

1 OUR LEGEND.

2 AND WE HAVE WATER TABLE FREE HYDROCARBON
3 OCCURRENCE, DASHED WHERE INFERRED, AND WE HAVE LIMITS OF
4 PERCHED ZONE FREE HYDROCARBON OCCURRENCE, DASHED WHERE
5 INFERRED. THE HATCHING IS OUR PERCHED AREA, AND THE AREA
6 THAT IS NOT HATCHED IS OUR WATER TABLE AREA. AND I THINK
7 WE SAW THIS YESTERDAY.

8 AND IN CONNECTION WITH IDENTIFYING THE
9 SUBSTANCES THAT WERE RIGHT IN HERE THAT WERE GASOLINE
10 COMPONENTS AS BEING LEADED GASOLINE, DO YOU REMEMBER THAT?

11 A. YES, I DO.

12 Q. REMEMBER THAT REPORT WE LOOKED AT THIS MORNING
13 FROM 1989, ONE YEAR AFTER THIS REPORT WAS ISSUED?

14 A. YES, I DO.

15 Q. WHAT KIND OF GASOLINE WAS IN THAT AREA AROUND
16 THE 502 POOL?

17 A. WELL, THAT WAS LEADED GASOLINE WITH THE T.E.L.
18 LEAD PACKAGE AS OPPOSED TO THE MIXED ALKYL LEAD PACKAGE.

19 Q. SO TO THE EXTENT THERE IS GASOLINE IN HERE, IF
20 IT'S GASOLINE THAT'S LEADED WITH T.E.L., COULD THAT BE THE
21 SAME LEADED GASOLINE UNDER OUR PLUME B 2?

22 A. NO, IT COULD NOT.

23 Q. AND THE REPORT WE SAW THIS MORNING THAT
24 ESTABLISHED THAT WAS WHAT DATE?

25 A. 1989.

26 Q. THERE IS ONE OTHER THING IN THIS REPORT THAT'S
27 PARTICULARLY USEFUL. WE'VE SEEN THIS, AND I'M GOING TO
28 MAYBE GIVE YOU AN OPPORTUNITY TO DRAW UP ON THE BOARD

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SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

DEPARTMENT NO. 307 HON. WENDELL MORTIMER, JR., JUDGE

WATSON LAND COMPANY,)
)
 PLAINTIFF,)
)
 VS.)
)
 ATLANTIC RICHFIELD COMPANY,)
 ET AL.,)
)
 DEFENDANTS.)

CASE NO.
BC150161

REPORTER'S CERTIFICATE

STATE OF CALIFORNIA)
) SS.
COUNTY OF LOS ANGELES)

I, CARMEN J. GARROD, CSR NO. 4009, OFFICIAL COURT
REPORTER OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA,
FOR THE COUNTY OF LOS ANGELES, DO HEREBY CERTIFY THAT THE
FOREGOING PAGES COMPRISE A FULL, TRUE AND CORRECT
TRANSCRIPTION OF THE PROCEEDINGS HELD IN THE ABOVE-ENTITLED
MATTER ON JUNE 6, 2001.

DATED THIS 7TH DAY OF JUNE, 2001.

_____ CSR NO. 4009

OFFICIAL COURT REPORTER



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SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

DEPARTMENT 307 HON. WENDELL MORTIMER, JR., JUDGE

WATSON LAND COMPANY, A CALIFORNIA CORPORATION,

PLAINTIFF,

VS.

ATLANTIC RICHFIELD COMPANY, ETC.,
ET AL.,

DEFENDANTS,

SUPERIOR COURT
CASE NO. BC 150161

REPORTER'S DAILY TRANSCRIPT OF PROCEEDINGS

THURSDAY, JUNE 7, 2001

VOLUME 13

PAGES 1867 THROUGH 2063, INCLUSIVE

APPEARANCES:

(AS NOTED ON THE FOLLOWING PAGE.)

