1	SUPERIOR COURT OF THE STATE OF CALIFORNIA
2	FOR THE COUNTY OF LOS ANGELES - CENTRAL DISTRICT
3	
4	
5	Coordination Proceeding)
6	Special Title (Rule 1550(b)))
7) Judicial Council
8	ANTELOPE VALLEY GROUNDWATER) Coordination
9	CASES) Proceeding No. 4408
10)
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14	CONTINUED DEPOSITION OF JAN HENDRICKX, Ph.D., I.R.
15	Los Angeles, California
16	Wednesday, January 22, 2014
17	Volume II
18	
19	
20	Reported by:
21	LORI SCINTA, RPR
22	CSR No. 4811
23	Job No. 1794014
24	
25	PAGES 248 - 352
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15	Continued Deposition of JAN HENDRICKX, Ph.D.,
16	I.R., Volume II, taken on behalf of Defendant and
17	Cross-Complainant Palmdale Water District, at
18	707 Wilshire Boulevard, Suite 3500, Los Angeles,
19	California, beginning at 10:23 A.M. and ending at
20	1:46 P.M. on Wednesday, January 22, 2014, before
21	LORI SCINTA, RPR, Certified Shorthand Reporter No. 4811.
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1	APPEARANCES:
2	
3	For Palmdale Water District:
4	ror rarmaare waser broaries
5	LAGERLOF, SENECAL, GOSNEY & KRUSE, LLP
6	BY: THOMAS S. BUNN III
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8	Attorneys at Law
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15	For Phelen Pinon Hills Community Services District:
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17	ALYSHIRE & WYNDER LLP
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23	(Telephonically present)
24	
25	
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1	APPEARANCES (continued):
2	
3	For Antelope Valley - East Kern Water Agency:
4	
5	BRUNICK, McELHANEY & KENNEDY
6	BY: LELAND MCELHANEY
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9	San Bernardino, California 92408
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14	For AGWA and the deponent:
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16	BROWNSTEIN HYATT FARBER SCHRECK
17	BY: MICHAEL T. FIFE
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22	Email: mfife@bhfs.com
23	
24	
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	1 436 231

1	APPEARANCES (Continued):
2	
3	For Bolthouse Properties:
4	
5	CLIFFORD & BROWN
6	BY: RICHARD ZIMMER (A.M. session only)
7	Attorney at Law
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10	661.322.6023
11	
12	Also Present:
13	
14	GENE NEBEKER
15	
16	
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13	
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15	deponent to Mr. Fife
16	
17	INFORMATION REQUESTED
18	(None)
19	
20	REFERENCE REQUESTED
21	(None)
22	
23	INSTRUCTION NOT TO ANSWER
24	(None)
25	
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1	Los Angeles, California, Wednesday, January 22, 2014
2	10:23 A.M.
3	
4	(Prior to the commencement of the
5	proceedings, Exhibit 1 was marked for
6	identification by the court reporter
7	and is attached hereto.)
8	
9	JAN HENDRICKX, Ph.D., I.R.,
10	having been administered an oath, was examined and
11	testified further as follows:
12	
13	EXAMINATION (Resumed)
14	BY MR. BUNN:
15	Q Good morning, Dr. Hendrickx.
16	A Good morning.
17	Q You've had your deposition taken before in this
18	case, correct?
19	A Yes, I did.
20	Q And the last time you had it taken was on the
21	topic of return flows, correct?
22	A That is correct, yeah.
23	Q And that's the same topic that you're prepared
24	to testify about in the Phase 5 trial?
25	A Yes, that is correct, on the urban return flow.
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1	A Yes, I did.
2	Q And did he have any suggestions to make when
3	you proposed what you were going to do?
4	A No.
5	Q All right. So now with Mr. Fife and
6	Mr. Herrema, have we covered everyone that you've spoke
7	with since your last deposition?
8	A I also talked to Ryan Drake, who is another
9	attorney in Mr. Fife's office. But with him, I only
10	discussed logistical matters.
11	Q Okay. Anyone else?
12	A In the office of BHFS, no.
13	Q Anyone else at all about the work that you're
14	doing?
15	A The one other person that I discussed issues
16	with is Jirka Simunek. I have a small company that is
17	called Soil Hydrology Associates, and it's me,
18	basically. And if I need some assistance about certain
19	issues, then I have associates, colleagues, that work
20	with me; just as sometimes people ask me to do answer
21	a quick question for them.
22	And Dr. Simunek is a professor of hydrology at
23	the University of California in Riverside, and he is the
24	builder of the HYDRUS code.
25	And he assisted me a little bit with setting up
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1	
1	the HYDRUS code. Basically, I asked him, I said,
2	"Dr. Simunek, this important work. Can you please check
3	my implementation of your code to assure that everything
4	was is done correctly?"
