LIBRARY – AIR RESOURCES BOARD

A1-147-32

# THE ORIGIN AND FATE OF AIRBORNE POLLUTANTS ALONG THE CENTRAL CALIFORNIA COASTAL REGION

## VOLUME 2 - TRACER DATA

## FOUR RELEASES OFFSHORE FROM R/V ACANIA AND THE YELLOW TAIL CONDUCTED DECEMBER 8-10, 1981, JUNE 21-24, 1982 AND SEPTEMBER 8-10, 1982

Report Prepared for the California Air Resources Board

by

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November 23, 1982

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Summary of Release Information

for The Offshore Field Studies

Conducted December 8, 1981 through September 10, 1982

| Test | Release Location | Date | Release Time | Release Rate lbs/hr | Release Rate gr/sec |
|---|---|---|---|---|---|
| 1. | 3 Miles Due West of Pismo Beach From R/V Acania | 12/ 8/81 | 1200-1700 PST | 50 | 6.3 |
| 2. | 3 Miles Due West of Pismo Beach From R/V Acania | 6/21/82<br>6/22/82 | 1221-1800 PDT<br>1339-2000 PDT | 25<br>25 | 3.2<br>3.2 |
| 3. | 4 Miles Off Purisima Pt, 6.5 Miles Off The Santa Ynez River Mouth From The Yellow Tail | 9/ 8/82 | 0715-1340 PDT | 106 | 13.3 |

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# OFFSHORE FIELD STUDIES

## Sample Count

| Test | Sampling Method | # of Samples |
|---|---|---|
| Test 1 - OSBLM (11/8-10/81) | | |
| | Automatic Samples | 129 |
| Total number of samples | | 129 |
| Test 2 - Offshore Dispersion Field Study (6/21-24/82) | | |
| | Automatic Samples | 593 |
| | Automobile Traverses | 456 |
| | Grab Samples | 29 |
| Total number of samples | | 1078 |
| Test 3 - Offshore Field Study (9/8-10/82) | | |
| | Automatic Samples | 291 |
| | Automobile Traverses | 1483 |
| Total number of samples | | 1774 |
| Final Total (all three tests) | | 2690 |

Offshore Field Studies

Appendix A1

Hourly Averaged Data

for

Test 1

Conducted Starting December 8, 1981

Offshore Field Study

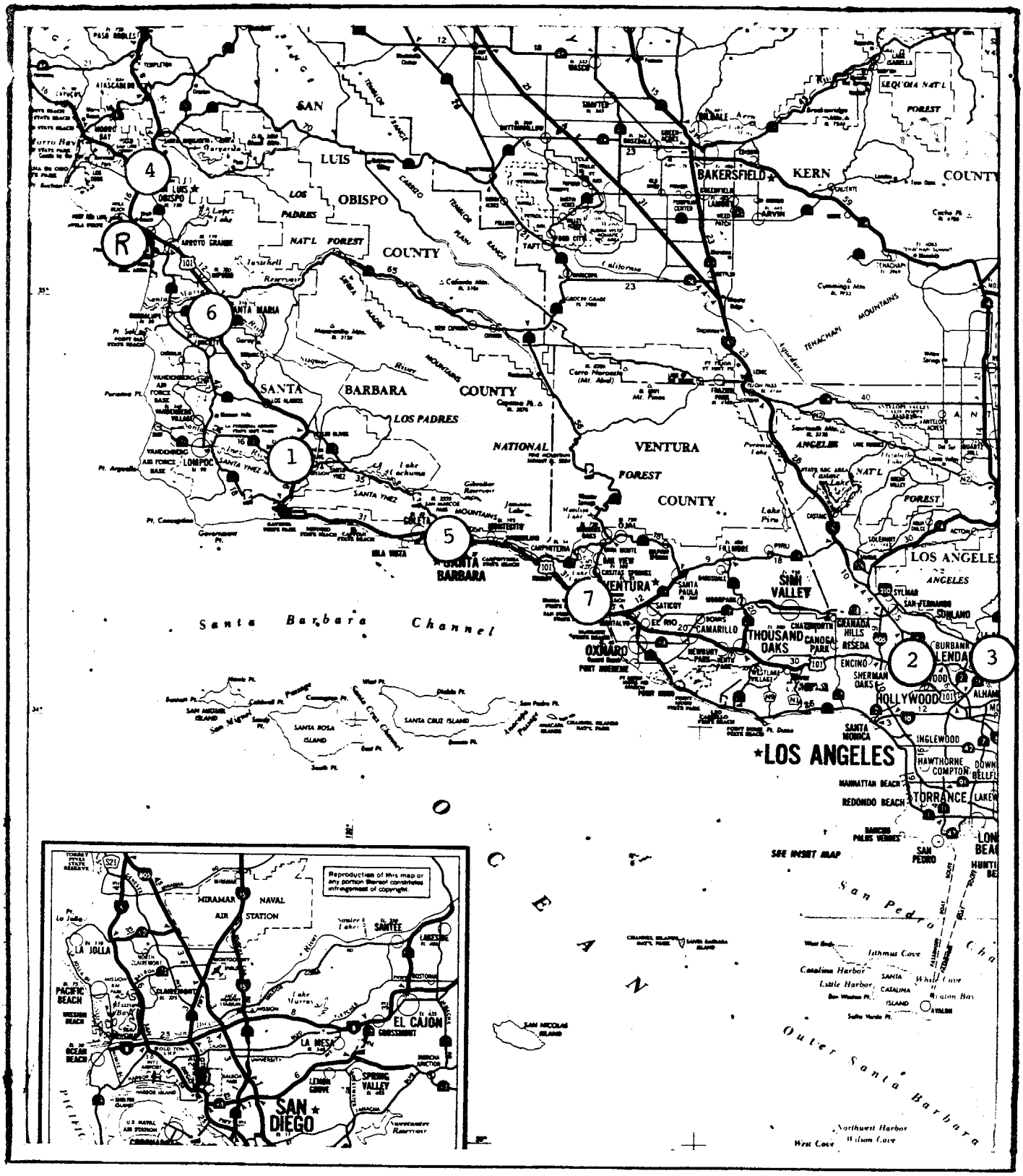
Test 1

Conducted December 8-10, 1981

Fixed Sites

| | Location | Abbreviation |
|---|---|---|
| 1. | Buelton | BUEL |
| 2. | North Hollywood | N HO |
| 3. | Pasadena | PASA |
| 4. | San Luis Obispo | S LO |
| 5. | Santa Barbara | S BA |
| 6. | Santa Maria | S MA |
| 7. | Ventura | VENT |

Offshore Field Study
Fixed Sites
Test 1




(#) INDICATES SAMPLER LOCATIONS

R INDICATES RELEASE LOCATION

RELEASE: 50 LBS SF6/HR (6.3 GR/SEC) OFF SHORE FROM ACANIA
RELEASE TIME: 1200-1700 PST, 12/8/81

Test: Offshore Field Study-Test 1

Conducted: December 8-10, 1981

Release Location: 3 mile due west of Pismo Beach

Release Rate: 50 lbs SF6/HR (6.3 Gr/sec)

Release Time: 1200-1700 PST, 12/8/81

| No. | Site | Distance From Rel. Site (Miles) | $[SF_6]$ Max (PPT) | Time From Start of Release (Hours) | Apparent Wind Speed (MPH) |
|---|---|---|---|---|---|
| 1. | San Luis Obispo | 8 | (4) | - | - |
| 2. | Santa Maria | 20 | 1549 | 5 | 4 |
| 3. | Buelton | 45 | 115 | 24 | 1.9 |
| 4. | Santa Barbara | 75 | 9 | 33 | 2.3 |
| 5. | Ventura | 100 | (7) | - | - |
| 6. | North Hollywood | 150 | 41 | 33 | 4.5 |
| 7. | Pasadena | 160 | 53 | 49 | 3.3 |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
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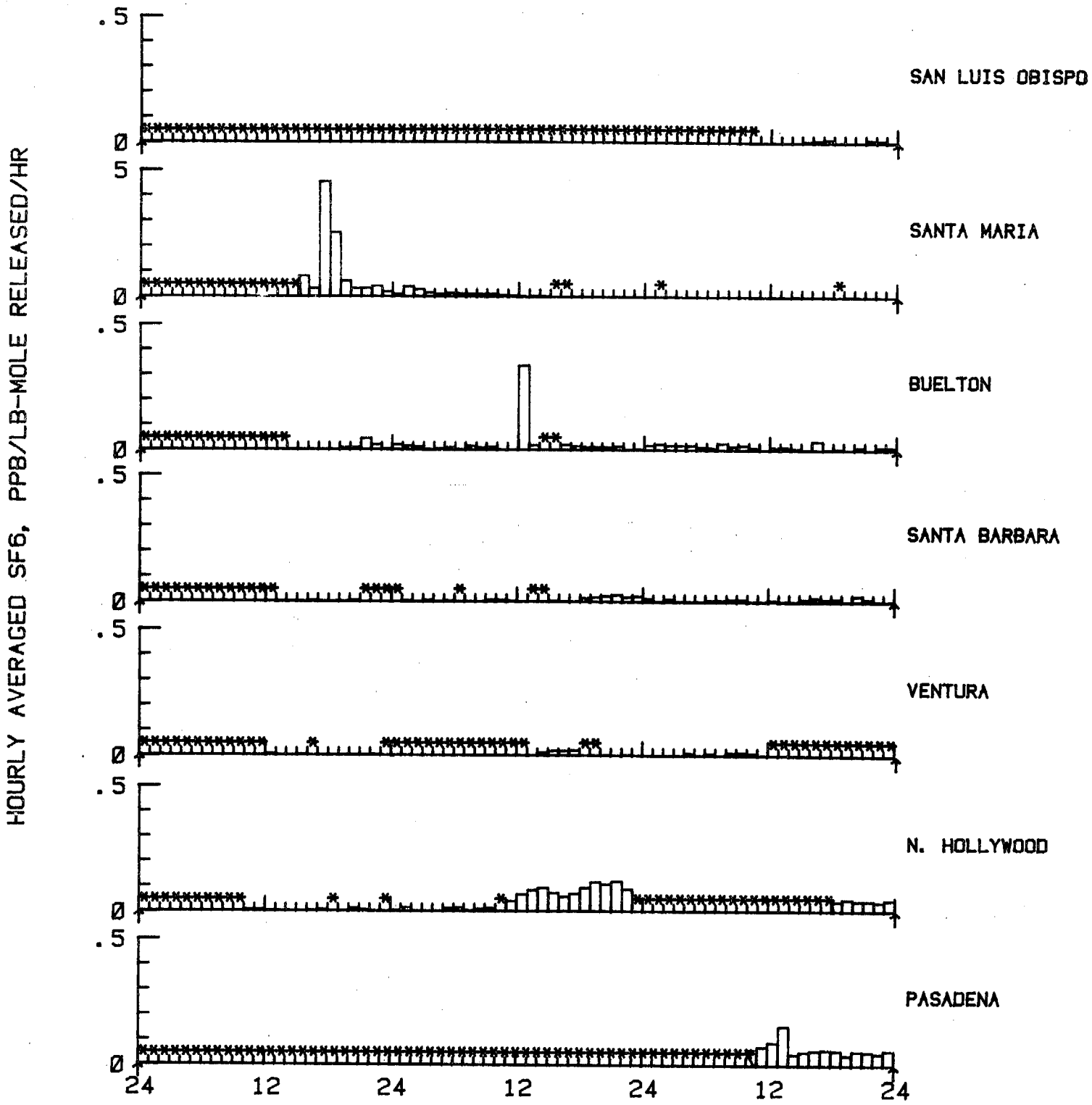
| 30. | | | | | |

# OFFSHORE FIELD STUDY (OSBLM) - TEST 1

## HOURLY AVERAGED DATA 12/8-10/81




RELEASE: 50 LBS SF6/HR (6.3 GR/SEC) OFFSHORE FROM ACANIA
RELEASE TIME: 1200-1700 PST, 12/8/81

* INDICATES MISSING DATA

LOCATIONS ORDERED BY DISTANCE FROM RELEASE

OFFSHORE FIELD STUDY - TEST 1

12/8/81

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PST) 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BUEL | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 15 | 7 | 1 |
| N HO | | | | | | | | | | | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | | 0 | 4 | 2 | 0 | |
| PASA | | | | | | | | | | | | | | | | | | | | | | | | |
| S LO | | | | | | | | | | | | | | | | | | | | | | | | |
| S BA | | | | | | | | | | | | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | | | |
| S MA | | | | | | | | | | | | | | | | 274 | 111 | 1549 | 863 | 211 | 112 | 114 | 141 | 66 |
| VENT | | | | | | | | | | | | | 2 | 0 | 0 | 1 | | 0 | 0 | 0 | 0 | 0 | 1 | |

RELEASE: 50 LBS SF6/HR (6.3 GR/SEC) OFF SHORE FROM ACANIA
RELEASE TIME: 1200-1700 PST, 12/8/81

OFFSHORE FIELD STUDY - TEST 1

12/9/81

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PST) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| BUEL | 7 | 5 | 4 | 0 | 1 | 3 | 0 | 5 | 3 | 4 | 0 | 0 | 115 | 6 | | | 7 | 5 | 4 | 4 | 4 | 5 | 0 | 1 |
| N HO | 1 | 5 | 0 | 0 | 0 | 4 | 5 | 1 | 3 | 4 | | 14 | 23 | 29 | 32 | 25 | 20 | 24 | 32 | 40 | 37 | 41 | 30 | |
| PASA | | | | | | | | | | | | | | | | | | | | | | | | |
| S LO | | | | | | | | | | | | | | | | | | | | | | | | |
| S BA | | 1 | 0 | 2 | 0 | 1 | | 0 | 0 | 2 | 2 | 1 | 0 | | | 1 | 0 | 0 | 5 | 6 | 8 | 9 | 6 | 7 |
| S MA | 37 | 137 | 96 | 53 | 34 | 46 | 42 | 40 | 35 | 35 | 24 | 10 | 1 | 9 | 6 | | | 7 | 5 | 7 | 0 | 2 | 0 | 0 |
| VENT | | | | | | | | | | | | | | 0 | 4 | 6 | 6 | 7 | | | 0 | 0 | 1 | 0 |

RELEASE: 50 LBS SF6/HR (6.3 GR/SEC) OFF SHORE FROM ACANIA
RELEASE TIME: 1200-1700 PST, 12/8/81

OFFSHORE FIELD STUDY - TEST 1

12/10/81

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PST) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| BUEL | 6 | 8 | 6 | 6 | 6 | 4 | 3 | 9 | 5 | 6 | 3 | 0 | 4 | 4 | 2 | 0 | 12 | 0 | 2 | 0 | 4 | 0 | 4 | 4 |
| N HO | | | | | | | | | | | | | | | | | | | 13 | 16 | 14 | 14 | 12 | 15 |
| PASA | | | | | | | | | | | 21 | 25 | 31 | 53 | 15 | 18 | 20 | 21 | 20 | 14 | 19 | 18 | 16 | 20 |
| S LO | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 4 | 0 | 0 | 0 | 4 | 3 | 0 |
| S BA | 4 | 0 | 3 | 0 | 0 | 0 | 2 | 2 | 3 | 3 | 0 | 0 | 2 | 0 | 0 | 3 | 5 | 3 | 4 | 0 | 8 | 3 | 0 | 0 |
| S MA | 0 | | 5 | 0 | 0 | 0 | 3 | 6 | 6 | 4 | 4 | 5 | 5 | 2 | 11 | 6 | 3 | 2 | | 6 | 3 | 2 | 4 | 4 |
| VENT | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 4 | 4 | 3 | 0 | | | | | | | | | | | | |

RELEASE: 50 LBS SF6/HR (6.3 GR/SEC) OFF SHORE FROM ACANIA
RELEASE TIME: 1200-1700 PST, 12/8/81

# Offshore Field Studies

## Appendix B1

## Hourly Averaged Data

## for

## Test 2

## Conducted Starting June 21, 1982

TEST-2

Offshore Dispersion Field Study

June 21-24, 1982

Fixed Sites

| | Location | Abbreviation |
|---|---|---|
| 1. | Nipomo | NIPO |
| 2. | Santa Maria | S MA |
| 3. | Lompoc | LOMP |
| 4. | Santa Ynez | S YN |
| 5. | New Cuyama | N CU |
| 6. | El Capitan | E CA |
| 7. | Santa Barbara Air Pollution Control Dist. | APCD |
| 8. | Santa Barbara | S BA |
| 9. | Ventura | VENT |
| 10. | Burbank | BURB |

