From: Susan Strachan <strachan@dcn.org>
To: Casey Weaver <CWeaver@energy.state.ca.us>, <choffman@energy.state.ca.us>
CC: Susan Strachan <strachan@dcn.org>
Date: 2/7/2011 9:30 AM
Subject: Re: Walnut Energy Center Soil and Water-5 Amendment Responses toQuestions
Attachments: TID well 5.pdf; TID well 126.pdf; TID well 312.pdf

Hi Casey - Attached is information you requested on the three wells from which water samples were collected - Wells 5, 126, and 312.

Regarding your second comment regarding Table 3 of the report which references: "Shallow Aquifer with WEC Site Well", Upper Aquifer with WEC Site Well", "Shallow Aquifer with South Washington Well", and "Upper Aquifer with South Washington Well", these were hypothetical wells for purposes of the groundwater modeling study. TID eventually drilled three wells on the WEC site; no wells were drilled on the South Washington Road site.

Please let me know if you have any further questions. Thanks.

Susan Strachan
Strachan Consulting
strachan@dcn.org
530-757-7038 (Office)
530-220-7038 (Cell)

On 1/26/11 1:34 PM, "Casey Weaver" <CWeaver@energy.state.ca.us> wrote:

> Hi Susan,
>
> Thanks for your clarifications and notifications of where in the document the
> information resides!
>
> Most of my questions have been answered. One lingering detail is the well
> construction details for the wells from which water samples were collected.
> They are referred to as wells 5, 126 and 312, but no such well references are
> provided on Table 3 or at least I don't know the convention to arrive at those
> numbers from the well address/DWR File No.s provided in the table. Are there
> well construction details for them?
>
> Also, Table 3 indicates "Shallow Aquifer with WEC Site Well", Upper Aquifer
> with WEC Site Well", "Shallow Aquifer with South Washington Well", and "Upper
> Aquifer with South Washington Well". Are these represented by 4 separate
> wells? Do they have reference id numbers? DWR File No.s? Well address? Are
> there well construction details for them?
>
> Just trying to get all the info tied together so we can make a determination.
>
> Thanks,
>
> Casey

>
>>>> >>> Susan Strachan <strachan@dcn.org> 1/25/2011 6:19 PM >>>
> Hi Casey -
>
> Thank you again for your quick review of the WEC amendment. In September of
> 2004, TID filed an amendment with the CEC (Amendment No. 2) to change the
> project¹s bridge water supply from potable water to poor quality groundwater.
> The answers to your questions can be found in that amendment. For your
> convenience, below, I have provided the link to the amendment from the CEC¹s
> webpage for the Walnut Energy Center.
>
> http://www.energy.ca.gov/sitingcases/turlock/compliance/2004-09-10_PETITION_WA
> TER.PDF
>
> Also, below in blue, is where the answers to your questions can be found in
> Amendment No.2 and/or Appendix A of the Amendment.
>
> 1. Do you have laboratory analyses of the degraded groundwater? We need
> something that demonstrates its poor quality. This information can be found in
> Amendment No. 2, Appendix A on page 3 and in Table 2.
>
> 2. In the first paragraph on page 5 of the AWSP, it is stated that "In
> practice these maximum impacts to all wells cannot occur simultaneously
> because the total extractions from the three on-site wells will not exceed the
> demands of the WEC. Thus when one WEC well is pumping at its maximum rate,
> other on-site wells must produce at lower rates than their maximum."
>
> Should this statement be revised to indicate the three wells could supply
> more than WEC could use? Yes.
>
> 3. On the bottom of p-5, it is stated that "If those future analyses
> determine that the well could in fact be impacted, then additional remedial
> actions could be taken, including, but limited to, additional treatment at the
> well head,..."
>
> Should this be revised to state "not" limited to? Yes.
>
> 4. What is the difference between the Shallow Aquifer (Figure 1) and the
> Upper Aquifer (Figure 2)? Can you provide a cross section that depicts the
> aquifers' characteristics? Please refer to Section 2.1, page 3 of of
> Amendment No. 2 and pages 1-4 and Figure 3 of Appendix A of Amendment No. 2.
>
> 5. Are there laboratory analyses conducted on groundwater samples obtained
> from these two separate aquifers? This information can be found in Appendix A,
> Table 2 of Amendment No. 2.
>
> 6. Which of the two aquifers is being dewatered by TID? This information is
> on Page 14 of Amendment No 2 and Page 7 of Appendix A. Which aquifers are
> screened by the WEC wells? The WEC wells are above the Corcoran Clay in the
> upper aquifer. A description of the wells is on page 3 of Amendment No.2.
>
> Please let me know if you have any additional questions.
>
> Thanks,
>
> Susan Strachan

