0.0				
1.4" S	21.16.20	SAMPLE (7)	36		0.0				
	(36)		38		0.0				
			40		0.0				
1.4" S	16.50.	SAMPLE (8)	42		0.0				
		ON ROCK	44		0.0				SILTSTONE GRAY TO V. OK. GRAY. DECOMPOSE TO V. INTENSELY WEATHERED V. INTENSELY FRACTURED, V. SOFT TO SOFT, 2.20 = 2
		V. HARD							

CALTRANS State of California		LOG OF EXPLORATORY BORING				B.A. No. <u>01-339601</u> DATE <u>2/26/57</u>		BORING No. <u>B-6</u>	
Field location of boring:						Drilling method _____			
Ground Elev. _____						Casing installation data _____			
Surveyed By _____ Datum _____						Hole dia. _____			
Type of Sample	Blows/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level	Time	Date	DESCRIPTION
			48						
1.4" S	750	SAMPLE (10)	50						SILTSTONE, GRAY TO V. DK. GRAY, DECOMPOSED TO V. INTENSELY WEATHERED, V. INTENSELY FRACTURED, V. SOFT TO SOFT, RQD = 0
(E 780P)		V. FIRM TO MOD. HARD DRILL	52						
		V. FIRM TO MOD. HARD DRILLING	54						
			56						
			58						
			60						
			62						
			64						
			66						
			68						
			70						

CALTRANS

State
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EXPLORATORY BORINGE.A. No. 91-335601DATE 2/27/97

BORING

LOCATION 21-Hm-254-127

B-7

PROJECT RODWAY, FAIRFAXLOGGED BY WV DRILLER EC, TE, SSSheet 1

Field location of boring:

SEE-B-4 FOR LOCATION SKETCH

Drilling method MUD-ROTARYHole dia. 7 1/2"

Casing installation data

Ground Elev.

Surveyed By
Datum

Type of Sample	Blow/ft. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.S.C.S.)	Water level	Time	Date	DESCRIPTION
		B-7, 17 FT. LT. & PM 12.71 + 160 FT	2						
			4						
1.4'S	3, 5, 6 (11)	SAMPLE (1)	6						SHALLOOY COMPACT BRN CLAYE SILT
			8						W/SCATTERED SUB-ANGULAR TO SUB-ROUNDED GRAVEL & ORGANICS, VET.
1.4'S	7, 8, 9 (17)	SAMPLE (2)	10						
			12						
			14						
1.4'S	3, 8, 11 (19)	SAMPLE (3)	16						
		Same	18						
1.4'S	4, 5, 8 (13)	SAMPLE (4)	20						SHALLOOY COMPACT BRN CLAYE SILT
			22						GRAVEL IS SUB-ANGULAR TO SUB-ROUNDED & COMPOSED OF SILTSTONE & SANDSTONE, VET.
			24						
1.4'S	9, 7, 8 (15)	SAMPLE (5)	26						
			28						
1.4'S	18, 16, 13 (31)	SAMPLE (6)	30						COMPACT BRN SILTY SANDY CLAYE
			32						THE CLAYS ARE BRN GR & COMPOSED OF SILTSTONE, VET (REGULIN)
			34						
1.4'S	10, 2, 2 (12)	SAMPLE (7)	36						
			38						
1.4'S	10, 2, 2 (12)	SAMPLE (8)	40						SILTSTONE GRAY TO V. DK GRAY, DECOMPOSED TO V. INTENSELY WEATHERED V. INTENSELY FRAGMENTED, V. SORT TO SORT, R.O.-2
			42						
			44						

CALTRANS State of California	LOG OF EXPLORATORY BORING							
Field location of boring:						E.A. No. <u>729601</u>	DATE <u>2-2-97</u>	BORING NO. <u>B-</u>
						LOCATION <u>ST-Hum-TS4-TZT</u>		
						PROJECT <u>DODGNA - FAULTS</u>		
						LOGGED BY <u>DMV</u>	DRILLER <u>EC.FE.SJ</u>	Sheet <u>21</u>
Ground Elev.						Drilling method _____ Hole dia. _____		
Surveyed By Datum						Casing installation date _____		
Type of Sample	Blows/fi. or Pressure PSI	REMARKS	Depth	Sample	Soil Group Symbol (U.C.S.)	Water level		
						Time		
						Date		
						DESCRIPTION		
						SILTSTONE GRAY TO V. DARK GRAY, DECOMPOSED TO V. INTENSELY WEATHERED V. INTENSELY FRACTURED, RED SOIL		
LMS Ref.		Sample # <u>(10)</u>	48		BOH @ SD			
			50					
			52					
			54					
			56					
			58					
			60					

