

**Appendix I**

John Hatch, Barrett - Interview and Deposition Transcripts

Pipeline Rupture and Fire  
Bellingham, Washington  
June 10, 1999  
DCA-99-MP-008

UNITED STATES OF AMERICA  
NATIONAL TRANSPORTATION SAFETY BOARD

IN RE: **OLYMPIC PIPELINE COMPANY**;  
Pipeline Rupture and Fire, June  
10, 1999, Bellingham, WA

DCA-99-WP-008

**INTERVIEW UNDER OATH  
OF  
JOHN HATCH**

July 14, 1999

---

**A P P E A R A N C E S :**

**MR. ALLAN C. BESHORE**, NTSB Pipeline Investigator, 490 L-  
Enfant Plaza East, SW, Washington, D.C. 20594-2000;

**MR. JOE SUBSITS**, Department of Ecology, Spills Program,  
P. O. Box 47600, Olympia, WA 98504;

**MR. DOUGLAS D. BEU**, Operations Manager, Olympic Pipeline  
Company, P. O. Box 1800, Renton, WA 98057;

**MR. TERENCE J. SCANLAN**, 1301 Fifth Avenue, Suite 3401,  
Seattle, WA 98101-2605.

**ALLEN R. EMERSON & ASSOCIATES  
COURT REPORTERS  
1226 McGarigle  
Sedro-Woolley, WA 98284  
(360) 856-2618/Skagit County  
(360) 734-2262/Whatcom County**

**ORIGINAL**

1 Interview under oath of Mr. John Hatch, a witness in  
2 the above-entitled matter, taken at the instance of the  
3 National Transportation and Safety Board, at the Cascade  
4 Conference Room of the Best Western Lakeway Inn, City of  
5 Bellingham, County of Whatcom, State of Washington, before  
6 Allen R. Emerson & Associates, commencing at the hour of  
7 10:00 o'clock a.m. on Wednesday, July 14, 1999;

8 WHEREUPON, the following proceedings were had, to-  
9 wit:

10 **JOHN HATCH**

11 Being duly sworn as a witness in this matter,  
12 testified on his oath, as follows:

13 **DIRECT EXAMINATION**

14 MR. BESHORE:

15 Q First let me introduce myself. I am Allan Beshore and I  
16 am the investigator in charge for the National  
17 Transportation and Safety Board investigation into the  
18 pipeline rupture and fire that occurred on June 10<sup>th</sup>. I  
19 will start out by asking you a few questions and thank  
20 you for coming in and helping us out. Since the other  
21 gentlemen in the room may also have some questions for  
22 you once I am through, I want you to know who they  
23 are and who they represent.

24 MR. BEU: I am Doug Beu, Olympic Pipeline  
25 operations manager.

1 MR. SUBSITS: Joe Subsits, Department of Ecology.

2 MR. SCANLAN: I am Terence Scanlan and I am  
3 appearing on behalf of Earth Tech from the law firm of  
4 Skellenger & Bender.

5 MR. BESHORE:

6 Q Would you state your full name please for the record?

7 A John Martin Hatch.

8 Q And John, you are employed by whom?

9 A By Earth Tech.

10 Q And how long have you been employed by Earth Tech?

11 A Well I have been with Earth Tech since they bought the  
12 Barrett Consulting Group a few years ago and I don't  
13 know exactly when that occurred, five or six years ago.

14 Q How long were you with Barrett before then?

15 A I was with Barrett - Pool Engineering was my previous  
16 employer which was purchased by Barrett. So I have been  
17 with Barrett since they purchased Pool Engineering and  
18 that was I think in '82 when I joined Pool Engineering.

19 Q What is your position there?

20 A I am project manager.

21 Q Was that the same position you held at the time of this  
22 water plant construction or did you have a different  
23 role?

24 A Essentially the same position. At that time I was also  
25 the construction service manager.

1 Q Okay maybe you can just go back and obviously we're  
2 interested in the water treatment pump station  
3 construction project, can you just kind of take us back  
4 when you became involved in that project and what your  
5 role was at that time?

6 A I became involved in the project during the building  
7 phase. I was aware of the project design in our office,  
8 knew it was going on and was also involved in the  
9 sister project that was occurring at the same time and  
10 my role then was to manage the construction for our  
11 larger projects. So I was the construction manager for  
12 the pump station project and reservoir project at the  
13 same time.

14 Q Okay now did Tom Franklin report to you?

15 A Yes Tom worked for me.

16 Q And his role was then to do what?

17 A Tom was our field representative and his role was to be  
18 on site full time during the construction phase and  
19 report to me.

20 Q So how often did you have an opportunity to be out on  
21 site? Was that a regular occurrence for you?

22 A I was on site frequently and I think during the  
23 construction we tried to have weekly meetings on site  
24 and I wasn't always able to attend those but I tried to  
25 be there on a weekly basis.

1 Q Okay during the construction part of the project I  
2 guess what was your involvement? Did you have any  
3 interaction whatsoever on the Olympic Pipeline during  
4 that project?

5 A I don't remember having any direct contract with  
6 Olympic during that time.

7 Q Okay do you remember if the line was ever exposed? Do  
8 you recall seeing the pipeline in there during any of  
9 your visits?

10 A Not specifically. There was a lot of activity going on,  
11 on site, a lot of excavation as we were going through  
12 the construction and I don't specifically remember  
13 seeing the Olympic line exposed.

14 Q Did anybody make you aware of any problems that might  
15 be associated with the Olympic Pipeline being there?

16 A No.

17 Q Or with it being damaged?

18 A No.

19 Q Did EMCO do all of the excavation work or did they  
20 contract any of that out, do you recall?

21 A My recollection is that EMCO did all of that work  
22 themselves.

23 Q What about the concrete work, did they sub that out?

24 A No I believe they also did the concrete work.

25 Q Do you remember any modifications that occurred during

1 the field part of the work, were any changes made to  
2 the plans I guess that occurred as a result of Olympic  
3 Pipeline being in that corridor anywhere?

4 A Not that I remember.

5 Q Do you recall if, for example - and I am not saying it  
6 occurred but if the pipeline was struck during that  
7 project in any way, what would you expect the  
8 contractor to do? To report that to you or Tom, how  
9 would that process work?

10 A I don't know for sure what EMCO would do in that  
11 instance. It would be speculation on my part how they  
12 would react.

13 Q So you don't recall whether there were specific things  
14 they needed to do?

15 A The contract required the contractor to be in touch  
16 with the utilities and to notify when they were working  
17 in the area of other utilities. I don't know  
18 specifically whether EMCO did that or not, I have no  
19 record, no recollection of that occurring. That would  
20 have been the responsibility of EMCO.

21 Q Did you consider I guess EMCO to be a good contractor?

22 A They completed the project, met the requirements of the  
23 contract documents as far as we're concerned. The  
24 project was accepted.

25 Q There was no litigation that resulted or any kind of

1           problem, lawsuit or anything after the project was  
2           over?

3    A    Not that I am aware of.

4    Q    Did they meet their deadline, close to the deadline for  
5           finalization of construction or do you recall?

6    A    The completion of the project was extended, they were  
7           given a time extension and I don't remember  
8           specifically the quantity or for how long, but it was  
9           basically to complete deficiency corrections, a punch  
10          list of work.

11   Q    Were there monetary damages if they extended past the  
12          contract deadline associated with the project?

13   A    There is a point called substantial completion which is  
14          identified in the contract documents and when they  
15          reach that point usually the clock stops as long as  
16          they persist with due diligence.

17   Q    And they met that deadline?

18   A    Yes.

19   Q    Were they rushed to meet that deadline or do you recall  
20          that?

21   A    I don't remember being specifically urgent.

22   Q    They didn't all of a sudden start working twelve (12)  
23          hour days?

24   A    No.

25                   MR. BESHORE: I am going to see if Doug has any



1 questions here, Doug?

2 MR. BEU: I don't have any questions.

3 MR. BESHORE: Joe?

4 MR. SUBSITS:

5 Q In terms of your experience in working with EMCO was  
6 this one job you're only experienced with them or were  
7 there other jobs?

8 A EMCO did an earlier small contract at the water  
9 treatment plant. I believe it was called chemical feed,  
10 a systems modification and they were the contractor for  
11 that project.

12 Q So that is the extent of your company's experience in  
13 working with them?

14 A That is the extent of my experience working with them.

15 Q Do you recall how long the project was in terms of the  
16 actual construction work?

17 A The pump station project?

18 Q Yes.

19 A Not specific days, no. It went on for over a year. I  
20 couldn't give you dates.

21 Q Do you recall during the course of the project what  
22 types of heavy equipment were used in the area?

23 A Not specifically, I don't recall that.

24 Q And you were aware Olympic did have a line going  
25 through the area?

1 A Oh yeah.

2 MR. SUBSITS: That's all.

3 MR. BESHORE:

4 Q The chemical feed line project, is that within the  
5 area?

6 A Within the treatment plant.

7 Q So in the building?

8 A All the work was inside the building.

9 Q Okay and just so I am clear, you personally didn't have  
10 any interaction with Olympic during this construction  
11 project?

12 A I don't recall that occurring no.

13 Q Were you aware of whether they had people on site or  
14 not?

15 A Only through our reports. I read our inspection  
16 reports, they were submitted weekly and I would read  
17 those and pass them on.

18 Q So your recollection is there was no problems  
19 associated with this that were discussed in a meeting?

20 A I don't remember any specific problems.

21 MR. BESHORE: I don't have any further questions.  
22 We can go off the record.

23 (WITNESS EXCUSED at 10:10 o'clock a.m. on 7-14-99)

24

25

STATE OF WASHINGTON)  
  )  
COUNTY OF SKAGIT      )

DECLARATION

Pursuant to the laws of the State of Washington,  
I declare under penalty of perjury that the following to be  
true:

I have read my interview under oath and the same  
is true and accurate save and except for any corrections as  
made by me on the correction page, herein.

Signed at \_\_\_\_\_, Washington  
on the \_\_\_\_\_ day of \_\_\_\_\_, 2000.

\_\_\_\_\_  
MR. JOHN HATCH

1 STATE OF WASHINGTON )  
2 COUNTY OF SKAGIT )

C-E-R-T-I-F-I-C-A-T-E

3

4

5 I, **ALLEN R. EMERSON**, a Notary Public in and for  
6 the **State of Washington**, do hereby certify that the  
7 interviews under oath before the National  
8 Transportation & Safety Board were reported in a  
9 verbatim manner stenographically before me and reduced  
10 typewritten form under my direction;

11 I further certify that the interviews under oath  
12 before the National Transportation and Safety Board are  
13 full true and correct transcript of the proceedings  
14 reported by me.

15 **IN WITNESS WHEREOF**, I have hereunto set my hand  
16 and affixed my Official Seal this 27 day  
17 of Jan, 2000.

18

19

20

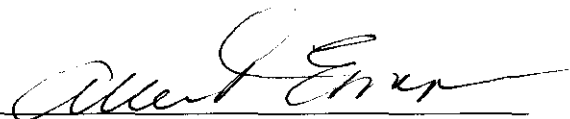
21

22

23

24

25

  
**NOTARY PUBLIC** in and for the  
**State of Washington**, residing  
at Sedro Woolley. My  
Commission expires 6/27/2000.

1 IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON  
 2 IN AND FOR THE COUNTY OF WHATCOM  
 -----  
 3 KATHERINE DALEN, Individually  
 4 and as the Personal  
 5 Representative of the Estate  
 6 of STEPHEN M. TSORVAS, and  
 7 as Guardian ad Litem for  
 8 ANDREW R. TSORVAS and GEORGE  
 9 K. TSORVAS,  
 10  
 11 Plaintiffs,  
 12  
 13 vs. No. 99-2-01468-1  
 14  
 15 OLYMPIC PIPE LINE COMPANY, a  
 16 foreign corporation, EQUILON  
 17 PIPELINE COMPANY LLC, a  
 18 foreign corporation, and  
 19 EQUILON ENTERPRISES, LLC, a  
 20 foreign corporation, and FRED  
 21 CROGNALE, FRANK HOPF, RON  
 22 BRENTSON and JOHN DOES,  
 23  
 24 Defendants.  
 25  
 26 OLYMPIC PIPE LINE COMPANY, a  
 27 foreign corporation,  
 28  
 29 Third-Party Plaintiff,  
 30  
 31 vs.  
 32 IMCO GENERAL CONSTRUCTION  
 33 CO., a domestic corporation,  
 34  
 35 Third-Party Defendant.  
 -----  
 36 VIDEOTAPED DEPOSITION UPON ORAL EXAMINATION OF  
 37  
 38 JOHN HATCH  
 39  
 40  
 41 June 26, 2000  
 42  
 43 Loraine Hohnstein  
 44 Court Reporter  
 45 HOHNSLTS230J

1 EXHIBIT INDEX Page 3

2 EXHIBIT NO.	3 PAGE
4 149 . . . . .	5 22
6 150 . . . . .	7 49
8 151 . . . . .	9 56
10 152 . . . . .	11 76
12 153 . . . . .	13 79
14 154 . . . . .	15 80
16 155 - 189 . . . . .	17 82

1 FRANK S. KING, as the  
 2 Personal Representative of  
 3 the Estate of WADE B. KING,  
 4 and FRANK S. KING and MARY L.  
 5 KING, individually, and TRACY  
 6 K. BELL, individually, and  
 7 JASON KING, individually,  
 8  
 9 Plaintiffs,  
 10  
 11 vs. No. 99-2-01467-3  
 12  
 13 OLYMPIC PIPE LINE COMPANY, a  
 14 foreign corporation, EQUILON  
 15 PIPELINE COMPANY, LLC., a  
 16 foreign corporation, and  
 17 EQUILON ENTERPRISES, LLC., a  
 18 foreign corporation, and FRED  
 19 CROGNALE, FRANK HOPF, RON  
 20 BRENTSON and JOHN DOES,  
 21  
 22 Defendants.  
 23  
 24 OLYMPIC PIPE LINE COMPANY, a  
 25 foreign corporation,  
 26  
 27 Third-Party Plaintiff,  
 28  
 29 vs.  
 30 IMCO GENERAL CONSTRUCTION CO.,  
 31 a domestic corporation, and  
 32 JOHN DOE DEFENDANTS ONE  
 33 THROUGH FOUR,  
 34  
 35 Third-Party Defendants.  
 -----  
 36 VIDEOTAPED DEPOSITION OF JOHN HATCH  
 37  
 38  
 39  
 40  
 41 9:38 a.m.  
 42 June 26, 2000  
 43 1201 Third Avenue, Suite 2760  
 44 Seattle, Washington  
 45 Loraine Hohnstein, Court Reporter

1 EXAMINATION INDEX Page 4

2 BY MR. ALLEN:	3 Pages:
4	5 7 - 101

A P P E A R A N C E S

FOR PLAINTIFFS DAVID M. BENINGER  
DALEN and KING: LUVERA, BARNETT, BRINOLEY,  
BENINGER & CUNNINGHAM  
Attorneys at Law  
701 Fifth Avenue  
Suite 6700  
Seattle, WA 98104

FOR OLYMPIC PIPE LINE COMPANY:  
RICHARD F. ALLEN  
COZEN AND O'CONNOR  
Attorneys at Law  
1201 Third Avenue  
Suite 5200  
Seattle, WA 98101-3071

FOR EQUILON: NICK S. VERWOLF  
DAVIS WRIGHT TREMAINE  
Attorneys at Law  
1800 Bellevue Place  
10500 N.E. 8th Street  
Bellevue, WA 98004-4300

FOR IMCO GENERAL CONSTRUCTION:  
DOUGLAS K. WEIGEL  
FLOYD & PFLUEGER  
Attorneys at Law  
300 Trianon Building  
2505 Third Avenue  
Seattle, WA 98121-1445

1 JOHN HATCH, witness herein, having  
2 been duly sworn by the  
3 Notary, testified as follows:

EXAMINATION

7 BY MR. ALLEN:  
8 Q. Mr. Hatch, as you heard from the introduction, I'm  
9 Dick Allen. I'm going to be asking you questions at the  
10 outset of the deposition. I represent Olympic Pipe Line  
11 Company, one of the defendants in the case brought by the  
12 Dalen plaintiffs.

13 Have you ever given a deposition before?

14 A. I have not.

15 Q. Let me just say a couple of things at the outset.  
16 First, if I ask you a question that you don't understand,  
17 feel free to tell me you don't understand the question and  
18 I'll attempt to reword it. Secondly, there will be times  
19 when I will be asking a question and you will want to  
20 answer. Only one of us can speak at a time so that the  
21 court reporter can take down the testimony in an orderly  
22 way. So if you will wait until I complete a question, and  
23 sometimes they may be prolonged questions, before you  
24 answer, that would be appreciated by the reporter and it  
25 will make the record read properly. Do you understand that?

1 FOR EARTH TECH and JOHN HATCH:  
2 TERENCE J. SCANLAN  
SKELLENGER BENDER, P.S.  
3 Attorneys at Law  
4 1301 Fifth Avenue  
5 Suite 3401  
Seattle, WA 98101-2605

6 ALSO PRESENT: STEVE DAHL, PROVIDED

1 A. Yes, I do.  
2 Q. Also, if at any time during the deposition you  
3 want to have a break, just tell us that. Sometimes we tend  
4 to rattle on a little too long in a deposition proceeding  
5 without taking a break and if you should need a break, let  
6 us know that. Are you represented here today by counsel?

7 A. Yes, I am.

8 Q. And is that Mr. Scanlan who is seated to your  
9 left?

10 A. Yes.

11 Q. Can you tell us generally what you have done in  
12 preparation for this deposition to prepare yourself for the  
13 deposition? Have you looked at any documents?

14 A. Yes, I have.

15 Q. Can you tell us what documents you looked through  
16 before the deposition?

17 A. I reviewed the field reports and I have looked at  
18 some of the photos.

19 Q. What was the general scope of the photographs that  
20 you looked at, what photographs did you take a look at?

21 A. I looked primarily at excavation photographs that  
22 showed the excavation work that was occurring on the  
23 project.

24 Q. I guess we should ask you to state your full name  
25 for the record?

1 A. John Martin Hatch.  
 2 Q. And what is your residence address, Mr. Hatch?  
 3 A. [REDACTED]  
 4 Q. How long have you lived at that address?  
 5 A. Since 1987.  
 6 Q. And where did you live before 1987?  
 7 A. I lived in Bellevue.  
 8 Q. By whom are you employed?  
 9 A. Earth Tech.  
 10 Q. And how long have you been employed by Earth Tech  
 11 or one of its predecessors?  
 12 A. Well, I was employed by Barrett Consulting Group.  
 13 And prior to that, Pool Engineering. It's a succession of  
 14 ownerships. Basically have been with the same group of  
 15 people since 1972.  
 16 Q. Where are the offices where you are employed now?  
 17 A. In Bellevue.  
 18 Q. What is the address?  
 19 A. 10800 Northeast Eighth Street.  
 20 Q. Is that the regional office of Earth Tech?  
 21 A. Yes.  
 22 Q. What is your job designation at this point?  
 23 A. I'm a project manager.  
 24 Q. As you know, we're going to be asking you  
 25 questions today about the Dakin-Yew Pump Station project

1 A. It usually is.  
 2 Q. And was that usually a Monday?  
 3 A. I don't remember what day of the week it was.  
 4 Q. And on the other four days of the week, where were  
 5 you working if you weren't visiting the City of Bellingham?  
 6 A. I would primarily be in the office unless I had  
 7 other construction projects going, I may visit those.  
 8 Q. That led me directly to my next question. During  
 9 the construction phase of the Dakin-Yew Pump Station  
 10 project, did you have other projects other than the City of  
 11 Bellingham project that you paid attention to or were  
 12 assigned to?  
 13 A. Well, there was a second City of Bellingham  
 14 project that I was involved in.  
 15 Q. And would you tell us what that was?  
 16 A. That was a Whatcom Falls Reservoir No. 2 project.  
 17 Q. Who was the contractor on that project?  
 18 A. Baugh Construction.  
 19 Q. Were you involved in any other projects during  
 20 1994 from the time that the construction commenced on the  
 21 Dakin-Yew Pump Station project?  
 22 A. I don't specifically remember but it could very  
 23 well have been.  
 24 Q. Did you keep time sheets in 1994?  
 25 A. Yes.

1 that was a part of the City of Bellingham water treatment  
 2 plant projects in the City of Bellingham that was under  
 3 construction in 1994 and 1995.  
 4 Can you tell me what role you played in respect to  
 5 that project during the construction phase of the project?  
 6 A. I was the construction services manager for  
 7 Barrett Consulting Group.  
 8 Q. And what was, what is the general ambit of  
 9 responsibilities of a construction services manager?  
 10 A. Primarily to provide coordination between the city  
 11 and the contractor.  
 12 Q. During the construction phase of the project, were  
 13 you officed in the Bellevue offices of Earth Tech or then  
 14 Barrett Consulting Group?  
 15 A. Yes.  
 16 Q. Can you tell me what the normal routine would be  
 17 with respect to your visiting Bellingham during that  
 18 project?  
 19 A. On a project like that, I would go up to the site  
 20 generally once a week to see what is going on, to meet with  
 21 the contractor, to meet with our inspector, to meet with the  
 22 client, in this case the City of Bellingham, to discuss  
 23 progress of the project.  
 24 Q. Would that usually have been on the day of the  
 25 weekly project meeting?