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OFFICIAL REPORTER

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1 WE ARE IN POSSESSION OF, AND WHAT THIS SHOWS IS,
2 IT'S A CLOSER PROXIMITY TO MW-4 AND 5, IT'S DOESN'T
3 ANYWHERE COME CLOSE TO THE PROFILE THAT IT NEEDS TO
4 BE, SINCE IT'S INTERSECTED BY ANY ARCO PLUME COMING
5 OVER IN A LARGE WAY, ALL THE WAY TO UTILITY WAY AND

6 IT'S MUCH CLOSER TO MW-4 AND 5 IN THE SCENARIO THAT
7 WE DO NOT KNOW THE CONDITIONS OF.

8 WE COULD LOOK AT THIS BY LOOKING AT
9 WSB-5 AND 6, THAT'S THE QA SAMPLES WE TOOK.

10 FOR INSTANCE, WSB-6 IS ABOUT 104
11 FEET NORTH OF THE LOCATION OF THE LEAK Laterally.
12 AND THEN THERE'S SOME DISTANCE, OF COURSE,
13 VERTICALLY, WE DON'T KNOW, AS DR. DAGDIGIAN
14 INDICATED, WHERE THE ACTUAL CHIMNEY, IF YOU WILL,
15 OR DOWNWARD CONVEYANCE WENT.

16 SO WE ARE IN THE HUNDRED TO 200
17 RANGE RIGHT THERE.

18 SO THAT'S THE IMPORTANCE OF WSB-5
19 AND 6, AS A YARDSTICK FOR MEASURING THESE TYPES OF
20 ASSUMPTIONS.

21 BUT WSB-4 SPEAKS FOR ITSELF JUST IN
22 LEVEL ALONE.

23 Q. WELL, LET'S TALK ABOUT THE A-PLUME
24 FOR A SECOND, DR. SCHMIDT.

25 DID YOU OBTAIN ANY DOWNHOLE FLUX
26 DATA THAT WOULD ALLOW YOU TO REACH ANY CONCLUSIONS
27 AS TO WHETHER OR NOT THE A-PLUME COMES FROM A
28 PIPELINE LEAK?

1 A. YES.

2 Q. WHAT DATA DID YOU FIND?

3 A. IN A RANDOM SAMPLING, ALONG THE
4 PIPELINE, WHICH IS MOST OF THE WORK THAT I DID,
5 TESTING AS CLOSE TO THE PIPELINE IN AVAILABLE AREA
6 ON THE PROPERTY, I DISCOVERED THE PLUME, A-1, OR A.

7 WSB-27 WAS DRILLED AS CLOSE TO THE
8 PIPELINE AS I COULD. I THINK THE DISTANCE WAS
9 ABOUT 16 FEET FROM THE PIPELINE, SHELL PIPELINE,
10 AND I HAVE THAT ON EXHIBIT, I THINK.

11 Q. YOU DO, IN FACT.

12 HERE COMES THE WSB-27 DOWNHOLE
13 VAPOR FLUX WHICH IS EXHIBIT 1544.

14 A. THANK YOU. SAME PLOTTING, WSB-27.

15 I AM SORRY, WHAT WAS YOUR QUESTION?

16 Q. MY QUESTION WAS, DID YOU HAVE ANY
17 DATA THAT COULD ALLOW YOU TO CONCLUDE WHETHER OR
18 NOT THE A-PLUME CAME FROM THE PIPELINE?

19 A. OH, YES.

20 DOWNHOLE FLUX, ALONG THE PIPELINE,
21 SAME TESTS, SAME EVERYTHING, SOIL-GAS AT 5 FEET,
22 THIS IS BACKGROUND CORRECTED, MEANING IT'S THE MOST
23 CONSERVATIVE INTERPRETATION OF DATA, SOIL-GAS TO 5
24 FEET, SOIL-GAS IS A LITTLE MORE PERSISTENCE BUT
25 THEN HOOPING OUT TO 10 FEET, I COULD HAVE COLORED
26 THAT ORANGE MAYBE, BUT TOO LOW.