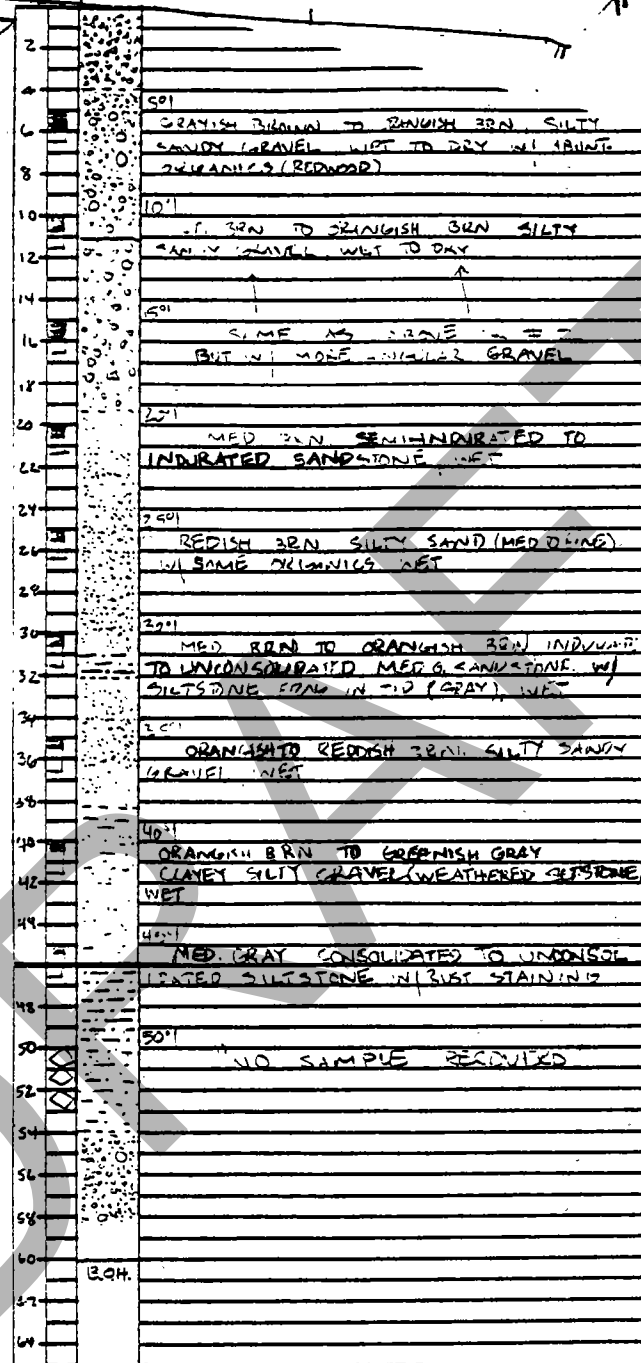
14'

CL
RTE
254

SOUTHERLY CRIB STA 11+63 = 12' LC

B-3

EXIST
LOG
CRIB



01-HUM-254 PM 17.8/17.9
01101-308200
REPLACE FAILING LOG CRIB

SCALE 1"=10'

FED. ROAD DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	CAL.				