1 Q. And 1993?  
 2 A. Yes.  
 3 MR. ALLEN: Mr. Scanlan, for some reason we have  
 4 been provided 1995 time sheets for Mr. Hatch but no 1994 or  
 5 1993 time sheets. Would you check to see if there are such  
 6 records?  
 7 MR. SCANLAN: I will. I would suspect, I remember  
 8 late last summer when we were first gathering these  
 9 materials and discovering that the time sheets were somehow  
 10 stored separately than the other materials and that Earth  
 11 Tech had to go to some effort to locate time sheets, and it  
 12 may be that we just didn't get a complete grouping of them.  
 13 Q. Mr. Hatch, can you tell me what your educational  
 14 background is following high school?  
 15 A. Yeah, I have a high school degree. And following  
 16 that, I went to work at Boeing directly, I don't have any  
 17 further degrees. But I have taken a number of continuing  
 18 education and professional courses.  
 19 Q. Are you a licensed professional engineer in the  
 20 state of Washington?  
 21 A. No, I'm not.  
 22 Q. Have you made statements concerning the Dakin-Yew  
 23 project to any government investigators since the June 10,  
 24 1999 incident at Bellingham?  
 25 A. Yes.

Page 13

1 Q. Can you tell me when you made or were interviewed  
 2 for the first time following that incident?  
 3 A. I don't remember the specific date.  
 4 Q. About when?  
 5 A. Oh, maybe nine months ago. Six, nine months ago.  
 6 Q. And by whom were you interviewed in that instance?  
 7 A. I believe it was Olympic Pipe Line and the NTSB  
 8 representatives.  
 9 Q. Was that part of an NTSB inquiry so far as you  
 10 understood it?  
 11 A. Yes.  
 12 Q. Where did that interview take place?  
 13 A. In Bellingham.  
 14 Q. And subsequently, have you been interviewed by  
 15 anyone?  
 16 A. Yes.  
 17 Q. And by whom in that case?  
 18 A. US attorneys.  
 19 Q. When and where were you interviewed by the US  
 20 attorneys?  
 21 A. I would believe, it's a couple of months ago,  
 22 again I'm not sure. And that was here in Seattle in their  
 23 offices.  
 24 Q. Were you shown any materials by the US attorneys  
 25 during that interview?

Page 14

1 A. Yes.  
 2 Q. Were you shown materials other than correspondence  
 3 concerning the project and diagrams or plans that were  
 4 generated by Barrett Consulting Group?  
 5 A. Not that I remember.  
 6 Q. Were you involved in the Dakin-Yew Pump Station  
 7 project during its design phase? That is, prior to the time  
 8 that the contract was let to a contractor?  
 9 A. I do not remember being involved in the design.  
 10 Q. Do you recall playing any part in determining  
 11 whether underground utilities or structures were present in  
 12 the area, the prospective area of the project prior to or  
 13 during the design phase?  
 14 A. No.  
 15 Q. Let me ask you about some of the individuals who  
 16 were employed on the project. Did you know Tom Collins?  
 17 A. Yes.  
 18 Q. And was he another employee of Barrett Consulting  
 19 Group?  
 20 A. Yes, he was.  
 21 Q. Is he still employed by Barrett Consulting Group?  
 22 A. No.  
 23 Q. Do you know when his employment ceased at Barrett,  
 24 approximately?  
 25 A. No, I don't.

Page 15

1 Q. Was he employed at Barrett throughout the  
 2 Dakin-Yew project?  
 3 A. I don't recall that.  
 4 Q. What was his job assignment so far as you know?  
 5 A. Tom was a younger engineer and I don't know what  
 6 his specific role in that project was, but he was an  
 7 engineer in our office.  
 8 Q. Did you have any interaction with him in respect  
 9 to the Dakin-Yew Pump Station project?  
 10 A. I don't recall any.  
 11 Q. In the ordinary course of your duties on the  
 12 Dakin-Yew Pump Station project during its construction  
 13 phase, to whom would you report, who did you view as your  
 14 immediate superior?  
 15 A. Dirk Van Woerden.  
 16 Q. What was Mr. Van Woerden's role in the project?  
 17 A. He was the director of engineering and he was our  
 18 primary contact with the City of Bellingham.  
 19 Q. And you said, as I recall it, that you interfaced  
 20 during the project with the city on the one hand; and would  
 21 you have interfaced with the contractor on the other?  
 22 A. Yes.  
 23 Q. Who was your principal contact at the city?  
 24 A. Wan Huang.  
 25 Q. Did you talk to other city people in the course of

Page 16

1 your duties on the project?  
 2 A. Yes.  
 3 Q. Was there, if Mr. Huang wasn't available, with  
 4 whom did you principally interface?  
 5 A. Larry Leight.  
 6 Q. And his surname is spelled?  
 7 A. I believe it's L-E-I-G-H-T.  
 8 Q. And what was his position with the city?  
 9 A. He was over Huang. I don't know what his title  
 10 was, he worked in public works.  
 11 Q. When you visited the job site, would it be the  
 12 case that you would see other City of Bellevue employees at  
 13 the construction site?  
 14 A. Yes.  
 15 Q. And on your weekly visits, who would you expect to  
 16 see from the city?  
 17 A. I would expect to see the plant operator, Bill  
 18 Evans, and occasionally to see Huang.  
 19 Q. On what occasions would Mr. Huang be present?  
 20 A. Well, I believe he made sporadic visits to the  
 21 site. He would also have been invited to attend weekly  
 22 meetings.  
 23 Q. Did Barrett Construction Group have a man on the  
 24 site on a daily basis?  
 25 A. Barrett had a man who was on site for certainly



1 the majority of the time, yes.  
 2 Q. And would that be Tom Franklin?  
 3 A. Yes.  
 4 Q. What was Mr. Franklin's assignment?  
 5 A. Tom was our inspector, he represented Barrett  
 6 Consulting Group as our field representative.  
 7 Q. Was he the inspector for both the Dakin-Yew Pump  
 8 Station project and the reservoir project?  
 9 A. Yes.  
 10 Q. Were those two projects going forward  
 11 simultaneously during 1994?  
 12 A. Yes, they were.  
 13 Q. Who was the project manager for the Dakin-Yew Pump  
 14 Station project at Barrett Construction Group?  
 15 A. George Nordby.  
 16 Q. In what circumstances would you interface with Mr.  
 17 Nordby?  
 18 A. I would talk to George about progress of the  
 19 project and any design-related issues that might come up  
 20 that I was aware of.  
 21 Q. On the days of the week that you weren't visiting  
 22 Bellingham, what was your usual routine during the Dakin-Yew  
 23 project in respect to the Bellingham water projects?  
 24 A. Well, primarily I would be involved in  
 25 corresponding with the contractor, written correspondence,

1 the project?  
 2 A. My role was construction services manager. And  
 3 again the role was primarily to provide coordination between  
 4 the city and the contractor.  
 5 Q. Did you see the project through to conclusion?  
 6 A. Yes, I did.  
 7 Q. And although we'll get to it in documents later in  
 8 your deposition, about when did the project conclude, as you  
 9 recall it?  
 10 A. I believe it was sometime in '95.  
 11 Q. And do you recall the date offhand that the, the  
 12 month that the city accepted the project as completed?  
 13 A. No, I don't.  
 14 Q. Were you involved in the process of determining  
 15 substantial completion of the project and its acceptance by  
 16 the city?  
 17 A. Yes.  
 18 Q. What was your role at that point in the project?  
 19 Or was it a continuation of the role you had at the outset?  
 20 A. Yes, it was pretty much a continuation.  
 21 Q. Mr. Hatch, when you started working on the  
 22 project, can you tell me about when that was?  
 23 A. No, I don't recall that.  
 24 Q. Do you recall what your first activities were with  
 25 respect to familiarizing yourself with the scope of the

1 verbal conversations.  
 2 Q. With whom in the contractors employ would you  
 3 carry on conversations on a day-to-day basis?  
 4 A. Their project manager.  
 5 Q. Who was the project manager at the outset of the  
 6 project?  
 7 A. At the beginning of the project, it was Chris  
 8 Hart.  
 9 Q. And about when did Mr. Hart stop being the project  
 10 manager?  
 11 A. I don't recall.  
 12 Q. And who then followed Mr. Hart as the project  
 13 manager?  
 14 A. Paul Krakenberg.  
 15 Q. Did Mr. Krakenberg have a role in the project from  
 16 the contractor's perspective, from the outset?  
 17 A. Yes, I believe he was Chris Hart's assistant.  
 18 Q. And at some point, he took over; is that what  
 19 happened?  
 20 A. Yes.  
 21 Q. Did Mr. Hart go on to another project so far as  
 22 you knew?  
 23 A. I believe he did.  
 24 Q. Would you tell me once again, because I've  
 25 forgotten, the exact description of your job assignment on

1 project?  
 2 A. Not specifically.  
 3 Q. At the outset, did you look at plans and  
 4 specifications or the project manual or any documents of  
 5 that sort?  
 6 A. My normal routine would be to do that, familiarize  
 7 myself with the project, yes.  
 8 Q. In that familiarization process, did you determine  
 9 that there were underground utilities in the area of the  
 10 project?  
 11 A. Yes.  
 12 Q. And did you find that among those utilities was  
 13 the Olympic Pipe Line Company's petroleum products pipeline?  
 14 A. Yes.  
 15 Q. One of the other witnesses has described the  
 16 Olympic Pipe Line Company's pipeline as going through the  
 17 heart of the project in respect to the Dakin-Yew Pump  
 18 Station; would you agree with that characterization?  
 19 A. I would say it went through the site.  
 20 Q. And did you have any interaction with Olympic Pipe  
 21 Line Company's representatives during your, in your role  
 22 during the project?  
 23 A. Not that I recall.  
 24 Q. Do you recall any specific conversations with  
 25 Olympic Pipe Line Company representatives?

1 A. No, I do not.  
 2 Q. Did you have any interaction with Christenson  
 3 Engineering Company during the project?  
 4 A. Not that I recall.  
 5 Q. Do you know what role Christenson Engineering  
 6 played in the project?  
 7 A. My understanding was that they did site survey for  
 8 the design.  
 9 Q. Do you know whether Christenson carried out any  
 10 activities in the location of the Olympic Pipeline Company's  
 11 pipeline?  
 12 A. I believe they potholed the pipeline to determine  
 13 its location. Or had that done.  
 14 Q. Were you present during the time of any of the  
 15 potholing of the underground utilities including the Olympic  
 16 Pipe Line Company's pipeline?  
 17 A. No, I was not.  
 18 Q. On your visits to the site, did you see any  
 19 markers designating the presence of underground utilities on  
 20 the site?  
 21 A. Yes, I believe I did.  
 22 Q. From time to time, did you see markers indicating  
 23 the presence of Olympic Pipe Line Company's pipeline?  
 24 A. I don't remember that specifically, it could very  
 25 well have been.

1 A. Yes, it does.  
 2 Q. Would you use a yellow marker and draw in the Pump  
 3 Station as it's shown on that same exhibit?  
 4 A. Okay.  
 5 Q. As originally designed, were there pipes to be put  
 6 in place during the project that would cross the Olympic  
 7 Pipe Line Company's pipeline?  
 8 A. Yes.  
 9 Q. And can you tell me what those pipes were?  
 10 A. There's a water pipeline, there's two water  
 11 pipelines that appear to cross.  
 12 Q. In the blue pen, would you mark the location of  
 13 those pipelines on the site plan, Exhibit 149?  
 14 A. Okay. I see a third line.  
 15 Q. Okay. Going from the northernmost of the blue  
 16 lines that you have drawn, can you tell me what -- that  
 17 cross the Olympic Pipe Line. First perhaps you could hold  
 18 that exhibit up to the camera so we can see the three lines  
 19 that cross the Olympic Pipe Line in the diagram site plan  
 20 that existed at the outset of the project.  
 21 A. (Witness complies.)  
 22 Q. Referring to the northernmost of those lines, what  
 23 was it?  
 24 A. The northernmost line was an overflow line from  
 25 the water treatment plant overflow for the wet well.

1 Q. What type of markers do you recall seeing?  
 2 A. I remember seeing markers, I don't remember  
 3 specifically what they were.  
 4 (Exhibit No. 149 marked for identification.)  
 5 (Discussion held off the record.)  
 6 Q. Mr. Hatch, handing you what has been marked as  
 7 Exhibit 149, I'll ask you if that's a document that you  
 8 looked at in the time that you were familiarizing yourself  
 9 with the Dakin-Yew project before you started your role in  
 10 the project, your work on the project?  
 11 A. Yes, it is.  
 12 Q. Can you tell me what that document is?  
 13 A. It's a site plan in the area of the Dakin-Yew Pump  
 14 Station.  
 15 Q. And is the Olympic Pipe Line Company's pipeline  
 16 shown in that site plan?  
 17 A. Yes, it is.  
 18 Q. Once I lay my hands on some markers, I'm going to  
 19 ask you to mark its location.  
 20 Would you trace it with the pink marker?  
 21 A. Okay.  
 22 Q. And essentially does the pipeline run from the  
 23 north to the south, west of the location of the -- or the  
 24 intended location for construction of the Dakin-Yew Pump  
 25 Station?

1 Q. And what was the diameter of that overflow line  
 2 that's indicated?  
 3 A. 20 inch.  
 4 Q. And coming from the north to the south, the next  
 5 blue line that you have drawn?  
 6 A. The next line was the suction line for the Pump  
 7 Station, the inlet for the pumps.  
 8 Q. And the diameter of that line?  
 9 A. 24 inch.  
 10 Q. Was there also a, coming to the south, a PVC  
 11 utility duct that was to cross the pipeline?  
 12 A. Yes.  
 13 Q. Would you, using the blue pen, also mark that  
 14 location.  
 15 A. Okay.  
 16 Q. And then continuing to the south, you have  
 17 sketched in a rather large blue marking crossing the Olympic  
 18 Pipe Line existing pipeline?  
 19 A. Yes.  
 20 Q. What is that?  
 21 A. That is the 72-inch pipeline and that's the feed  
 22 to the water reservoir.  
 23 Q. On the plan, is there shown a 24-inch discharge  
 24 line from the pump station into the city water system?  
 25 A. Yes, there is.

Page 25

1 Q. Where is that located?

2 A. It's south of the pump station and south of the

3 72-inch line.

4 Q. It runs from the pump station over or under the

5 72-inch line and intersects with the 16-inch water main; is

6 that correct?

7 A. That's correct.

8 Q. Asking you to use this black marker pen, and mark

9 the 16-inch waterline that already existed at the site.

10 A. (Witness complies.)

11 Q. And using a red marker pen, would you mark the

12 24-inch discharge line as it was designed at the outset of

13 the project?

14 A. (Witness complies.)

15 Q. As designed at the outset of the project, was it

16 your understanding then that the intersection of the 24-inch

17 discharge line and the 16-inch waterline was to be somewhere

18 east of the Olympic Pipe Line right-of-way?

19 A. It appears to be that way.

20 Q. And can you tell us approximately how far east

21 would that intersection or junction of the 24-inch line and

22 the existing 16-inch waterline have taken place?

23 A. It looks to be about 15 feet or so.

24 Q. Although we'll get back to it later in the

25 examination when we're looking at some documents, was there

Page 26

1 a redesign in respect to the T-joint intersection of the

2 24-inch discharge line and the 16-inch waterline during the

3 course of the project?

4 A. Yes. . .

5 Q. Do you recall approximately when that redesign

6 occurred?

7 A. No, I do not.

8 Q. Do you recall, Mr. Hatch, that you had some

9 involvement in your role in that redesign effort?

10 A. No, I do not.

11 Q. Did you have any contact or communication with

12 anyone in respect to the redesign effort as you recall it?

13 A. Not that I recall.

14 Q. Who would have undertaken the redesign from the

15 engineering perspective at Barrett Consulting Group?

16 A. The redesign would have been managed by George

17 Nordby.

18 Q. During 1994, did you work with Mr. Nordby or Ron

19 Dorn in any direct way?

20 A. Yes.

21 Q. In what respect would you have worked with them in

22 respect to this project?

23 A. They would have provided design support during the

24 construction phase.

25 Q. Did Mr. Dorn work for Mr. Nordby, was he an

Page 27

1 assistant or what was his role as you saw it?

2 A. Ron was one of our main engineers, and our

3 organization is such that the groupings of people changed

4 depending on the project. So Ron wouldn't necessarily have

5 worked directly for George.

6 Q. Did you understand that George Nordby had the role

7 of project manager with respect to this project?

8 A. George was the overall project manager, yes.

9 Q. Is Mr. Dorn still employed at Earth Tech?

10 A. Yes, he is.

11 Q. I saw some other names as I was going through

12 documents. I thought this is as good an opportunity as any

13 to ask you about them. Jim Lutz, L-U-T-Z?

14 A. Yes.

15 Q. Is he still employed by Earth Tech?

16 A. Yes, he is.

17 Q. And what is his job assignment now as you

18 understand it?

19 A. Jim is our senior structural engineer.

20 Q. And another name, if I recall correctly, is Chen

21 Shen. C-H-E-N, S-H-E-N. Can you tell me who Chen Shen is

22 or was in the organization?

23 A. Chen is still with Earth Tech and he is one of our

24 senior process engineers.

25 Q. What role does a process engineer play in a

Page 28

1 project?

2 A. He would design treatment processes such as

3 chlorine feed equipment, chemical feed equipment, that sort

4 of thing.

5 Q. Would you have expected him to be more involved in

6 the reservoir side of the City of Bellingham project than

7 the pump station side?

8 A. No.

9 Q. Let's take a break for just a minute while I

10 organize some documents here.

11 THE VIDEOGRAPHER: Going off the record, the time

12 is approximately 10:20 a.m.

13 (Deposition resumed after a short recess.)

14 THE VIDEOGRAPHER: Back on the record, the time is

15 approximately 10:26.

16 Q. Mr. Hatch, I'm going to ask you some questions

17 about the commencement of construction at the Dakin-Yew Pump

18 Station on that project. First, were you involved with the

19 project before the selection of a contractor for the

20 Dakin-Yew Pump Station project?

21 A. I don't recall specifically but it could very well

22 have been.

23 Q. Do you recall the identity of the contractor that

24 was chosen for the project?

25 A. Imco.

1 Q. And it was Imco that you worked with then through  
 2 the project?  
 3 A. Yes.  
 4 Q. Was there a preconstruction meeting for the  
 5 project?  
 6 A. Yes, there was.  
 7 Q. And handing you what has been marked in a prior  
 8 deposition as Exhibit 67, is that a letter concerning the  
 9 preconstruction meeting?  
 10 A. Yes, it is.  
 11 Q. And it's a letter that you wrote?  
 12 A. Yes.  
 13 Q. To whom is it addressed?  
 14 A. It's addressed to Chris Hart.  
 15 Q. I think you have already told us he was your  
 16 principal contact at Imco General Construction Company  
 17 during the early phase of the project?  
 18 A. That's correct.  
 19 Q. And does it outline an agenda for the meeting?  
 20 A. Yes, it does.  
 21 Q. Turning I believe to Exhibit 69, is that in fact  
 22 the actual agenda of the meeting?  
 23 A. It appears to be.  
 24 Q. Is there -- go back for a moment. Did you attend  
 25 the preconstruction meeting, as you recall?

1 recall any of those requirements?  
 2 A. No, I do not.  
 3 Q. Do you recall that there were such requirements?  
 4 A. No, not specifically.  
 5 Q. During the project, what was your understanding as  
 6 to who the party was that would have the requirement of  
 7 coordinating with Olympic Pipe Line or any other underground  
 8 utility owner, if the construction activity was going to  
 9 relate to their utility?  
 10 A. That would have been the contractor.  
 11 Q. During the project, did you play any role in  
 12 coordinating with Olympic Pipe Line Company or any other  
 13 utility?  
 14 A. Not that I recall.  
 15 Q. Do you ever recall calling to the contractor's  
 16 attention its obligation to coordinate with the underground  
 17 utilities?  
 18 A. Not specifically.  
 19 Q. Do you recall in any general way a discussion of  
 20 that sort with the contractor at any point in the project?  
 21 A. No.  
 22 Q. Is there an attendance list attached to Exhibit  
 23 69?  
 24 A. Yes, there is.  
 25 Q. You said just a moment ago that you expected you

1 A. I don't specifically recall but I probably did,  
 2 that would be my role.  
 3 Q. Do you recall who else attended the meeting? Or  
 4 do you have no recollection of the meeting at all?  
 5 A. I don't remember the meeting specifically, no.  
 6 Q. Is one of the agenda items concerned with Olympic  
 7 Pipe Line?  
 8 A. Yes, it is.  
 9 Q. And what does the section concerning Olympic Pipe  
 10 Line say?  
 11 A. Contact person, phone number, emergency phone  
 12 number, requirements for protection of pipeline,  
 13 notification when working and pipeline right-of-way.  
 14 Q. Do you recall those points being discussed at a  
 15 preconstruction meeting?  
 16 A. No, I don't.  
 17 Q. Do you recall the requirements of Olympic Pipe  
 18 Line Company in respect to notification if work was  
 19 occurring along its right-of-way?  
 20 A. No, not specifically.  
 21 Q. Do you know whether such documents were at hand  
 22 during the project time? That is, whether Olympic Pipe Line  
 23 Company's requirements in respect to coordination with it  
 24 whenever there was construction or digging near its  
 25 pipeline, whether those requirements were available; do you

1 would have attended that meeting, but are you listed on the  
 2 attendance sheet signatures?  
 3 A. No, I'm not.  
 4 Q. Might you, or you have already testified that you  
 5 probably have been there. Is it possible you were there and  
 6 did not sign the attendance list?  
 7 A. Yes, it's very likely.  
 8 Q. You have now gone back a page and are looking at  
 9 some notes that are attached to the copy of the meeting  
 10 agenda as a part of Exhibit 69. Have you seen those notes  
 11 before?  
 12 A. Those are my notes.  
 13 Q. And to what do they refer?  
 14 A. There's a discussion about USWest and who got  
 15 billed. There's a note here about city providing a trench,  
 16 I don't know what for, it doesn't say. There's a note that  
 17 says Olympic has delivered a package to Imco, it doesn't say  
 18 what the package was.  
 19 Q. Do you have any recollection as to what that  
 20 package was?  
 21 A. No, I do not.  
 22 Q. Do you recall whether or not you saw the package  
 23 at the time?  
 24 A. No, I do not.  
 25 Q. You just note that Olympic has delivered a package

1 to Imco who were the general contractors?  
 2 A. Yes.  
 3 Q. Do you know whether those notes were written in  
 4 respect to the other documents with which they were provided  
 5 to us, that is, as a part of the preconstruction meeting?  
 6 A. Yes, I would say those were notes that I took  
 7 during that meeting.  
 8 Q. On the attendance list, there doesn't seem to be  
 9 any entry or signature of a person from, a representative of  
 10 Olympic Pipe Line. Would you have expected that an Olympic  
 11 Pipe Line Company representative was there given the note  
 12 that you have attached?  
 13 A. I don't know because I don't know when the package  
 14 was delivered.  
 15 Q. Turning to Exhibit 70, the next exhibit in order,  
 16 it's I will represent to you the face page of the project  
 17 manual. And the whole manual is an exhibit, if you would  
 18 like to look through it. But if you will turn to the next  
 19 page, there is a page from the project requirements section  
 20 of the manual and it's project requirement 14.  
 21 Is that the requirement with respect to the  
 22 contractor's obligation to coordinate its construction  
 23 activities with the underground utilities whose utilities  
 24 are located on or near the project site?  
 25 A. Yes, it is.