TEST-2

Test: Offshore Dispersion Field Study

Conducted: 6/21-24/82

Release Location: 3 Miles Due West of Pismo Beach

Release Rate: 25 lbs/Hr (3.15 Gr/Sec)

Release Time: 1221-1800 PDT, 6/21/82

| No. | Site | Distance From Rel. Site (Miles) | $[SF_6]$ Max (PPT) | Time From Start of Release (Hours) | Apparent Wind Speed (MPH) |
|---|---|---|---|---|---|
| 1. | Nipomo | 13 | 116 | 4 | 3.2 |
| 2. | Santa Maria | 20 | 71 | 2.6 | 7.7 |
| 3. | Lompoc | 37 | 26 | 13.6 | 2.7 |
| 4. | Santa Ynez | 50 | 31 | 6.6 | 7.6 |
| 5. | New Cuyama | 60 | 28 | 9.6 | 6.2 |
| 6. | El Capitan | 60 | - | - | - |
| 7. | Santa Barbara A.P.C.D | 72 | - | - | - |
| 8. | Santa Barbara | 75 | 12 | 16.6 | 4.5 |
| 9. | Ventura | 100 | 20 | 24.6 | 4.1 |
| 10. | Burbank | 150 | (8) | - | - |
| 11. | | | | | |
| 12. | | | | | |
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TEST-2

Test: Offshore Dispersion Field Study

Conducted: 6/21-24/82

Release Location: 3 Miles Due West of Pismo Beach

Release Rate: 25 lbs/Hr (3.15 Gr/Sec)

Release Time: 1339-2000 PDT, 6/22/82

| No. | Site | Distance From Rel. Site (Miles) | $[SF_6]$ Max (PPT) | Time From Start of Release (Hours) | Apparent Wind Speed (MPH) |
|---|---|---|---|---|---|
| 1. | Nipomo | 13 | 45/76 | 11.4/19.4 | 1.8/1.0 |
| 2. | Santa Maria | 20 | 64 | 8.4 | 2.4 |
| 3. | Lompoc | 37 | 12 | 4.4 | 8.4 |
| 4. | Santa Ynez | 50 | 23 | 13.4 | 3.7 |
| 5. | New Cuyama | 60 | 19 | 4.4 | 13.6 |
| 6. | El Capitan | 60 | 56 | 51.4 | 1.2 |
| 7. | Santa Barbara A.P.C.D | 72 | 32/72 | 28.4/34.4 | 2.5/2.1 |
| 8. | Santa Barbara | 75 | 47 | 30.4 | 2.5 |
| 9. | Ventura | 100 | 29 | 37.4 | 2.7 |
| 10. | Burbank | 150 | 43 | 21.4 | 2.0 |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |
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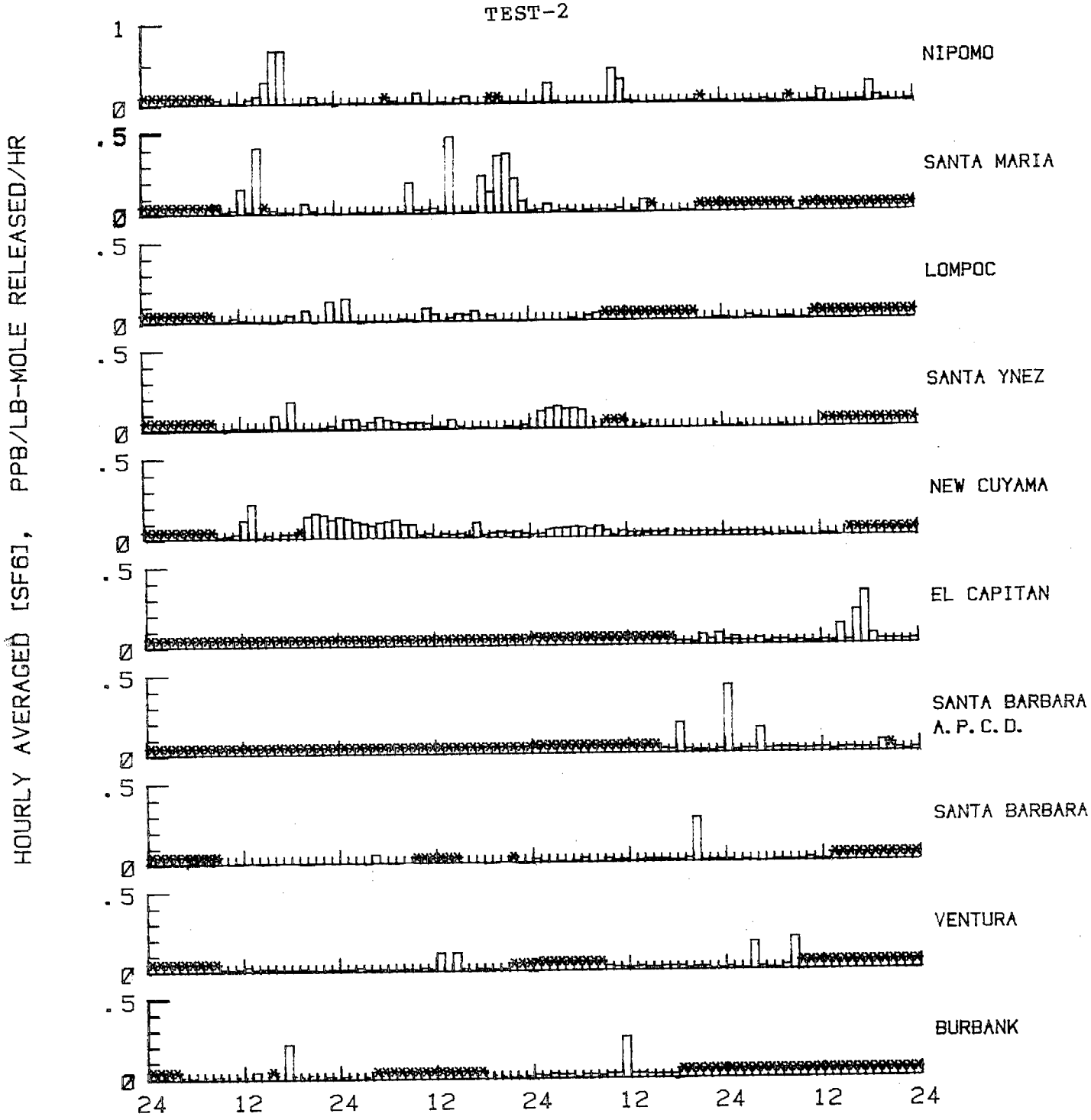
# OFFSHORE DISPERSION FIELD STUDY
## FIXED SITES 6/21-24/82

TEST-2




RELEASE: 25 LBS SF6/HR OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

* INDICATES MISSING DATA

LOCATIONS ORDERED BY DISTANCE FROM RELEASE

TEST-2

(#) INDICATES SAMPLER LOCATIONS

R INDICATES RELEASE LOCATION

# TEST-2

OFFSHORE DISPERSION FIELD STUDY

6/21/82

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PDT) 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NIPO | | | | | | | | | | 12 | 0 | 7 | 6 | 13 | 20 | 50 | 116 | 116 | 0 | 6 | 5 | 19 | 6 | 6 |
| S MA | | | | | | | | | | | 3 | 5 | 28 | 3 | 71 | | 5 | 3 | 3 | 2 | 12 | 4 | 2 | 2 |
| LOMP | | | | | | | | | | 2 | 2 | 5 | 3 | 2 | 0 | 2 | 0 | 3 | 8 | 2 | 13 | 0 | 1 | 23 |
| S YN | | | | | | | | | | 0 | 2 | 3 | 2 | 3 | 2 | 2 | 16 | 3 | 31 | 2 | 2 | 2 | 3 | 5 |
| N CU | | | | | | | | | | 3 | 4 | 6 | 21 | 38 | 2 | 5 | 2 | 6 | 6 | | 25 | 28 | 26 | 21 |
| E CA | | | | | | | | | | | | | | | | | | | | | | | | |
| APCD | | | | | | | | | | | | | | | | | | | | | | | | |
| S BA | | | | | | | | | | 0 | 2 | 2 | 1 | 0 | 2 | 2 | 0 | 3 | 2 | 1 | 2 | 2 | 0 | 0 |
| VENT | | | | | | | | | | 3 | 2 | 3 | 5 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 |
| BURB | | | | | 3 | 2 | 0 | 3 | 3 | 3 | 0 | 3 | 3 | 8 | 0 | | 5 | 38 | 4 | 3 | 5 | 5 | 3 | 3 |

RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

# TEST-2

OFFSHORE DISPERSION FIELD STUDY

6/22/82

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PDT) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| NIPO | 6 | 26 | 6 | 1 | 7 | 5 | 14 | 19 | 0 | 5 | | | 7 | 7 | 6 | | | | | | | | | |
| S MA | 2 | 1 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 34 | 5 | 5 | 7 | 3 | 82 | 2 | 3 | 3 | 41 | 24 | 62 | 64 | 38 | 14 |
| LOMP | 2 | 26 | 2 | 0 | 0 | 2 | 0 | 0 | 4 | 3 | 0 | 15 | 9 | 2 | 5 | 9 | 8 | 12 | 2 | 7 | 0 | 2 | 0 | 0 |
| S YN | 2 | 12 | 12 | 5 | 9 | 14 | 11 | 9 | 7 | 8 | 8 | 7 | 4 | 4 | 11 | 4 | 2 | 3 | 3 | 2 | 0 | 4 | 3 | 5 |
| N CU | 24 | 22 | 19 | 17 | 15 | 18 | 19 | 21 | 16 | 16 | 5 | 6 | 3 | 6 | 5 | 6 | 4 | 19 | 5 | 7 | 8 | 7 | 8 | 6 |
| E CA | | | | | | | | | | | | | | | | | | | | | | | | |
| APCD | | | | | | | | | | | | | | | | | | | | | | | | |
| S BA | 2 | 3 | 0 | 0 | 12 | 2 | 0 | 2 | 0 | | | | | | | 3 | 3 | 3 | 2 | 1 | 3 | | 0 | 2 |
| VENT | 2 | 2 | 4 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 4 | 3 | 20 | 0 | 20 | 3 | 0 | 3 | 3 | 2 | 3 | | | |
| BURB | 3 | 4 | 6 | 3 | | | | | | | | | | | | | | | 7 | 4 | 3 | 2 | 3 | 3 |

RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

# TEST-2

## OFFSHORE DISPERSION FIELD STUDY

6/23/82

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PDT) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| NIPO | 0 | 6 | 45 | 7 | 0 | 6 | 5 | 5 | 0 | 5 | 76 | 53 | 8 | 6 | 0 | 5 | 6 | 7 | 5 | 6 | 8 | | 6 | 7 |
| S MA | 2 | 3 | 9 | 1 | 3 | 2 | 0 | 2 | 3 | 3 | 2 | 4 | 0 | 3 | 13 | | 0 | 0 | 0 | 2 | 1 | | | |
| LOMP | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 5 | 7 | | | | | | | | | | | | | 0 | 0 | 2 |
| S YN | 10 | 18 | 21 | 23 | 20 | 21 | 19 | 11 | 6 | | | | 7 | 4 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| N CU | 5 | 5 | 9 | 10 | 9 | 9 | 9 | 8 | 12 | 6 | 2 | 6 | 5 | 5 | 5 | 5 | 4 | 7 | 5 | 5 | 5 | 5 | 5 | 5 |
| E CA | | | | | | | | | | | | | | | | | | 4 | 4 | 3 | 11 | 6 | 12 | 5 |
| APCD | | | | | | | | | | | | | | | | | 5 | 4 | 32 | 4 | 3 | 3 | 2 | 4 |
| S BA | 4 | 1 | 0 | 1 | 0 | 2 | 5 | 0 | 0 | 4 | 2 | 3 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 4 | 47 | 2 | 2 | 2 |
| VENT | | | | | | | | | | 4 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 0 | 1 |
| BURB | 3 | 2 | 4 | 3 | 3 | 0 | 3 | 3 | 2 | 4 | 4 | 43 | 4 | 4 | 3 | 3 | 3 | 3 | | | | | | |

RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

# TEST-2

OFFSHORE DISPERSION FIELD STUDY

6/24/82

HOURLY AVERAGED SF6 CONCENTRATION IN PPT

| SITE | HOUR (PDT) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| NIPO | 8 | 0 | 6 | 8 | 6 | 10 | 7 | 5 | | 5 | 7 | 8 | 28 | 0 | 5 | 7 | 7 | 8 | 46 | 17 | 9 | 4 | 6 | 8 |
| S MA | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| LOMP | 2 | 1 | 0 | 4 | 2 | 1 | 0 | 2 | 2 | 0 | 1 | | | | | | | | | | | | | |
| S YN | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | | | | | | | | | | | | |
| N CU | 4 | 5 | 5 | 5 | 5 | 2 | 0 | 3 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | | | | | | | | | |
| E CA | 8 | 5 | 4 | 4 | 7 | 3 | 5 | 5 | 3 | 4 | 3 | 3 | 4 | 3 | 21 | 4 | 36 | 56 | 11 | 5 | 5 | 5 | 4 | 5 |
| APCD | 72 | 3 | 4 | 4 | 26 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 3 | 4 | 5 | 4 | 4 | 4 | 12 | | 4 | 2 | 4 |
| S BA | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 2 | 1 | 2 | 4 | 2 | 2 | | | | | | | | | | | |
| VENT | 2 | 0 | 0 | 29 | 2 | 1 | 0 | 4 | 34 | | | | | | | | | | | | | | | |
| BURB | | | | | | | | | | | | | | | | | | | | | | | | |

RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

Offshore Field Studies

Appendix B2

Automobile Traverse Data

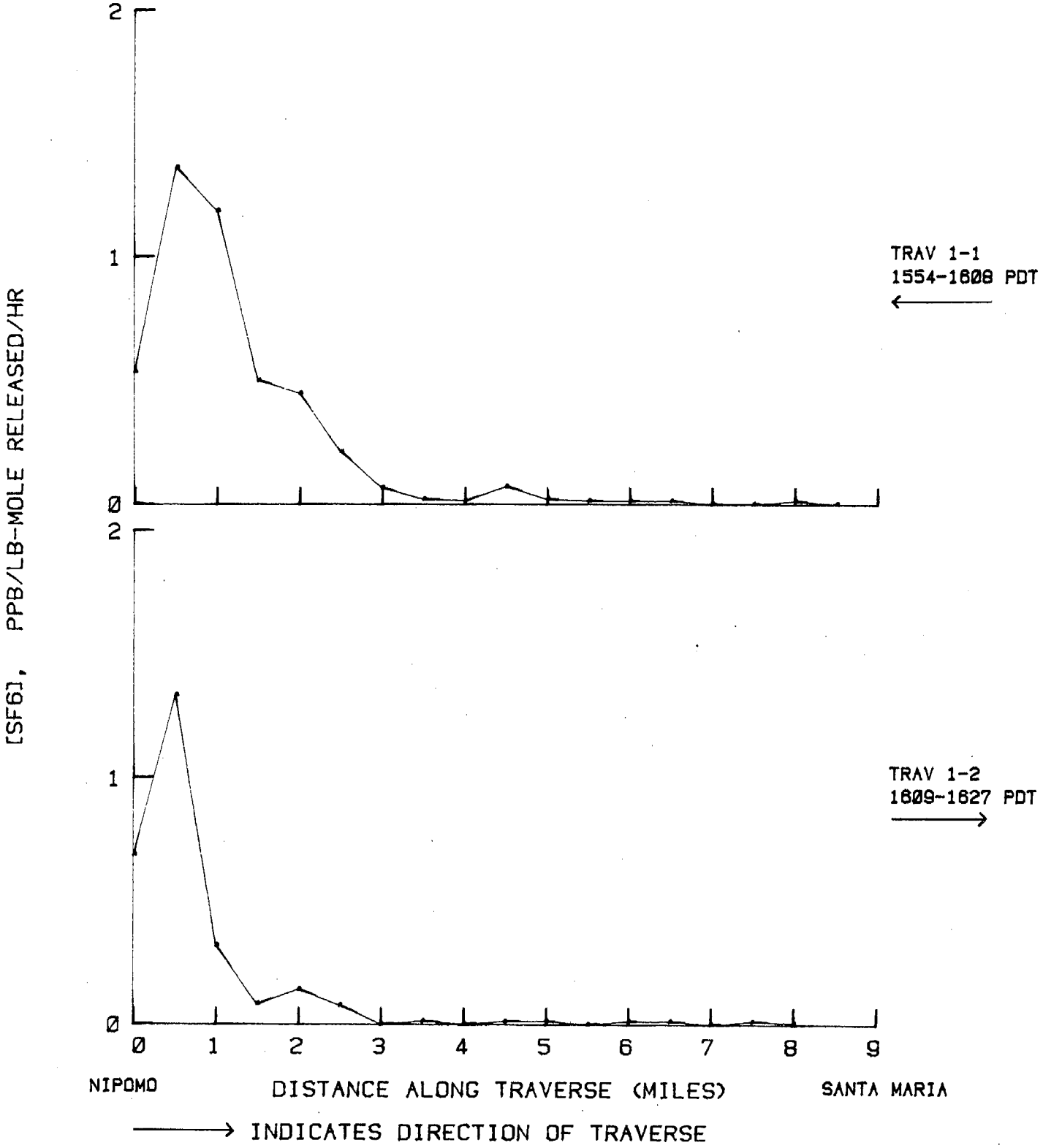
for

Test 2

Conducted Starting June 21, 1982

TEST-2

# OFFSHORE DISPERSION FIELD STUDY - 6/21/82
## AUTO TRAVERSES ALONG RT 101




RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

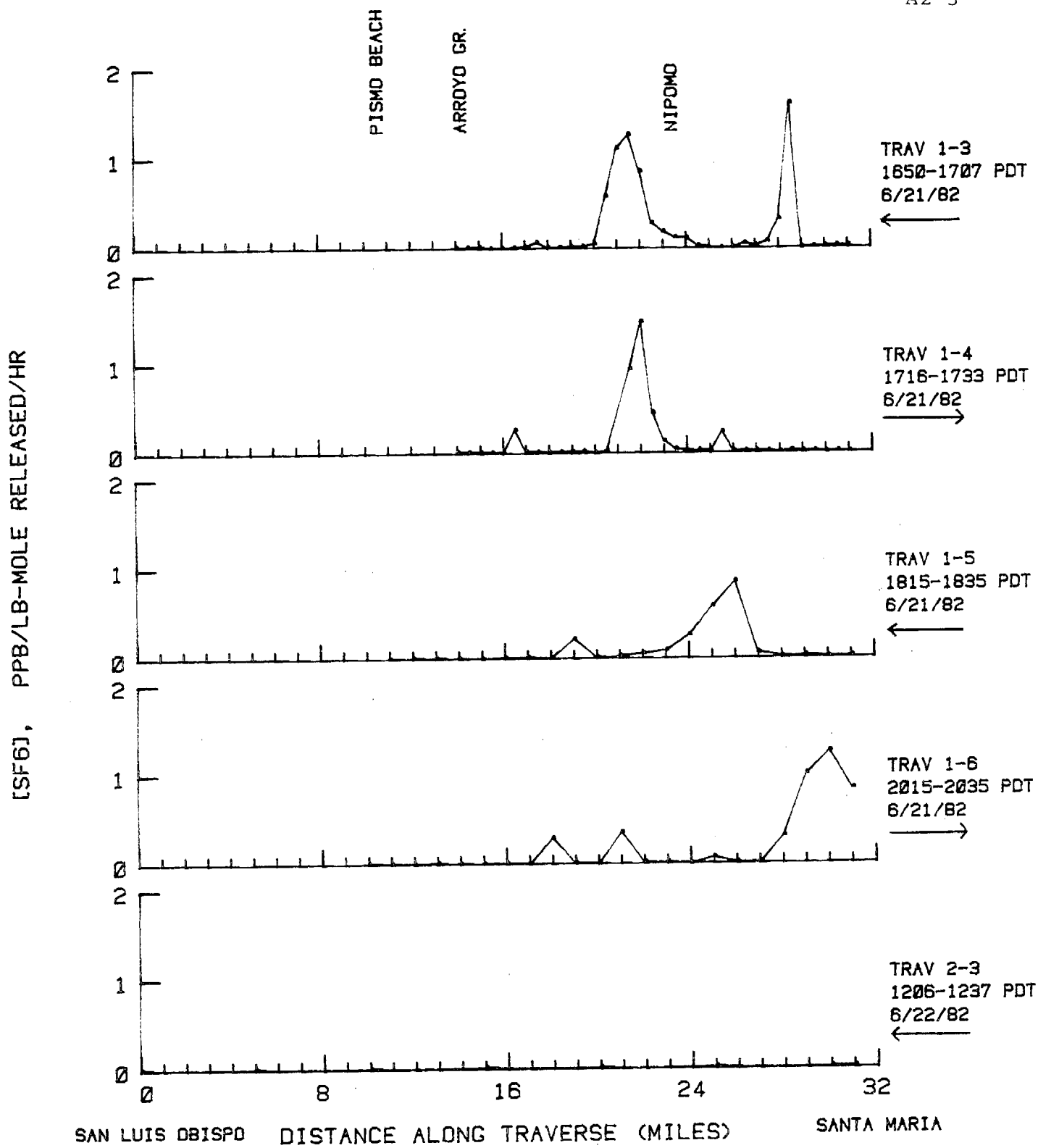
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

TEST-2

# OFFSHORE DISPERSION FIELD STUDY - 6/21-22/82
## AUTO TRAVERSES ALONG RT 101

A2-3




——→ INDICATES DIRECTION OF TRAVERSE

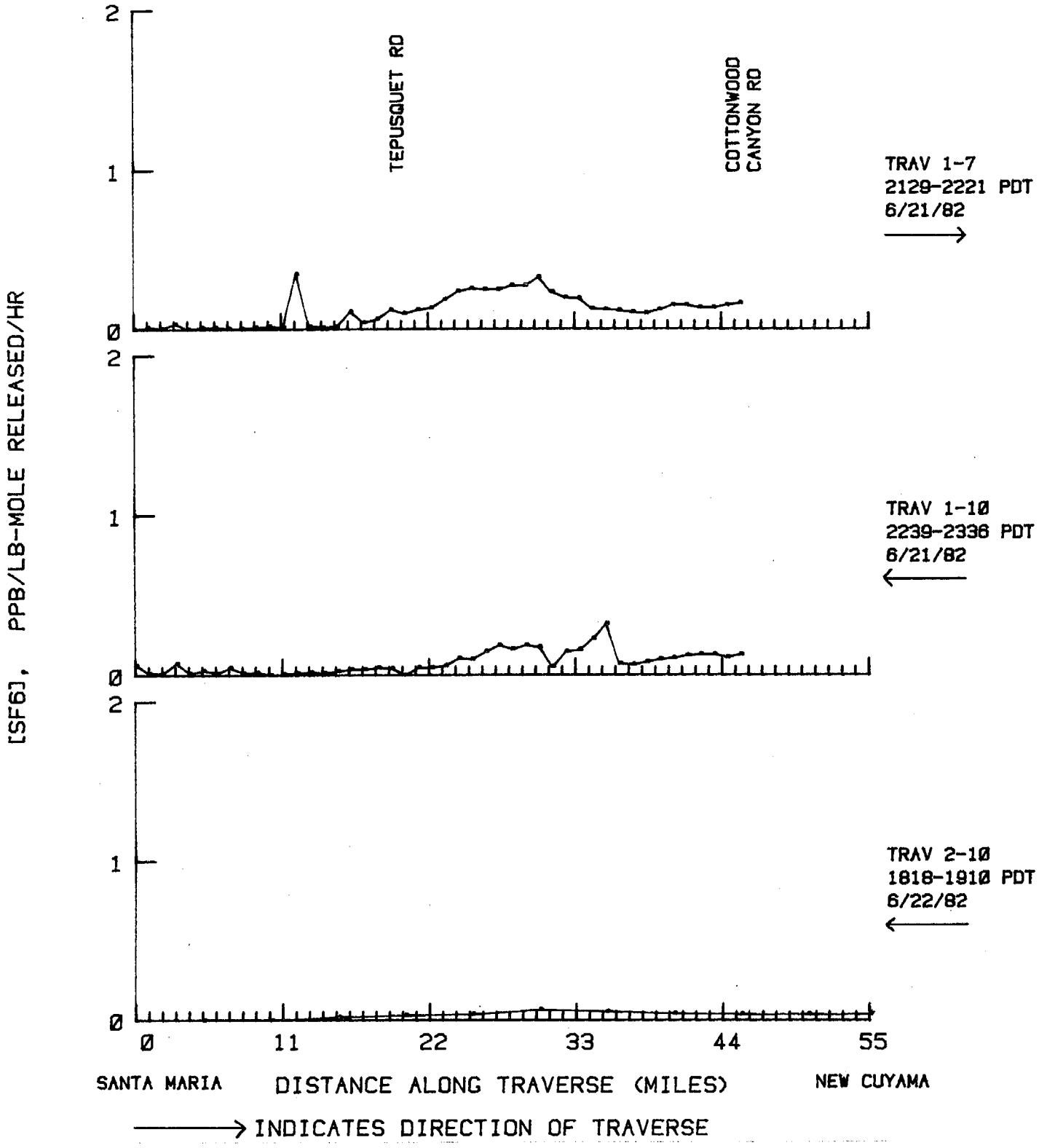
RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

TEST-2 OFFSHORE DISPERSION FIELD STUDY - 6/21-22/82

AUTO TRAVERSES ALONG RT 166




RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

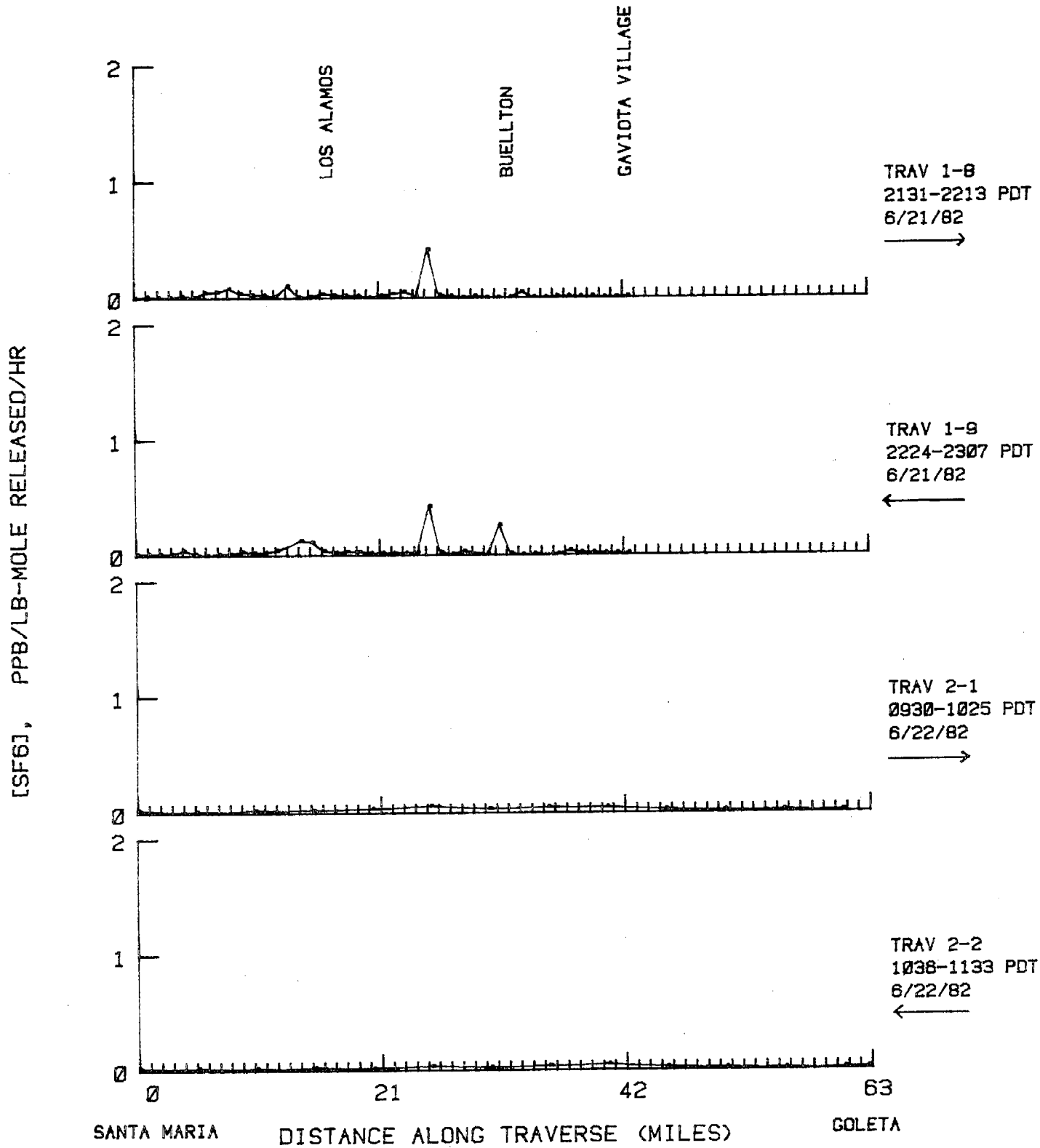
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

TEST-2 OFFSHORE DISPERSION FIELD STUDY - 6/21-22/82

AUTO TRAVERSES ALONG RT 101






→ INDICATES DIRECTION OF TRAVERSE

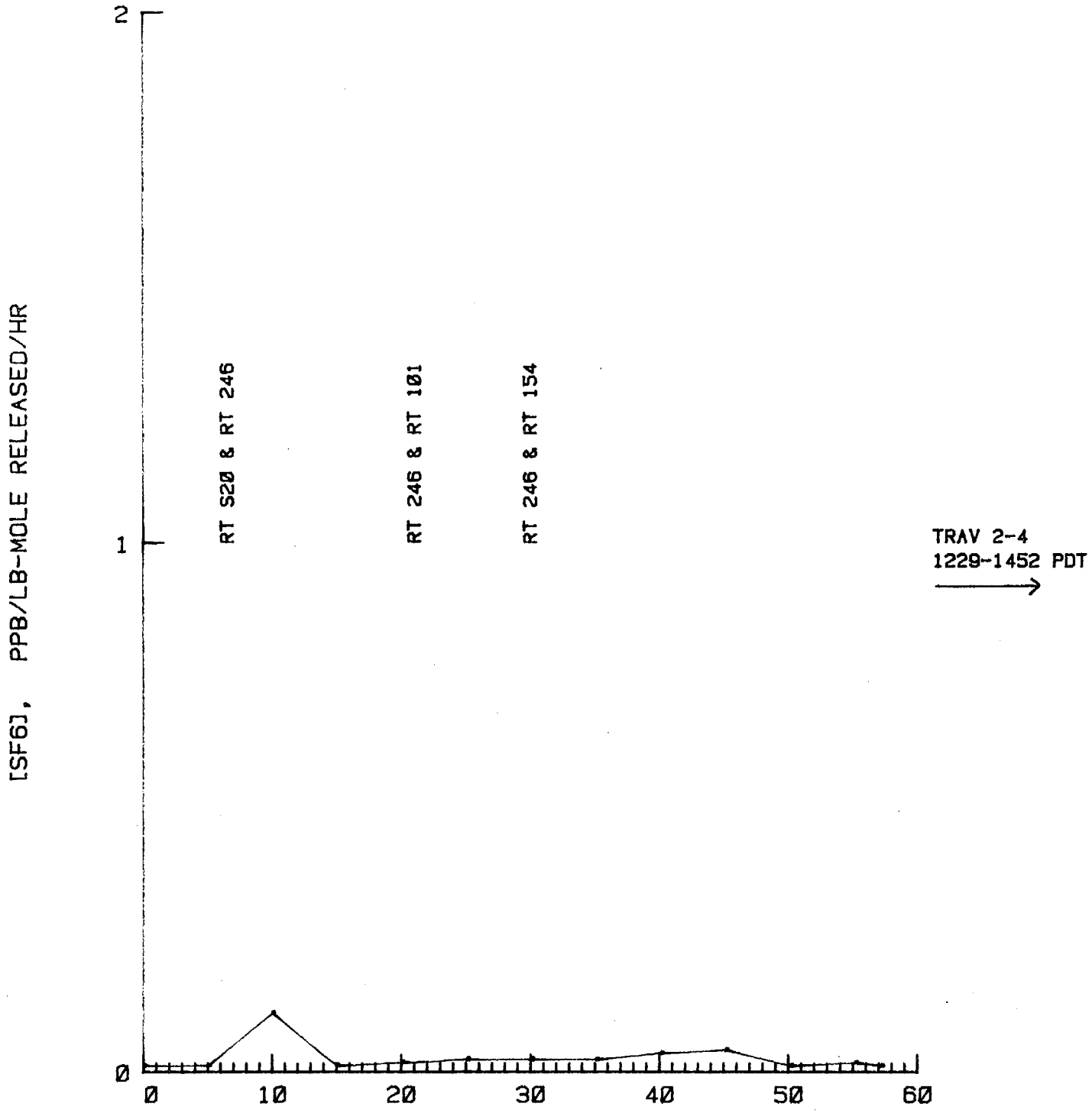
RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