> Strachan Consulting
> strachan@dcn.org
> 530-757-7038 (Office)
> 530-220-7038 (Cell)
>
>
>
>
>
>
>

TURLOCK IRRIGATION DISTRICT

PURCHASE REQUISITION

DATE: 10-23-90

442300937

REASON FOR PURCHASE: ☐ REPLENISH INVENTORY STOCK ☐ OTHER EXPLAIN

VENDOR - 1ST CHOICE: J052850
BYRON JACKSON PUMP DIV.
844 BROADWAY
CHICO, CA. 95926

VENDOR - 2ND CHOICE:
PUMP 126

850

FOR QUESTIONS CONTACT	TERMS	F.O.B. POINT		SHIPPING TERMS				WILL CALL	DELIVERY DATE	P.O. NUMBER
		DEST.	ORIGIN	COLLECT	PREPAID	PPD/ADD	FRT.ALWD.			
S. Tucker									2-3 wks.	

ITEM	QUANTITY	U/M	DESCRIPTION	T.I.D. STOCK NUMBER	UNIT PRICE	U/M	TOTAL
1	1		12MQL 1 STAGE BOWL				
			W/10"x10' SUCTION				3,522.00
2	60'		TWO 10"x10' COLUMN T&C				
			TWO 10"x20' COLUMN T&C				1,188.00
3	60'		INNER COLUMN W/ SPIDERS				662.00
4	1		20 HP HS MOTOR W/ HARDWEAR				1,257.00
							6,629.00
			Could only install		TAX		414.31
			40' of Column Bowl		TOTAL		7,043.31
			and 10' Suction. Total of 53'				
			24" well goes to 16" @ 50' well				
			Somewhat crooked and Pump could not inter				
			innerliner.				

SPECIAL INSTRUCTIONS TO VENDOR

WHEN GOODS RECEIVED NOTIFY: S. Tucker

ITEM(S)	ACCOUNT CODE GENERAL	O/T	SECONDARY	EQUIP. #
	75394	27		

OK Roland

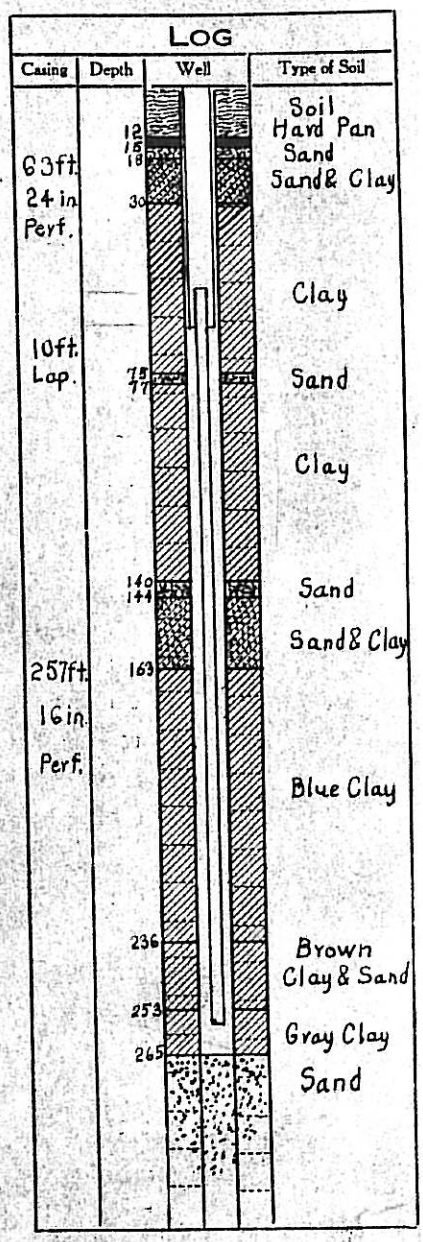
TURLOCK IRRIGATION DISTRICT DRAINAGE WELL NO. 126

Commons Rd North of Lat 5

MAP

PROFILE

LOG



LOCATION Sec. 30-5-10 (Center)

DRILLED BY: T.I.D.