1 Barrett Consulting Group.  
 2 Q. And in conjunction with the partnering workshop,  
 3 do you recall seeing what has been marked as Exhibit 72, a  
 4 key personnel organization chart?  
 5 A. I don't specifically recall -- or I don't recall  
 6 this document.  
 7 Q. It has a profile that shows City of Bellingham,  
 8 Barrett Consulting Group, Imco General Construction Company,  
 9 and names, phone numbers, in boxes for each of those  
 10 organizations with lines drawn between some boxes in one  
 11 column, that is, the Imco General Construction Company  
 12 column and Barrett construction company -- or Barrett  
 13 Consulting Group, and the City of Bellingham; is that  
 14 correct?  
 15 A. Yes, that's correct.  
 16 Q. And do you see your name in that chart.  
 17 organization chart?  
 18 A. Yes, I do.  
 19 Q. Is it generally correct in showing the  
 20 relationships that you had, that is, the lines drawn from  
 21 one of the boxes to another?  
 22 A. Yes, this would be a typical arrangement for a  
 23 construction project like this.  
 24 Q. And it shows that your coordination with Imco  
 25 General Construction Company is to be with Chris Hart, the

1 Q. And what does it say about Olympic Pipe Line  
 2 Company?  
 3 A. Buried waterlines owned and operated by the Owner,  
 4 a buried petroleum products pipeline owned and operated by  
 5 Olympic Pipe Line Company, and a buried telephone conductor  
 6 conduit owned and operated by U. S. West Communications are  
 7 located within the construction area. The Contractor shall  
 8 perform any and all work required to protect the existing  
 9 utilities from damage and to maintain the existing utilities  
 10 in continuous operation -- or service, pardon me.  
 11 Q. Do you recall having any discussion at any time  
 12 during the project concerning that project requirement with  
 13 representatives of Imco Construction Company?  
 14 A. Other than what was mentioned in the agenda for  
 15 the preconstruction, no.  
 16 Q. After the -- strike that. Do you recall there  
 17 being a partnering workshop with respect to the Dakin-Yew  
 18 Pump Station project?  
 19 A. Yes, I do.  
 20 Q. Did you attend the partnering workshop?  
 21 A. Yes, I did.  
 22 Q. And what was the purpose of the partnering  
 23 workshop?  
 24 A. The purpose of the partnering workshop was to  
 25 develop a relationship between the contractor, the city, and

1 principal line of communication, and as you have testified  
 2 earlier, with Wan Huang in the city; is that correct?  
 3 A. That's correct.  
 4 Q. And that you are in the line of communication  
 5 within Barrett construction company between Dirk Van Woerden  
 6 who was the overall manager of the project, as I understand  
 7 it, and Tom Franklin who is the inspector on the site; is  
 8 that correct?  
 9 A. That's correct.  
 10 Q. What was your understanding with respect to Tom  
 11 Franklin's role in respect to the City of Bellingham on that  
 12 project?  
 13 A. I don't understand the question.  
 14 Q. Was Mr. Franklin playing the role of being the  
 15 city inspector on the site under the arrangement that was in  
 16 place in the contracts between the city and Barrett  
 17 construction or Barrett Consulting Group?  
 18 A. Mr. Franklin was Barrett Consulting Group's  
 19 inspector. Barrett Consulting Group had a contract with the  
 20 City of Bellingham to provide those services.  
 21 Q. So then could it be said that Tom Franklin served  
 22 as the city's inspector on the site with respect to that  
 23 project?  
 24 A. I don't know if I could answer it that way.  
 25 Q. Turning to Exhibit 73, tell us whether that's a

1 document that you wrote?  
 2 A. It appears to be, yes.  
 3 MR. SCANLAN: I'm sorry, which exhibit?  
 4 MR. ALLEN: 73.  
 5 Q. Do you recall the circumstance that caused you to  
 6 write that short letter?  
 7 A. Not specifically, no.  
 8 Q. Generally, do you have a recollection?  
 9 A. No.  
 10 Q. What the issue was?  
 11 A. No.  
 12 Q. Turning to Exhibit 74, is that a document that you  
 13 have seen before?  
 14 A. Yes.  
 15 Q. Going to the cover sheet which says Serial Letter  
 16 No. 8, what is intended by that reference "serial letter,"  
 17 if you could tell us?  
 18 A. We used the serial letter method to have a  
 19 continuous numbering of our correspondence.  
 20 Q. So --  
 21 A. So this would have been the eighth letter in a  
 22 series.  
 23 Q. And a series concerning a given subject or just  
 24 concerning the project overall?  
 25 A. Project in general.

1 A. I do not see Olympic listed as an attendee.  
 2 Q. Who kept the minutes of the weekly project  
 3 meetings?  
 4 A. These minutes were kept by Imco.  
 5 Q. Do you know who wrote them within the Imco  
 6 organization?  
 7 A. No, I do not.  
 8 Q. Did you routinely review them when they were  
 9 received at Barrett Consulting Group?  
 10 A. I would have looked through them, yes, and then  
 11 filed them.  
 12 Q. Do you recall any discussions of the effort to  
 13 locate the buried underground utilities on the project site  
 14 during any of those meetings?  
 15 A. No.  
 16 Q. I will ask you to look at the minutes of the  
 17 meeting of October 29 and tell me whether or not there is a  
 18 reference there that all utility locators have been to the  
 19 site.  
 20 MR. VERWOLF: What date is this?  
 21 MR. ALLEN: March 29.  
 22 THE WITNESS: Oh, March 29.  
 23 MR. ALLEN: Excuse me, did I say October?  
 24 THE WITNESS: October.  
 25 MR. ALLEN: March 29.

1 Q. So it would have been the eighth letter you would  
 2 have written to the contractor concerning the project?  
 3 A. Yes.  
 4 Q. That's the method, okay. And concerning what  
 5 subjects?  
 6 A. In the case of this letter?  
 7 Q. Yes?  
 8 A. The letter appears to address questions that were  
 9 raised at a meeting on February 18, 1994. And it's on a  
 10 number of different topics.  
 11 Q. Were those topics prompted, according to the  
 12 letter, by matters that were raised in a weekly project  
 13 meeting?  
 14 A. It doesn't say that specifically. It says a  
 15 meeting on February 18, it was probably a weekly meeting.  
 16 Q. Handing you what has been marked as Exhibit 103  
 17 which is a group of documents, take a moment and look  
 18 through them and I'm going to ask you whether you have seen  
 19 these documents before in your role in the project, and  
 20 whether you would have routinely seen these documents which  
 21 are minutes of the weekly project meetings?  
 22 A. Yes.  
 23 Q. First I will ask you to look through those and  
 24 tell me whether any employer representative of Olympic Pipe  
 25 Line Company attended any of the weekly project meetings?

1 MR. SCANLAN: And your question was what again?  
 2 MR. ALLEN: whether all utility locators have been  
 3 to the site.  
 4 MR. SCANLAN: Thank you.  
 5 A. There is a reference to that, yes.  
 6 Q. When you reviewed those minutes, can you tell us  
 7 what you understood by that reference?  
 8 MR. SCANLAN: Object as to form, do you mean  
 9 understood then or understood now?  
 10 Q. Did you have an understanding at the time as to  
 11 what that meant, and do you have that understanding now?  
 12 A. I don't recall this specific item from that time.  
 13 Q. And reading it now, what is your understanding of  
 14 that reference?  
 15 A. The sentence says all utility locators have been  
 16 to site. I would assume that's what that means.  
 17 Q. Does that mean that all the utilities have been  
 18 located on the site?  
 19 A. Not necessarily.  
 20 Q. Do you have any specific understanding of what was  
 21 done to locate the Olympic Pipe Line Company's pipeline in  
 22 the position that it's shown on Exhibit 149, the site plan?  
 23 A. I believe the pipeline was potholed to locate it  
 24 and the location of those potholes would have been picked up  
 25 in the survey.

1 Q. Are there any indications on that exhibit of the  
 2 location of potholes or the potholing effort?  
 3 A. Yes, there are.  
 4 Q. And just using a black pen, would you put a circle  
 5 around those locations?  
 6 A. (Witness complies.)  
 7 Q. What are the references that you see on the  
 8 exhibit, the site plan?  
 9 A. There's a circle with an X in it with an elevation  
 10 next to it.  
 11 Q. And what does that communicate to you?  
 12 A. That would tell me that that was the horizontal  
 13 location of the pipeline in an elevation to probably the top  
 14 of the pipeline.  
 15 Q. And what is the elevation number that's shown?  
 16 A. There's two numbers. The north number is 256.0.  
 17 The south number is 253 point something, I can't read the  
 18 last, the tenth of a foot, I can't read that.  
 19 Q. Could that number be 263 rather than 253?  
 20 A. Yes, it could.  
 21 Q. On the south number?  
 22 A. Yes, it could. There's a contour line right  
 23 there, it's hard to read the number.  
 24 Q. Did you have an understanding of whether the  
 25 elevation of the grade of the Olympic Pipe Line increased or

1 should be in the same volume of exhibits.  
 2 A. Yes.  
 3 Q. Do you see a reference to the same elevation?  
 4 A. Yes.  
 5 Q. Then what does that indicate in respect to the  
 6 position of the pipeline or the tendency of the pipeline to  
 7 ascend or descend as it transits the construction site?  
 8 A. The southern elevation is 253.6 inch and the  
 9 northern elevation was 256. So it appears to be descending  
 10 in a southerly direction.  
 11 Q. Similarly, are any elevations shown for the  
 12 16-inch waterline that existed in the area of the  
 13 construction project?  
 14 A. Not that I see.  
 15 Q. Do you know whether there was any problem that  
 16 arose during the construction project concerning the  
 17 accuracy of the location of the 16-inch waterline?  
 18 A. Not that I recall.  
 19 Q. And you don't presently recall any, or do you  
 20 presently recall any conversations during the time of the  
 21 project concerning the accuracy of the survey that was  
 22 furnished to the contractor in respect to either the 16-inch  
 23 waterline's location or the Olympic Pipe Line Company's  
 24 pipeline location?  
 25 A. No.

1 decreased as the pipeline transited the construction site  
 2 from north to south?  
 3 A. No.  
 4 Q. You don't know whether it was tending up or down?  
 5 A. No, I do not.  
 6 Q. Did you ever learn that information during the  
 7 project?  
 8 A. Not that I recall.  
 9 Q. If the southernmost elevation is correct, or my  
 10 characterization of it as 263 is correct, and the elevation  
 11 at the north is 256, would that communicate to you that it  
 12 was on an ascending grade as it went through the  
 13 construction site?  
 14 MR. SCANLAN: Object as to form.  
 15 Q. You can go ahead and answer.  
 16 A. It appears to rise in elevation from north to  
 17 south.  
 18 MR. WEIGEL: Off record for a minute here.  
 19 THE VIDEOGRAPHER: Going off the record, the time  
 20 is approximately 10:57 a.m.  
 21 (Discussion held off the record.)  
 22 THE VIDEOGRAPHER: Back on the record, the time is  
 23 approximately 10:58 a.m.  
 24 Q. We have had the record set straight here, that is  
 25 a 253 at the south. And if you turn to Exhibit 115 which

1 Q. On the organization chart that was indicated  
 2 earlier, there is another name I didn't ask you about, a  
 3 Barrett Consulting Group employee, Bob Morley. Do you  
 4 recall what his role was in the job?  
 5 A. Bob was our senior inspector and would have  
 6 provided consultation on inspection matters during the  
 7 project.  
 8 Q. And am I correct in recalling that he is no longer  
 9 employed at Barrett Consulting Group or Earth Tech?  
 10 A. Yes, that's correct.  
 11 Q. Has he retired or gone to other employment?  
 12 A. I believe Bob is retired.  
 13 Q. Do you know where he is, where he's residing at  
 14 this time, do you maintain contact?  
 15 A. I don't know where he is right now, I haven't  
 16 talked to him for awhile. He was living in West Seattle.  
 17 Q. Handing you what has been marked as Exhibit 77,  
 18 and again I'll ask you if that's a document you have seen  
 19 before?  
 20 A. I don't recall it specifically but it's from me,  
 21 so it must be mine.  
 22 Q. Do you recall the subject matter that it  
 23 discusses?  
 24 A. It discusses pending changes to the project.  
 25 Q. And what are those changes?

1 A. Revised vertical alignment of the 72-inch pipeline  
2 to clear the 16-inch waterline, revise alignment of the  
3 24-inch Dakin-Yew Pump Station discharge so it does not  
4 cross the 72-inch pipeline, revise manifold vault to prevent  
5 flotation and infiltration due to high groundwater, revise  
6 alignment of 60-inch pipeline in the pipeline corridor to  
7 avoid conflict with actual location of existing pipelines.

8 Q. Do you have a recollection now of any of those  
9 redesign issues that arose back in 1994?

10 A. No, I don't.

11 Q. Can you tell us whether that document refreshes  
12 your recollection as to redesign projects that occurred in  
13 the Dakin-Yew project?

14 A. No.

15 Q. Do you recall anything, any redesign of the  
16 72-inch pipeline's vertical alignment?

17 A. No, I don't.

18 Q. When it says in that document that there are  
19 changes currently under design, who would have been  
20 undertaking that, the design of those changes?

21 A. For this project, the design effort would have  
22 been managed by George Nordby.

23 Q. Then would it be Mr. Nordby or someone assisting  
24 him who would have performed those redesigns?

25 A. Yes.

1 Q. The second of the items is revise alignment of the  
2 24-inch Dakin-Yew station discharge so it does not cross the  
3 72-inch pipeline. Do you recall that redesign effort?

4 A. I don't recall it from that time. I was aware of  
5 it later.

6 Q. And when you say you were aware of it later, in  
7 becoming aware of it later, did you become aware of it only  
8 after the June 10, 1999 incident?

9 A. Yes.

10 Q. Has it been the subject of investigators'  
11 questions to you both during the NTSB investigation and the  
12 later government investigation?

13 A. Yes.

14 Q. Has it been a matter of discussion within Earth  
15 Tech since the June 10, 1999 incident?

16 A. Yes.

17 Q. Who have you discussed that design change with  
18 within Earth Tech since the June 10, 1999 incident?

19 A. George Nordby.

20 Q. Anyone else?

21 A. Tom Franklin.

22 Q. And anyone else?

23 A. No.

24 Q. During those discussions, did you find out who it  
25 was that actually did the engineering redesign of the

1 24-inch to 16-inch -- the 24-inch discharge line  
2 intersection to the 16-inch existing waterline?

3 A. No.

4 Q. Did you go to the construction site at any time  
5 just in respect to this redesign effort?

6 A. Not that I recall.

7 Q. Did you ever see the construction site during the  
8 time that the 24-inch discharge line tie-in to the 16-inch  
9 line was under construction, was being dug?

10 A. I don't recall seeing that particular pipeline  
11 alignment, no.

12 Q. Do you recall seeing the excavation for the  
13 T-joint intersection between the 24-inch discharge line and  
14 the 16-inch line while that excavation was uncovered?

15 A. No.

16 Q. Do you recall or do you know the purpose of the  
17 redesign, why was it done?

18 A. I believe the redesign was done so that it didn't  
19 have to cross the 72-inch pipeline.

20 Q. At the time of the redesign effort, did you see  
21 drawings of the redesigned location and intersection of the  
22 24-inch discharge line with the 16-inch existing waterline?

23 A. I don't recall those drawings.

24 Q. Let's take a break, if we may, for a few minutes  
25 while we find the drawings.

1 THE VIDEOGRAPHER: Going off the record, the time  
2 is approximately 11:09 a.m.

3 (Deposition resumed after a short recess.)

4 (Exhibit No. 150 marked for identification.)

5 THE VIDEOGRAPHER: Back on the record, the time is  
6 approximately 11:17 a.m.

7 Q. Mr. Hatch, I've had what has been marked as  
8 Exhibit 103 placed in front of you, can you tell us what  
9 this document is?

10 A. This says Exhibit 150. This is a plan and profile  
11 for the 72-inch pipeline.

12 Q. And is that one of the pipelines that were to be  
13 installed as a part of the Dakin-Yew Pump Station project  
14 that crossed the right-of-way of the Olympic Pipe Line  
15 Company gasoline pipeline?

16 A. Yes.

17 Q. Is the Olympic Pipe Line Company pipeline location  
18 shown in Exhibit 150?

19 A. Yes, it is.

20 Q. First of all, tell us whether or not there are two  
21 or more separate parts shown on Exhibit 150, that is, plan  
22 view and elevation?

23 A. Yes, it has a plan and a profile.

24 Q. Is the location of the Olympic Pipe Line Company  
25 petroleum products pipeline shown on both the plan view and



1 the profile?  
 2 A. Yes, it is.  
 3 Q. Again taking that pink marker, would you mark it  
 4 on the plan view and on the profile view where it is shown?  
 5 A. (Witness complies.)  
 6 Q. Is the existing 16-inch waterline shown on either  
 7 the plan view or the profile view in respect to the 72-inch  
 8 waterline?  
 9 A. Yes, it is.  
 10 Q. And using the blue pen, would you show where the  
 11 existing 16-inch waterline is located?  
 12 A. (Witness complies.)  
 13 Q. Now you have indicated on the profile view the  
 14 location of the 16-inch waterline which is a blue ellipse;  
 15 is that correct?  
 16 A. Yes, that's correct.  
 17 Q. And the 16-inch petroleum pipeline is a pink  
 18 ellipse?  
 19 A. Yes.  
 20 Q. Does the profile location of the 16-inch pipeline  
 21 indicate it at the elevation that was shown on the site plan  
 22 we looked at earlier, and I was corrected to say that it was  
 23 253.6?  
 24 A. It seems to be in that general elevation, yes.  
 25 Q. I notice there's a -- is scale the proper

1 A. It appears to be about five feet.  
 2 Q. As I would see it, it's -- argue with you now a  
 3 little bit. Would you agree with me that it would be a foot  
 4 and a half from, a foot and a half from the top of the  
 5 pipeline to the 255 marker?  
 6 A. Yes, approximately.  
 7 MR. SCANLAN: Just so we're clear, counsel, by  
 8 saying from the top of the pipeline, you mean the petroleum  
 9 products pipeline?  
 10 Q. Pipeline, yes. And then it's about a three-foot  
 11 difference is what you're saying then, from the bottom of  
 12 the water pipeline to the Olympic Pipe Line as it's shown on  
 13 this plan?  
 14 A. Well, it's closer to 2 1/2 feet.  
 15 Q. Would you take a look at Exhibit 115, and I may  
 16 have it here. Here it is. Does this Exhibit 115, first I  
 17 will ask you if this is a document you have seen before  
 18 today?  
 19 A. Yes.  
 20 Q. And did you see it during the time of the project?  
 21 A. I don't recall whether I did or not.  
 22 Q. Does it show the relocated position of the  
 23 intersection between the 16-inch existing waterline and the  
 24 24-inch discharge line from the Dakin-Yew Pump Station?  
 25 A. Yes, it does.

1 reference -- series of numbers on the left-hand margin of  
 2 the profile on Exhibit 150 showing in ascending order 240,  
 3 245, 250 and so forth; do you see those?  
 4 A. Yes, I do.  
 5 Q. Is there a different scale in play when we move  
 6 across to the locations where you have marked the Olympic  
 7 Pipe Line and the 16-inch waterline?  
 8 A. It's not a change in scale, it's a shift in how  
 9 the picture is drawn. They are shifted relative to each  
 10 other vertically.  
 11 Q. So that between, if we look at the numbers that  
 12 are adjacent to the locations where you have marked the  
 13 16-inch pipeline and the 16-inch waterline, between the  
 14 crosshatched lines or the dotted lines going from the bottom  
 15 up, is 250 to 255. And then one goes three dotted lines  
 16 further up the page to get to 260; is that correct?  
 17 A. Yes, those represent, the 250 and 255 represent  
 18 elevations to the right. There's a vertical line that's a  
 19 heavy line that's a split between the elevations. So the  
 20 250 and 255 represent elevations to the right. The 260 and  
 21 265 represent elevations to the left.  
 22 Q. And then approximately what would the difference  
 23 in height at the location of the 72-inch pipeline be between  
 24 the top of the Olympic Pipe Line and the bottom of the  
 25 16-inch waterline as shown on this profile, Exhibit 150?