TEST-2 OFFSHORE DISPERSION FIELD STUDY - 6/22/82

# AUTO TRAVERSE ALONG RT S20, RT 246, & RT 154




RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

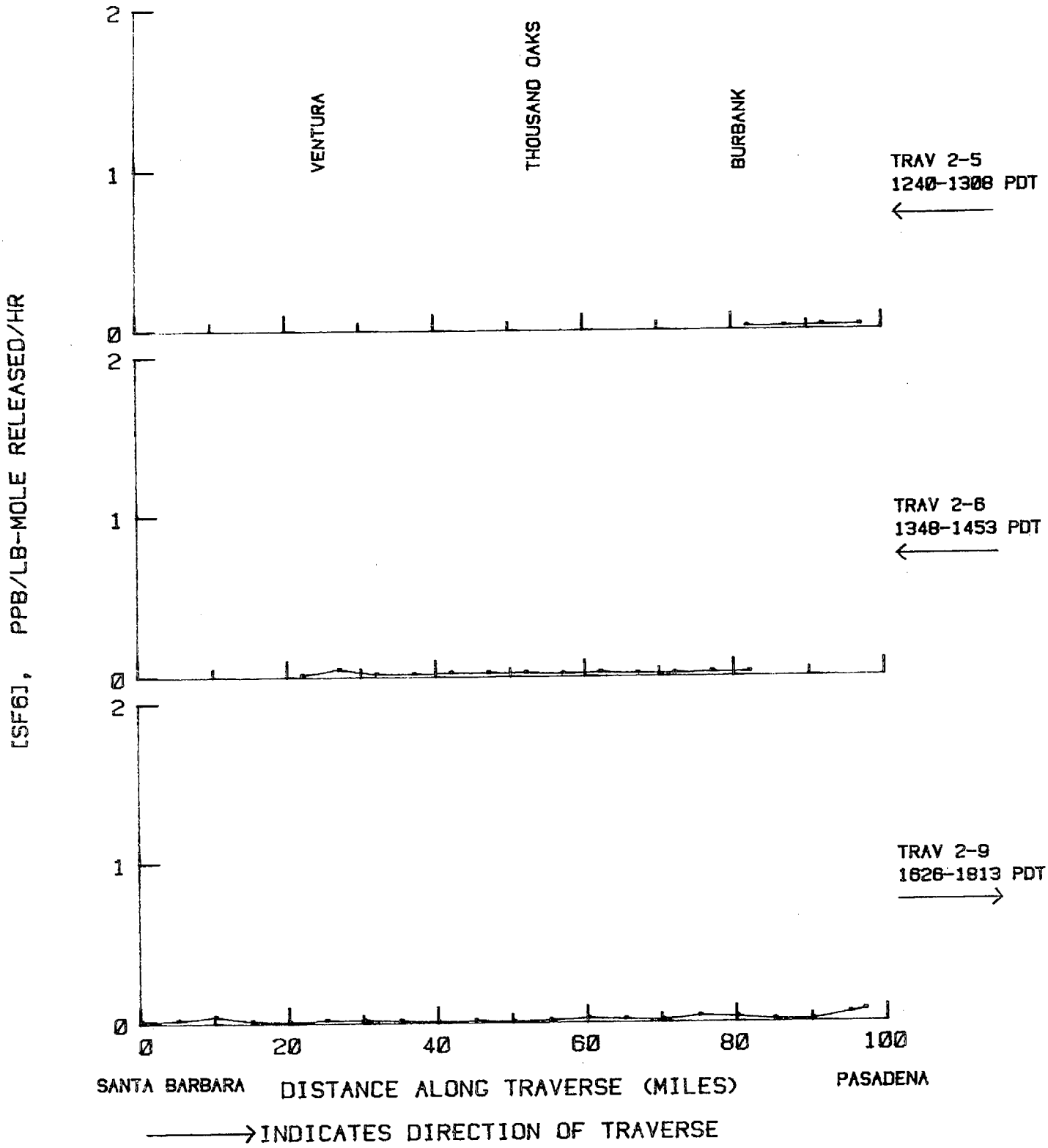
TW 7/5/82

TEST-2

# OFFSHORE DISPERSION FIELD STUDY - 6/22/82

A2-7

## AUTO TRAVERSES ALONG RT 101, RT 134, & RT 210



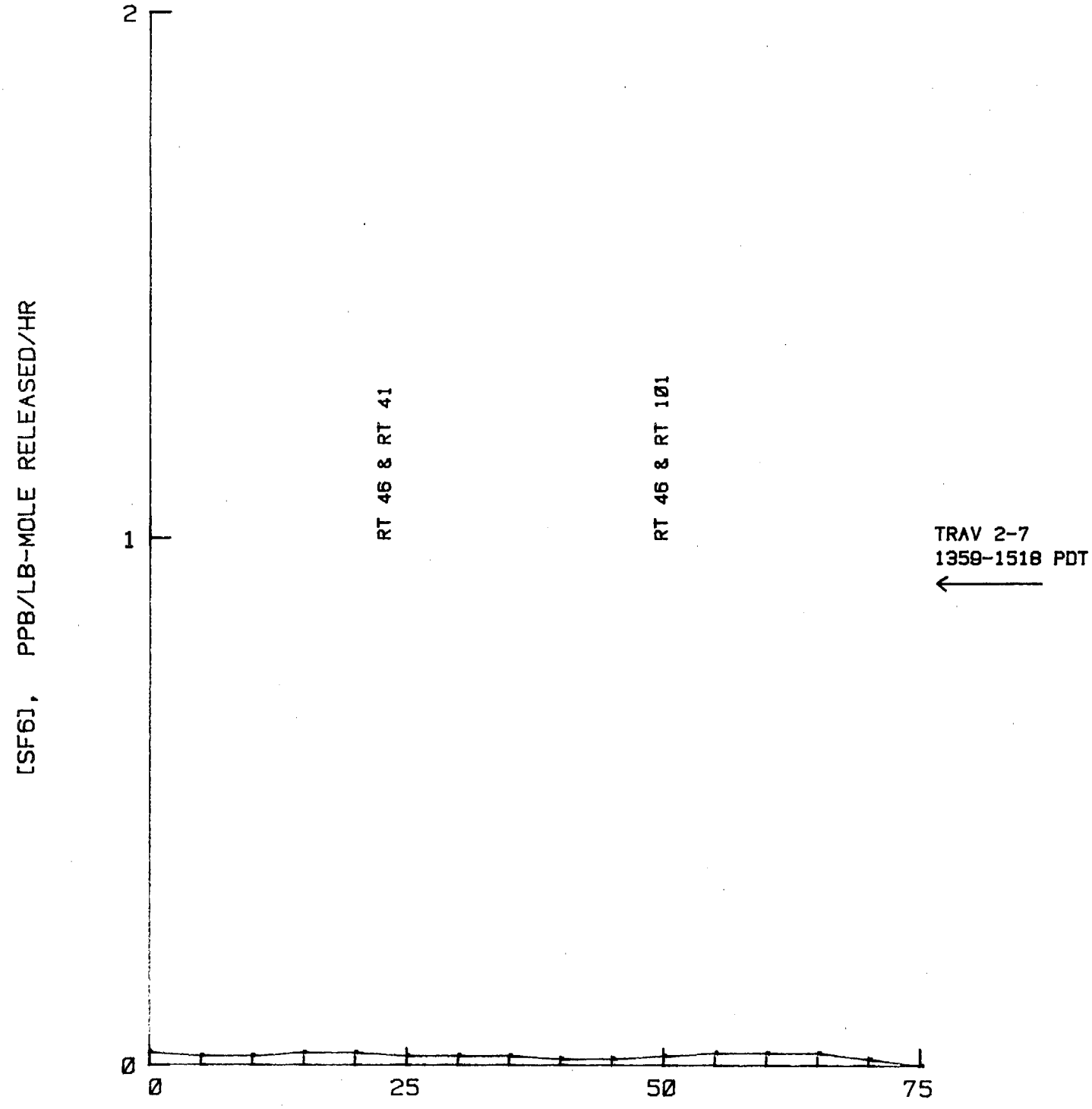

RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

TEST-2

# OFFSHORE DISPERSION FIELD STUDY - 6/22/82
## AUTO TRAVERSE ALONG RT 41, RT 46, & RT 101




RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

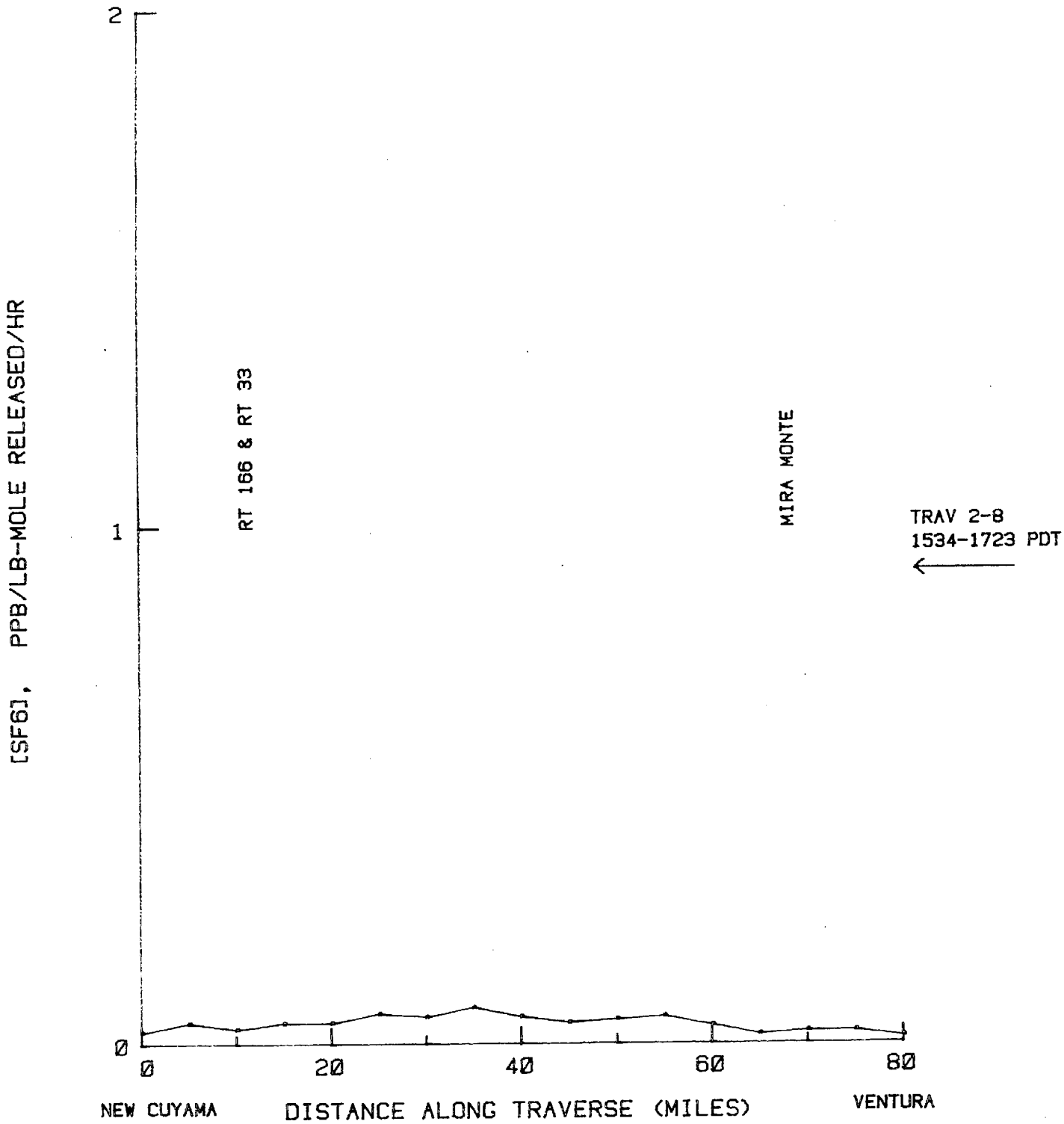
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

TEST-2

# OFFSHORE DISPERSION FIELD STUDY - 6/22/82
## AUTO TRAVERSE ALONG RT 166, & RT 33






RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TW 7/5/82

# Offshore Dispersion Field Study

## Auto Traverses
## Day One (6/21/82)

| No. | Day | Start Time | End Time | Start Location | End Location | No. Samples | Route |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 1554 | 1608 | Santa Maria | Nipomo | 18 | N on 135<br>N on 101 |
| 2 | 1 | 1609 | 1627 | Nipomo | Santa Maria | 17 | S on 101<br>S on 135 |
| 3 | 1 | 1650 | 1707 | Santa Maria | 1 & 101 Arroyo Grande | 35 | N on 101 |
| 4 | 1 | 1716 | 1733 | Arroyo Grande | Santa Maria | 35 | S on 101 |
| 5 | 1 | 1815 | 1835 | Santa Maria | Pismo Beach | 21 | N on 101 |
| 6 | 1 | 2015 | 2035 | Pismo Beach | Santa Maria | 22 | S on 101 |
| 7 | 1 | 2129 | 2221 | Santa Maria | Cottonwood Cyn Rd & 166 | 46 | N on 101<br>E on 166 |
| 8 | 1 | 2131 | 2213 | Santa Maria | Caviota Vil. | 43 | S on 101 |
| 9 | 1 | 2224 | 2307 | Gaviota Vil. | Santa Maria | 43 | N on 101 |
| 10 | 1 | 2239 | 2336 | Cottonwood Cyn Rd & 166 | Santa Maria | 46 | W on 166<br>S on 101 |

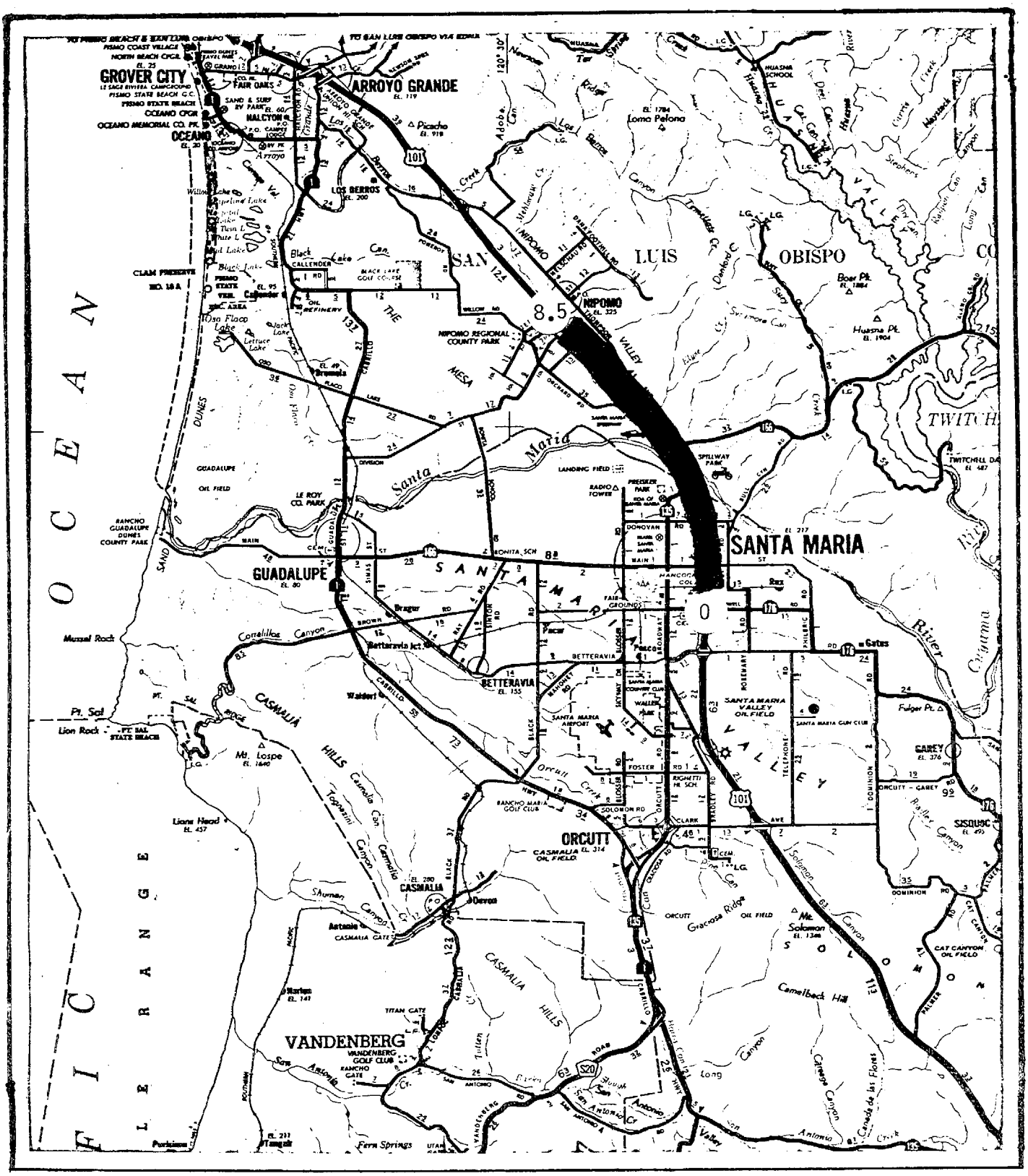
RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 1-1