27 SOIL-GAS AT 20 FEET, SIMILAR
28 CHARACTER, THESE ARE ALL PRETTY MUCH THE SAME.

1 INDICATING PROXIMITY BUT NOT VERY
2 NEAR THE SOURCE.

3 40 FEET, GASOLINE RANGE DETECTED.
4 MUCH HIGHER, SOURCE-LIKE CHARACTER, KIND OF WHACKY
5 CHARACTER, JUMPS UP AND DOWN, THIS COULD BE
6 INSTRUMENT ARTIFACT, I COULD HAVE SAMPLED HERE, BUT
7 I USUALLY SAMPLE OUT HERE.

8 SO SOURCE-LIKE CHARACTER, 500 PARTS
9 PER MILLION, AND FALLING OFF, SO IT LOSES RED
10 DESIGNATION HERE, SOURCE GROUPING IDENTIFICATION.
11 MUCH HIGHER CONCENTRATION, 10,000
12 PARTS PER MILLION BY OVA, BUT SOME SOURCE-LIKE
13 CHARACTER, BUT ALSO POOR SOURCE, SOIL-GAS
14 CHARACTER. SO WE SEE SORT OF A UNIQUE SITUATION
15 HERE WHERE WE DON'T GET THE IMPRESSION THAT WE ARE
16 AS CLOSE TO THE SOURCE.

17 I MEAN, ALL THIS SHOULD BE ND,
18 DON'T GET ME WRONG, THESE SHOULD ALL BE ND OR VERY
19 LOW. AT BEST, SOIL-GAS, ALL OVER GAS OF THE
20 GENERAL NEIGHBORHOOD, PRETTY MUCH ALL OF LA IS LIKE
21 THAT.

22 BUT ANYWAYS, WE DON'T EXPECT TO SEE
23 ANY OF THIS IF WE ARE DOWN IN THE SOURCE, IN FACT
24 WE HAVE A LOT OF SAMPLES ALONG THE PIPELINE THAT SO
25 NOTHING ALL THE WAY DOWN, JUST SOIL-GAS.

26 SO THIS CHARACTER HERE AND THE
27 SOURCE-LIKE COMPONENT OF IT AND THE LEVEL IS
28 INDICATIVE OF A POTENTIAL PIPELINE LEAKING IN THIS

1 AREA AS WELL.

2 AND SUBSEQUENT STUDIES SHOW THAT,
3 OBVIOUSLY, TO BE TRUE.

4 SO IT'S THIS PROFILE THAT SHOWS
5 THIS SIMILAR CHARACTER WITH SOME SOURCE-LIKE AT 40
6 FEET INDICATING WE ARE GETTING KIND OF CLOSE,
7 PERHAPS, TO THIS FRINGE OF VAPOR AND THEN SOME
8 SOURCE ON GROUNDWATER, LIKE DISSOLVED PHASE, THIS
9 IS A CLASSIC DISSOLVE PHASE PLUME, NOT AN LNAPL
10 PLUME.

11 Q. I HAVE A COUPLE OF CROSS-SECTIONS
12 FOR YOU.

13 I'D LIKE YOU TO SHOW US THE
14 RELATIONSHIP OF WSB-27 TO THE FINAL LOCATION OF THE
15 PLUME.

16 I AM NOW HANDING YOU EXHIBIT 1515,
17 WHICH IS THE NORTH/SOUTH CROSS-SECTION. I AM GOING
18 TO JOIN YOU UP HERE FOR JUST A MINUTE, SEE IF
19 WE CAN FIND OUR EAST/WEST CROSS-SECTION.