1 Q. Did you see any drawings of the design change at  
 2 the time the design change occurred?  
 3 A. Not that I recall.  
 4 Q. It's going to take me a few minutes to look for  
 5 the letter here, we'll go off the record.  
 6 THE VIDEOGRAPHER: Off the record, the time is  
 7 approximately 11:27 a.m.  
 8 (Discussion held off the record.)  
 9 THE VIDEOGRAPHER: Back on the record, the time is  
 10 approximately 11:30 a.m.  
 11 Q. Mr. Hatch, I'm handing you what has been marked  
 12 Exhibit 89 in Mr. Franklin's deposition and ask you if this  
 13 is a document you have reviewed since the June 10, 1999  
 14 incident?  
 15 A. No, it isn't.  
 16 Q. Take a moment and look at it, is it a document you  
 17 recall?  
 18 A. No, I don't recall the document itself.  
 19 Q. Did you write it?  
 20 A. Yes, I did.  
 21 Q. And do you recall the subject matter?  
 22 A. The subject has to do with the discharge  
 23 connection from the pump station.  
 24 Q. Does it relate to the coordination that's required  
 25 between the city and the contractor in effecting the tie-in

1 from the 24-inch discharge line to the 16-inch existing  
 2 waterline, the Dakin-Yew line?  
 3 A. Yes, it does.  
 4 Q. Can you tell me from the city's perspective what  
 5 had to be done in order to allow that placement of the  
 6 T-joint in the 16-inch waterline?  
 7 MR. SCANLAN: Object to the form of the question,  
 8 calls for speculation.  
 9 A. Well, it appears that the city needed to operate  
 10 some valves and close down part of their system.  
 11 Q. So is it your understanding then that a part of  
 12 the city's water system would have to be shut down or  
 13 partially shut down in order to accomplish the placement of  
 14 the T?  
 15 A. Yes.  
 16 Q. Do you have any recollection of the timing of that  
 17 shutdown?  
 18 A. No, I don't.  
 19 Q. Do you recall any discussions with the contractor  
 20 or persons at the city with respect to the shutdown of the  
 21 16-inch Dakin-Yew pipeline in order to accomplish the  
 22 placement of the T-joint?  
 23 A. No, I don't.  
 24 Q. Did you play any role in the coordination of the  
 25 shutdown of the 16-inch waterline?

1 attendees at that meeting?  
 2 A. Yes, I do.  
 3 Q. Do you see any reference there to the placement of  
 4 the T-joint in the 16-inch waterline?  
 5 A. Yes, I do.  
 6 Q. And is there any reference there to the change in  
 7 the schedule for that?  
 8 A. Yes, it does say that it will be postponed to the  
 9 seventh of July, I don't know from what date.  
 10 Q. So you don't know whether or not it was originally  
 11 scheduled to be accomplished in May or June or sometime  
 12 before July 7?  
 13 A. No.  
 14 Q. Do you know whether or not the placement of the  
 15 T-joint in the 16-inch waterline actually occurred on July  
 16 7?  
 17 A. No, I don't.  
 18 Q. Have you heard any discussion of the actual date  
 19 that occurred, since the event?  
 20 A. No.  
 21 Q. Or since the incident of June 10, 1999?  
 22 A. No.  
 23 Q. Take another look here?  
 24 A. Okay.  
 25 Q. Turning to the next weekly minute, it's the minute

1 A. I don't remember specific roles. I obviously  
 2 wrote this memo having to do with that operation.  
 3 Q. Can you take a moment to look at the memo and  
 4 synopsize for us what the city had to do in order to shut  
 5 down the 16-inch line.  
 6 A. Well, the city had to close some valves on the  
 7 pipeline and they possibly had to close down a portion of a  
 8 system adjacent to this in order to stop flow while the  
 9 contractor installed the T. It appears to be some concern  
 10 about fire protection during that time, too, because the  
 11 pipeline would have been shut off.  
 12 Q. Do you have any recollection as to whether the  
 13 shutdown of the 16-inch waterline and the placement of the  
 14 T-joint in the 16-inch waterline occurred on the date  
 15 originally scheduled or whether there were shifts in  
 16 scheduling?  
 17 A. No, I don't recall what date the actual connection  
 18 occurred.  
 19 Q. Do you recall whether there were shifts in  
 20 schedule dates?  
 21 A. No, I don't.  
 22 Q. Handing you what has been marked as Exhibit 103,  
 23 this is again the weekly project notes. And I'm referring  
 24 you to the minutes of the weekly project meeting for June  
 25 21, 1994. Do you see that you are listed as one of the

1 of June 28, the minute to the weekly project meeting, again  
 2 part of the same exhibit. There's a reference to John and I  
 3 see you're the only John among the persons listed, handing  
 4 out something with respect to building repair. Do you  
 5 recall the circumstances that relate to that entry?  
 6 A. I believe there was some damage done to the floor  
 7 inside the building during construction and this was  
 8 instructions for how to repair that damage.  
 9 Q. Do you recall whether you handed out a direction  
 10 to the contractor at that meeting to immediately repair the  
 11 damage to the structure of the pump station building?  
 12 A. No, I don't.  
 13 (Exhibit No. 151 marked for identification.)  
 14 Q. Mr. Hatch, would you take a moment and look at  
 15 this document and then I will ask you whether you have seen  
 16 that before?  
 17 A. I don't recall this letter.  
 18 Q. Do you have any reason to believe that you did not  
 19 receive this letter during the time that's shown on the  
 20 letter as the date of the letter?  
 21 A. No.  
 22 Q. Would you expect that if this document was in  
 23 Earth Tech's records with respect to the Dakin-Yew project,  
 24 you did receive and read the letter?  
 25 A. Yes.

1 Q. This is a letter from Imco General Construction  
 2 Company; is that correct?  
 3 A. Yes, it is.  
 4 Q. And field Serial Letter No. 5, does that have any  
 5 specific meaning?  
 6 A. That would be Imco's numbering system for their  
 7 serial letter -- for their letters.  
 8 Q. Sort of corresponding to the Serial Letter No. 8  
 9 that we saw in a reference from one of your earlier letters?  
 10 A. Yes.  
 11 Q. And this letter in fact does respond to your  
 12 Serial Letter No. 14; is that correct?  
 13 A. Yes, it does.  
 14 Q. Okay, we'll look at that in a moment but I want  
 15 you to look at the first paragraph of the letter and see if  
 16 there's any statement there concerning the location of the  
 17 16-inch waterline at the point where the 16-inch waterline  
 18 crosses under the 72-inch pipeline?  
 19 A. Yes, there is.  
 20 Q. And does it indicate a problem with the vertical  
 21 alignment as shown in the plans for the project?  
 22 A. It says that the 16-inch line was found to be  
 23 lower than shown on the plans.  
 24 Q. If we go back to Exhibit 150 for a minute, which I  
 25 think you still have in front of you?

1 A. Okay.  
 2 Q. Does it appear that the Olympic Pipe Line is shown  
 3 at an elevation of about 253.6?  
 4 A. Yes.  
 5 Q. And from there to the dotted line above where it  
 6 says 255, would that indicate about a foot and a half  
 7 difference?  
 8 A. Yes, it would.  
 9 Q. And then the distance in the three next  
 10 crosshatched lines is five feet overall; is it not?  
 11 A. The distance between the horizontal dotted lines  
 12 is five feet.  
 13 Q. If we go up three horizontal dotted lines, do we  
 14 get to 260, from 255?  
 15 A. No, no, you do not.  
 16 Q. Oh, okay. Am I misreading that, and I obviously  
 17 am. Can you help me out in that respect?  
 18 A. Yeah, as I said earlier, the numbers 250 and 255  
 19 represent the vertical elevations, represent elevations to  
 20 the right of that solid vertical line.  
 21 Q. Okay, and it's 260 then that's on the right-hand  
 22 margin?  
 23 A. Yes.  
 24 Q. And not the 260 that's vertically above?  
 25 A. The 260 that's vertically above represents the

1 A. Oh, I'm sorry, yes, I do.  
 2 Q. I think you told us that it looked like the  
 3 16-inch waterline as shown on the plans is something in the  
 4 range of four and a half feet from the Olympic Pipe Line  
 5 pipeline?  
 6 A. The 16-inch waterline?  
 7 Q. Waterline, yes, from the Olympic Pipe Line  
 8 petroleum products pipeline?  
 9 A. No, I didn't say that.  
 10 Q. Take another look then at this exhibit which is  
 11 150?  
 12 A. Right.  
 13 Q. You have marked in the profile the location of the  
 14 16-inch waterline and you have marked in the profile the  
 15 location of the Olympic Pipe Line petroleum products  
 16 pipeline?  
 17 A. Yes.  
 18 Q. And would you tell me what the difference is  
 19 between the top of the, or the distance is from the top of  
 20 the Olympic Pipe Line pipeline as shown on this profile to  
 21 the bottom of the waterline?  
 22 A. Which waterline?  
 23 Q. The 16-inch waterline?  
 24 A. It appears to be about six feet.  
 25 Q. I think we'll go through this again?

1 elevations to the left.  
 2 Q. Okay, okay, I see it.  
 3 THE VIDEOGRAPHER: Excuse me, we have to go off  
 4 this tape in about three minutes to switch.  
 5 MR. ALLEN: Okay, we'll probably take a break at  
 6 that point.  
 7 Q. But in any case, according to Exhibit 151, the  
 8 pipeline according to Mr. Krakenberg from Imco is lower than  
 9 shown on the plans?  
 10 MR. WEIGEL: Object to the form of the question.  
 11 It's not clear which plans you're referring to in field  
 12 Serial Letter No. 5. Apart from that, I'm not sure if it's  
 13 referring to the revised plan or the original plan.  
 14 Q. Can you answer the question.  
 15 A. Serial Letter No. 5 says that the 16-inch line was  
 16 found to be lower than shown on the plans. In reading it  
 17 again, it doesn't say which 16-inch line, there was two of  
 18 them.  
 19 Q. And are there two of them that are in the way of  
 20 the 72-inch line?  
 21 A. No, according to Exhibit 150, the 16-inch  
 22 waterline is in the way.  
 23 Q. And in the same paragraph, when it discusses  
 24 shutting down the 16-inch line, is that reference to the  
 25 16-inch waterline?

1 A. I would assume it is.  
 2 Q. Would you assume that all the references to the  
 3 16-inch line in that paragraph are the 16-inch waterline?  
 4 A. Yes. Having read that, yes, I would assume that  
 5 that's the case.  
 6 Q. Had you asked Imco Construction Company to make an  
 7 allowance in the project cost to reflect a savings from the  
 8 relocation of the 24-inch discharge line to the tie-in to  
 9 the 16-inch existing waterline?  
 10 A. I don't recall making that request.  
 11 Q. Is it a fair reading of Exhibit 151 to conclude  
 12 that Imco General Construction Company in any case is not  
 13 going to make any allowance, that is, decrease in project  
 14 costs owing to the relocation of the 24-inch discharge line  
 15 tie-in into the 16-inch waterline?  
 16 A. It appears that their position is that, well,  
 17 basically they said all things considered, these changes  
 18 equal out between the benefits and the impacts. So I would  
 19 say that they were saying it was a no change -- no-cost  
 20 change.  
 21 Q. And does Imco say that the relocation in the  
 22 vertical alignment of the 72-inch line necessitated the  
 23 redesign of the location of the T-joint placement in the  
 24 16-inch existing waterline?  
 25 A. Yes.

1  
 2  
 3 AFTERNOON SESSION  
 4 1:11 p.m.  
 5  
 6 THE VIDEOGRAPHER: This is the beginning of tape  
 7 number two in the deposition of John Hatch, the time is  
 8 approximately 1:11 p.m.  
 9  
 10 EXAMINATION (Cont'd)  
 11 BY MR. ALLEN:  
 12 Q. Mr. Hatch, would you take another look at Exhibit  
 13 89. I think the exhibit book is in front of you there. Is  
 14 this a document you authored?  
 15 A. Yes, it is.  
 16 Q. And do you recall it?  
 17 A. No, I do not.  
 18 Q. Is that your signature that's shown on the upper  
 19 part of the letter?  
 20 A. Yes, it is.  
 21 Q. And what is this communication?  
 22 A. This is a memorandum to Wan Huang, City of  
 23 Bellingham, regarding the pump station discharge connection.  
 24 Q. And this is the discharge connection between the  
 25 existing 16-inch Dakin-Yew waterline and the 24-inch

1 Q. Okay, no further questions at this point. We'll  
 2 take a break for lunch and resume afterward.  
 3 MR. SCANLAN: You're not saying you are done?  
 4 MR. ALLEN: I'm not done.  
 5 THE VIDEOGRAPHER: This is the end of tape number  
 6 one in the deposition of John Hatch, the time is  
 7 approximately 11:51 a.m.  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25

1 discharge line that comes out of the south side of the  
 2 Dakin-Yew Pump Station; is that correct?  
 3 A. Yes.  
 4 Q. Is there any indication as to when that junction  
 5 was to be made, that is, the T section put in the 16-inch  
 6 waterline by the contractor Imco at the time this memorandum  
 7 was written on June 16, 1994?  
 8 A. Yes.  
 9 Q. And what does it indicate?  
 10 A. It says that Imco plans to install a connection on  
 11 July 7, 1994.  
 12 Q. Okay, and is the purpose of this letter to advise  
 13 the city about the timing of shutdown of the 16-inch  
 14 waterline and the necessary coordination for putting the  
 15 T-joint in the 16-inch waterline?  
 16 A. Yes.  
 17 Q. And we have discussed that earlier, as I recall?  
 18 A. That's correct.  
 19 Q. Do you see your statement that the discussion will  
 20 be made on July 5 as to when the work can be performed; can  
 21 you tell me what that means?  
 22 A. No, nothing, I can't add anything to what the  
 23 statement says.  
 24 Q. But it appears that at the time this was written  
 25 there was going to be a discussion on July 5; is that

Page 65

1 correct?  
 2 A. Yes.  
 3 Q. And the exact scheduling of that work would then  
 4 be determined at that time; is that correct?  
 5 A. Yes, it says when the work would be performed  
 6 during the day or at night, yes.  
 7 Q. Do you recall that there was work in that time  
 8 period of the project at night?  
 9 A. I believe Imco was doing some nighttime work, yes,  
 10 I don't recall specifics.  
 11 Q. What were Mr. Franklin's usual working hours on  
 12 the project?  
 13 A. Well, he worked during the day, I don't remember  
 14 exactly when he began and ended.  
 15 Q. If night work were going on on the project, who  
 16 was the inspector for the night work? First, was there an  
 17 inspector for night work?  
 18 A. It would have depended on what was going on. If  
 19 there was an inspector on site, it would have been Tom.  
 20 Q. Then are you telling me that you don't recall  
 21 anyone else being employed as an on-site inspector when  
 22 there were long shifts or second shifts on the project other  
 23 than Mr. Franklin who was the day shift inspector?  
 24 A. No, I don't recall that.  
 25 Q. Would you turn to the next exhibit, 90. Do you

Page 66

1 recall this memorandum?  
 2 A. No.  
 3 Q. And again, is this a memorandum that you authored  
 4 and is that your signature on the upper part of the page?  
 5 A. Yes.  
 6 Q. The "From" line?  
 7 A. Yes.  
 8 Q. Do you know what this is in regard to, this  
 9 memorandum?  
 10 A. Yeah, it has to do with working a second shift to  
 11 install the pipelines that went to the reservoir, or in the  
 12 direction of the reservoir.  
 13 Q. Does it outline a requirement that where there is  
 14 an excavation for laying pipe that there not be any backfill  
 15 until the pipe has been inspected by your inspector?  
 16 A. Yes.  
 17 Q. Would that have been a condition throughout the  
 18 project that backfilling not occur until pipeline put in  
 19 trenches had been inspected?  
 20 A. Yes.  
 21 Q. Would you look at Exhibit 91. Again is this a  
 22 document that you authored?  
 23 A. Yes, it is.  
 24 Q. Do you recall the circumstances which led to its  
 25 being written?

Page 67

1 A. No, I do not.  
 2 Q. Do you recall -- take a moment to look through it.  
 3 A. Okay.  
 4 Q. Is it fair to say that this document reflects that  
 5 some serious structural damage was done to the Dakin-Yew  
 6 Pump Station by a demolition effort undertaken by Imco  
 7 Construction Company?  
 8 A. No, the damage occurred in the water treatment  
 9 plant.  
 10 Q. Oh, excuse me, the water treatment plant, all  
 11 right. Otherwise, is that statement correct?  
 12 A. Yes.  
 13 Q. And is this letter a direction to Imco to repair,  
 14 that is, remedy the conditions caused by the demolition  
 15 work?  
 16 A. Yes, it is.  
 17 Q. And was it a direction that the remedial work  
 18 commence immediately?  
 19 A. Yes.  
 20 Q. Look at Exhibit 92. Again, is this a document  
 21 that you wrote, a memorandum that you wrote?  
 22 A. Yes, it is.  
 23 Q. Do you have any recollection of the circumstances  
 24 under which it was written?  
 25 A. No.

Page 68

1 Q. Would you look at Exhibit 116. Is this a document  
 2 you have seen before?  
 3 A. I don't recall it.  
 4 Q. Do you recall our discussion this morning  
 5 concerning a redesign of the 24-inch discharge line from the  
 6 Dakin-Yew station and its connection with the 16-inch  
 7 waterline?  
 8 A. Yes, I do.  
 9 Q. And do you recall our discussing a letter where  
 10 you indicated that design changes were being accomplished in  
 11 respect to that intersection of the 16-inch waterline and  
 12 the 24-inch discharge line?  
 13 A. Yes.  
 14 Q. Would you take a look at Exhibit 116, just the  
 15 covering letter, and see if the design changes are being  
 16 forwarded to Imco General Construction Company in part by  
 17 this letter?  
 18 A. Yes.  
 19 Q. And the letter is dated what?  
 20 A. The letter is dated May 16, 1994.  
 21 Q. And are there sets of plans attached to Exhibit  
 22 116?  
 23 A. Yes, there are.  
 24 Q. In fact, they're listed in the fourth paragraph of  
 25 the letter; are they not?

1 A. Yes, they are.  
 2 Q. A number of revised drawings?  
 3 A. Yes.  
 4 Q. And they include C1 through C5 and a revised P1,  
 5 do they not?  
 6 A. Yes.  
 7 Q. Would you take a moment to look at those and tell  
 8 me if some of those plans reflect the change that had been  
 9 redesigned as to the location of the T-joint intersection of  
 10 the 16-inch waterline to 24-inch discharge line. And  
 11 attached to that document are some plans, and we may have to  
 12 find some of these documents in other places, but.  
 13 A. Yes, those drawings reflect the revision to the  
 14 24-inch discharge line.  
 15 Q. Was a copy of these revised drawings sent to  
 16 Olympic Pipe Line Company?  
 17 A. Oh, I don't know.  
 18 Q. Did your letter, does your letter indicate that  
 19 you sent copies to anyone other than the addressee at Imco  
 20 General Construction Company?  
 21 A. Yes.  
 22 Q. To whom did you send copies of these revised  
 23 drawings?  
 24 A. Wan Huang and Tom Franklin.  
 25 Q. Do you recall at the time having a conversation

1 A. This appears to relate to a pipeline that crossed,  
 2 the pipelines that crossed Hannah Creek.  
 3 Q. And was this additional survey work that was  
 4 carried out by Christenson Engineering Company?  
 5 A. Yes.  
 6 Q. Did you have a particular contact at Christenson  
 7 Engineering?  
 8 A. No one that I remember specifically.  
 9 Q. Have you had occasion to work with Christenson  
 10 Engineering since this project in 1994?  
 11 A. Not that I recall.  
 12 Q. Was Christenson Engineering the only surveyors  
 13 retained by Barrett Consulting Group in conjunction with the  
 14 Dakin-Yew project?  
 15 A. I don't know.  
 16 Q. Do you recall any other surveyors being employed  
 17 to do survey work on the project?  
 18 A. No, I don't.  
 19 Q. Would you look at Exhibit 88. Again is that a  
 20 memorandum that you authored?  
 21 A. Yes, it is.  
 22 Q. And it's your signature that's shown?  
 23 A. Yes.  
 24 Q. Do you recall the circumstances -- first, do you  
 25 recall this memorandum?

1 with anyone concerning coordination of these changes with  
 2 Olympic Pipe Line Company?  
 3 A. No, I do not.  
 4 Q. In the other course of your duties, would you have  
 5 had such a conversation with the Imco General Construction  
 6 Company representative with whom you were in touch as the  
 7 project went on?  
 8 A. Yes.  
 9 Q. Would you have relied on the Imco General  
 10 Construction Company representatives to then be in touch  
 11 with Olympic Pipe Line if coordination were needed?  
 12 A. I don't know.  
 13 Q. Who would you have expected would send Olympic  
 14 Pipe Line Company's company copies of these revised  
 15 drawings, if anyone would?  
 16 A. I probably would have expected Imco to coordinate  
 17 that.  
 18 Q. Do you know whether they did so or not?  
 19 A. No, I do not.  
 20 Q. Would you look at Exhibit 87.  
 21 A. Okay.  
 22 Q. Can you tell me what, first, is this a letter that  
 23 was addressed to you?  
 24 A. Yes, it is.  
 25 Q. Can you tell me what work this relates to?