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 1 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1554 PDT, 6/21/82 AT 135 & STOWELL (SANTA MARIA)
TRAVERSE END: 1608 PDT AT 101 & FRONTAGE ST (NIPOMO)
TRAVERSE ROUTE: N ON 135, 101

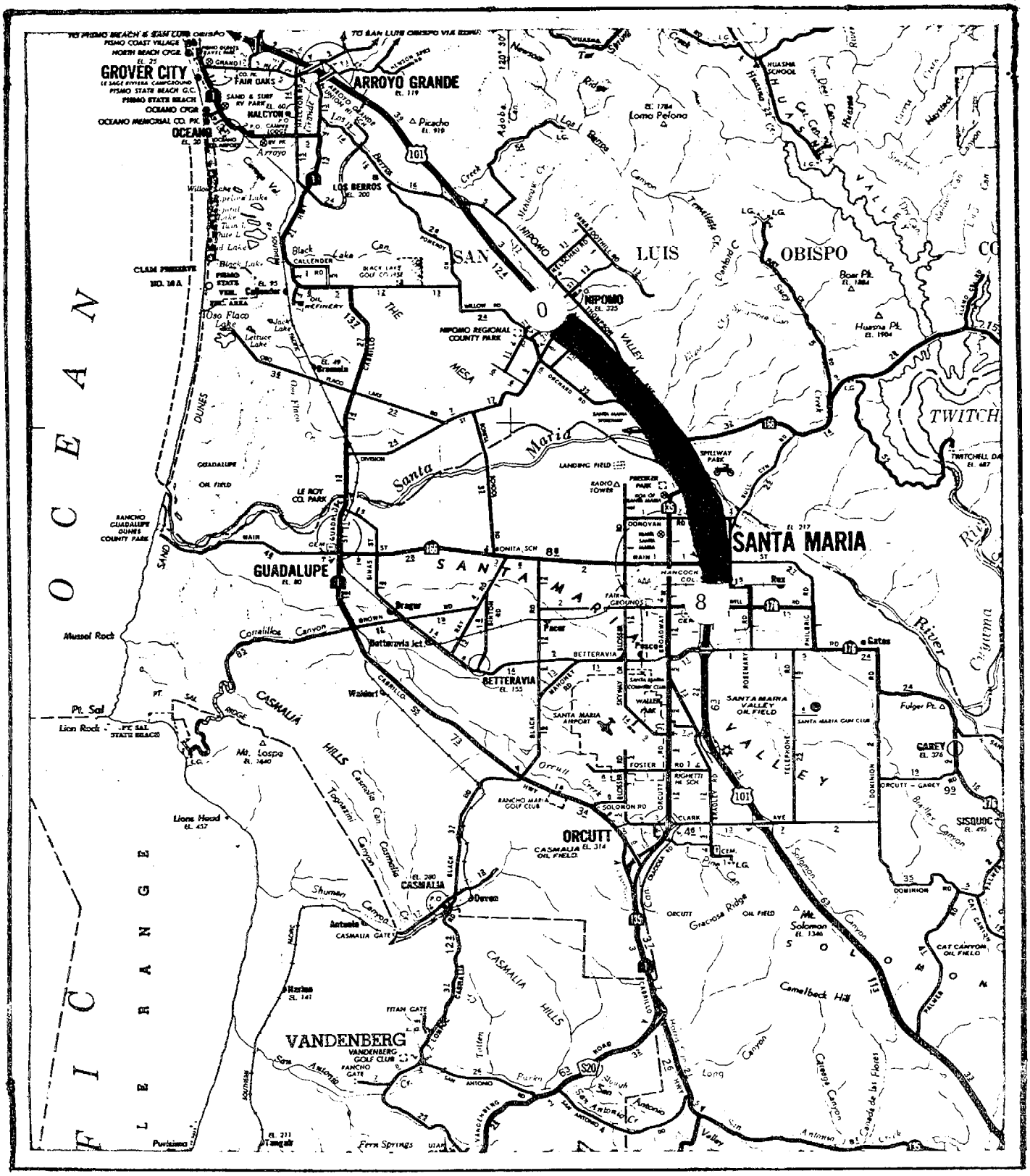
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 0 |
| .5 | 2 |
| 1 | 0 |
| 1.5 | 0 |
| 2 | 2 |
| 2.5 | 2 |
| 3 | 2 |
| 3.5 | 3 |
| 4 | 12 |
| 4.5 | 2 |
| 5 | 3 |
| 5.5 | 11 |
| 6 | 36 |
| 6.5 | 77 |
| 7 | 86 |
| 7.5 | 203 |
| 8 | 233 |
| 8.5 | 92 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 1-2




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY
## AUTOMOBILE TRAVERSE 2 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

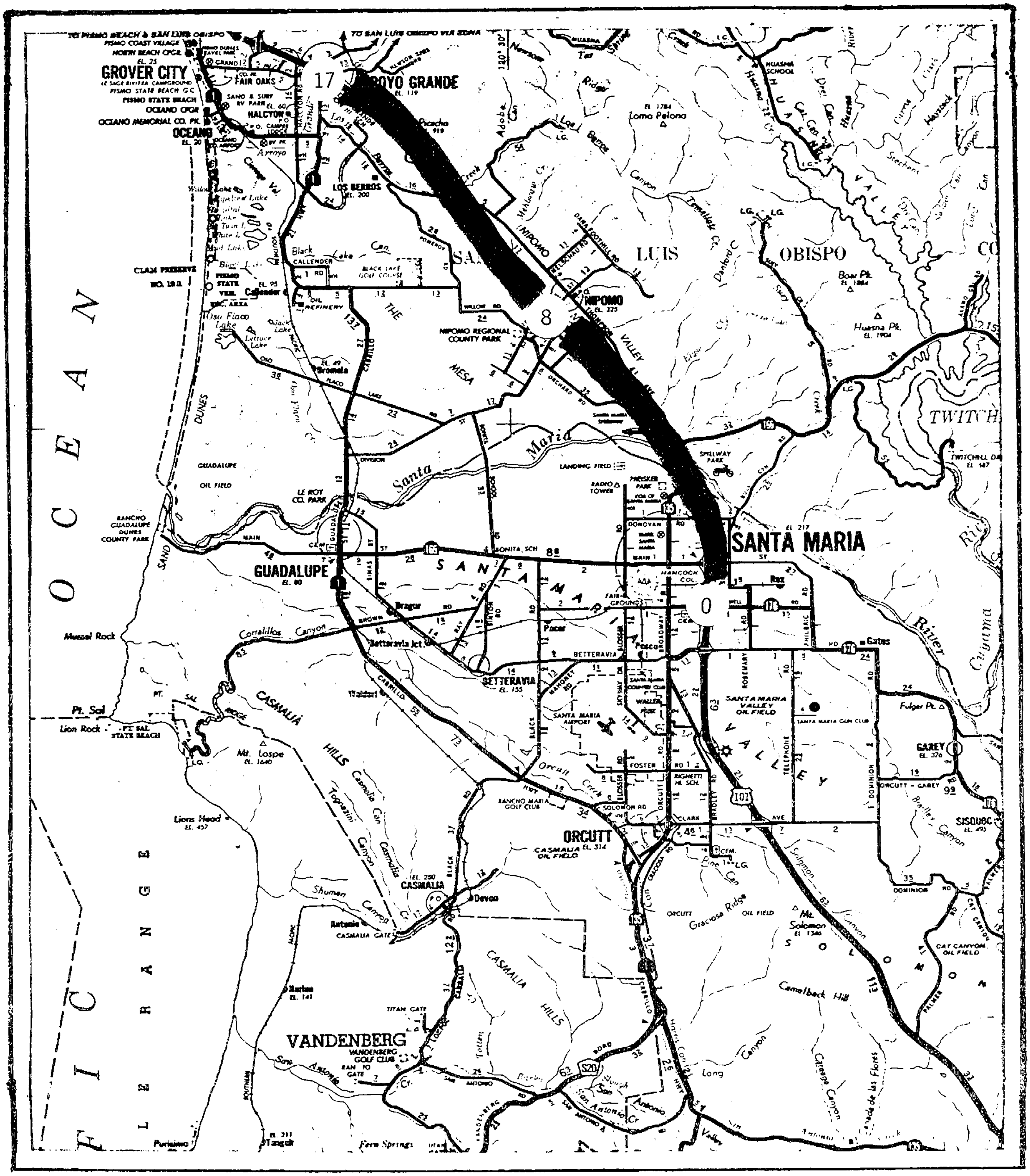
TRAVERSE START: 1609 PDT, 6/21/82 AT 101 & FRONTAGE ST (NIPOMO)
TRAVERSE END: 1627 PDT AT 135 & STOWELL (SANTA MARIA)
TRAVERSE ROUTE: S ON 101, 135

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 117 |
| .5 | 229 |
| 1 | 54 |
| 1.5 | 14 |
| 2 | 24 |
| 2.5 | 13 |
| 3 | 0 |
| 3.5 | 2 |
| 4 | 0 |
| 4.5 | 2 |
| 5 | 2 |
| 5.5 | 0 |
| 6 | 2 |
| 6.5 | 2 |
| 7 | 0 |
| 7.5 | 2 |
| 8 | 1 |

# OFFSHORE DISPERSION FIELD STUDY

## 1-3




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 3 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

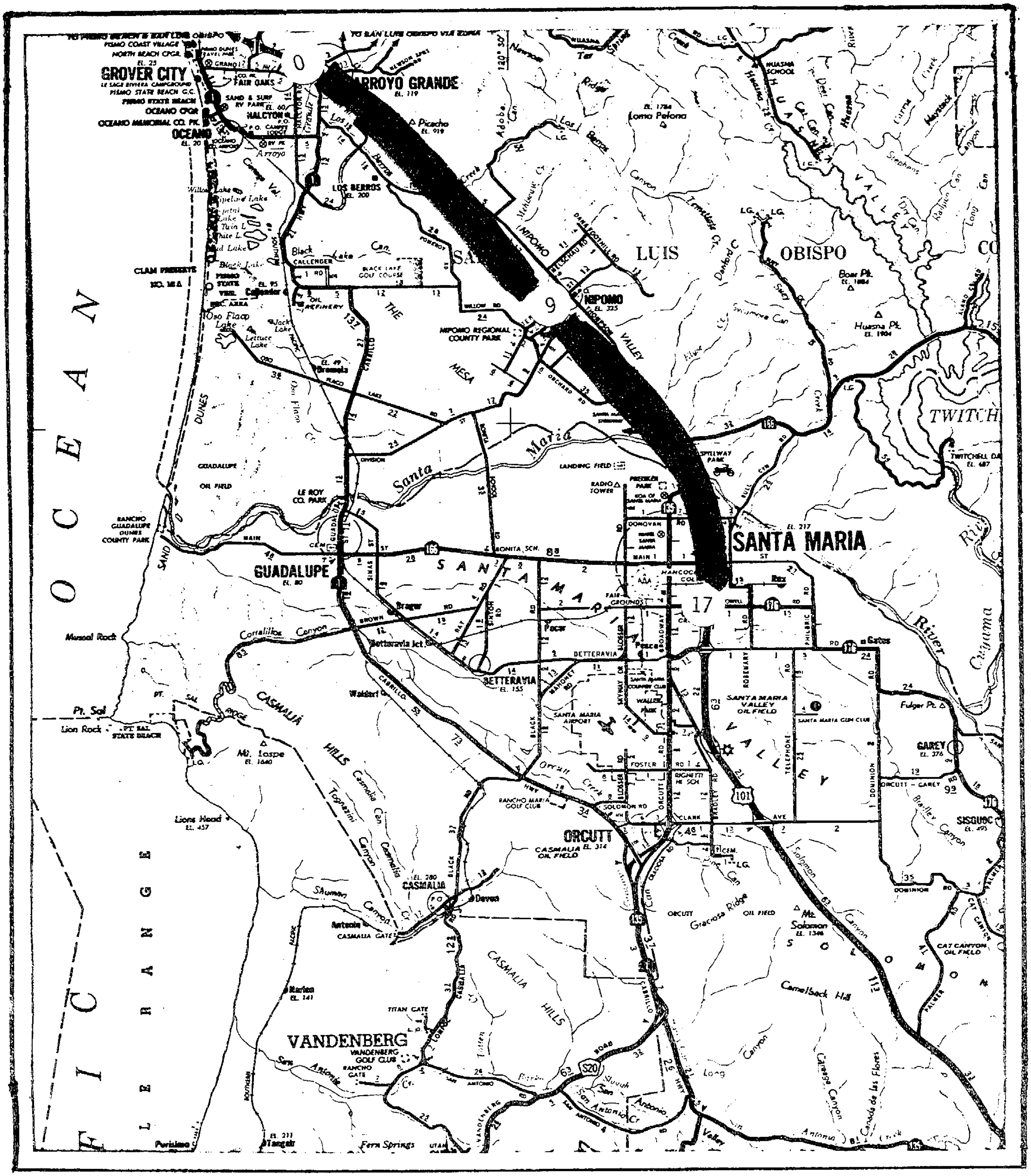
TRAVERSE START: 1650 PDT, 6/21/82 AT STOWELL & 101 (SANTA MARIA)
TRAVERSE END: 1707 PDT AT 1 & 101 NEAR ARROYO GRANDE
TRAVERSE ROUTE: N ON 101

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 3 | 12.5 | 2 |
| .5 | 3 | 13 | 1 |
| 1 | 2 | 13.5 | 11 |
| 1.5 | 2 | 14 | 3 |
| 2 | 0 | 14.5 | 2 |
| 2.5 | 275 | 15 | 1 |
| 3 | 54 | 15.5 | 0 |
| 3.5 | 12 | 16 | 3 |
| 4 | 4 | 16.5 | 2 |
| 4.5 | 8 | 17 | 2 |
| 5 | 1 | | |
| 5.5 | 0 | | |
| 6 | * | | |
| 6.5 | 4 | | |
| 7 | 19 | | |
| 7.5 | 20 | | |
| 8 | 31 | | |
| 8.5 | 48 | | |
| 9 | 146 | | |
| 9.5 | 216 | | |
| 10 | 190 | | |
| 10.5 | 99 | | |
| 11 | 8 | | |
| 11.5 | 3 | | |
| 12 | 3 | | |

# OFFSHORE DISPERSION FIELD STUDY

1-4




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY



## AUTOMOBILE TRAVERSE 4 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1716 PDT, 6/21/82 AT 101 & HALCYON (ARROYO GRANDE)
TRAVERSE END: 1733 PDT AT 101 & STOWELL (SANTA MARIA)
TRAVERSE ROUTE: S ON 101