20 WE WILL JUST GO WITH THIS ONE FOR
21 THE MOMENT, THIS IS THE NORTH/SOUTH CROSS-SECTION.

22 SHOW US WHERE WSB-27 IS RELATIVE TO
23 THE PLUME?

24 A. THIS IS B NORTH TO B-PRIME SOUTH.
25 AND WE ARE LOOKING AT VERTICAL, SURFACE TO
26 GROUNDWATER AGAIN. THE A-PLUME AND WSB-27 IS RIGHT
27 HERE, YOU SEE THE LITHOLOGY AND YOU SEE IT GOING
28 THROUGH WHAT THEY ARE DESCRIBING AS AN INFERRED

1 PERCHING LAYER WITH SOME CONCENTRATIONS OF
2 DISSOLVED PHASE BENZENE AND HIGHER CONCENTRATIONS
3 OF DISSOLVED PHASE BENZENE IN GROUNDWATER.

4 Q. NOW, I HAVE BEEN GIVEN A CLUE THAT
5 MY BOARD MAY BE HIDING BACK HERE. SO IF YOU WILL
6 EXCUSE ME FOR ONE MOMENT.

7 ALL RIGHT, LET THE RECORD REFLECT
8 THAT I AM PLACING ON THE BOARD EXHIBIT 1514, WHICH
9 IS CROSS-SECTION A, A-PLUME, THROUGH THE A-PLUME
10 AND THIS, AGAIN, IS EAST AND WEST.

11 DR. SCHMIDT, WOULD YOU FIRST GIVE
12 US THE OVERVIEW, WHICH SIDE IS THE ARCO REFINERY
13 ON?

14 A. SEE, WEST, EAST, IT WOULD HAVE TO
15 BE THIS WAY, TO THE EAST.

16 Q. YES, ALL RIGHT.

17 AND WHERE IS WSB-27?

18 A. WSB-27 IS RIGHT HERE, WITH THE SAME
19 VERTICAL AXIS. 27 IS RIGHT HERE.

20 Q. SO IF PLUME A WAS CAUSED BY THE
21 ARCO REFINERY, WOULD WSB-27 LOOK DIFFERENT TO YOU?

22 A. OH, YEAH. YOU WOULD HAVE A PROFILE
23 THAT WAS INDICATIVE OF PRODUCT COMING OVER, HIGH
24 LEVELS, SOURCE-LIKE LEVELS, AND PERSISTENCE LEVELS
25 AS OPPOSED TO DISTANCE FROM THE PLUME ON THIS SIDE
26 OF THE CORRIDOR.

27 IF I WERE TO DRILL ON THIS SIDE,
28 THE PROFILES WOULD LOOK GREATLY DIFFERENT, MORE

1 SOURCE-LIKE OR SOURCE CHARACTER, EVEN FROM THE
2 DISSOLVED PHASE, YOU CAN HAVE SOURCE CHARACTER, IT
3 JUST CONTAINS THE LEVEL OF BENZENE, FOR INSTANCE,
4 GETTING IN THE CHAMBER, ALTHOUGH WE HAVE BEEN
5 TALKING TOTAL HYDROCARBONS RECENTLY.

6 SO THIS PROFILE IS INDICATIVE OF A
7 CLEANER DOWNHOLE FLUX STACK OF PROFILES AND IT IS
8 BETWEEN THE LOCATION OF THE PLUME AND THE
9 THEORETICAL SOURCE.

10 Q. ALL RIGHT. WHY DON'T YOU SET THAT
11 DOWN SO IT DOESN'T FALL DOWN.

12 I WANT TO TALK TO YOU FOR A MINUTE,
13 DR. SCHMIDT, ABOUT QAQC KIND OF STUFF.

14 YOU MENTIONED USING A PIECE OF
15 EQUIPMENT CALLED AN OVA. DO YOU RECALL THAT?

16 A. YES.

17 Q. WHAT IS AN OVA?

18 A. AN OVA, IT STANDS FOR "ORGANIC
19 VAPOR ANALYZER."

20 IT'S A FIELD INSTRUMENT AND IT
21 WORKS OFF THE PRINCIPLE OF GAS CHROMATOGRAPHY,
22 FLAME IONIZATION DETECTION. ACRONYM BEING
23 G-C-F-I-D.