1 A. No.  
 2 Q. And do you recall upon reading it, does it refresh  
 3 your recollection as to the circumstances that caused this  
 4 memorandum to be written?  
 5 A. It appears that this was written in response to  
 6 some work that Imco had done in Hannah Creek where they had  
 7 overexcavated the pipe trench.  
 8 Q. What is the purpose of the letter -- or the  
 9 memorandum?  
 10 A. It's to give them some instruction on how to  
 11 backfill and to tell them that they had taken unilateral  
 12 action in doing that overexcavation, and basically that they  
 13 weren't going to get paid for it.  
 14 Q. Would you take a look at Exhibit 115, I believe it  
 15 is, if you have that handy. I believe I asked you when we  
 16 looked at Exhibit 115 this morning whether you had seen that  
 17 document before today. And did you tell me you have no  
 18 recollection of having seen it or not?  
 19 A. No, I have seen this document.  
 20 Q. You have seen it?  
 21 A. Um-hum.  
 22 Q. And do you recall having seen that document in  
 23 1994?  
 24 A. No, I do not.  
 25 Q. But you had reference to this document since the

1 1999 incident at Bellingham?  
 2 A. Yes.  
 3 Q. Is the Olympic Pipe Line shown on that document?  
 4 A. Yes, it is.  
 5 Q. And someone, some witness before you has colored  
 6 it with a pink line; have they not?  
 7 A. Yes.  
 8 Q. And is the intersection of, that is, the T-joint  
 9 intersection of the 24-inch discharge line from the  
 10 Dakin-Yew Pump Station and the 16-inch Dakin-Yew waterline  
 11 shown?  
 12 A. Yes, it is.  
 13 Q. Is it fair to say that as shown on that plan the  
 14 T-joint between the 16-inch waterline and the 24-inch  
 15 discharge line is placed directly above the Olympic Pipe  
 16 Line petroleum pipeline?  
 17 A. Yes, as shown on the drawing, it is.  
 18 Q. Do you know whether that's an as-built drawing or  
 19 not?  
 20 A. No, I do not.  
 21 Q. Do you know anything of a, what I would call a  
 22 field change, being made with respect to a slight relocation  
 23 of that line from the position that's shown in this drawing?  
 24 A. No.  
 25 Q. I'll ask you to look at Exhibit 94, if you would.

1 A. No, I don't.  
 2 Q. Does the attached drawing show the location of the  
 3 Olympic Pipe Line petroleum products pipeline?  
 4 A. No, it does not.  
 5 Q. Do you have any recollection of the week in 1994  
 6 when that document Exhibit 94 was written?  
 7 A. No, I do not.  
 8 Q. Just, if you would take another quick look at it,  
 9 it appears that the date on the reply has been changed.  
 10 That is, the request seems to be dated October 7 and in fact  
 11 that's what the fax caption from the Dakin-Yew job site fax  
 12 shows at the top of the page.  
 13 MR. SCANLAN: Do you mean July 7?  
 14 Q. July 7. July 7, 1994 or 7/7/94. And at the  
 15 bottom, the reply appears to originally have been dated  
 16 7/10/94, and the ten has been struck through and a seven put  
 17 under it. Do you know who made that change?  
 18 MR. SCANLAN: Objection, calls for speculation.  
 19 He's already testified that he has never seen this document  
 20 before.  
 21 Q. If you can answer the question, please do so?  
 22 A. No, I don't.  
 23 Q. Would you look at Exhibit 98, Mr. Hatch. Again  
 24 I'll ask you if this is a letter you wrote?  
 25 A. Yes, it is.

1 Have you seen this document before?  
 2 A. I don't recall it.  
 3 Q. The first page, is it fair to say, are what appear  
 4 to be faxed memoranda which become a contract clarification  
 5 request?  
 6 A. Yes.  
 7 Q. Or interpretation request?  
 8 A. Yes.  
 9 Q. That's the title of the form, at least. And is  
 10 this a request for a slight change in the location of the  
 11 intersection of the placement of the T-joint in the 16-inch  
 12 waterline?  
 13 A. Yes, it is.  
 14 Q. Or if not of the -- strike that.  
 15 And what is the second page of that document which  
 16 I will represent to you comes from Earth Tech's files?  
 17 A. It appears to be a profile of the 24-inch  
 18 waterline discharge line from the pump station with a  
 19 centerline drawn in a different alignment than is shown on  
 20 the original drawing.  
 21 Q. And do you know, first, is that a Barrett  
 22 Consulting Group drawing?  
 23 A. Yes.  
 24 Q. And do you know who the engineer is that drew  
 25 that?

1 Q. Do you have any present recollection of the  
 2 circumstances that led you to write that letter?  
 3 A. Yes, I do.  
 4 Q. Okay, what was the situation?  
 5 A. Our inspection determined that some sections of  
 6 the large diameter pipe were out of round, out of tolerance,  
 7 and we relayed a method of repair.  
 8 Q. And did you receive a response to that letter from  
 9 Imco General Construction Company? And I'll refer you to  
 10 Exhibit 99 if you don't recall whether you received one or  
 11 not?  
 12 A. No, I don't recall.  
 13 Q. Does this reflect, does this refresh your  
 14 recollection by looking at Exhibit 99? Or the two letters  
 15 aren't connected?  
 16 A. No, I believe they're connected.  
 17 (Exhibit No. 152 marked for identification.)  
 18 MR. SCANLAN: Is that in the bundle that you gave  
 19 us?  
 20 MR. ALLEN: It's in the bundle.  
 21 MR. SCANLAN: Do you know what --  
 22 MR. ALLEN: It's the first document, believe it or  
 23 not. Or is it not?  
 24 MR. SCANLAN: Not --  
 25 MR. ALLEN: Oh, then it's not in the bundle I gave

1 you and it's my fault.  
 2 (Discussion held off the record.)  
 3 Q. Mr. Hatch, is that a letter -- or a memorandum  
 4 that you wrote?  
 5 A. Yes, it is.  
 6 Q. And it's to a Mr. William Bender; is that correct?  
 7 A. That's correct.  
 8 Q. The date of the memorandum is July 12, 1999?  
 9 A. Yes.  
 10 Q. And this document or this memorandum was written  
 11 in respect to transmitting certain documents related to the  
 12 Dakin-Yew Pump Station project; is that correct?  
 13 A. That's correct.  
 14 Q. Who instructed you to assemble these documents and  
 15 write this memorandum?  
 16 A. I believe that came from my boss Dirk Van Woerden.  
 17 Q. Does it indicate that a copy of all the daily  
 18 reports were forwarded?  
 19 A. Yes, it does.  
 20 Q. Does it further reflect that highlighted copies of  
 21 daily reports 46 to 118 were forwarded?  
 22 A. Yes.  
 23 Q. Who accomplished the highlighting?  
 24 A. I believe I did.  
 25 Q. What was being highlighted on those documents?

1 MR. SCANLAN: I'm going to object and instruct the  
 2 witness not to answer the question.  
 3 MR. ALLEN: Do you want to state a basis for that  
 4 objection?  
 5 MR. SCANLAN: I'll assert attorney/client  
 6 privilege.  
 7 Q. Were you responding to a request from counsel that  
 8 highlighting be accomplished?  
 9 MR. SCANLAN: I'm going to object and instruct the  
 10 witness not to answer the question.  
 11 Q. Can you tell me what the date range is of reports  
 12 numbers 46 through 118 of the daily reports referring to  
 13 Exhibit 64 which as I recall from Mr. Franklin's deposition  
 14 is a compilation of the daily reports.  
 15 A. Daily report 46 is dated April 26, 1994. Daily  
 16 report 118 is dated August 9, 1994.  
 17 Q. Can I take a look at the exhibit?  
 18 A. Yes.  
 19 Q. Referring to daily report 46, the first in the  
 20 date range that you have just discussed, would you tell us  
 21 whether there is any reference to Olympic Pipe Line on that  
 22 daily report?  
 23 A. Yes, there is.  
 24 Q. What is the statement with respect to Olympic Pipe  
 25 Line?

1 A. The statement is waterline and Olympic Pipe Line  
 2 personnel identified utilities in area.  
 3 Q. Thank you, that's all I'm going to ask on that.  
 4 MR. SCANLAN: Is this an extra?  
 5 MR. ALLEN: Off the record.  
 6 THE VIDEOGRAPHER: Going off the record, the time  
 7 is approximately 1:51 p.m.  
 8 (Discussion held off the record.)  
 9 THE VIDEOGRAPHER: Back on the record, the time is  
 10 approximately 1:52 p.m.  
 11 (Exhibit No. 153 marked for identification.)  
 12 Q. With apologies to counsel because this document  
 13 already has been marked but I don't have the exhibit number  
 14 so I pulled another. It's in the packet, it's OPL 5003125.  
 15 MR. SCANLAN: Do you know which packet?  
 16 MR. ALLEN: It's in there.  
 17 MR. SCANLAN: May I see that.  
 18 THE WITNESS: Yes.  
 19 MR. ALLEN: January 28, 1994 letter.  
 20 MR. SCANLAN: You don't have any idea where in  
 21 these packets it might be? Ah, thank you.  
 22 MR. ALLEN: I've marked it, have I not, as Exhibit  
 23 153?  
 24 MR. SCANLAN: Yes.  
 25 Q. Again Mr. Hatch, is this a letter that you have

1 written?  
 2 A. Yes, it is.  
 3 Q. Does it refer to coordination with utilities in  
 4 any respect?  
 5 A. Yes, it does.  
 6 Q. What is the utility involved in regard to this  
 7 letter?  
 8 A. USWest Communications.  
 9 Q. And it's a letter to the contractor Imco  
 10 Construction Company?  
 11 A. Yes, it is.  
 12 Q. And earlier today we discussed project requirement  
 13 14; do you recall that?  
 14 A. Yes, I do.  
 15 Q. Do you refer to that project requirement in this  
 16 letter?  
 17 A. Yes, I do.  
 18 Q. And is that the project requirement that requires  
 19 the contractor to carry out all necessary coordination with  
 20 the underground utilities owners?  
 21 A. Yes, it is.  
 22 (Exhibit No. 154 marked for identification.)  
 23 MR. ALLEN: This is the big packet with respect to  
 24 Intermountain Corrosion.  
 25 MR. SCANLAN: Okay, the whole packet.



Page 81

1 Q. Mr. Hatch, what role did Intermountain Corrosion  
2 play in the Dakin-Yew project?  
3 A. They provided design services for cathodic  
4 protection systems and construction inspection for those  
5 facilities.  
6 Q. Did you have any role in working with them in the  
7 project?  
8 A. Yes.  
9 Q. What was that role?  
10 A. I would have coordinated their activities during  
11 construction.  
12 Q. And can you tell me what this document, which was  
13 obtained from Earth Tech's files and there's quite a few  
14 pages, constitutes? And I will just ask you to take a look  
15 through it?  
16 A. It's a collection of letters written to me on a  
17 number of subjects relating to the project.  
18 Q. Do they all relate to the cathodic protection  
19 program that Intermountain Corrosion was designing?  
20 A. No.  
21 Q. What other subjects are incorporated, just  
22 generally?  
23 A. There's some discussion about force account,  
24 grades, change orders, markups, more change orders.  
25 Q. Would this appear to be, this collection appear to

Page 82

1 be the Barrett Consulting Group or Earth Tech file with  
2 respect to Intermountain Corrosion's participation in this  
3 job?  
4 A. I'm not sure I understand the question.  
5 Q. Would this appear to be the contents of a file  
6 related to Intermountain Corrosion's role in the Dakin-Yew  
7 project, or the Bellingham water treatment project?  
8 MR. SCANLAN: Calls for speculation.  
9 A. Intermountain Corrosion Service was certainly a  
10 part of this pile of documents.  
11 Q. And I can see that I probably have handed you  
12 something that is not related, one thing to the other. And  
13 we may have to go through each document and we probably  
14 should mark them all separately. We'll take a break at this  
15 time and do that.  
16 THE VIDEOGRAPHER: Going off the record, the time  
17 is approximately 1:59 p.m.  
18 (Exhibit Nos. 155 - 189 marked for  
19 identification.)  
20 THE VIDEOGRAPHER: Back on the record, the time is  
21 approximately 2:08 p.m.  
22 Q. Mr. Hatch, it's my intention to go through a  
23 number of documents very quickly with you here. We put  
24 aside, if you will put aside what has been marked as Exhibit  
25 154. And have we discussed Exhibit 155 earlier today?

Page 83

1 A. I don't think so.  
2 Q. Do you know what it relates to?  
3 A. This is a proposal for a construction services  
4 from Christenson Engineering.  
5 Q. And do you know what those services incorporated  
6 -- strike that. Were part of Christenson's services that  
7 these quotes relate to staking the centerline and offsets  
8 for all buried piping?  
9 A. Yes.  
10 Q. Do you recall working with Christenson Engineering  
11 in respect to that surveying project during the design stage  
12 of the Dakin-Yew project?  
13 A. No.  
14 Q. Was this surveying that's reflected by the  
15 December 16, 1993 letter, Exhibit 155, a part of the  
16 construction project itself?  
17 A. Yes.  
18 Q. Can you tell us what Christenson Engineering  
19 Corporation was being required to do in respect to item  
20 three, if it's anything more than what is stated. What were  
21 you expecting that they would accomplish?  
22 A. No, I can't expand on what was stated there.  
23 Q. What is meant by offsets in that term of  
24 reference, "Stake centerline and offsets for all buried  
25 piping"?

Page 84

1 A. Centerline would be a stake over the top of the  
2 pipe. Offset would be another stake placed at a known  
3 distance from that centerline stake as a reference point.  
4 Q. And then looking at Exhibit 156, what is the date  
5 of this document?  
6 A. It's dated January 28, 1994.  
7 Q. And does that provide a project organization chart  
8 for Imco Construction Company and its participation in the  
9 project?  
10 A. Yes, it does.  
11 Q. Turning to Exhibit 157, is this a letter to you  
12 from Imco Construction Company?  
13 A. Yes, it is.  
14 Q. What is the general subject area?  
15 A. This is in regards to the connection between the  
16 24-inch discharge line and an existing 16-inch waterline.  
17 Q. Is that what installation of the 16-inch service  
18 line refers to, the 16-inch waterline? Or is there another  
19 16-inch service line on the project?  
20 A. No, you're right. In looking at it again, I'll  
21 correct myself. I believe this has to do with the service  
22 line that comes out of the wet well.  
23 MR. BENINGER: Out of the wet well?  
24 THE WITNESS: Out of the wet well, yes, out of the  
25 pump station.

1 A. Try one more time here, sorry. This has to do  
 2 with the existing waterline that comes out of the water  
 3 treatment plant.  
 4 Q. Could you take a look at Exhibit 150, I believe it  
 5 is, probably on the bottom of that stack in front of you.  
 6 We're surrounding you with paper at this point.  
 7 MR. SCANLAN: This is 150 here, is it not.  
 8 Q. 149. Can you show us where that 16-inch line is  
 9 located on -- referring to Exhibit 149 -- maybe if you hold  
 10 it up to the camera.  
 11 A. It's this line right here that was relocated.  
 12 Q. And you have already marked the existing 16-inch  
 13 waterline on that exhibit, have you not?  
 14 A. That's correct, it's this line right here.  
 15 Q. So the reference to 16-inch line is not in  
 16 relation to the Dakin-Yew 16-inch waterline to which the  
 17 24-inch line was to be connected?  
 18 A. That's correct.  
 19 Q. And Exhibit 158, please.  
 20 A. Okay.  
 21 Q. Again is this correspondence to you?  
 22 A. Yes, it is.  
 23 Q. And is there a list of equipment attached to this  
 24 document?  
 25 A. Yes, there is.

1 change orders would come through me as a construction  
 2 services manager. And the ultimate approval was given by  
 3 the owner, City of Bellingham.  
 4 Q. Would you expect there's also documentation  
 5 showing that ultimate approval, if we look through all these  
 6 files, maybe we'll get to some before we finish this file?  
 7 A. There would be an executed contract change order,  
 8 yes.  
 9 Q. To whom would you pass a request for a change  
 10 order that had been initiated by the contractor?  
 11 A. If I had reviewed this and felt that costs were  
 12 reasonable, I would have forwarded this to the City of  
 13 Bellingham to Wan Huang.  
 14 Q. Look at Exhibit 160 then. This is a document  
 15 written by Imco General Construction Company to Barrett  
 16 Consulting Group. Can you tell us what this is?  
 17 A. This is a submittal for material. In this case,  
 18 this is CDF or controlled density fill, Imco would submit  
 19 this to us for approval.  
 20 Q. In this instance, the CDF was to be supplied by  
 21 another company whose quote is attached, or at least there's  
 22 some documents attached from Cowden Gravel and Ready Mix?  
 23 A. Yes.  
 24 Q. Were they a materials supplier on this project  
 25 throughout the project?

1 Q. Is it your recollection or do you have any  
 2 recollection as to whether the contract called for the  
 3 contractor to furnish equipment which would be billed by the  
 4 hour of usage?  
 5 A. There is a provision in the construction contract  
 6 for force account work where the equipment would be charged  
 7 by the hour.  
 8 Q. And does this set up a schedule then for the  
 9 hourly charges for use of specific pieces of equipment which  
 10 were to be employed on the project?  
 11 A. Yes, it does.  
 12 Q. Let's look at Exhibit 159. Can you tell us what  
 13 this document is. First, is it a document, correspondence  
 14 to you with attachments?  
 15 A. Yes, it is.  
 16 Q. And concerning what subject?  
 17 A. This is in regards to contract change orders one  
 18 through five. This is Imco's cost proposal for those  
 19 changes.  
 20 Q. What was the process on this job, just so that we  
 21 have a context, for accomplishing change orders. How would  
 22 they be initiated, who would they flow through and who would  
 23 finally approve them, what was the approval process?  
 24 A. Changes could be initiated either by the  
 25 contractor or by the engineer or by the owner. Contract

1 A. I don't know if I would say throughout the  
 2 project. They provided concrete.  
 3 Q. And they provided concrete on more than one  
 4 occasion during the project; is that correct?  
 5 A. I don't know the answer to that, I would assume  
 6 they did.  
 7 Q. Do you recall whether there were other concrete or  
 8 concrete products that were suppliers of wet concrete on the  
 9 project?  
 10 A. Do I understand that there were others?  
 11 Q. Other suppliers of concrete on the project, cement  
 12 or concrete?  
 13 A. No, I don't know the answer to that.  
 14 Q. The next document we're going to pass by has been  
 15 marked as Exhibit 161, but it also says on its face it's  
 16 also Exhibit 87. Let me just take a look at it.  
 17 Would you just take a look at Exhibit 161 and tell  
 18 us what that -- first, it is a letter to you?  
 19 A. Yes, it is.  
 20 Q. And specifically to what part of the project does  
 21 it relate?  
 22 A. This has to do with the area in the neighborhood  
 23 of Hannah Creek.  
 24 Q. And Exhibit 162, again is this another piece of  
 25 correspondence to you?

1 A. Yes, it is.  
 2 Q. And what was transmitted by this document?  
 3 A. This is from Imco and it lists their calculations  
 4 for overhead and profit for them and their subcontractors.  
 5 Q. Do you have any recollection of why this document  
 6 was being, that is, the calculations of overhead and profit  
 7 for their work and their subcontractors work, was being  
 8 forwarded in May of 1994, well after the project had  
 9 commenced?  
 10 A. No, I don't.  
 11 Q. And do you know why there was a requirement for,  
 12 or why if not a requirement, why it's stated it would be  
 13 appreciated if there were a response by June 1, 1994?  
 14 A. No, I don't.  
 15 Q. I will ask you to look at Exhibit 163. This is  
 16 another piece of correspondence bearing the same date, May  
 17 24, 1994, also from Mr. Krakenberg to you. What was the  
 18 purpose of this letter, if you can tell by reviewing it?  
 19 A. Yeah, they're asking to work two shifts to do  
 20 excavation during the day and to lay pipe at night.  
 21 Q. There's a reference in Exhibit 163 to speeding up  
 22 the work on the project; is that correct?  
 23 A. Yes.  
 24 Q. Do you have any recollection as to whether the  
 25 project by May of 1994 was falling behind schedule?

1 Q. Do they relate to the same problem?  
 2 A. Yes, they do.  
 3 Q. Do you recall there being an issue concerning the  
 4 profile view of whatever plan was relevant to that portion  
 5 of the project being misleading, that is, inaccurate?  
 6 A. I don't recall that.  
 7 Q. Does this letter to you appear to make the point  
 8 that the profile furnished the contractor in the plans and  
 9 drawings was misleading?  
 10 A. That's what the letter states.  
 11 Q. Is it fair to say that Imco is asserting that the  
 12 topographical profile in respect to that portion of the  
 13 project was incorrect?  
 14 A. I think that's their implication.  
 15 Q. Okay, let's go to Exhibit 165. I believe you told  
 16 us earlier today that Jim Lutz was a structural engineer or  
 17 an engineer who worked on this project?  
 18 A. Yes, that's correct.  
 19 Q. And is Exhibit 165 a report from Mr. Lutz to you  
 20 concerning two trips that he made to the project?  
 21 A. Yes, it is.  
 22 Q. What is the subject matter of the, that took him  
 23 to the Bellingham project in May and early June 1994?  
 24 A. Jim wanted to look at some structural issues at  
 25 the project and this is his comments.

1 A. No, I don't.  
 2 Q. Do you have any recollection of the project  
 3 meeting schedule being a concern throughout the project?  
 4 A. No.  
 5 Q. Do you have any recollection as to whether or not  
 6 there was delay in completion of the project?  
 7 A. I don't remember there being a delay.  
 8 Q. Would you take a look at Exhibit 164, sir. Again  
 9 is this another letter from Mr. Krakenberg to you written  
 10 the next day from the prior two exhibits, May 25, 1994?  
 11 A. Yes, it is.  
 12 Q. And I think earlier we looked at a document  
 13 written by you in respect to the overexcavation at Hannah  
 14 Creek; is that correct?  
 15 A. Yes, that's correct.  
 16 Q. Is this a response to the letter we were  
 17 discussing, and I can't recall the exhibit number, in  
 18 respect to overexcavation and the problem that created?  
 19 MR. VERWOLF: It was Exhibit 88.  
 20 MR. ALLEN: I believe it was, yes. Thank you,  
 21 counsel.  
 22 A. Without looking at the other exhibit, I can't say.  
 23 Q. Okay, let's take a look at Exhibit 88 and see.  
 24 A. Exhibit 164 is dated May 25. Exhibit 88 is dated  
 25 May 30.