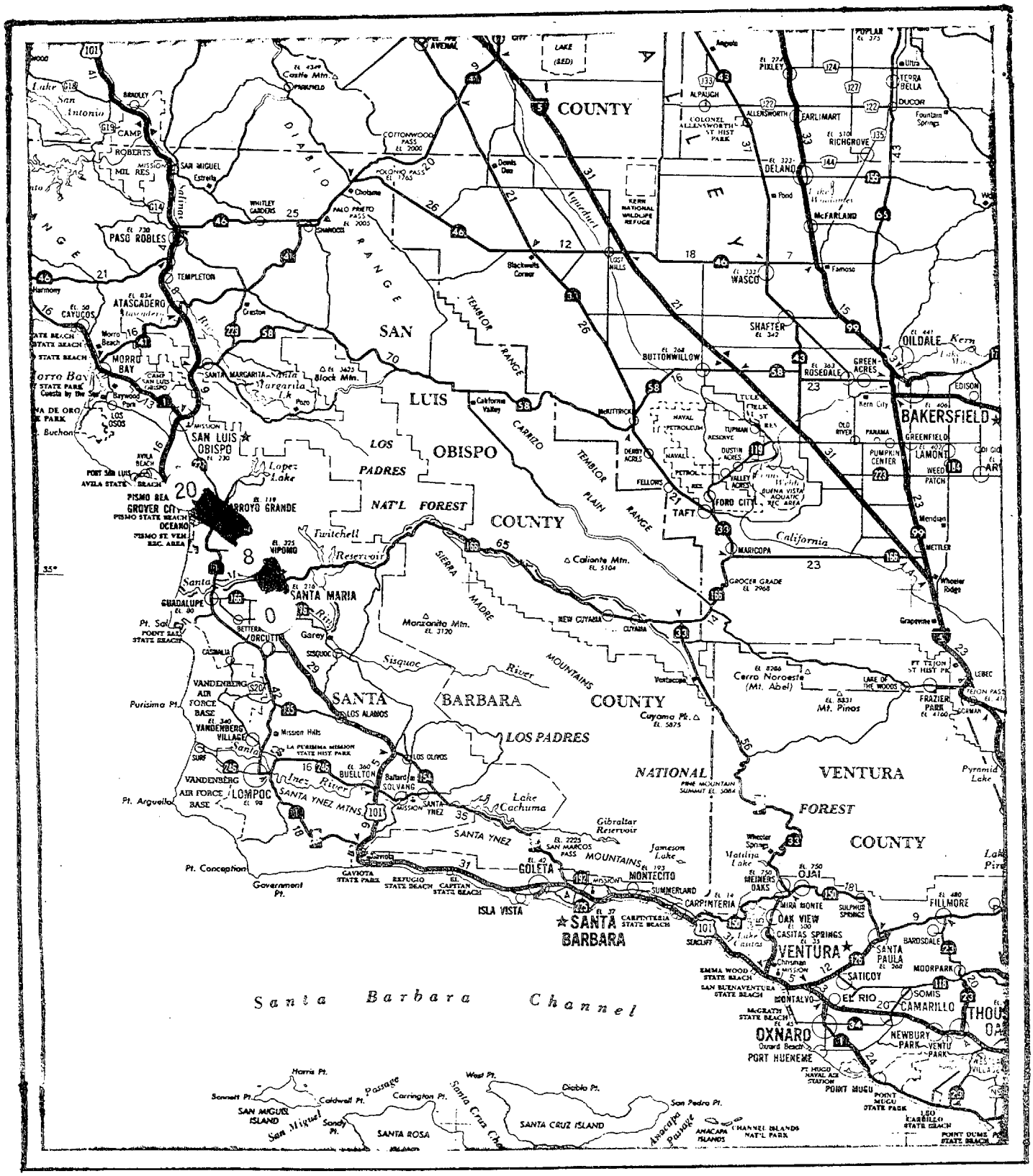
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 4 | 12.5 | 3 |
| .5 | 3 | 13 | 3 |
| 1 | 3 | 13.5 | 3 |
| 1.5 | 2 | 14 | 1 |
| 2 | 2 | 14.5 | 4 |
| 2.5 | 45 | 15 | 2 |
| 3 | 3 | 15.5 | 3 |
| 3.5 | 3 | 16 | 0 |
| 4 | 2 | 16.5 | 2 |
| 4.5 | 3 | 17 | 0 |
| 5 | 3 | | |
| 5.5 | 4 | | |
| 6 | 0 | | |
| 6.5 | 5 | | |
| 7 | * | | |
| 7.5 | 161 | | |
| 8 | 252 | | |
| 8.5 | 77 | | |
| 9 | 23 | | |
| 9.5 | 7 | | |
| 10 | * | | |
| 10.5 | 5 | | |
| 11 | 4 | | |
| 11.5 | 40 | | |
| 12 | 3 | | |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 1-5




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY



## AUTOMOBILE TRAVERSE 5 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1815 PDT, 6/21/82 AT 101 & STOWELL (SANTA MARIA)
TRAVERSE END: 1835 PDT AT 101 & 4TH ST (PISMO BEACH)
TRAVERSE ROUTE: N ON 101

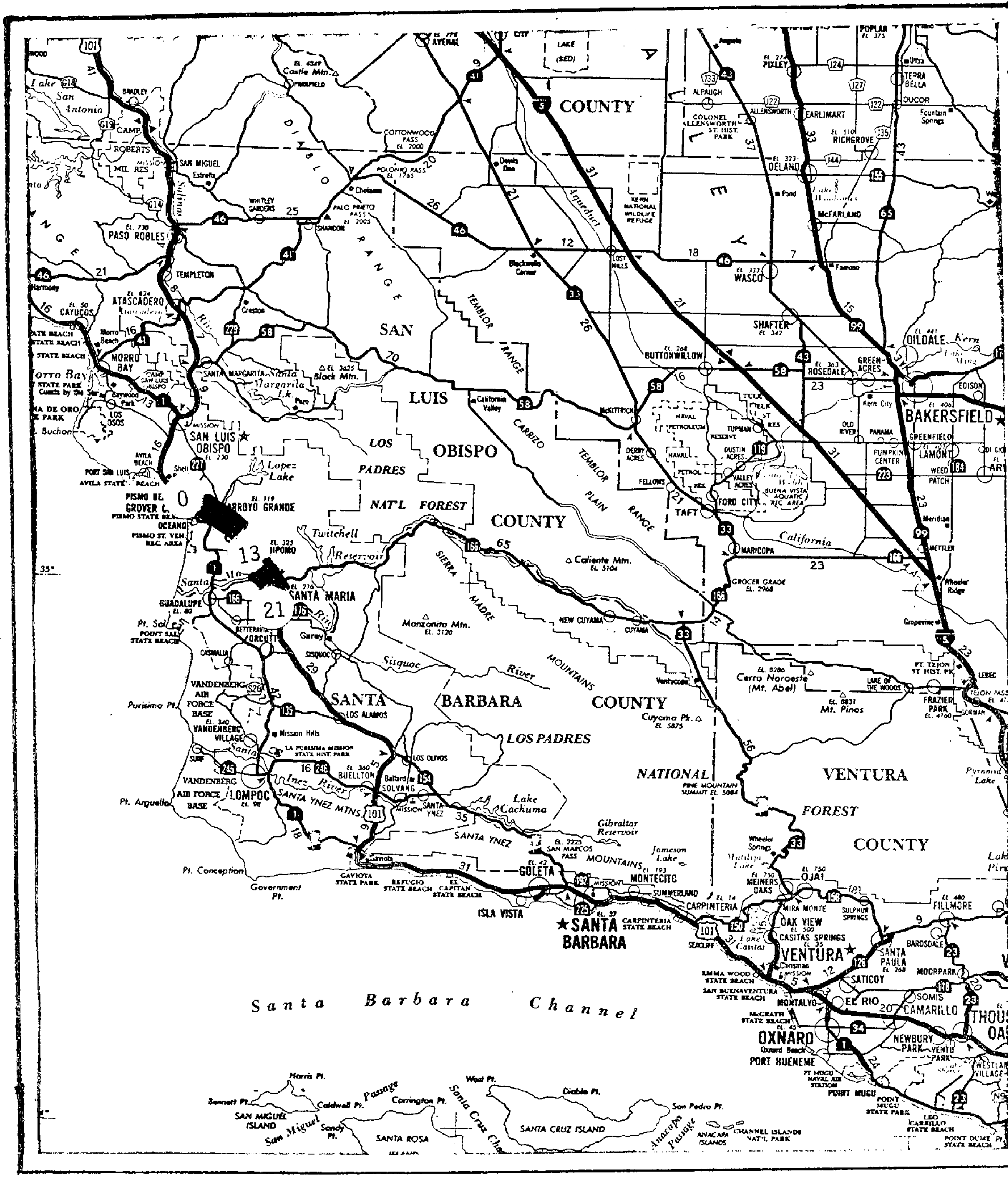
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 3 |
| 1 | 2 |
| 2 | 5 |
| 3 | 3 |
| 4 | 10 |
| 5 | 147 |
| 6 | 99 |
| 7 | 45 |
| 8 | 15 |
| 9 | 9 |
| 10 | 5 |
| 11 | 2 |
| 12 | 38 |
| 13 | 1 |
| 14 | 2 |
| 15 | 2 |
| 16 | 0 |
| 17 | 1 |
| 18 | 2 |
| 19 | 2 |
| 20 | 0 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 1-6




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY
## AUTOMOBILE TRAVERSE 6 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 2015 PDT, 6/21/82 AT 101 & S. PISMO BEACH
TRAVERSE END: 2035 PDT AT 101 & STOWELL (SANTA MARIA)
TRAVERSE ROUTE: S ON 101

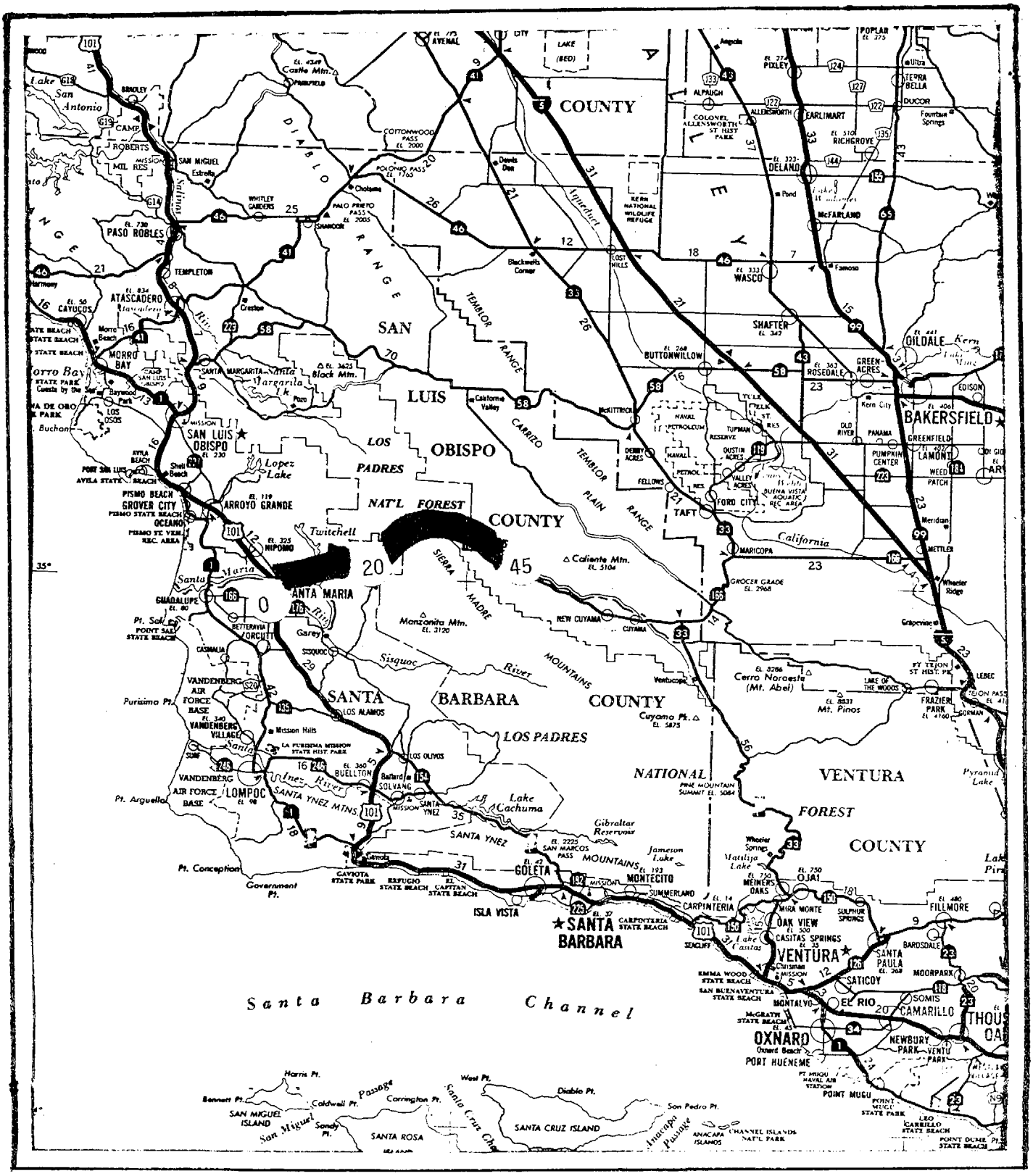
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 2 |
| 1 | 2 |
| 2 | 0 |
| 3 | 3 |
| 4 | 1 |
| 5 | 1 |
| 6 | 2 |
| 7 | 0 |
| 8 | 49 |
| 9 | 2 |
| 10 | 0 |
| 11 | 60 |
| 12 | 3 |
| 13 | 3 |
| 14 | 0 |
| 15 | 11 |
| 16 | 2 |
| 17 | 2 |
| 18 | 52 |
| 19 | 171 |
| 20 | 214 |
| 21 | 142 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 1-7




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 7 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 2129 PDT, 6/21/82 AT STOWELL & 101 (SANTA MARIA)
TRAVERSE END: 2221 PDT AT 166 & COTTONWOOD CANYON RD
TRAVERSE ROUTE: N ON 101; E ON 166

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 0 | 25 | 44 |
| 1 | 2 | 26 | 43 |
| 2 | 1 | 27 | 43 |
| 3 | 6 | 28 | 47 |
| 4 | 0 | 29 | 47 |
| 5 | 2 | 30 | 56 |
| 6 | 2 | 31 | 40 |
| 7 | 1 | 32 | 34 |
| 8 | 1 | 33 | 33 |
| 9 | 2 | 34 | 22 |
| 10 | 3 | 35 | 21 |
| 11 | 2 | 36 | 20 |
| 12 | 60 | 37 | 18 |
| 13 | 3 | 38 | 17 |
| 14 | 2 | 39 | 21 |
| 15 | 3 | 40 | 26 |
| 16 | 19 | 41 | 26 |
| 17 | 7 | 42 | 23 |
| 18 | 11 | 43 | 23 |
| 19 | 21 | 44 | 26 |
| 20 | 17 | 45 | 28 |
| 21 | 21 | | |
| 22 | 23 | | |
| 23 | 32 | | |
| 24 | 41 | | |