24 THE OVA HAS BEEN AROUND IN
25 BUSINESS, ESPECIALLY IN THE PETROLEUM INDUSTRY FOR
26 DECADES.

27 AND MY PRINCIPLE IT'S EXTREMELY
28 USEFUL TOOL FOR FIELD ASSESSMENT.

1 SUBMITTED TO YOU, WE WILL SEE YOU BACK MONDAY
2 MORNING, 9:00 A.M.

3

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(THE PROCEEDINGS IN THE ABOVE-ENTITLED
5 MATTER WERE ADJOURNED AND CONTINUED TO
6 MONDAY, JUNE 11, 2001, AT 9:00 A.M.)

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COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

WATSON LAND COMPANY,)	
)	
PLAINTIFF-RESPONDENT,)	
)	
VS.)	SUPERIOR COURT
)	CASE NO. BC 150161
ATLANTIC RICHFIELD COMPANY,)	
ETC., ET AL.,)	
)	
DEFENDANTS-APPELLANTS,)	
)	

APPEAL FROM THE SUPERIOR COURT OF LOS ANGELES COUNTY

HONORABLE WENDELL MORTIMER, JR., JUDGE PRESIDING

REPORTER'S TRANSCRIPT ON APPEAL

JUNE 12, 2001

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VOLUME 16 OF 37 VOLUMES
PAGES 2286 THROUGH 2501, INCLUSIVE

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SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

DEPARTMENT 307 HON. WENDELL MORTIMER, JR., JUDGE

WATSON LAND COMPANY, A CALIFORNIA)
CORPORATION,)

PLAINTIFF,)

SUPERIOR COURT
CASE NO. BC 150161

VS.)

ATLANTIC RICHFIELD COMPANY, ETC.,)
ET AL,)

DEFENDANTS.)

REPORTER'S DAILY TRANSCRIPT OF PROCEEDINGS

TUESDAY, JUNE 12TH, 2001

VOLUME 15
PAGES 2286 THROUGH 2501, INCLUSIVE

APPEARANCES:
(SEE APPEARANCE PAGE)

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1 (THE FOLLOWING PROCEEDINGS
2 WERE HELD IN OPEN COURT IN
3 THE PRESENCE OF THE JURY.)
4

5 THE COURT: ALL RIGHT, BACK ON THE
6 RECORD.

7 CONTINUE, COUNSEL.

8 MR. BRIGHT: THANK YOU, YOUR HONOR.

9 Q BY MR.. BRIGHT: NOW, MS. BERESKY,
10 YOU JUST POINTED OUT THE FIVE MAJOR AREAS OF
11 CONTAMINATION ON THE WATSON CENTER PROPERTY.