1 Q. What kind of structural issues was he addressing  
 2 on those two trips, what were the structural issues he was  
 3 addressing?  
 4 A. In one he has comments about the floor slab inside  
 5 the water treatment plant. About a crack in a concrete  
 6 pipeline. About damage to a slab, again in the building.  
 7 Cracked sealing of the reservoir which was the adjacent  
 8 project. And comments regarding cutting in the clearwell.  
 9 Q. Why is he addressing these points to you in this  
 10 memorandum?  
 11 A. This would be the equivalent of a field report, it  
 12 was Jim's practice that when he went to a job site he would  
 13 write up a little memo of what he had observed and issues  
 14 that he thought needed to be addressed.  
 15 Q. And would you then relay those issues to both the  
 16 city and the contractor?  
 17 A. It depended on what they were.  
 18 Q. In this instance, do you recall whether you  
 19 addressed the issues to the contractor or the city?  
 20 A. No, I don't.  
 21 Q. There's a copy to Dirk; is that a reference to Mr.  
 22 Van Woerden?  
 23 A. Yes, it is.  
 24 Q. Take a look at Exhibit 166. Again, is this a  
 25 letter written to you?

Page 93

1 A. Yes, it is.  
 2 Q. The date of the letter?  
 3 A. Date is June 8, 1994.  
 4 Q. Do you recall receiving this letter?  
 5 A. No, I don't.  
 6 Q. Who are Casne Engineering, Inc.?  
 7 A. Casne Engineering was our electrical consulting  
 8 engineer on this project.  
 9 Q. Does this letter reflect that some problem had  
 10 arisen between Imco and Casne in regard to the project?  
 11 A. It appears to imply that, yes.  
 12 Q. And it states in part that Imco is alleging that  
 13 Casne has provided inaccurate information; is that correct?  
 14 A. Yes.  
 15 Q. And that was, it was slow in getting information  
 16 out so that the project was being delayed?  
 17 A. Yes.  
 18 Q. Do you have any specific recollection of those  
 19 problems or those issues between Casne and Imco as we sit  
 20 here today?  
 21 A. No, not from that time, no.  
 22 Q. Let's mark Exhibit 167. This is a document that  
 23 you viewed earlier today and it is Imco's field Serial  
 24 Letter No. 5. And I think we discussed it this morning in  
 25 respect to the statement in the third sentence that the

Page 94

1 16-inch line was found to be lower than shown on the plans?  
 2 A. Yes, that's correct.  
 3 Q. And did we finally agree that it was the 16-inch  
 4 Dakin-Yew waterline that was lower than shown on the plans  
 5 as alleged here?  
 6 A. Yes.  
 7 Q. Do you recall any action being taken to determine  
 8 the accuracy of the position of the 16-inch waterline,  
 9 existing 16-inch waterline as shown on the plans furnished  
 10 to the contractor?  
 11 A. Not specifically, no.  
 12 Q. Did you go to Bellingham following the June 10,  
 13 1999 incident?  
 14 A. No, I did not.  
 15 Q. I take it that when you say that, you were not  
 16 present during the excavation of the area of the rupture of  
 17 the Olympic Pipe Line petroleum pipeline?  
 18 A. Yes, that's correct.  
 19 Q. Take a look at Exhibit 168. Again this is, we  
 20 have talked about the subject before but perhaps haven't  
 21 seen this document. It's a June 16 letter from Mr.  
 22 Krakenberg again to you; is that correct?  
 23 A. Yes, that's correct.  
 24 Q. Do you recall whether by June 16, 1994 Mr.  
 25 Krakenberg had replaced Mr. Hart as the project manager for

Page 95

1 Imco on the Dakin-Yew Pump Station project?  
 2 A. I don't recall that. The letter is signed Paul  
 3 Krakenberg, Project Manager.  
 4 Q. And you do recall that at sometime during the  
 5 project that evolution did occur, Mr. Hart was no longer the  
 6 project manager and Mr. Krakenberg became the project  
 7 manager for Imco?  
 8 A. Yes.  
 9 Q. And the letter reflects that there was going to be  
 10 a night shift working and that it would not work past twelve  
 11 o'clock midnight?  
 12 A. Yes, that's correct.  
 13 Q. What was the concern reflected by the statement  
 14 that they would not work past twelve o'clock midnight, if  
 15 you know?  
 16 A. I don't know.  
 17 Q. What were the ordinary working hours of the  
 18 project when they were working just a day shift? When did  
 19 they knock off work, as you would say?  
 20 A. My recollection was that Imco was working four  
 21 10's at least through a pretty good part of the project. I  
 22 don't know exactly when they began and ended.  
 23 Q. By four 10's, you mean four days a week, ten hours  
 24 a day?  
 25 A. Yes.

Page 96

1 Q. And do you know what the, when the ten hours would  
 2 commence and terminate?  
 3 A. No, I don't.  
 4 Q. Let's look at Exhibit 169. I think we have seen a  
 5 part of this document earlier but could you tell me what  
 6 this is?  
 7 A. Well, there's two fax transmittal forms, one from  
 8 the City of Bellingham followed by one from myself to Wan  
 9 Huang. And my fax transmittal had some memorandums attached  
 10 to it. One memorandum was to Paul Krakenberg regarding  
 11 night shift work.  
 12 Q. Yes?  
 13 A. And the second one regarding a topography  
 14 discrepancy west of Hannah Creek.  
 15 Q. And does that memorandum indicate that based on a  
 16 survey performed by Greg Bruce and Tom Franklin yesterday,  
 17 which would have been June 15, 1994, there was a discrepancy  
 18 between the topography indicated on the plans and the actual  
 19 ground elevation between the creek and the reservoir?  
 20 A. Yes.  
 21 Q. Let's take a look at 170 then. Is this a document  
 22 that was directed to you?  
 23 A. Yes.  
 24 Q. At the Barrett Consulting Company fax number in  
 25 Bellevue?

1 A. Yes, it is.  
 2 Q. And from whom is this document sent?  
 3 A. This is from Gary Hess.  
 4 Q. Is he an employee of the City of Bellingham? Or  
 5 was he?  
 6 A. Yes.  
 7 Q. And what is attached to his memorandum?  
 8 A. They appear to be drawings that show portions of  
 9 the city water system.  
 10 Q. And do they show the portions that include the  
 11 16-inch Dakin-Yew waterline that's going to be shut down so  
 12 the 24-inch to 16-inch T-joint could be installed?  
 13 A. Yes, they do.  
 14 Q. Do you expect that the June 21 construction  
 15 meeting that's referred to in that covering memorandum to  
 16 you is the June 21, 1994 weekly project meeting?  
 17 A. Yes.  
 18 Q. Exhibit 171. Again, this is a letter from Mr.  
 19 Krakenberg to you, is it, sir?  
 20 A. Yes, it is.  
 21 Q. And to what does it refer?  
 22 A. It refers to structural problems in the existing  
 23 pump station.  
 24 Q. Does this relate to your direction that some  
 25 remedial work should be commenced immediately, the document

1 which I see is a letter again from Mr. Krakenberg to you on  
 2 July 6, 1994?  
 3 A. The issue is regarding a markup for change order  
 4 work.  
 5 Q. Is it a request that a higher markup than you had  
 6 allowed be permitted for the subcontractor work?  
 7 A. Yes.  
 8 Q. Is the statement to the effect that the markup  
 9 that was being allowed was insufficient to allow a  
 10 reasonable profit to income?  
 11 A. Yes.  
 12 Q. Let's look at Exhibit 179. Excuse me, 174. If  
 13 one writes a "3" very carelessly, it looks like an "8."  
 14 I'm not going to ask you any questions about this  
 15 because we'll come back later on and I'll supplement this,  
 16 if it's permissible with counsel, with the attachments to  
 17 this letter which are missing from it as it's presently  
 18 submitted.  
 19 Let's go to the Imco Serial Letter No. 14 on pipe  
 20 which is marked as Exhibit 175. Would you take a moment and  
 21 look at this exhibit. What is the issue that's being  
 22 reflected by this document, Mr. Hatch?  
 23 A. This has to do with deflection of the large  
 24 diameter pipelines, 60-inch and 72-inch.  
 25 Q. And does it relate to a complaint concerning the

1 we discussed a few minutes ago?  
 2 A. It's not clear to me what this refers to.  
 3 Q. It does refer to your June 22, 1994 letter; is  
 4 that correct?  
 5 A. Yes.  
 6 Q. Let's look at Exhibit 172. What is this document,  
 7 sir?  
 8 A. This is an agreement for surveying services from  
 9 Leonard, Boudinot & Skodje.  
 10 Q. And Leonard, Boudinot & Skodje, it says are  
 11 professional engineers and land surveyors. And the work  
 12 that they are being called upon to do in July of 1994 is  
 13 construction staking services; is that correct?  
 14 A. Yes, it is.  
 15 Q. Do you recall the nature of the construction  
 16 staking they were going to undertake in July of 1994?  
 17 A. Yes, they were to provide or they are proposing --  
 18 back up. The agreement is for construction staking  
 19 associated with the waste site which was located west of the  
 20 reservoir.  
 21 Q. And again, the reservoir, is the reservoir east or  
 22 west of the pump station?  
 23 A. The reservoir is west of the pump station and this  
 24 would have been west of that.  
 25 Q. Exhibit 173. What is the issue in this letter

1 procedure that's being followed, a complaint by Imco? Or is  
 2 that not a fair characterization?  
 3 A. I'm not sure I can categorize it as a complaint or  
 4 not.  
 5 Q. How would you categorize it?  
 6 A. I would say it's a discussion of the issues.  
 7 Q. Is there some disagreement apparent between  
 8 Barrett Consulting Group and Imco concerning the issue of  
 9 the pipe deflection and the remedy for that situation?  
 10 A. Yes, there appears to be.  
 11 Q. Let's look at the next of these documents, Exhibit  
 12 176. What is the date of this document, sir?  
 13 A. The fax transmittal is dated August 5. The letter  
 14 from Imco to myself is dated August 2, 1994. And there's  
 15 another letter to Paul Krakenberg from me dated August 5,  
 16 1994.  
 17 Q. And does this document also relate to the issue of  
 18 the deflection in the large diameter pipe and the remedy for  
 19 that situation?  
 20 A. Yes.  
 21 Q. Does this exchange of correspondence reflect a  
 22 disagreement between Barrett Consulting Group and Imco  
 23 Construction Company concerning the actions taken and to be  
 24 taken with respect -- or to be taken with respect to the  
 25 pipe deflection issues?

1 A. Yes.  
 2 Q. Will you look at the next document which is a  
 3 letter of December 8, 1994. Is this again a letter from Mr.  
 4 Krakenberg to you?  
 5 A. Yes, it is.  
 6 Q. Does it reflect a complaint or disagreement on  
 7 Imco General Construction Company's part with actions taken  
 8 by or directions given by Barrett Consulting Group on behalf  
 9 of the city?  
 10 A. I'm sorry, restate or would you say that again.  
 11 (The record was read back by the reporter.)  
 12 A. Yes, I would say this is a complaint.  
 13 Q. I think we better stop there if we're going to  
 14 make our medical appointments.  
 15 THE VIDEOGRAPHER: This adjourns the deposition of  
 16 John Hatch, the time is approximately 2:57 p.m.  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25

1 CERTIFICATE  
 2 STATE OF WASHINGTON )  
 ) ss.  
 3 COUNTY OF KING )  
 4 I, the undersigned Notary Public in and for the  
 5 State of Washington, do hereby certify:  
 6 That the annexed and foregoing deposition of each  
 7 witness named herein was taken stenographically before me  
 8 and reduced to typewriting under my direction;  
 9 I further certify that the deposition was  
 10 submitted to each said witness for examination, reading and  
 11 signature after the same was transcribed, unless indicated  
 12 in the record that the parties and each witness waive the  
 13 signing;  
 14 I further certify that all objections made at the  
 15 time of said examination to my qualifications or the manner  
 16 of taking the deposition, or to the conduct of any party,  
 17 have been noted by me upon said deposition;  
 18 I further certify that I am not a relative or  
 19 employee or attorney or counsel of any of the parties to  
 20 said action, or a relative or employee of any such attorney  
 21 or counsel, and that I am not financially interested in the  
 22 said action or the outcome thereof;  
 23 I further certify that each witness before  
 24 examination was by me duly sworn to testify the truth, the  
 25 whole truth and nothing but the truth;

1 AFFIDAVIT  
 2  
 3 STATE OF WASHINGTON  
 4 ) ss  
 5 COUNTY OF KING )  
 6  
 7  
 8 I have read my within deposition, and  
 9 the same is true and accurate, save and except for  
 10 changes and/or corrections, if any, as indicated by  
 11 me on the CORRECTIONS page hereof,  
 12  
 13 JOHN HATCH - VOLUME I  
 14  
 15  
 16 SUBSCRIBED AND SWORN to before me this  
 17 day of , 2000.  
 18  
 19 Notary Public, in and for the  
 20 State of Washington, residing at  
 21  
 22 My commission expires  
 23  
 24 Loraine Hohnstein  
 25 Court Reporter

1 I further certify that the deposition, as  
 2 transcribed, is a full, true and accurate transcript of the  
 3 testimony, including questions and answers, and all  
 4 objections, motions, and exceptions of counsel made and  
 5 taken at the time of the foregoing examination;  
 6 I further certify that I am sending the  
 7 deposition with the title of the above cause thereon; and  
 8 marking "Deposition" with the name of each witness, and  
 9 promptly delivering the same to the proper party.  
 10 Unless otherwise requested, all records pertaining  
 11 to this deposition will be discarded three years from  
 12 today's date.  
 13 WITNESS MY HAND AND SEAL this 3rd day of July,  
 14 2000.  
 15 *Lorraine Hohnstein*  
 16 LORAINÉ HOHNSTEIN  
 17 Notary Public, in and for the State  
 18 of Washington, residing at Vashon.  
 19  
 20 My commission expires 1/29/03.  
 21  
 22  
 23  
 24  
 25

'95 [1] 19:10	54:5 54:13 54:14	97:16	99:24	accepted [1] 19:12
08 [1] 82:21	55:4 55:15 57:17	22 [2] 3:3 98:3	64 [1] 78:13	accomplish [3] 53:13
09 [1] 48:2	57:17 57:22 58:3	238th [1] 9:3	67 [1] 29:8	53:21 83:21
1 [6] 63:4 63:8	58:6 58:14 58:23	24 [2] 24:9 89:17	6700 [1] 5:6	accomplished [4]
79:7 79:10 82:17	60:15 60:17 60:21	24-inch [27] 24:23	69 [3] 29:21 31:23	55:11 68:10 77:23
89:13	60:24 60:25 61:3	25:12 25:16 25:21	32:10	78:8
1/2 [1] 51:14	61:24 61:25 64:5	26:2 45:3 46:2	7 [8] 4:2 55:12	accomplishing [1]
1/29/03 [1] 104:17	64:13 64:15 68:6	47:1 47:1 47:8	55:16 64:11 75:10	86:21
10 [11] 12:23 28:12	68:11 69:10 73:10	47:13 47:22 51:24	75:13 75:14 75:14	according [4] 38:11
28:15 42:20 42:23	73:14 74:11 84:16	53:1 61:8 61:14	7/10/94 [1] 75:16	60:7 60:8 60:21
46:8 46:15 46:18	84:17 84:18 84:19	63:25 68:5 68:12	7/7/94 [1] 75:14	account [2] 81:23
52:13 55:21 94:12	85:8 85:12 85:15	69:10 69:14 73:9	70 [1] 33:15	86:6
10's [2] 95:21 95:23	85:16 94:1 94:3	73:14 74:17 84:16	701 [1] 5:6	accuracy [3] 43:17
101 [1] 4:2	94:8 94:9 97:11	85:17 97:12	72 [1] 35:3	43:21 94:8
103 [3] 38:16 48:8	97:12	240 [1] 50:2	72-inch [15] 24:21	accurate [2] 102:9
54:22	160 [1] 87:14	245 [1] 50:3	25:3 25:5 45:1	104:2
10500 [1] 5:15	161 [2] 88:15 88:17	25 [2] 90:10 90:24	45:4 45:16 46:3	action [4] 72:12
10800 [1] 9:19	162 [1] 88:24	250 [5] 50:3 50:15	47:19 48:11 49:7	94:7 103:20 103:22
11 [7] 48:2 48:6	163 [2] 89:15 89:21	50:17 50:20 59:18	50:23 57:18 60:20	actions [2] 100:23
52:7 52:10 62:7	164 [2] 90:8 90:24	2505 [1] 5:20	61:22 99:24	101:7
63:4 63:8	165 [2] 91:15 91:19	253 [3] 41:17 41:19	73 [2] 36:25 37:4	activities [4] 19:24
115 [5] 42:25 51:15	166 [1] 92:24	42:25	74 [1] 37:12	21:10 33:23 81:10
51:16 72:14 72:16	167 [1] 93:22	253.6 [3] 43:8	76 [1] 3:6	activity [1] 31:8
116 [3] 68:1 68:14	168 [1] 94:19	49:23 59:3	77 [1] 44:17	actual [5] 29:22
68:22	169 [1] 96:4	255 [7] 50:15 50:17	7818 [1] 9:3	45:7 54:17 55:18
118 [3] 77:21 78:12	17 [1] 48:6	50:20 51:5 59:6	79 [1] 3:7	96:18
78:16	170 [1] 96:21	59:14 59:18	8 [5] 37:16 57:8	ad [1] 1:4
12 [1] 77:8	171 [1] 97:18	256 [2] 42:11 43:9	93:3 99:13 101:3	add [1] 64:22
1201 [2] 2:23 5:11	172 [1] 98:6	256.0 [1] 41:16	80 [1] 3:8	additional [1] 71:3
1301 [1] 6:3	173 [1] 98:25	26 [4] 1:23 2:22	82 [1] 3:9	address [4] 9:2
14 [4] 33:20 57:12	174 [1] 99:12	28:15 78:15	87 [2] 70:20 88:16	9:4 9:18 38:8
80:13 99:19	175 [1] 99:20	260 [6] 50:16 50:20	88 [4] 71:19 90:19	addressed [5] 29:13
149 [7] 3:3 22:4	176 [1] 100:12	59:14 59:21 59:24	90:23 90:24	29:14 70:23 92:14
22:7 23:13 40:22	179 [1] 99:12	59:25	89 [2] 52:12 63:13	92:19
85:8 85:9	18 [2] 38:9 38:15	263 [2] 41:19 42:10	8th [1] 5:15	addressee [1] 69:19
15 [2] 25:23 96:17	1800 [1] 5:15	265 [1] 50:21	9 [2] 2:22 78:16	addressing [3] 92:1
150 [12] 3:4 48:4	189 [2] 3:9 82:18	27 [1] 52:7	90 [1] 65:25	92:3 92:9
48:10 48:18 48:21	1972 [1] 9:15	2760 [1] 2:23	91 [1] 66:21	adjacent [3] 50:12
50:2 50:25 57:24	1987 [2] 9:5 9:6	28 [3] 56:1 79:19	92 [1] 67:20	54:8 92:7
58:11 60:21 85:4	1993 [3] 12:1 12:5	84:6	94 [2] 73:25 75:6	adjoins [1] 101:15
85:7	83:15	29 [4] 39:17 39:21	98 [1] 75:23	advise [1] 64:12
151 [4] 3:5 56:13	10:3	39:22 39:25	98004-4300 [1]	AFTERNOON [1]
60:7 61:11	1994 [37] 10:3	3 [1] 99:13	5:16	63:3
152 [2] 3:6 76:17	11:20 11:24 12:4	30 [2] 52:10 90:25	98101-2605 [1]	afterward [1] 62:2
153 [3] 3:7 79:11	17:11 26:18 38:9	300 [1] 5:20	6:4	again [29] 13:22
79:23	45:9 54:25 64:7	3401 [1] 6:4	98101-3071 [1]	18:24 19:3 40:1
154 [3] 3:8 80:22	64:11 68:20 71:10	38 [1] 2:22	5:12	44:18 49:3 54:23
82:25	72:23 75:5 75:14	3rd [1] 104:13	98104 [1] 5:7	56:1 58:25 60:17
155 [4] 3:9 82:18	78:15 78:16 79:19	46 [4] 77:21 78:12	98121-1445 [1]	66:3 66:21 67:20
82:25 83:15	84:6 89:8 89:13	78:15 78:19	5:21	71:19 75:23 79:25
156 [1] 84:4	89:17 89:25 90:10	48 [1] 3:4	99 [2] 76:10 76:14	84:20 85:21 88:24
157 [1] 84:11	91:23 93:3 94:24	5 [8] 57:4 60:12	99-2-01467-3 [1]	90:8 92:6 92:24
158 [1] 85:19	96:17 97:16 98:3	60:15 64:20 64:25	2:6	94:19 94:22 97:18
159 [1] 86:12	98:12 98:16 99:2	93:24 100:13 100:15	1:7	98:21 99:1 101:3
16 [5] 64:7 68:20	100:14 100:16 101:3	5003125 [1] 79:14	99-2-01468-1 [1]	101:10
83:15 94:21 94:24	1995 [2] 10:3 12:4	51 [2] 62:7 79:7	2:22 28:12	agenda [5] 29:19
16-inch [74] 25:5	1999 [9] 12:24 46:8	52 [1] 79:10	42:20 42:23 48:2	29:22 30:6 32:10
25:9 25:17 25:22	46:15 46:18 52:13	5200 [1] 5:11	48:6 52:7 52:10	34:14
26:2 43:12 43:17	55:21 73:1 77:8	56 [1] 3:5	a.m [9] 2:22 28:12	ago [5] 13:5 13:5
43:22 45:2 47:1	94:13	57 [2] 42:20 101:16	62:7	13:21 31:25 98:1
47:2 47:8 47:14	2 [5] 11:16 51:14	58 [1] 42:23	above [5] 59:5	agree [3] 20:18 51:3
47:22 49:6 49:11	82:21 100:14 101:16	59 [1] 82:17	59:24 59:25 73:15	94:3
49:14 49:17 49:20	20 [2] 24:3 28:12	6 [1] 99:2	104:7	agreement [2] 98:8
50:7 50:13 50:13	2000 [4] 1:23 2:22	60-inch [2] 45:6	acceptance [1] 19:15	98:18
50:25 51:23 53:1	102:17 104:14			ahead [1] 42:15
53:6 53:21 53:25	21 [3] 54:25 97:14			alignment [9] 45:1