# OFFSHORE DISPERSION FIELD STUDY

## 1-8

THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY



## AUTOMOBILE TRAVERSE 8 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

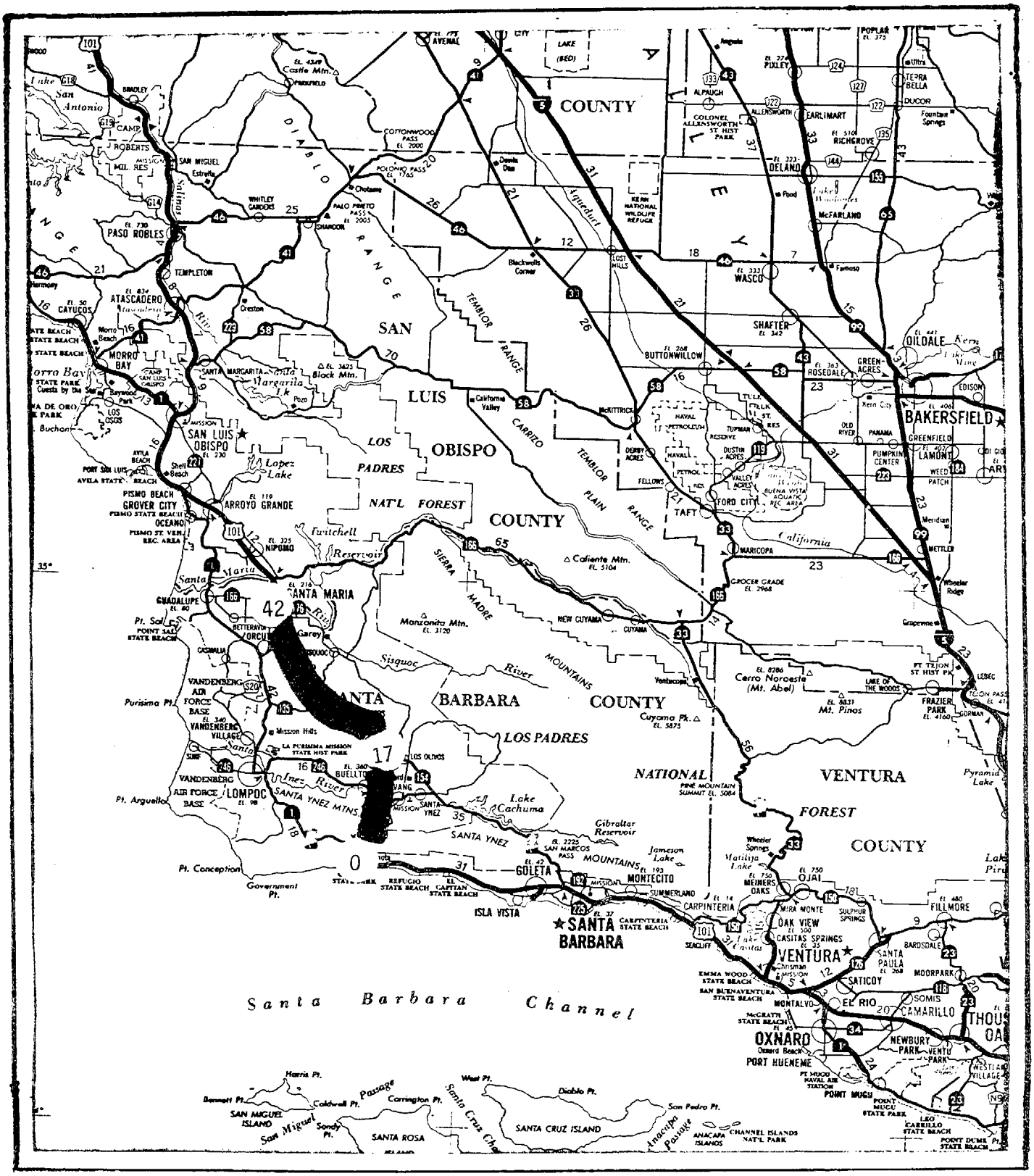
TRAVERSE START: 2131 PDT, 6/21/82 AT 101 & STOWELL (SANTA MARIA)
TRAVERSE END: 2213 PDT ON 101 IN GAVIOTA VILLAGE
TRAVERSE ROUTE: S ON 101

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 0 | 25 | 71 |
| 1 | 2 | 26 | 4 |
| 2 | 1 | 27 | 2 |
| 3 | 1 | 28 | 0 |
| 4 | 3 | 29 | 2 |
| 5 | 1 | 30 | 0 |
| 6 | 8 | 31 | 0 |
| 7 | 9 | 32 | 0 |
| 8 | 14 | 33 | 8 |
| 9 | 7 | 34 | 0 |
| 10 | 5 | 35 | 0 |
| 11 | 4 | 36 | 1 |
| 12 | 2 | 37 | 1 |
| 13 | 18 | 38 | 1 |
| 14 | 1 | 39 | 1 |
| 15 | 2 | 40 | 0 |
| 16 | 6 | 41 | 0 |
| 17 | 4 | 42 | 1 |
| 18 | 3 | | |
| 19 | 3 | | |
| 20 | 0 | | |
| 21 | 3 | | |
| 22 | 6 | | |
| 23 | 9 | | |
| 24 | 2 | | |

# OFFSHORE DISPERSION FIELD STUDY

## 1-9




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 9 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 2224 PDT, 6/21/82 ON 101 IN GAVIOTA VILLAGE
TRAVERSE END: 2307 PDT 101 & STOWELL (SANTA MARIA)
TRAVERSE ROUTE: N ON 101

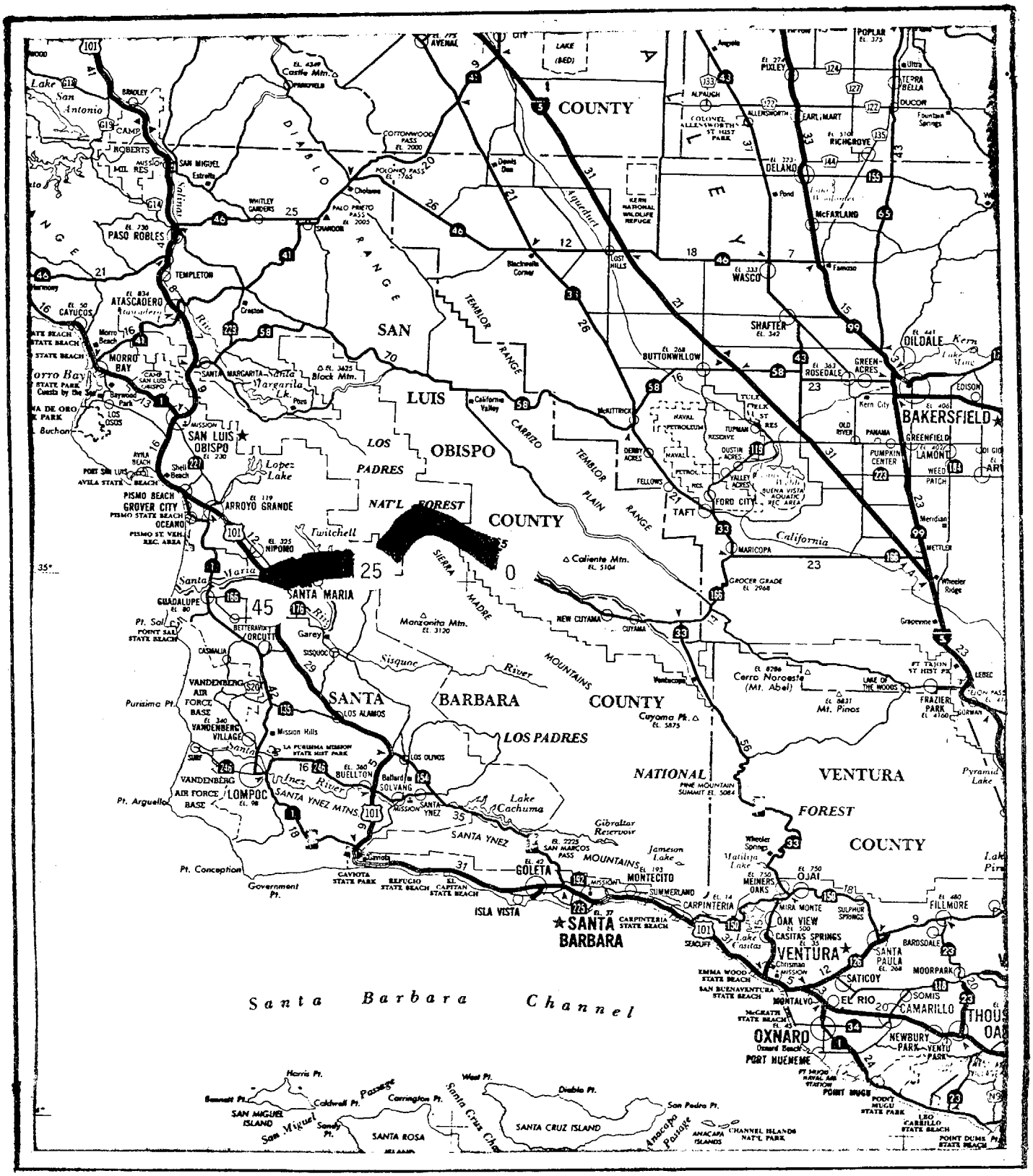
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 2 | 25 | 4 |
| 1 | 2 | 26 | 6 |
| 2 | 2 | 27 | 19 |
| 3 | 3 | 28 | 21 |
| 4 | 3 | 29 | * |
| 5 | 6 | 30 | 7 |
| 6 | 1 | 31 | 4 |
| 7 | * | 32 | 4 |
| 8 | 1 | 33 | 5 |
| 9 | 0 | 34 | 2 |
| 10 | 2 | 35 | 2 |
| 11 | 44 | 36 | 0 |
| 12 | 1 | 37 | 2 |
| 13 | * | 38 | 7 |
| 14 | 5 | 39 | 2 |
| 15 | 1 | 40 | 2 |
| 16 | 4 | 41 | 2 |
| 17 | 72 | 42 | 2 |
| 18 | 4 | | |
| 19 | 3 | | |
| 20 | 3 | | |
| 21 | 3 | | |
| 22 | 3 | | |
| 23 | 5 | | |
| 24 | 5 | | |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 1-10




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 10 OF DAY 1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 2239 PDT, 6/21/82 AT 166 & COTTONWOOD CANYON RD
TRAVERSE END: 2336 PDT AT 101 & STOWELL (SANTA MARIA)
TRAVERSE ROUTE: W ON 166; S ON 101

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 22 | 25 | 0 |
| 1 | 19 | 26 | 7 |
| 2 | 22 | 27 | 8 |
| 3 | 22 | 28 | 6 |
| 4 | 21 | 29 | 6 |
| 5 | 18 | 30 | 4 |
| 6 | 17 | 31 | 2 |
| 7 | 14 | 32 | 3 |
| 8 | 11 | 33 | 2 |
| 9 | 12 | 34 | 1 |
| 10 | 55 | 35 | 0 |
| 11 | 39 | 36 | 3 |
| 12 | 27 | 37 | 2 |
| 13 | 25 | 38 | 8 |
| 14 | 9 | 39 | 2 |
| 15 | 30 | 40 | 5 |
| 16 | 32 | 41 | 2 |
| 17 | 28 | 42 | 13 |
| 18 | 32 | 43 | 2 |
| 19 | 25 | 44 | 2 |
| 20 | 17 | 45 | 11 |
| 21 | 18 | | |
| 22 | 10 | | |
| 23 | 8 | | |
| 24 | 8 | | |

TEST-2

# Offshore Dispersion Field Study

## Auto Traverses
## Day Two (6/22/82)

| No. | Day | Start Time | End Time | Start Location | End Location | No. Samples | Route |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 0930 | 1025 | Santa Maria | Goleta | 13 | S on 101 |
| 2 | 2 | 1036 | 1133 | Goleta | Santa Maria | 14 | N on 101 |
| 3 | 2 | 1206 | 1237 | Santa Maria | San Luis Obispo | 8 | N on 101 |
| 4 | 2 | 1229 | 1452 | Vandenburg AFB Main Gate | 101 & 154 | 13 | E on S20<br>E on 246<br>E on 154 |
| 5 | 2 | 1240 | 1308 | Pasadena | Burbank | 4 | E on 210<br>E on 134 |
| 6 | 2 | 1348 | 1453 | Burbank | Ventura | 13 | N on 101 |
| 7 | 2 | 1359 | 1518 | San Luis Obispo | 41 & 33 | 16 | N on 101<br>E on 46<br>NE on 41 |
| 8 | 2 | 1534 | 1723 | Ventura | New Cuyama | 17 | N on 33<br>W on 166 |
| 9 | 2 | 1626 | 1813 | Santa Barbara | Pasadena | 21 | S on 101<br>E on 134<br>E on 210 |
| 10 | 2 | 1818 | 1910 | New Cuyama | Santa Maria | 11 | W on 166 |

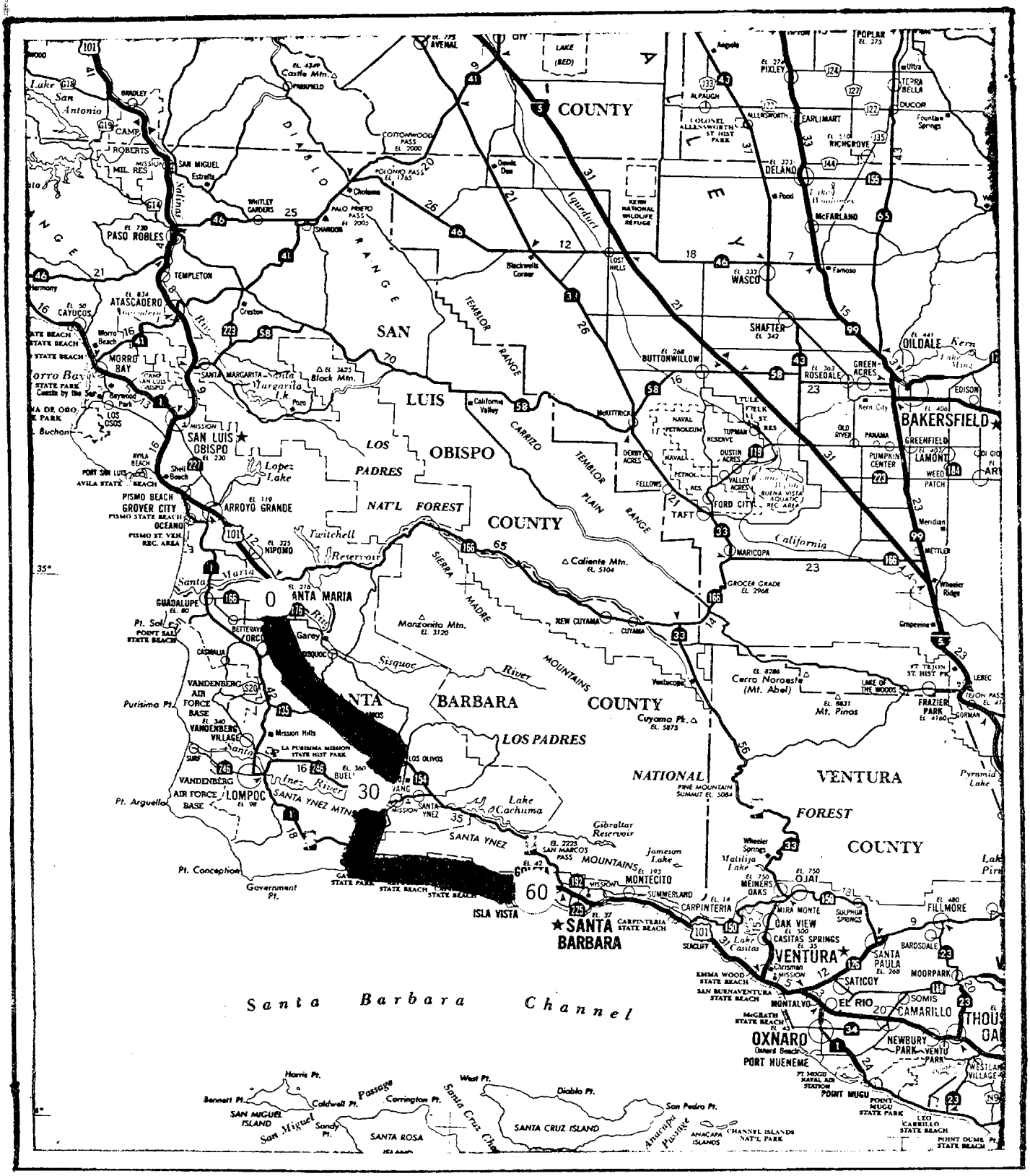
RELEASE: 25 LBS $SF_6$/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH

RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 2-1




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY
## AUTOMOBILE TRAVERSE 1 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 0930 PDT, 6/22/82 AT 101 & STOWELL (SANTA MARIA)
TRAVERSE END: 1025 PDT AT 101 & U.C. SANTA BARBARA EXIT (GOLETA)
TRAVERSE ROUTE: S ON 101