DIST.	COUNTY	ROUTE	SECTION	SHEET NO.	TOTAL SHEETS
I	HUM	1	C		

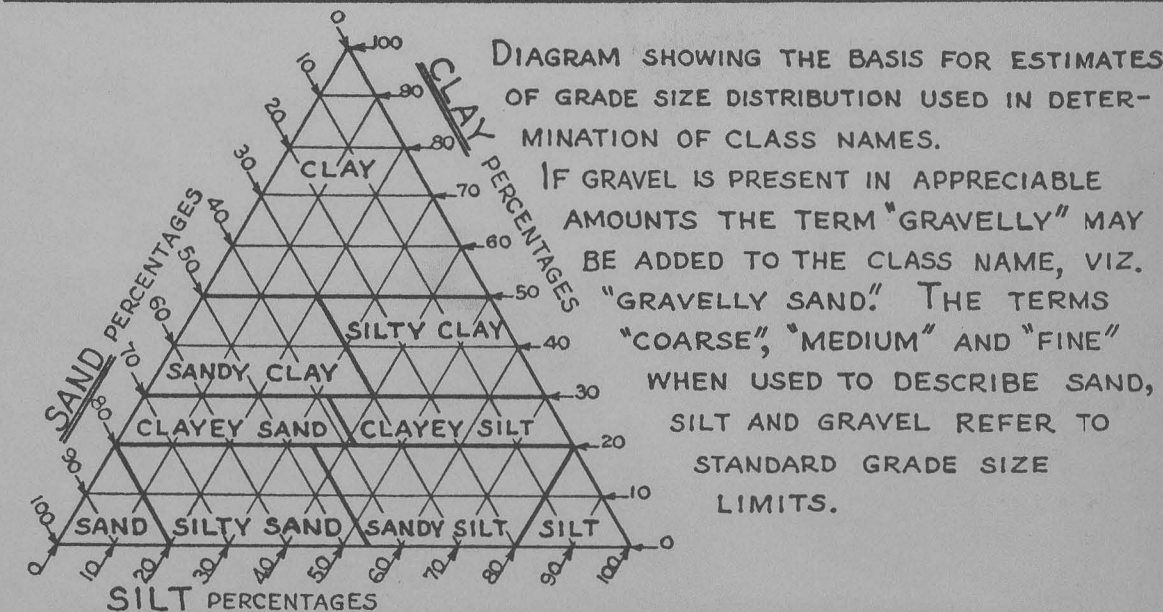
BRIDGE ENGINEER
DATE APPROVED: _____
CIVIL ENGINEER—LICENSE 5585
Myers Flat to 0.6
Mi. S. of Dyerville
I-Hum-1-C
Contract 60-1T09-F
E-200(8)

Design Pile Loading 45T
Type Pile: 12" Pipe Pile
Total Number Piles: 46
Lineal ft. Piles "As Built": 1150.5
Lineal ft. Piles Called for on Plans: 1185.2
Hammer Vulcan No 1



Resident Engineer's File.

CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS

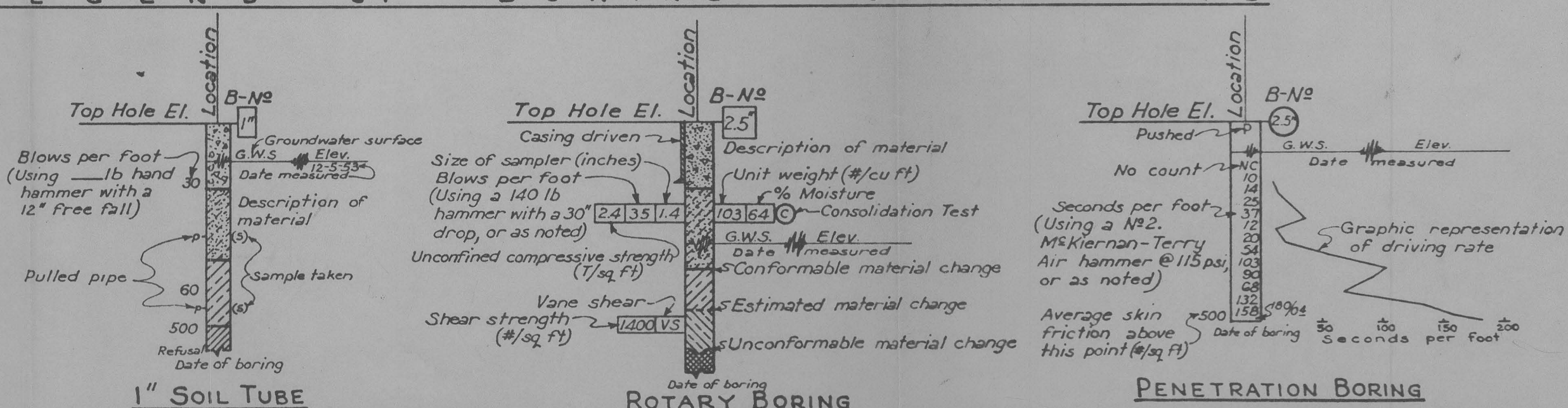


LEGEND OF EARTH MATERIALS

GRAVEL	SILTY CLAY OR CLAYEY SILT
SAND	PEAT AND/OR ORGANIC MATTER
SILT	FILL MATERIAL
CLAY	IGNEOUS ROCK
SANDY CLAY OR CLAYEY SAND	SEDIMENTARY ROCK
SANDY SILT OR SILTY SAND	METAMORPHIC ROCK