<b>column</b> [2] 35:11 35:12	<b>conclusion</b> [1] 19:5	<b>contour</b> [1] 41:22	89:16 100:21	75:11 77:12 81:2
<b>coming</b> [2] 24:4 24:10	<b>concrete</b> [8] 88:2 88:3 88:7 88:8 88:8 88:11 88:12 92:5	<b>contract</b> [8] 14:8 36:19 74:4 86:2 86:5 86:17 86:25 87:7	<b>corresponding</b> [2] 17:25 57:8	82:6 83:12 85:16 94:4 95:1 97:11
<b>commence</b> [2] 67:18 96:2	<b>condition</b> [1] 66:17	<b>contractor</b> [29] 10:11 10:21 11:17 14:8 15:21 17:25 19:4 28:19 28:23 31:10 31:20 34:7 34:25 38:2 43:22 52:25 53:19 54:9 56:10 64:6 80:9 80:19 86:3 86:25 87:10 91:8 92:16 92:19 94:10	<b>corridor</b> [1] 45:6	<b>Dalen</b> [3] 1:2 5:4 7:12
<b>commenced</b> [3] 11:20 89:9 97:25	<b>conditions</b> [1] 67:14	<b>contractor's</b> [3] 18:16 31:15 33:22	<b>Corrosion</b> [4] 80:24 81:1 81:19 82:9	<b>damage</b> [7] 34:9 56:6 56:8 56:11 67:5 67:8 92:6
<b>commencement</b> [1] 28:17	<b>conduct</b> [1] 103:16	<b>contractors</b> [2] 18:2 33:1	<b>Corrosion's</b> [2] 82:2 82:6	<b>date</b> [18] 13:3 19:11 39:20 54:14 54:17 55:9 55:18 56:20 75:9 77:8 78:11 78:20 84:4 89:16 93:2 93:3 100:12 104:12
<b>comments</b> [3] 91:25 92:4 92:8	<b>conductor</b> [1] 34:5	<b>contracts</b> [1] 36:16	<b>cost</b> [2] 61:7 86:18	<b>dated</b> [12] 68:19 68:20 75:10 75:15 78:15 78:16 84:6 90:24 90:24 100:13 100:14 100:15
<b>commission</b> [2] 102:21 104:17	<b>conduit</b> [1] 34:6	<b>controlled</b> [1] 87:18	<b>costs</b> [2] 61:14 87:11	<b>dates</b> [1] 54:20
<b>communicate</b> [2] 41:11 42:11	<b>conflict</b> [1] 45:7	<b>conversion</b> [1] 87:18	<b>counsel</b> [9] 8:6 51:7 78:7 79:12 90:21 99:16 103:19 103:21 104:4	<b>DAVID</b> [1] 5:4
<b>communication</b> [4] 26:11 36:1 36:4 63:21	<b>conjunction</b> [2] 35:2 71:13	<b>conversation</b> [2] 69:25 70:5	<b>COUNTY</b> [3] 1:1 102:5 103:3	<b>DAVIS</b> [1] 5:14
<b>Communications</b> [2] 34:6 80:8	<b>connected</b> [3] 76:15 76:16 85:17	<b>conversations</b> [4] 18:1 18:3 20:24 43:20	<b>couple</b> [2] 7:15 13:21	<b>day-to-day</b> [1] 18:3
<b>company</b> [46] 1:8 1:9 1:14 2:7 2:8 2:12 5:8 7:11 20:25 21:3 29:16 30:18 31:12 33:11 34:2 34:5 34:13 35:8 35:11 35:12 35:25 36:5 38:25 48:15 48:17 48:24 57:2 61:6 61:12 67:7 68:16 69:16 69:20 70:2 70:6 70:10 70:14 71:4 76:9 80:10 84:8 84:12 87:15 87:21 96:24 100:23	<b>connection</b> [7] 52:23 54:17 63:23 63:24 64:10 68:6 84:15	<b>cooperate</b> [3] 31:16 33:22 70:16	<b>course</b> [4] 15:11 15:25 26:3 70:4	<b>days</b> [3] 11:4 17:21 95:23
<b>Company's</b> [13] 20:13 20:16 20:21 21:10 21:16 21:23 22:15 23:7 30:23 40:21 43:23 70:14 101:7	<b>considered</b> [1] 61:17	<b>coordinate</b> [1] 81:10	<b>courses</b> [1] 12:18	<b>December</b> [2] 83:15 101:3
<b>compilation</b> [1] 78:14	<b>constitutes</b> [1] 81:14	<b>coordinating</b> [2] 31:7 31:12	<b>court</b> [5] 1:1 1:24 2:25 7:21 102:24	<b>defeat</b> [1] 5:4
<b>complaint</b> [5] 99:25 100:1 100:3 101:6 101:12	<b>construction</b> [67] 1:17 2:16 5:17 10:3 10:5 10:6 10:9 10:12 11:7 11:9 11:18 11:20 15:12 16:13 16:23 17:14 19:2 22:24 26:24 28:17 29:16 30:24 31:8 33:22 34:7 34:13 35:8 35:11 35:12 35:23 35:25 36:5 36:17 42:1 42:13 43:7 43:13 43:16 47:4 47:7 47:9 56:7 57:1 61:6 61:12 67:7 68:16 69:20 70:5 70:10 76:9 80:10 81:4 81:11 83:3 83:16 84:8 84:12 86:5 87:1 87:15 97:14 98:13 98:15 98:18 100:23 101:7	<b>coordinated</b> [1] 81:10	<b>cover</b> [1] 37:15	<b>defendants</b> [1] 2:18
<b>complete</b> [2] 7:22 12:12	<b>consultation</b> [1] 44:6	<b>coordinating</b> [2] 31:7 31:12	<b>covering</b> [2] 68:15 97:15	<b>Defendant</b> [1] 1:19
<b>completed</b> [1] 19:12	<b>consulting</b> [26] 9:12 10:7 10:14 14:4 14:18 14:21 17:6 26:15 35:1 35:8 35:13 36:17 36:18 36:19 39:9 44:3 44:9 71:13 74:22 82:1 87:16 93:7 96:24 100:8 100:22 101:8	<b>copies</b> [4] 69:19 69:22 70:14 77:20	<b>Cracked</b> [1] 92:7	<b>defendants</b> [4] 1:13 2:11 2:17 7:11
<b>completion</b> [2] 19:15 90:6	<b>Cont'd</b> [1] 63:10	<b>copy</b> [4] 32:9 69:15 77:17 92:21	<b>created</b> [1] 90:18	<b>deflection</b> [4] 99:23 100:9 100:18 100:25
<b>complies</b> [6] 23:21 25:10 25:14 41:6 49:5 49:12	<b>contact</b> [7] 15:18 15:23 26:11 29:16 30:11 44:14 71:6	<b>corporation</b> [11] 1:9 1:10 1:11 1:14 1:18 2:7 2:8 2:9 2:13 2:16 83:19	<b>creek</b> [6] 71:2 72:6 88:23 90:14 96:14 96:19	<b>degree</b> [1] 12:15
<b>concern</b> [3] 54:9 90:3 95:13	<b>contents</b> [1] 82:5	<b>correct</b> [44] 25:6 25:7 29:18 35:14 35:15 35:19 36:2 36:3 36:8 36:9 42:9 42:10 44:8 44:10 49:15 49:16 50:16 57:2 57:12 64:2 64:18 65:1 65:4 67:11 77:6 77:7 77:12 77:13 84:21 85:14 85:18 88:4 89:22 90:14 90:15 91:18 93:13 94:2 94:18 94:22 94:23 95:12 98:4 98:13	<b>crossed</b> [3] 48:14 71:1 71:2	<b>degrees</b> [1] 12:17
<b>concerned</b> [1] 30:6	<b>context</b> [1] 86:21	<b>corrected</b> [1] 49:22	<b>crosses</b> [1] 57:18	<b>delay</b> [2] 90:6 90:7
<b>concerning</b> [20] 12:22 14:3 29:8 30:9 34:12 37:23 37:24 38:2 38:4 43:16 43:21 57:16 68:5 70:1 86:16 91:3 91:20 99:25 100:8 100:23	<b>continuation</b> [2] 19:19 19:20	<b>corrections</b> [2] 102:10 102:11	<b>crosshatched</b> [2] 50:14 59:10	<b>delayed</b> [1] 93:16
<b>conclude</b> [2] 19:8 61:11	<b>continuing</b> [2] 12:17 24:16	<b>correctly</b> [1] 27:20	<b>crossing</b> [1] 24:17	<b>delivered</b> [3] 32:17 32:25 33:14
	<b>continuous</b> [2] 34:10 37:19	<b>correspondence</b> [8] 14:2 17:25 37:19 85:21 86:13 88:25	<b>CUNNINGHAM</b> [1] 5:5	<b>delivering</b> [1] 104:9
			<b>cutting</b> [1] 92:8	<b>demolition</b> [2] 67:6 67:14
			<b>D</b> [1] 102:1	<b>density</b> [1] 87:18
			<b>DAHL</b> [1] 6:6	<b>depended</b> [2] 65:18 92:17
			<b>daily</b> [9] 16:24 77:17 77:21 78:12 78:14 78:15 78:15 78:19 78:22	<b>depending</b> [1] 27:4
			<b>Dakin-Yew</b> [42] 9:25 11:9 11:21 12:22 14:6 15:2 15:9 15:12 17:7 17:13 17:22 20:17 22:9 22:13 22:24 28:17 28:20 34:17 45:3 45:13 46:2 48:13 51:24 53:2 53:21 56:23 63:25 64:2 67:5 68:6 71:14 73:10 73:10	<b>deposition</b> [27] 1:20 2:20 7:10 7:13 8:2 8:4 8:12 8:13 8:16 19:8 28:13 29:8 48:3 52:12 62:6 63:7 78:13 101:15 102:8 103:6 103:9 103:16 103:17 104:1 104:7 104:8 104:11
				<b>descend</b> [1] 43:7
				<b>descending</b> [1] 43:9
				<b>described</b> [1] 20:15
				<b>description</b> [1] 18:25
				<b>design</b> [16] 14:7 14:9 14:13 21:8



faxed [1] 74:4	58:4 95:20 95:23	Group's [1] 36:18	hours [4] 65:11	indication [1] 64:4
February [2] 38:9	95:23	grouping [1] 12:12	95:17 95:23 96:1	indications [1] 41:1
38:15	fourth [1] 68:24	groupings [1] 27:3	Huang [10] 15:24	individually [4]
feed [3] 24:21 28:3	FRANK [4] 1:11	Guardian [1] 1:4	16:3 16:9 16:18	1:2 2:3 2:3
28:3	2:1 2:2 2:10	guess [1] 8:24	16:19 36:2 63:22	2:4
feet [7] 25:23 51:1	Franklin [9] 17:2	half [4] 51:4 51:4	69:24 87:13 96:9	individuals [1] 14:15
51:14 58:4 58:24	36:7 36:14 36:18	hand [3] 15:20 30:21	idea [1] 79:20	infiltration [1] 45:5
59:10 59:12	36:21 46:21 65:23	104:13	identification [7]	information [3] 42:6
felt [1] 87:11	69:24 96:16	handed [2] 56:9	22:4 48:4 56:13	93:13 93:15
few [4] 47:24 52:4	Franklin's [5] 17:4	82:11	76:17 79:11 80:22	initiated [3] 86:22
81:13 98:1	36:11 52:12 65:11	handing [7] 22:6	82:19	86:24 87:10
field [7] 8:17 17:6	FRED [2] 1:11	29:7 38:16 44:17	identified [1] 79:2	inlet [1] 24:7
57:4 60:11 73:22	2:9	52:11 54:22 56:3	identity [1] 28:23	inquiry [1] 13:9
92:11 93:23	free [1] 7:17	hands [1] 22:18	Imco [50]	inside [2] 56:7
Fifth [2] 5:6 6:3	front [4] 48:8 57:25	handy [1] 72:15	2:16 5:17 28:25	92:4
file [3] 82:1 82:5	63:13 85:5	Hannah [5] 71:2	29:1 29:16 32:17	inspected [2] 66:15
87:6	full [2] 8:24 104:2	72:6 88:23 90:13	33:1 34:13 35:8	66:19
filed [1] 39:11	furnish [1] 86:3	96:14	35:11 35:24 39:4	inspection [3] 44:6
files [3] 74:16 81:13	furnished [3] 43:22	hard [1] 41:23	39:5 57:1 60:8	inspector [14] 10:21
87:6	91:8 94:9	Hart [8] 18:8 18:9	61:6 61:12 61:21	17:5 17:7 36:7
fill [1] 87:18	Gary [1] 97:3	18:12 18:21 29:14	64:6 64:10 65:9	36:15 36:19 36:22
finally [2] 86:23	gasoline [1] 48:15	35:25 94:25 95:5	67:6 67:13 68:16	44:5 65:16 65:17
94:3	gathering [1] 12:8	Hart's [1] 18:17	69:19 70:5 70:9	65:19 65:21 65:23
financially [1] 103:21	general [23] 1:17	Hatch [27] 1:21	70:16 72:6 76:9	66:15
finish [1] 87:6	2:16 5:17 8:19	2:20 6:1 7:1	80:9 84:8 84:12	install [2] 64:10
fire [1] 54:10	10:8 29:16 31:19	7:8 9:1 9:2	87:15 87:18 89:3	66:11
first [19] 7:16 12:8	33:1 35:8 35:11	12:4 12:13 19:21	91:11 93:10 93:12	installation [1] 84:17
13:2 19:24 23:17	35:25 37:25 49:24	22:6 26:8 28:16	93:19 95:1 95:7	installed [3] 48:13
28:18 38:23 48:20	57:1 61:12 68:16	48:7 52:11 56:14	95:20 99:19 100:1	54:9 97:12
51:16 57:15 65:16	69:20 70:5 70:9	62:6 63:7 63:12	100:8 100:14 100:22	instance [3] 13:6
70:22 71:24 74:3	76:9 84:14 87:15	75:23 77:3 79:25	101:7	87:20 92:18
74:21 76:22 78:19	101:7	81:1 82:22 99:22	Imco's [3] 57:6	instruct [2] 78:1
86:13 88:18	generally [5] 8:11	101:16 102:13	86:18 93:23	78:9
five [4] 51:1 59:10	10:20 35:19 37:8	heard [2] 7:8	immediate [1] 15:14	instructed [1] 77:14
59:12 86:18	81:22	55:18	immediately [3]	instruction [1] 72:10
floor [2] 56:6 92:4	generated [1] 14:4	heart [1] 20:17	56:10 67:18 97:25	instructions [1] 56:8
flotation [1] 45:5	George [9] 1:5	heavy [1] 50:19	impacts [1] 61:18	insufficient [1] 99:9
flow [2] 54:8 86:22	17:15 17:18 26:16	height [1] 50:23	implication [1] 91:14	intended [2] 22:24
FLOYD [1] 5:19	27:5 27:6 27:8	held [5] 22:5 42:21	imply [1] 93:11	37:16
followed [3] 18:12	45:22 46:19	52:8 77:2 79:8	inaccurate [2] 91:5	intention [1] 82:22
96:8 100:1	given [5] 7:13	help [1] 59:17	93:13	interaction [3] 15:8
following [4] 12:14	33:11 37:23 87:2	hereby [1] 103:5	Inc. [1] 93:6	20:20 21:2
12:15 13:2 94:12	101:8	herein [2] 7:1	inch [3] 24:3 24:9	interested [1] 103:21
follows [1] 7:3	goes [1] 50:15	103:7	43:8	interface [2] 16:4
foot [4] 41:18 51:3	gone [2] 32:8 44:11	hereof [1] 102:11	incident [9] 12:24	17:16
51:4 59:6	good [2] 27:12 95:21	Hess [1] 97:3	13:2 46:8 46:15	interfaced [2] 15:19
force [2] 81:23 86:6	government [2] 12:23	high [3] 12:14 12:15	46:18 52:14 55:21	15:21
foregoing [2] 103:6	46:12	45:5	73:1 94:13	Intermountain [6]
104:5	grade [2] 41:25	higher [1] 99:5	include [2] 69:4	80:24 81:1 81:19
foreign [8] 1:9	42:12	highlighted [2] 77:20	97:10	82:2 82:6 82:9
1:10 1:11 1:14	grades [1] 81:24	77:25	including [2] 21:15	interpretation [1]
2:7 2:8 2:9	Gravel [1] 87:22	highlighting [2] 77:23	104:3	74:7
2:13	Greg [1] 96:16	78:8	income [1] 99:10	intersection [12]
forgotten [1] 18:25	ground [1] 96:19	HOhNSLT5230J [1]	incorporated [2]	25:16 25:21 26:1
form [5] 40:8 42:14	groundwater [1]	1:25	81:21 83:5	47:2 47:13 47:21
53:7 60:10 74:9	45:5	Hohnstein [4] 1:24	incorrect [1] 91:13	51:23 68:11 69:9
forms [1] 96:7	group [27] 9:12	2:25 102:24 104:15	increased [1] 41:25	73:8 73:9 74:11
forth [1] 50:3	9:14 10:7 10:14	hold [2] 23:17 85:9	INDEX [2] 3:1	intersects [1] 25:5
forward [1] 17:10	14:4 14:19 14:21	HOPF [2] 1:11	4:1	interview [2] 13:12
forwarded [5] 68:16	16:23 17:6 17:14	2:10	indicate [8] 43:5	13:25
77:18 77:21 87:12	26:15 35:1 35:8	horizontal [3] 41:12	49:21 57:20 59:6	interviewed [4] 13:1
89:8	35:13 36:17 36:19	59:11 59:13	64:9 69:18 77:17	13:6 13:14 13:19
found [3] 57:22	38:17 39:9 44:3	hour [2] 86:4 86:7	96:15	introduction [1]
60:16 94:1	44:9 71:13 74:22	hourly [1] 86:9	indicated [7] 24:2	7:8
four [6] 2:17 11:4	82:1 87:16 100:8		44:1 49:13 68:10	
	100:22 101:8		96:18 102:10 103:11	
			indicating [1] 21:22	