DATE: June 1935

on pipe line

REMARKS: Tested with air-pump

1050 G.P.M. 23'6" D.D.

950 G.P.M. 20'6" D.D.

770 G.P.M. 18'0" D.D.

Byron Jackson Pump Division
BORG-WARNER CORPORATION
P.O. BOX 2017, TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90054

IMPORTANT
MAIL REMITTANCE TO NEAREST BOX
P.O. BOX 54056 TERMINAL ANNEX, LOS ANGELES, CALIF. 90054
P.O. BOX 91329 CHICAGO, ILLINOIS 60690
P.O. BOX 8241 CHURCH ST. STATION, NEW YORK, NEW YORK 10008

5-735

INVOICE COPY
PAGE 1 OF 1

STOMER'S ORDER NO.	REQ. NO.	DATE ENTERED	ORDER NO.
P.O. 11797		5-5-70	BJ 701-S-0216

FACTORY ORDER AND INVOICE NUMBER

INVOICE DATE: 5-14-70
SHIPPING DATE: 5-6-70
BACK ORDER SCHD:

SOLD TO: #8395000

TURLOCK IRRIGATION DISTRICT
P.O. BOX 949
TURLOCK, CALIFORNIA 95380

SHIP TO:

SAME

CORPORATION YARD - TURLOCK

SHIP VIA TRUCK
COLLECT [ ] PREPAID [X]
EXPORT [ ] PACKAGES [ ]
WEIGHT: 1922#
SHIPPED FROM: FRESNO
F.O.B.

MAY
ARK PACKAGE WELL 312 WORK ORDER 376

IP VIA (C-COLLECT, A-ALLOWED, CH-CHARGE, I-INSTALL) MOORE TRUCK LINES (A)
F.O.B. FRESO
SHIPMENT REQUESTED

NO. UNITS	SIZE	NO. STGS. H/P	TYPE	MET. CL.
1	14 CGH	1	DWT	CIFB

TERMS
NET CASH 30 DAYS
UNLESS OTHERWISE NOTED
INTEREST CHARGED HIGHEST LEGAL RATE ON PAST DUE INVOICES.

ITEM	QUANTITY ORDERED	DESCRIPTION	UNIT PRICE	QUANTITY B/O	QUANTITY SHIPPED	AMOUNT
1	1	14 CGH 1 STAGE BOWL ASSEMBLY OIL LUBE			1	506.00
2	50'	10" x 1-1/2 x 1" COLUMN COMPLETE			50'	248.00
3	1	10" x 10" AG HEAD COMPLETE WITH FLANGE AND SOLENOID VALVE 220 VOLT			1	322.00
4	2	10" x 10' SUCTION AND DISCHARGE PIPE			2	106.00
5	1	20 HP 1200 RPM VHS/SRC G.E. MOTOR			1	605.00
6	1	20 HP 220 VOLT PUMPING PLANT PANEL G.E.			1	183.00
						$1970.00
		5% CALIFORNIA STATE AND LOCAL SALES TAX				98.50
		TOTAL				$2068.50

Quotation
Order No.
Chg. to Acct. No. 11797
WS 7376 Pump 312

Warrant No. 32925
Register No.

R

ORDER NUMBER
BJ 701-S-0216

Permission must be secured before returning goods for credit.

We hereby certify that these goods were produced in compliance with all applicable requirements of Sec. 6-7-12 of the Fair Labor Standards Act, as amended and of regulations and orders of the United States Department of Labor issued under Sec. 14 thereof.

In accordance with our quotation, this order was accepted and made binding at our Home Office at Los Angeles, California, and title to the above described property, was transferred F.O.B., the factory shown above. All taxes, now or hereafter imposed in respect to this sale shall be for the account of the Purchaser, and if paid or required to be paid by us, the amount thereof, shall be added to and become part of the purchase price, payable by the Purchaser.