LEGEND OF BORING OPERATIONS

- PLAN OF ANY BORING
- PENETROMETER
- 2 1/2" CONE PENETROMETER
- SAMPLER BORING (DRY)
- ROTARY BORING (WET)
- AUGER BORING (DRY)
- JET BORING
- CORE BORING
- TEST PIT



NOTES

The contractor's attention is directed to Section 2, Article (c) of the Standard Specifications and to the Special Provisions accompanying this set of plans.
Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
Myers Flat to 0.6
Mi. S. of Dyerville
I-Hum-1-C
Contract 60-1T09-F
E-200(8)

WEOTT UNDERCROSSING

LOG OF TEST BORINGS

SCALE 1"=10' BRIDGE 4-125 FILE DRAWING

PR-5542-5

Appendix 5.

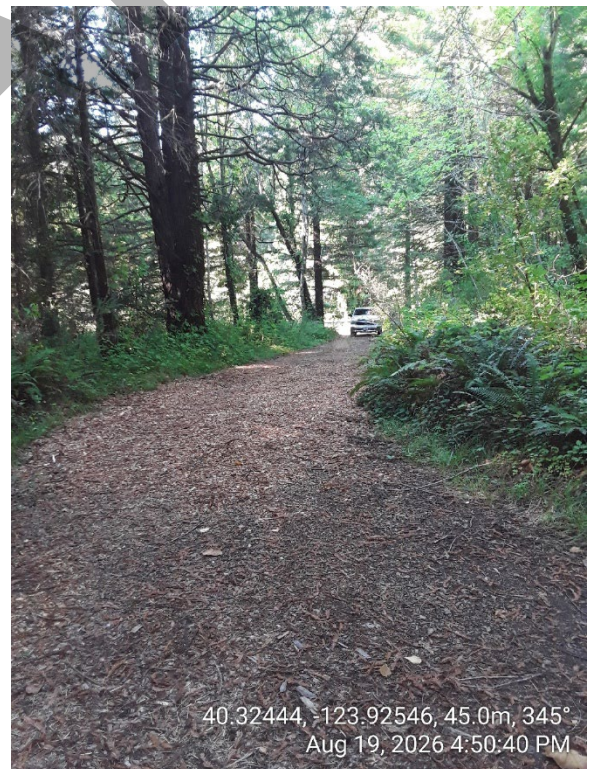
Field Reconnaissance

Photographs

DRAFT



Location 1- Existing State Parks Well

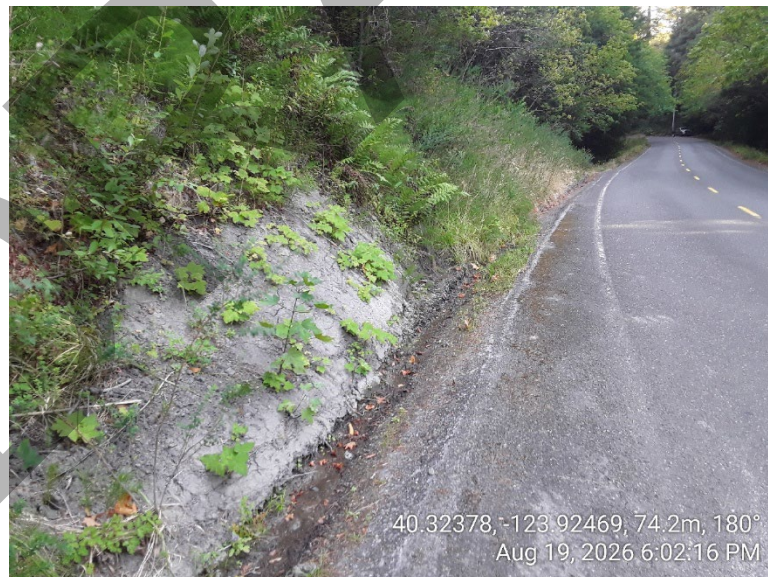


Location 2- Potential Well Site





Location 3- Stream Channel Across Lower Terrace



Location 4- Bedrock Exposed in Roadcut w/Seep





Location 5- Bedrock Exposed in Channel Bank w/Seep





Location 6- Alluvium Exposed in Channel Bank