<b>PFLUEGER [1]</b> 5:19 <b>phase [8]</b> 10:5 10:12 11:9 14:7 14:13 15:13 26:24 29:17 <b>phone [3]</b> 30:11 30:11 35:9 <b>photographs [3]</b> 8:19 8:20 8:21 <b>photos [1]</b> 8:18 <b>picked [1]</b> 40:24 <b>picture [1]</b> 50:9 <b>piece [2]</b> 88:24 89:16 <b>pieces [1]</b> 86:9 <b>pile [1]</b> 82:10 <b>pink [4]</b> 22:20 49:3 49:17 73:6 <b>pipe [65]</b> 1:8 1:14 2:7 2:12 5:8 7:10 13:7 20:13 20:16 20:20 20:25 21:16 21:23 22:15 23:7 23:17 23:19 24:18 25:18 30:7 30:9 30:17 30:22 31:7 31:12 33:10 33:11 34:1 34:5 38:24 40:21 41:25 43:23 48:14 48:17 48:24 50:7 50:24 51:12 58:4 58:7 58:15 58:20 59:2 66:14 66:15 69:16 70:2 70:11 70:14 72:7 73:3 73:15 75:3 76:6 78:21 78:24 79:1 84:2 89:20 94:17 99:19 100:9 100:18 100:25 <b>pipeline [63]</b> 1:9 2:8 20:13 20:16 21:10 21:11 21:12 21:16 21:23 22:15 22:22 23:7 23:10 24:11 24:18 24:21 30:12 30:13 30:25 34:4 40:21 40:23 41:13 41:14 42:1 43:6 43:6 43:24 45:1 45:4 45:6 45:6 46:3 47:10 47:19 48:11 48:15 48:17 48:25 49:17 49:20 50:13 50:23 51:5 51:8 51:9 51:10 51:12 53:21 54:7 54:11 57:18 58:5 58:8 58:16 58:20 60:8 66:18 71:1 73:16 75:3 92:6 94:17 <b>pipeline's [1]</b> 45:16 <b>pipelines [7]</b> 23:11 23:13 45:7 48:12 66:11 71:2 99:24 <b>pipes [2]</b> 23:5 23:9 <b>pipng [2]</b> 83:8 83:25	<b>place [5]</b> 5:15 13:12 23:6 25:22 36:16 <b>placed [3]</b> 48:8 73:15 84:2 <b>placement [8]</b> 53:5 53:13 53:22 54:13 55:3 55:14 61:23 74:11 <b>places [1]</b> 69:12 <b>Plaintiff [2]</b> 1:15 2:14 <b>plaintiffs [4]</b> 1:6 2:5 5:4 7:12 <b>plan [19]</b> 22:13 22:16 23:13 23:19 24:23 40:22 41:8 48:10 48:21 48:23 48:25 49:4 49:7 49:21 51:13 60:13 60:13 73:13 91:4 <b>plans [17]</b> 14:3 20:3 57:21 57:23 58:3 60:9 60:11 60:16 64:10 68:21 69:8 69:11 91:8 94:1 94:4 94:9 96:18 <b>plant [7]</b> 10:2 16:17 23:25 67:9 67:10 85:3 92:5 <b>play [5]</b> 27:25 31:11 50:5 53:24 81:2 <b>played [2]</b> 10:4 21:6 <b>playing [2]</b> 14:10 36:14 <b>point [11]</b> 9:22 18:18 19:18 31:20 41:17 57:17 60:6 62:1 84:3 85:6 91:7 <b>points [2]</b> 30:14 92:9 <b>Pool [1]</b> 9:13 <b>portion [3]</b> 54:7 91:4 91:12 <b>portions [2]</b> 97:8 97:10 <b>position [7]</b> 16:8 40:22 43:6 51:22 61:16 73:23 94:8 <b>possible [1]</b> 32:5 <b>possibly [1]</b> 54:7 <b>postponed [1]</b> 55:8 <b>potholed [2]</b> 21:12 40:23 <b>potholes [2]</b> 40:24 41:2 <b>potholing [2]</b> 21:15 41:2 <b>practice [1]</b> 92:12 <b>preconstruction [6]</b> 29:4 29:9 29:25 30:15 33:5 34:15 <b>predecessors [1]</b> 9:11 <b>preparation [1]</b> 8:12	<b>prepare [1]</b> 8:12 <b>presence [2]</b> 21:19 21:23 <b>present [6]</b> 6:6 14:11 16:19 21:14 76:1 94:16 <b>presently [3]</b> 43:19 43:20 99:17 <b>pretty [2]</b> 19:20 95:21 <b>prevent [1]</b> 45:4 <b>primarily [5]</b> 8:21 10:10 11:6 17:24 19:3 <b>primary [1]</b> 15:18 <b>principal [3]</b> 15:23 29:16 36:1 <b>principally [1]</b> 16:4 <b>privilege [1]</b> 78:6 <b>problem [5]</b> 43:15 57:20 90:18 91:1 93:9 <b>problems [2]</b> 93:19 97:22 <b>procedure [1]</b> 100:1 <b>proceeding [1]</b> 8:4 <b>process [6]</b> 19:14 20:8 27:24 27:25 86:20 86:23 <b>processes [1]</b> 28:2 <b>products [8]</b> 20:13 34:4 48:25 51:9 58:8 58:15 75:3 88:8 <b>professional [3]</b> 12:18 12:19 98:11 <b>profile [17]</b> 35:7 48:10 48:23 49:1 49:4 49:7 49:13 49:20 50:2 50:25 58:13 58:14 58:20 74:17 91:4 91:8 91:12 <b>profit [3]</b> 89:4 89:6 99:10 <b>program [1]</b> 81:19 <b>progress [2]</b> 10:23 17:18 <b>project [177]</b> 8:23 9:23 9:25 10:5 10:5 10:12 10:18 10:19 10:23 10:25 11:10 11:11 11:14 11:16 11:17 11:21 12:23 14:3 14:7 14:12 14:16 15:2 15:6 15:9 15:12 15:16 15:20 16:1 17:8 17:8 17:13 17:14 17:19 17:23 18:4 18:5 18:6 18:7 18:9 18:12 18:15 18:21 19:1 19:5 19:8 19:12 19:15 19:18 19:22 20:1 20:4 20:7 20:10 20:17 20:22 21:3 21:6 22:9	22:10 22:10 23:6 23:20 25:13 25:15 26:3 26:22 27:4 27:7 27:7 27:8 28:1 28:6 28:18 28:19 28:20 28:24 29:2 29:5 29:17 30:22 31:5 31:11 31:20 33:16 33:19 33:20 33:24 34:12 34:12 34:18 35:23 36:6 36:12 36:23 37:24 37:25 38:2 38:12 38:19 38:21 38:25 39:2 39:13 42:7 43:13 43:16 43:21 44:7 44:24 45:13 45:21 48:13 51:20 54:23 54:24 56:1 56:23 57:21 61:7 61:13 65:8 65:12 65:15 65:22 66:18 70:7 71:10 71:14 71:17 77:12 80:12 80:15 80:18 81:2 81:7 81:17 82:7 82:7 83:11 83:12 83:16 84:7 84:9 84:19 86:10 87:24 87:25 88:2 88:4 88:9 88:11 88:20 89:8 89:22 89:25 90:2 90:3 90:6 91:5 91:13 91:17 91:20 91:23 91:25 92:8 93:8 93:10 93:16 94:25 95:1 95:3 95:5 95:6 95:6 95:18 95:21 97:16 <b>projects [7]</b> 10:2 11:7 11:10 11:19 17:10 17:23 45:12 <b>prolonged [1]</b> 7:23 <b>prompted [1]</b> 38:11 <b>promptly [1]</b> 104:9 <b>proper [2]</b> 49:25 104:9 <b>properly [1]</b> 7:25 <b>proposal [2]</b> 83:3 86:18 <b>proposing [1]</b> 98:17 <b>prospective [1]</b> 14:12 <b>protect [1]</b> 34:8 <b>protection [4]</b> 30:12 54:10 81:4 81:18 <b>provide [5]</b> 10:10 19:3 36:20 84:7 98:17 <b>provided [8]</b> 12:4 26:23 33:4 44:6 81:3 88:2 88:3 93:13 <b>PROVIDEO [1]</b> 6:6 <b>providing [1]</b> 32:15 <b>provision [1]</b> 86:5 <b>public [4]</b> 16:10 102:19 103:4 104:16	<b>pulled [1]</b> 79:14 <b>pump [36]</b> 9:25 11:9 11:21 14:6 15:9 15:12 17:7 17:13 20:17 22:13 22:24 23:2 24:6 24:24 25:2 25:4 28:7 28:17 28:20 34:18 45:3 48:13 51:24 52:23 56:11 63:23 64:2 67:6 73:10 74:18 77:12 84:25 95:1 97:23 98:22 98:23 <b>pumps [1]</b> 24:7 <b>purpose [6]</b> 34:22 34:24 47:16 64:12 72:8 89:18 <b>put [7]</b> 23:5 41:4 64:5 66:18 75:16 82:23 82:24 <b>putting [1]</b> 64:14 <b>PVC [1]</b> 24:10 <b>qualifications [1]</b> 103:15 <b>questions [9]</b> 7:9 7:23 9:25 28:16 38:8 46:11 62:1 99:14 104:3 <b>quick [1]</b> 75:8 <b>quickly [1]</b> 82:23 <b>quite [1]</b> 81:13 <b>quote [1]</b> 87:21 <b>quotes [1]</b> 83:7 <b>R [3]</b> 1:5 5:2 103:1 <b>raised [2]</b> 38:9 38:12 <b>range [3]</b> 58:4 78:11 78:20 <b>rather [2]</b> 24:17 41:19 <b>rattle [1]</b> 8:4 <b>read [8]</b> 7:25 41:17 41:18 41:23 56:24 61:4 101:11 102:8 <b>reading [5]</b> 40:13 60:16 61:11 72:2 103:10 <b>Ready [1]</b> 87:22 <b>reason [2]</b> 12:3 56:18 <b>reasonable [2]</b> 87:12 99:10 <b>recalling [1]</b> 44:8 <b>receive [3]</b> 56:19 56:24 76:8 <b>received [2]</b> 39:9 76:10 <b>receiving [1]</b> 93:4 <b>recess [2]</b> 28:13 48:3 <b>recollection [21]</b> 30:4 32:19 37:8 45:8 45:12 53:16 54:12 67:23 72:3 72:18 75:5 76:1
---	--	---	---	---



show [6] 49:10 51:22 75:2 85:8 97:8 97:10	73:5 sometime [3] 19:10 55:11 95:4	28:7 28:18 28:20 34:18 45:3 46:2 48:13 51:24 52:23 56:11 63:23 64:2 67:6 68:6 73:10 74:18 77:12 84:25 95:1 97:23 98:22 98:23	survey [6] 21:7 40:25 43:21 71:3 71:17 96:16	three-foot [1] 51:10 through [25] 2:17 8:15 19:5 20:16 20:19 27:11 29:1 33:18 38:18 38:23 39:10 42:12 58:25 67:2 69:4 75:16 78:12 81:15 82:13 82:22 86:18 86:22 87:1 87:5 95:21
showed [1] 8:22	sometimes [2] 7:23 8:3	STEPHEN [1] 1:4	surveying [3] 83:11 83:14 98:8	tie-in [4] 47:8 52:25 61:8 61:15
showing [3] 35:19 50:2 87:5	somewhere [1] 25:17	STEVE [1] 6:6	surveyors [3] 71:12 71:16 98:11	times [1] 7:18
shown [35] 13:24 14:2 22:16 23:3 24:23 40:22 41:15 43:11 48:18 48:21 48:25 49:4 49:6 49:21 50:25 51:12 56:19 57:21 57:23 58:3 58:20 59:2 60:9 60:16 63:18 71:22 73:3 73:11 73:13 73:17 73:23 74:19 94:1 94:4 94:9	sorry [4] 37:3 58:1 85:1 101:10	still [5] 14:21 27:9 27:15 27:23 57:25	suspect [1] 12:7	timing [2] 53:16 64:13
shows [3] 35:7 35:24 75:12	sort [4] 20:5 28:3 31:20 57:8	stop [3] 18:9 54:8 101:13	switch [1] 60:4	title [3] 16:9 74:9 104:7
shut [5] 53:12 53:13 54:4 54:11 97:11	south [12] 22:23 24:4 24:10 24:16 25:2 25:2 41:17 41:21 42:2 42:17 42:25 64:1	stored [1] 12:10	sworn [3] 7:2 102:16 103:24	today [9] 8:6 9:25 51:18 72:17 80:12 82:25 91:16 93:20 93:23
shutdown [5] 53:17 53:20 53:25 54:13 64:13	southerly [1] 43:10	straight [1] 42:24	synopsized [1] 54:4	today's [1] 104:12
shutting [1] 60:24	southern [1] 43:8	Street [2] 5:15 9:19	system [6] 24:24 53:10 53:12 54:8 57:6 97:9	tolerance [1] 76:6
side [3] 28:6 28:7 64:1	southernmost [1] 42:9	strike [3] 34:16 74:14 83:6	systems [1] 81:4 T [6] 53:14 54:9 64:5 102:1 103:1 103:1	Tom [11] 14:16 15:5 17:2 17:5 36:7 36:10 36:21 46:21 65:19 69:24 96:16
sign [1] 32:6	speak [1] 7:20	struck [1] 75:16	T-joint [14] 26:1 47:13 53:6 53:22 54:14 55:4 55:15 61:23 64:15 69:9 73:8 73:14 74:11 97:12	too [2] 8:4 54:10
signature [5] 33:9 63:18 66:4 71:22 103:11	specific [9] 13:3 15:6 20:24 40:12 40:20 54:1 57:5 86:9 93:18	structural [7] 27:19 67:5 91:16 91:24 92:1 92:2 97:22	tape [3] 60:4 62:5 63:6	took [3] 18:18 33:6 91:22
signatures [1] 32:2	specifically [17] 11:22 20:2 21:24 22:3 28:21 30:1 30:5 30:20 31:4 31:18 35:5 37:7 38:14 44:20 71:8 88:20 94:11	structure [1] 56:11	Tech [13] 6:1 9:9 9:10 9:20 10:13 12:11 27:9 27:15 27:23 44:9 46:15 46:18 82:1	top [8] 41:13 50:24 51:4 51:8 58:19 58:19 75:12 84:1
signed [1] 95:2	specifications [1] 20:4	structures [1] 14:11	Tech's [3] 56:23 74:16 81:13	topics [2] 38:10 38:11
signing [1] 103:13	specifics [1] 65:10	subcontractor [1] 99:6	telephone [1] 34:5	topographical [1] 91:12
Similarly [1] 43:11	speculation [3] 53:8 75:18 82:8	subcontractors [2] 89:4 89:7	telling [1] 65:20	topography [2] 96:13 96:18
simultaneously [1] 17:11	speeding [1] 89:21	subject [9] 37:23 44:22 46:10 52:21 52:22 84:14 86:16 91:22 94:20	ten [3] 75:16 95:23 96:1	touch [2] 70:6 70:10
sit [1] 93:19	spelled [1] 16:6	subjects [3] 38:5 81:17 81:21	tend [1] 8:3	trace [1] 22:20
site [36] 10:19 16:11 16:13 16:21 16:24 16:25 20:19 21:7 21:18 21:20 22:13 22:16 23:13 23:19 25:9 33:24 36:7 36:15 36:22 39:13 39:19 40:3 40:16 40:18 40:22 41:8 42:1 42:13 43:7 47:4 47:7 49:21 65:19 75:11 92:12 98:19	split [1] 50:19	submit [1] 87:18	tendency [1] 43:6	TRACY [1] 2:3
situation [3] 76:4 100:9 100:19	sporadic [1] 16:20	submittal [1] 87:17	tending [1] 42:4	transcribed [2] 103:11 104:2
six [2] 13:5 58:24	ss [2] 102:4 103:2	submitted [2] 99:18 103:10	tenth [1] 41:18	transcript [1] 104:2
SKELLENGER [1] 6:2	stack [1] 85:5	SUBSCRIBED [1] 102:16	TERENCE [1] 6:2	transited [1] 42:1
sketched [1] 24:17	stage [1] 83:11	subsequently [1] 13:14	term [1] 83:23	transits [1] 43:7
Skodje [2] 98:9 98:10	stake [4] 83:24 84:1 84:2 84:3	substantial [1] 19:15	terminate [1] 96:2	transmittal [3] 96:7 96:9 100:13
slab [2] 92:4 92:6	staked [4] 83:7 98:13 98:16 98:18	succession [1] 9:13	testified [4] 7:3 32:4 36:1 75:19	transmitted [1] 89:2
slight [2] 73:22 74:10	staked [4] 83:7 98:13 98:16 98:18	such [7] 12:5 27:3 28:2 30:21 31:3 70:5 103:20	testify [1] 103:24	transmitting [1] 77:11
slow [1] 93:15	started [2] 19:21 22:9	suction [1] 24:6	testimony [2] 7:21 104:3	treatment [8] 10:1 23:25 28:2 67:8 67:10 82:7 85:3 92:5
solid [1] 59:20	state [9] 1:1 8:24 12:20 78:3 102:4 102:19 103:2 103:5 104:16	Suite [4] 2:23 5:6 5:11 6:4	thank [4] 40:4 79:3 79:21 90:20	TREMAINE [1] 5:14
someone [2] 45:23	statement [9] 57:16 64:19 64:23 67:11 78:24 79:1 93:25 95:13 99:8	summer [1] 12:8	thereof [1] 103:22	trench [2] 32:15 72:7
	statements [1] 12:22	superior [2] 1:1 15:14	thereon [1] 104:7	trenches [1] 66:19
	states [2] 91:10 93:12	supplement [1] 99:15	third [5] 2:23 5:11 5:20 23:14 93:25	
	station [38] 9:25 11:9 11:21 14:6 15:9 15:12 17:8 17:14 20:18 22:14 22:25 23:3 24:7 24:24 25:2 25:4	supplier [1] 87:24	Third-Party [4] 1:15 1:19 2:14 2:18	
		suppliers [2] 88:8 88:11	thought [2] 27:12 92:14	
		support [1] 26:23	three [7] 23:18 50:15 59:9 59:13 60:4 83:20 104:11	
		surname [1] 16:6		
		surrounding [1] 85:6		



<b>Trianon</b> [1] 5:20	<b>USWest</b> [2] 32:14	25:5 51:12 53:12	35:2
<b>trips</b> [2] 91:20 92:2	80:8	67:8 67:10 82:7	<b>WRIGHT</b> [1] 5:14
<b>true</b> [2] 102:9 104:2	<b>utilities</b> [15] 14:11	85:2 92:5 97:9	<b>write</b> [5] 37:6 52:19
<b>truth</b> [3] 103:24 103:25	20:9 20:12 21:15	<b>waterline</b> [60] 25:9	76:2 77:15 92:13
103:25	21:19 31:17 33:23	25:17 25:22 26:2	<b>writes</b> [1] 99:13
<b>Try</b> [1] 85:1	33:23 34:9 34:9	43:12 43:17 45:2	<b>written</b> [17] 17:25
<b>TSIORVAS</b> [3] 1:4	39:13 40:17 79:2	47:2 47:22 49:6	33:3 38:2 64:7
1:5 1:5	80:3 80:20	49:8 49:11 49:14	64:24 66:25 67:24
<b>turn</b> [3] 33:18 42:25	<b>utility</b> [8] 24:11	50:7 50:13 50:25	72:4 72:5 75:6
65:25	31:8 31:9 31:13	51:23 53:2 53:6	77:10 80:1 81:16
<b>Turning</b> [6] 29:21	39:18 40:2 40:15	53:25 54:13 54:14	87:15 90:9 90:13
33:15 36:25 37:12	80:6	55:4 55:15 57:17	92:25
55:25 84:11	<b>V</b> [1] 102:1	57:17 58:3 58:6	<b>wrote</b> [8] 29:11
<b>twelve</b> [2] 95:10	<b>valves</b> [2] 53:10	58:7 58:14 58:21	37:1 39:5 54:2
95:14	54:6	58:22 58:23 60:22	67:21 67:21 75:24
<b>two</b> [13] 17:10 23:10	<b>Van</b> [5] 15:15 15:16	60:25 61:3 61:9	77:4
41:16 48:20 60:17	36:5 77:16 92:22	61:15 61:24 63:25	<b>X</b> [1] 41:9
60:19 63:7 76:14	<b>Vashon</b> [1] 104:16	64:6 64:14 64:15	<b>years</b> [1] 104:11
89:19 90:10 91:20	<b>vault</b> [1] 45:4	68:7 68:11 69:10	<b>yellow</b> [1] 23:2
92:2 96:7	<b>verbal</b> [1] 18:1	73:10 73:14 74:12	<b>yesterday</b> [1] 96:16
<b>type</b> [1] 22:1	<b>vertical</b> [7] 45:1	74:18 79:1 84:16	<b>younger</b> [1] 15:5
<b>typewriting</b> [1] 103:8	45:16 50:18 57:20	84:18 85:2 85:13	<b>yourself</b> [3] 8:12
<b>typical</b> [1] 35:22	59:19 59:20 61:22	85:16 94:4 94:8	19:25 22:8
<b>U</b> [1] 34:6	<b>vertically</b> [3] 50:10	94:9 97:11	
<b>ultimate</b> [2] 87:2	59:24 59:25	<b>waterline's</b> [1] 43:23	
87:5	<b>VERWOLF</b> [3] 5:13	<b>waterlines</b> [1] 34:3	
<b>Um-hum</b> [1] 72:21	39:20 90:19	<b>week</b> [6] 10:20 11:3	
<b>uncovered</b> [1] 47:14	<b>VIDEOGRAPHER</b>	11:4 17:21 75:5	
<b>under</b> [9] 10:2	[16] 28:11 28:14	95:23	
25:4 36:15 45:19	42:19 42:22 48:1	<b>weekly</b> [13] 10:25	
47:9 57:18 67:24	48:5 52:6 52:9	16:15 16:21 38:12	
75:17 103:8	60:3 62:5 63:6	38:15 38:21 38:25	
<b>underground</b> [9]	79:6 79:9 82:16	39:2 54:23 54:24	
14:11 20:9 21:15	82:20 101:15	55:25 56:1 97:16	
21:19 31:7 31:16	<b>VIDEOTAPED</b> [2]	<b>WEIGEL</b> [3] 5:18	
33:23 39:13 80:20	1:20 2:20	42:18 60:10	
<b>undersigned</b> [1]	<b>view</b> [9] 15:13 48:22	<b>west</b> [8] 22:23 34:6	
103:4	48:25 49:4 49:4	44:16 96:14 98:19	
<b>understand</b> [9] 7:16	49:7 49:7 49:13	98:22 98:23 98:24	
7:17 7:25 27:6	91:4	<b>wet</b> [5] 23:25 84:22	
27:18 36:6 36:13	<b>viewed</b> [1] 93:23	84:23 84:24 88:8	
82:4 88:10	<b>visit</b> [1] 11:7	<b>Whatcom</b> [2] 1:1	
<b>understood</b> [4] 13:10	<b>visited</b> [1] 16:11	11:16	
40:7 40:9 40:9	<b>visiting</b> [3] 10:17	<b>whole</b> [3] 33:17	
<b>undertake</b> [1] 98:16	11:5 17:21	80:25 103:25	
<b>undertaken</b> [2] 26:14	<b>visits</b> [3] 16:15	<b>William</b> [1] 77:6	
67:6	16:20 21:18	<b>within</b> [6] 34:7	
<b>undertaking</b> [1] 45:20	<b>volume</b> [2] 43:1	36:5 39:5 46:14	
<b>unilateral</b> [1] 72:11	102:13	46:18 102:8	
<b>unless</b> [3] 11:6	<b>vs</b> [4] 1:7 1:16	<b>without</b> [2] 8:5	
103:11 104:10	2:6 2:15	90:22	
<b>up</b> [13] 10:19 17:19	<b>WA</b> [5] 5:7 5:12	<b>witness</b> [20] 7:1	
23:18 40:24 42:4	5:16 5:21 6:4	23:21 25:10 25:14	
50:15 50:16 59:13	<b>WADE</b> [1] 2:2	39:22 39:24 41:6	
85:10 86:8 89:21	<b>wait</b> [1] 7:22	49:5 49:12 73:5	
92:13 98:18	<b>waive</b> [1] 103:12	78:2 78:10 79:18	
<b>upper</b> [2] 63:18	<b>Wan</b> [6] 15:24 36:2	84:24 103:7 103:10	
66:4	63:22 69:24 87:13	103:12 103:23 104:8	
<b>usage</b> [1] 86:4	96:8	104:13	
<b>used</b> [1] 37:18	<b>Washington</b> [9] 1:1	<b>witnesses</b> [1] 20:15	
<b>using</b> [4] 24:13	2:23 9:3 12:20	<b>Woerden</b> [4] 15:15	
25:11 41:4 49:10	102:4 102:19 103:2	36:5 77:16 92:22	
<b>usual</b> [2] 17:22	103:5 104:16	<b>Woerden's</b> [1] 15:16	
65:11	<b>waste</b> [1] 98:19	<b>worked</b> [6] 16:10	
<b>usually</b> [3] 10:24	<b>water</b> [16] 10:1	26:21 27:5 29:1	
11:1 11:2	17:23 23:10 23:10	65:13 91:17	
	23:25 24:22 24:24	<b>works</b> [1] 16:10	
		<b>workshop</b> [5] 34:17	
		34:20 34:23 34:24	