12 CAN YOU GO BACK AND FOR EACH ONE OF
13 THOSE FIVE AREAS, TELLS US WHAT THE CONTAMINATION
14 IS?

15 A. SURE. WE WILL START WITH PLUME A
16 UP HERE AT THE NORTH.

17 PLUME A IS A LEADED GASOLINE
18 UNDERNEATH UTILITY WAY PIPELINE CORRIDOR.

19 PLUME B1 IS AN UNLEADED GASOLINE,
20 UNDERNEATH THE -- UNDERNEATH THE DWP PIPELINE
21 CORRIDOR.

22 AND THEN B2 IS A LEADED GASOLINE
23 UNDERNEATH THE UTILITY WAY PIPELINE CORRIDOR.

24 THE FOURTH AREA, THE GATX PLUME,
25 WHICH PROBABLY RUNS IN AROUND THIS SORT OF A
26 CONFIGURATION, A JET FUEL PLUME.

27 AND THEN THE SMALL AMOUNT OF
28 CONTAMINATION THAT'S COMING OVER ON TO THE WATSON

1 PROPERTY FROM THE ARCO REFINERY, CONSISTS OF MIDDLE
2 DISTILLATES WHICH HAS BEEN REFERENCED AS REFINERY
3 SLOPS.

4 BUT BASICALLY A MIXTURE OF THINGS
5 AND IT DOES HAVE A GASOLINE COMPONENT TO IT.

6 THERE'S A LITTLE BIT OF GASOLINE IN THAT.

7 Q. THANK YOU.

8 NOW, LET'S GET -- LET'S INCREASE
9 THE SCALE A LITTLE BIT. I'D LIKE YOU TO LOOK AT A
10 DOCUMENT THAT'S BEEN MARKED FOR IDENTIFICATION AS
11 EXHIBIT 1500.

12 MR. BRIGHT: YOUR HONOR, MAY I?

13 THE COURT: YOU MAY.

14 Q BY MR. BRIGHT: DO YOU RECOGNIZE
15 THAT DOCUMENT?

16 A. YES, I DO.

17 Q. IS THAT A MAP THAT YOU WORKED ON IN
18 CONJUNCTION WITH DR. DAGDIGIAN?

19 A. YES, IT IS.

20 Q. CAN YOU TELL US WHAT IT SHOWS?

21 A. YES.

22 MAY I APPROACH THE BOARD?

23 THE COURT: YOU MAY.

24 THE WITNESS: THIS IS A MAP OF THE B1
25 PLUME AND THE B2 PLUME, BENZENE AND GROUNDWATER.

26 IT BASICALLY SHOWS THE CHEMICAL
27 CONCENTRATIONS AND WE HAVE USED DIFFERENT COLORS TO
28 DENOTE DIFFERENT LEVELS OF CHEMICAL CONCENTRATIONS.

1 PLUME AND THEN THAT IS ACTUALLY ON TOP OF THIS
2 SMALL DISSOLVED PHASE PLUME. JET FUEL PLUME IS ALL
3 LNAPL OR FREE PRODUCT, SO IT IS FLOATING ON THE
4 GROUNDWATER.

5 THIS B1 GASOLINE PLUME IS DISSOLVED
6 IN THE GROUNDWATER.

7 SO BASICALLY, AGAIN, WHAT IT SHOWS
8 HERE IS THAT YOU HAVE THIS VERY LARGE JET FUEL
9 PLUME WHICH REALLY HAD NO DIFFICULTY MIGRATING
10 THROUGH SILTY CLAY, SANDY SILT, SILTY CLAY, CLAY,
11 CLAY, AND THEN, OF COURSE, EASILY THROUGH THE SAND
12 AND INTO THE PLUME AREA.

13 Q. NOW, JUST IN TERMS OF RELATIVE
14 PERMEABILITY, WHAT WOULD FLOW THROUGH CLAY MORE
15 EASILY, JET FUEL OR WATER?

16 A. WATER, BECAUSE IT'S NOT AS VISCOUS
17 OF A MATERIAL.

18 Q. AND HOW ABOUT THE SAME COMPARISON,
19 OBVIOUSLY THIS TIME BETWEEN WATER AND GASOLINE?

20 A. GASOLINE WOULD FLOW THROUGH THIS
21 KIND OF MATERIAL MORE READILY THAN JET FUEL FOR THE
22 SAME REASON.

23 Q. SO IF JET FUEL GETS THROUGH,
24 GASOLINE --

25 A. YES.

26 Q. -- MORE EASILY CAN GET THROUGH?

27 A. YES, THAT IS CORRECT.

28 Q. ALL RIGHT, MS. BERESKY, TAKE A DEEP

1 BREATH, AND CAN YOU TELL US THE BASIS FOR YOUR
2 OPINIONS AS TO THE LOCATION AND NATURE OF EACH OF
3 THE FIVE MAJOR AREAS OF CONTAMINATION ON THE WATSON
4 CENTER PROPERTY. AND PERHAPS FOR THIS IT WOULD BE
5 BETTER TO GET THE PLUME MAP BACK UP.