5	And that is what he he has done.
6	Q Let's pause for a couple of spellings. His
7	name, please.
8	A Jirka is spelled J-i-r-k-a, and Simunek is
9	spelled S-i-m-u-n-e-k.
10	Q And HYDRUS is another acronym, correct? (Would)
11	you spell that.
12	A HYDRUS is spelled H-Y-D-R-U-S.
13	Q So I do understand that Mr. Simunek looked at
14	your model results?
15	(A) (Yes, he did.)
16	Q And critiqued those?
17	(A) (No. (There was not much to critique.) (As a
18	matter of fact, he said the model was running
19	excellently and everything was okay.
20	Q So he validated those results?
21	A He validated that, yeah.
22	Q Just a couple of other preliminary things
23	before we get to the work that you've actually done.
24	Prior to coming in today, did you review the
25	transcript of your deposition, your earlier deposition?
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1	to the sewage system. The question there was: How much
2	water would be evaporated and transpire from these
3	effluents before the remainder would be on its way to
4	the ground water table?
5	Q Okay. And I'll delve into each of those
6	issues.
7	Was there anything else besides resolving I
8	remember those two outstanding issues.
9	A Yeah. Uh-huh.
10	Q Was there anything else besides resolving those
11	that you did?
12	A No. Basically, I can say my effort was
13	concentrated on these two issues.
14	Q Okay. Very good. Let's take the first one.
15	What happens to the water in the vadose zone?
16	(What did you do?)
17	A I did the HYDRUS simulations. (And we needed to
18	do these HYDRUS simulations because, if we look to
19	agricultural fields, there are of course, many
20	simulations have been done by Mr. Wildermuth and others
21	in previous phases of the trial.
22	An agricultural field is really huge and
23	extensive, and so we can assume that water is flowing
24	down as being flowing down to a cylindrical column in
25	one dimension. So we can use a relatively simple model,
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1	(huh?) (The one-dimensional version of HYDRUS we could use)
2	and a number of other models to evaluate how the water
3	moves from agricultural fields to the ground water
4	(table.)
5	If we look at urban recharge, we cannot use a
6	one-dimensional model anymore. We need to use a
7	three-dimensional model because we are dealing with a
8	point source. [Instead of looking at an ag. field with]
9	the dimension of half-a-mile by half-a-mile, here we are
10	looking to a source that is wrapping maybe an area of
11	six-by-six feet with water, or if we look at a backyard,
12	something like 30-by-30 feet.
13	And so we really need to take into
14	consideration the lateral movement of water that will
15	(happen if it flows down from the urban land surface to)
16	(the aquifer.) (And, in order to do that, I used the
17	HYDRUS 2D/3D code.
18	Q And explain to me what that is.
19	A In what sense?
20	Q Well, it's a ground water model, correct?
21	(A) (No.) (It is a model that deals with unsaturated)
22	as well as saturated flow, whereas regular ground water
23	models deal only with saturated flow.
24	(Discussion off the record.)
25	BY MR. BUNN:
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1	MR. FIFE: Okay. Me, too.
2	THE REPORTER: Mr. McElhaney, do you stipulate
3	to that, also?
4	MR. McELHANEY: I so stipulate.
5	And, Mike, when you get a chance, give me a
6	call, please.
7	MR. FIFE: Okay.
8	THE REPORTER: Do you wish to order a copy of
9	the transcript?
10	MR. FIFE: Yes.
11	
12	(TIME NOTED: 1:46 P.M.)
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1	I, JAN HENDRICKX, Ph.D., I.R., do hereby
2	declare under penalty of perjury that I have read the
3	foregoing transcript; that I have made any corrections
4	as appear noted, in ink, initialed by me, or attached
5	hereto; that my testimony as contained herein, as
6	corrected, is true and correct.
7	
8	EXECUTED this,
9	20, at
10	(City) (State)
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14	
15	
16	JAN HENDRICKX, Ph.D., I.R.
17	Volume II
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1	I, the undersigned, a Certified Shorthand
2	Reporter of the State of California, do hereby certify:
3	That the foregoing proceedings were taken
4	before me at the time and place herein set forth; that
5	any witnesses in the foregoing proceedings, prior to
6	testifying, were duly sworn; that a record of the
7	proceedings was made by me using machine shorthand which
8	was thereafter transcribed under my direction; that the
9	foregoing transcript is a true record of the testimony
10	given.
11	Further, that if the foregoing pertains to
12	the original transcript of a deposition in a Federal
13	Case, before completion of the proceedings, review of
14	the transcript [] was [] was not requested.
15	I further certify I am neither financially
16	interested in the action nor a relative or employee of
17	any attorney or party to this action.
18	IN WITNESS WHEREOF, I have this date
19	subscribed my name.
20	
21	Dated: 1/27/2014
22	
23	
	·
24	LORI SCINTA, RPR
25	CSR No. 4811
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