TURLOCK IRRIGATION DISTRICT DRAINAGE WELL NO. 312

LOCATION N.E. cor. Clayton & Commons Sec 19-5-10

DRILLED BY Osterberg & Stewart

DATE May 8 1970

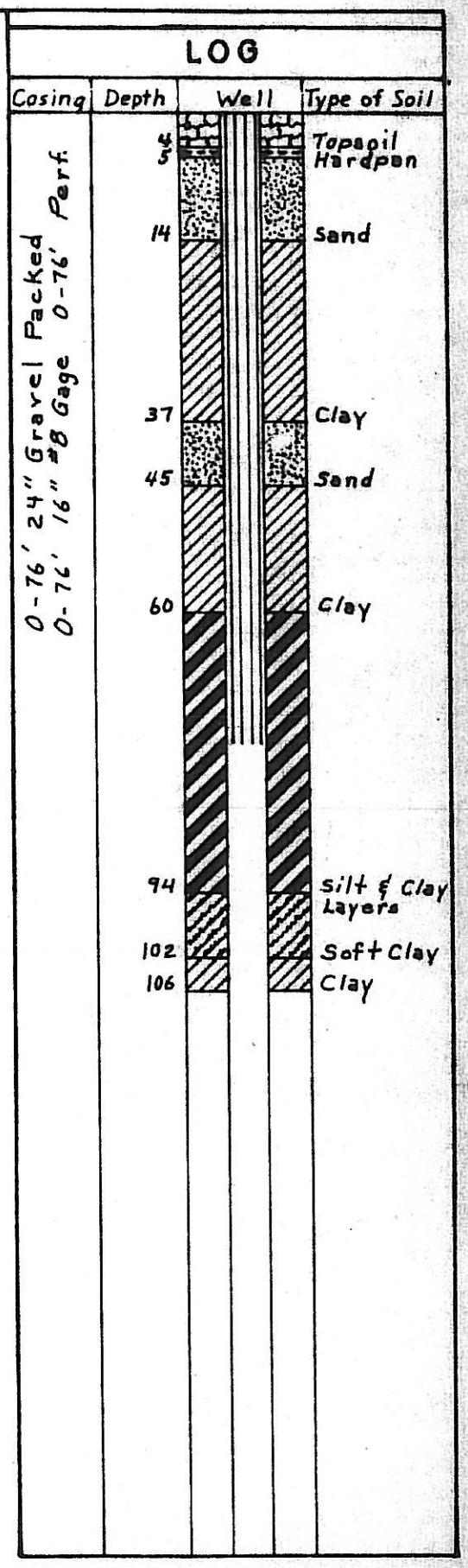
TYPE

DEPTH 106 ft

REMARKS

Water found 4 ft.

LOG



TURLOCK IRRIGATION DISTRICT

REQUISITION

DATE 7-22-94	P.O. #	FREIGHT YES
FOR QUESTIONS CONTACT S. TUCKER	REQUISITION # R018816	

VENDOR NUMBER

BW/IP INTERNATIONAL INC.
BYRON JACKSON PUMPS
844 BROADWAY
CHICO, CA. 95928

ED GRENS #6694

DELIVERY DATE	EXPECTED 8-9-94	CRITICAL 8-9-94

REQUISITION REASON: REPLACMENT FOR PUMP 5

WAREHOUSE - WHEN GOODS ARRIVE, NOTIFY: S. TUCKER

ITEM	U/M	QTY.	DESCRIPTION	TID STOCK #	UNIT PRICE	TOTAL
1	EA	1	12GH 2STG. BOWL		1966 50	
2	FT	30'	8"x1"x1½" COLUMN ASSY.		← 42.02	
			2PCS 10', 2PCS 5', 8x24" SUCTION		1260 72	
3	EA.	1	8x16½ GSR DISCH. HEAD			
			COMPANION FLG., MOTOR			
			ADAPTOR PLATE ASSY.		1642 30	
4	EA.	1	10HP USH/HT/NRR			
			1200 RPM MOTOR		1057 00	

ITEMS	FUND	IMP. DIST. #	W.O. #	COST CENTER	OBJ.
1-4	001	—	75706	621	027
		CLOSE TO 51435			

#2

BY Richard [illegible]

AUTHORIZED SIGNATURE

IS3360.100 07/26/91

TURLOCK IRRIGATION DISTRICT DRAINAGE WELL NO. 5.

Jan 1949 by Carl Tatting
Perf with T.I.D Perf tool from 10 ft to 30 ft
4 rolls of Holes

$198.4

MAP

PROFILE

LOCATION Beginning at the NE Cor. of Sec. 29-5-10
thence W 810.0 ft., thence S 20.0 ft.

DRILLED BY: Osterberg Bros. 70 ft. of 16" hole.

DATE: Aug. 25, 1922.
no pipe line

REMARKS:

2000 GPM
24'?
105 ft 14" casing

standard Pump
1600 - 14" - 20 H.P.
45 DD

Big Pump
2000 GPM on 50 ft DD 1150 RPM
Deepen well with 14" casing

LOG

Casing	Depth	Well	Type of Soil
40' of 16"	10		Top Soil
	20		Clay
	30		Sand
	40		
	50		Clay
	60		
	70		
	80		Sand
	90		
	100		
	110		
	120		
	130		
	140		
	150		
	160		
	170		
	180		
	190		
	200		
	210		
	220		
	230		
	240		
	250		
	260		
	270		
	280		
	290		
	300		

TURLOCK IRRIGATION DISTRICT DRAINAGE WELL NO. 5.

MAP

PROFILE

LOCATION Beginning at the NE Cor. of Sec. 29-5-10 thence W. 810.0 ft, thence S. 20.0 ft.

DRILLED BY: Osterberg Bros. 70. ft. of 16" hole.

DATE: Aug. 25, 1922.

REMARKS: 500 g.p.m. 19 ft.

No pipe line.

LOG

Casing	Depth	Well	Type of Soil
40' of 16"	10		Top Soil.
	20		Clay
	30		Sand
	40		
	50		Clay
	60		
	70		
	80		Sand
	90		
	100		
	110		
	120		
	130		
	140		
	150		
	160		
	170		
	180		
	190		
	200		
	210		
	220		
	230		
	240		
	250		
	260		
	270		
	280		
	290		