6 A. THERE ARE SEVERAL LINES OF
7 REASONING THAT I HAVE USED TO DETERMINE THE NATURE
8 AND EXTENT OF THE PLUMES.

9 THE FIRST ONE IS, THAT IF YOU JUST
10 LOOK AT THE PLUME -- WE CALL IT MORPHOLOGY, ITS
11 SHAPE, WHAT'S THE SHAPE OF THE PLUME. THE PLUME
12 MORPHOLOGY IS ELONGATED IN A NORTH/SOUTH DIRECTION
13 UNDERNEATH UTILITY WAY PIPELINE CORRIDOR. ALSO
14 HERE, ELONGATED IN A NORTH/SOUTH DIRECTION.

15 IF YOU LOOK AT THE CONCENTRATION OF
16 THE PLUMES, THE HOT SPOT, IS CENTERED IN THE AREA
17 OF THE PIPELINE CORRIDOR.

18 YOU CAN ALSO LOOK AT, IT'S
19 IMPORTANT TO LOOK AT WHERE DATA SHOWS YOU THE PLUME
20 IS, WHERE DATA SHOWS YOU THE PLUME IS NOT. THAT'S
21 JUST AS IMPORTANT INFORMATION TO HAVE.

22 SO WE CAN SEE THERE ARE LINES,
23 THERE ARE PLACES WHERE IN THE BENZENE PLUME, WE
24 HAVE SOME CLEAR, LOWER CONCENTRATIONS THAN WHAT WE
25 HAVE IN THE HOT SPOT HERE, EVEN THESE, ALTHOUGH
26 THERE ARE HIGH CONCENTRATIONS AND INDICATE SOME
27 COMING OVER ACROSS WILMINGTON FROM THE ARCO
28 REFINERY OF THIS PLUME, THERE'S STILL NOT AS HIGH

1 AS THE HOT SPOT CONCENTRATIONS.

2 AND AGAIN, THE SECOND LAW OF
3 THERMODYNAMIC AS DR. DAGDIGIAN EXPLAINED TO YOU,
4 IT'S NOT GOING TO MOVE FROM A LESS CONCENTRATED
5 STATE TO A MORE CONCENTRATED STATE.

6 Q. WHAT ABOUT THE OTHER CHEMICALS?

7 A. THE OTHER CHEMICALS, HERE, AGAIN,
8 WE HAVE ONLY MET BENZENE HERE. WE HAVE MAPS OF
9 MTBE AND DIPE.

10 WE ALSO HAVE ANOTHER MAP OF EDB AND
11 EDC.

12 AND THOSE CHEMICAL CONCENTRATIONS
13 IN THESE PLUMES CLEARLY MARK IT AS THE SAME
14 MATERIAL AND ALSO INDICATE THAT THESE PLUME SHAPES
15 ARE VERY SIMILAR AND THEY ARE VERY WELL DEFINED.

16 AND I THINK MR. LESLIE HAD POINTED
17 OUT BEFORE THAT WE DIDN'T HAVE VERY GOOD DEFINITION
18 IN THE AREA OF THESE DASHED LINES. WELL, THAT'S
19 WHAT THE DASHED LINES ARE FOR, THEY INDICATE AN
20 INFERRED BOUNDARY.

21 BUT IN THIS CASE, AND AGAIN, WE
22 HAVE THE LUXURY OF HAVING A VERY LARGE DATABASE FOR
23 THIS PARTICULAR PROJECT.

24 WE HAVE DIPE CONCENTRATIONS THAT WE
25 CAN SEE THAT THESE LINES ARE WELL DEFINED, WE HAVE
26 EDB, EDC CONCENTRATION WHERE WE SEE THESE LINES
27 WELL DEFINED.

28 SO IF WE LOOK AT ALL THE DATA AND