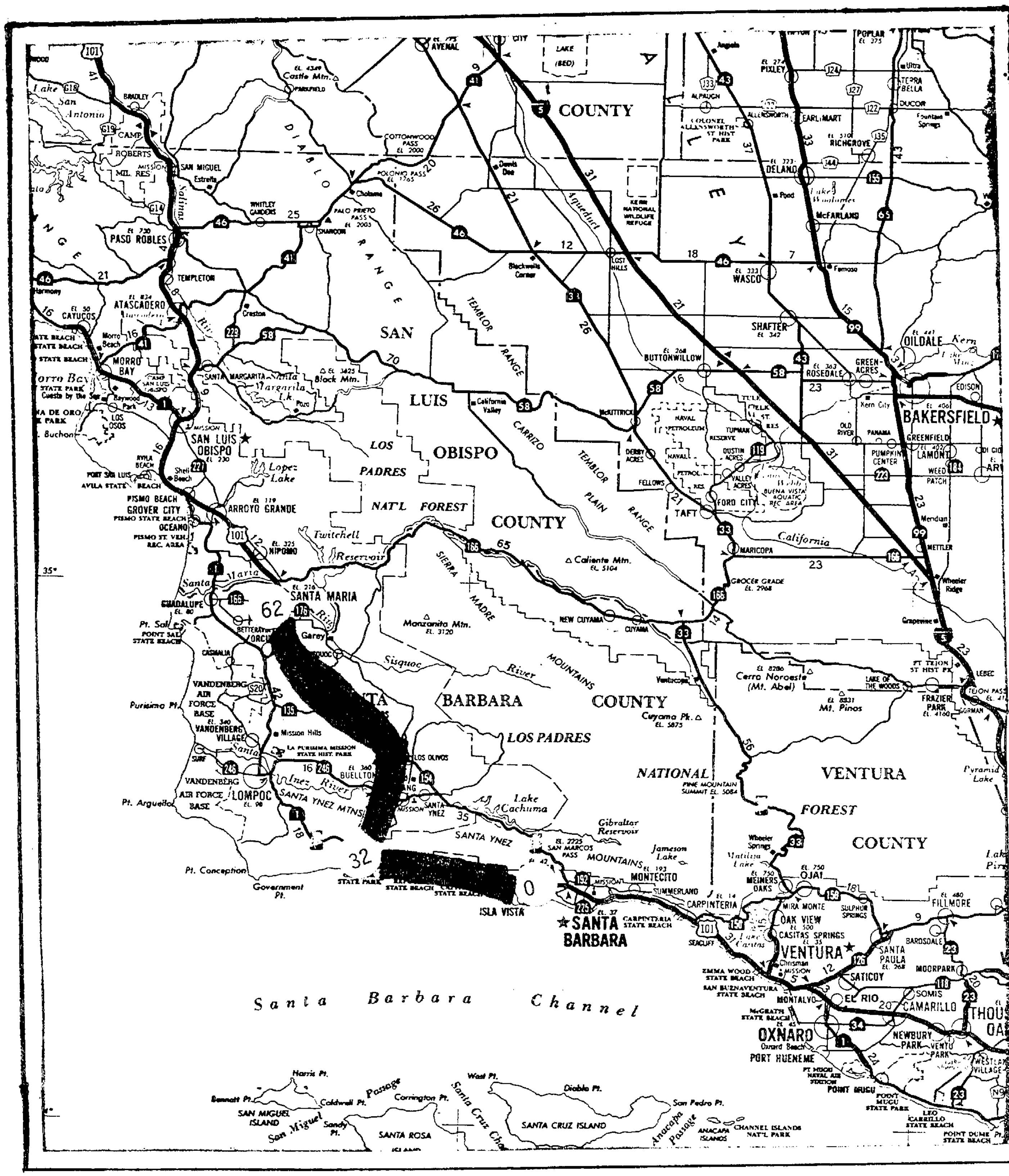
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 4 |
| 5 | 2 |
| 10 | 4 |
| 15 | 4 |
| 20 | 6 |
| 25 | 10 |
| 30 | 6 |
| 35 | 8 |
| 40 | 8 |
| 45 | 4 |
| 50 | 3 |
| 55 | 3 |
| 60 | 2 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 2-2




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 2 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1036 PDT, 6/22/82 AT 101 & U.C. SANTA BARBARA EXIT (GOLETA)
TRAVERSE END: 1133 PDT AT 101 & STOWELL (SANTA MARIA)
TRAVERSE ROUTE: N ON 101

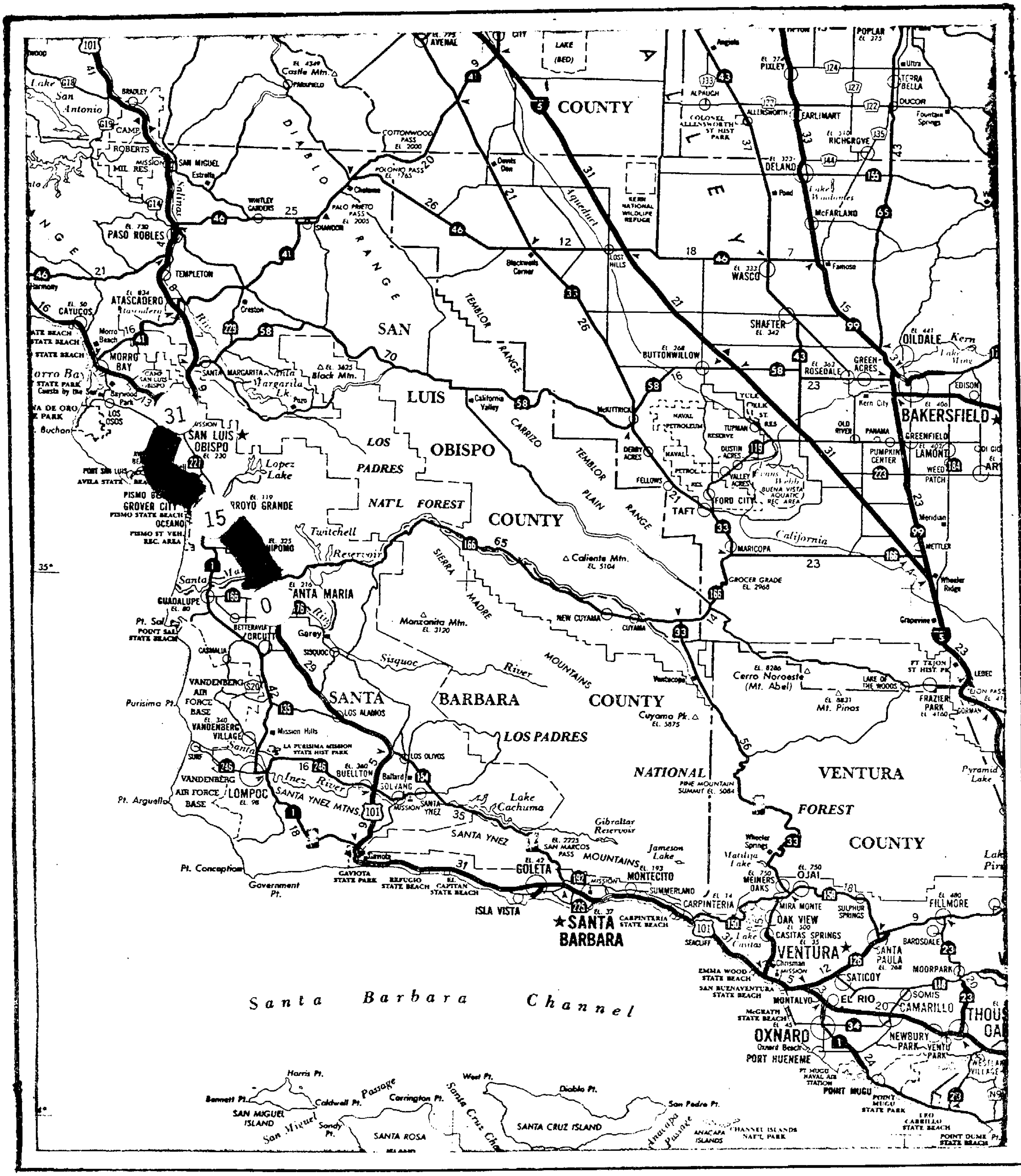
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 3 |
| 5 | 2 |
| 10 | 2 |
| 15 | 3 |
| 20 | 4 |
| 25 | 8 |
| 30 | 6 |
| 35 | 4 |
| 40 | 6 |
| 45 | 3 |
| 50 | 4 |
| 55 | 3 |
| 60 | 3 |
| 62 | 3 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 2-3




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 3 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

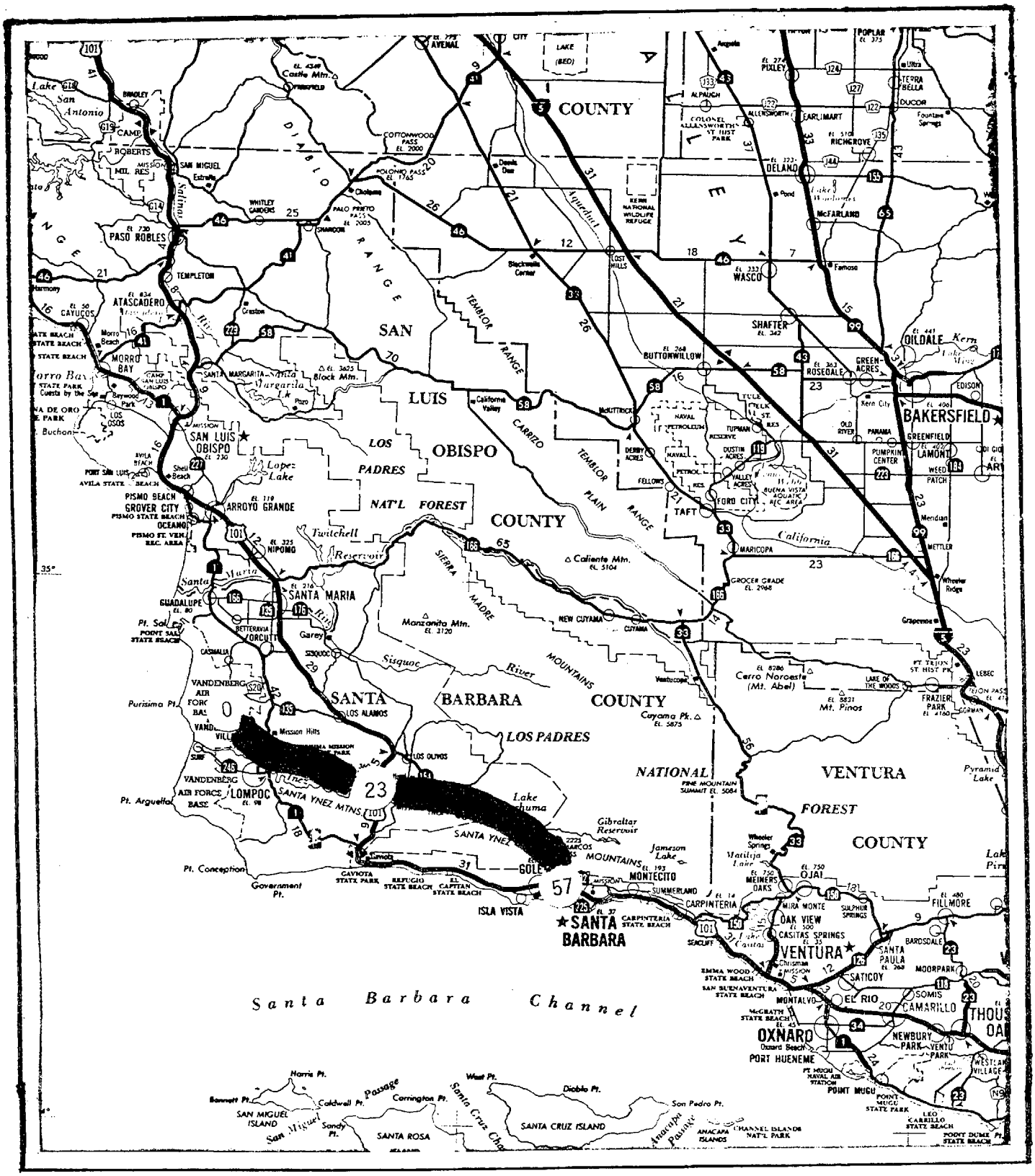
TRAVERSE START: 1206 PDT, 6/22/82 AT 101 & STOWELL (SANTA MARIA)
TRAVERSE END: 1237 PDT AT MARSH & 101 (SAN LUIS OBISPO)
TRAVERSE ROUTE: N ON 101

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 3 |
| 5 | 3 |
| 10 | 4 |
| 15 | 3 |
| 20 | 4 |
| 25 | 3 |
| 30 | 3 |
| 31 | 2 |

# OFFSHORE DISPERSION FIELD STUDY

## 2-4




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 4 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1226 PDT, 6/22/82 AT VANDENBURG AFB MAIN GATE & S20
TRAVERSE END: 1452 PDT AT 101 & 154
TRAVERSE ROUTE: E ON S20, 246, 154

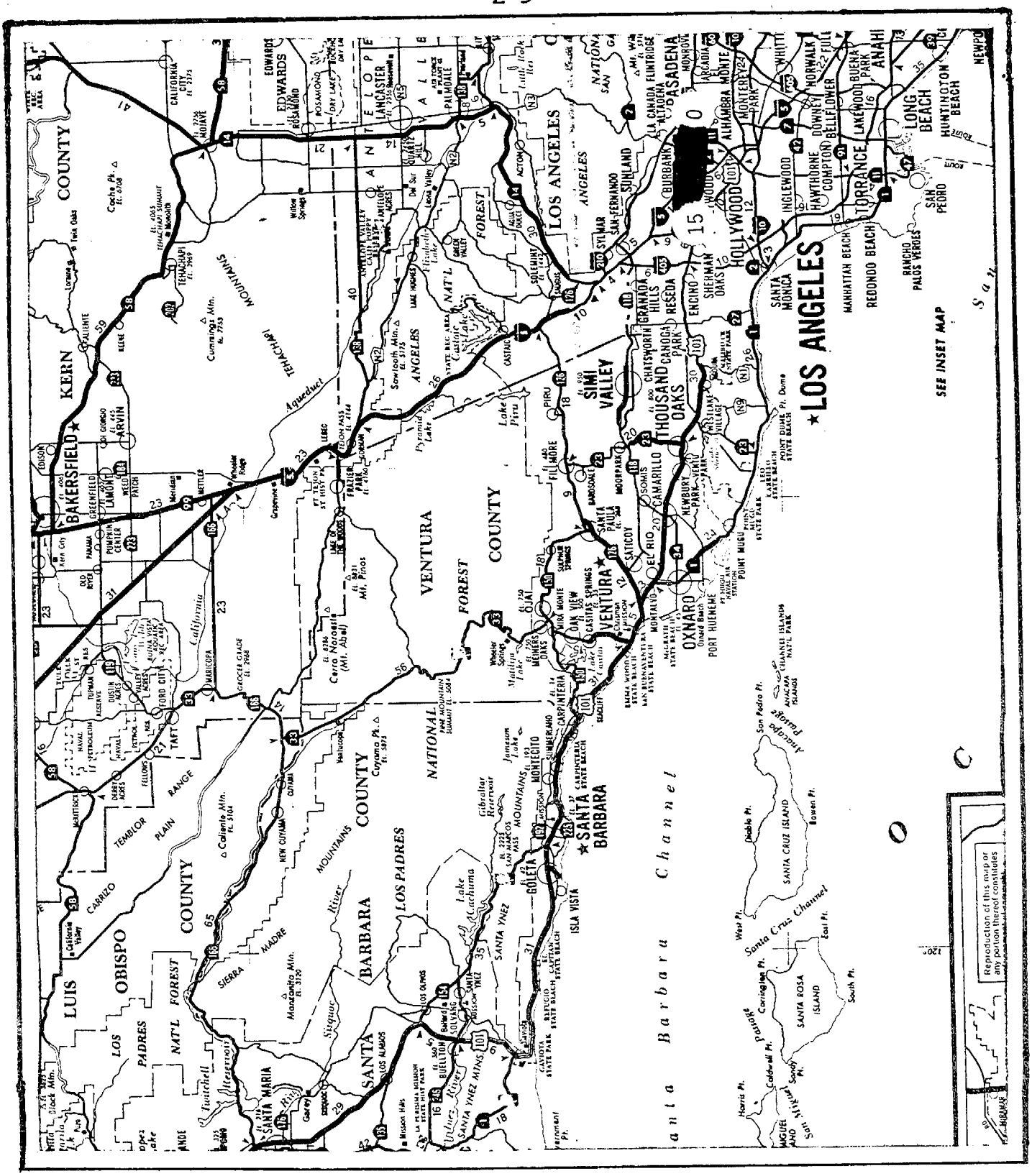
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 2 |
| 5 | 2 |
| 10 | 19 |
| 15 | 2 |
| 20 | 3 |
| 25 | 4 |
| 30 | 4 |
| 35 | 4 |
| 40 | 6 |
| 45 | 7 |
| 50 | 2 |
| 55 | 3 |
| 57 | 2 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 2-5




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 5 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

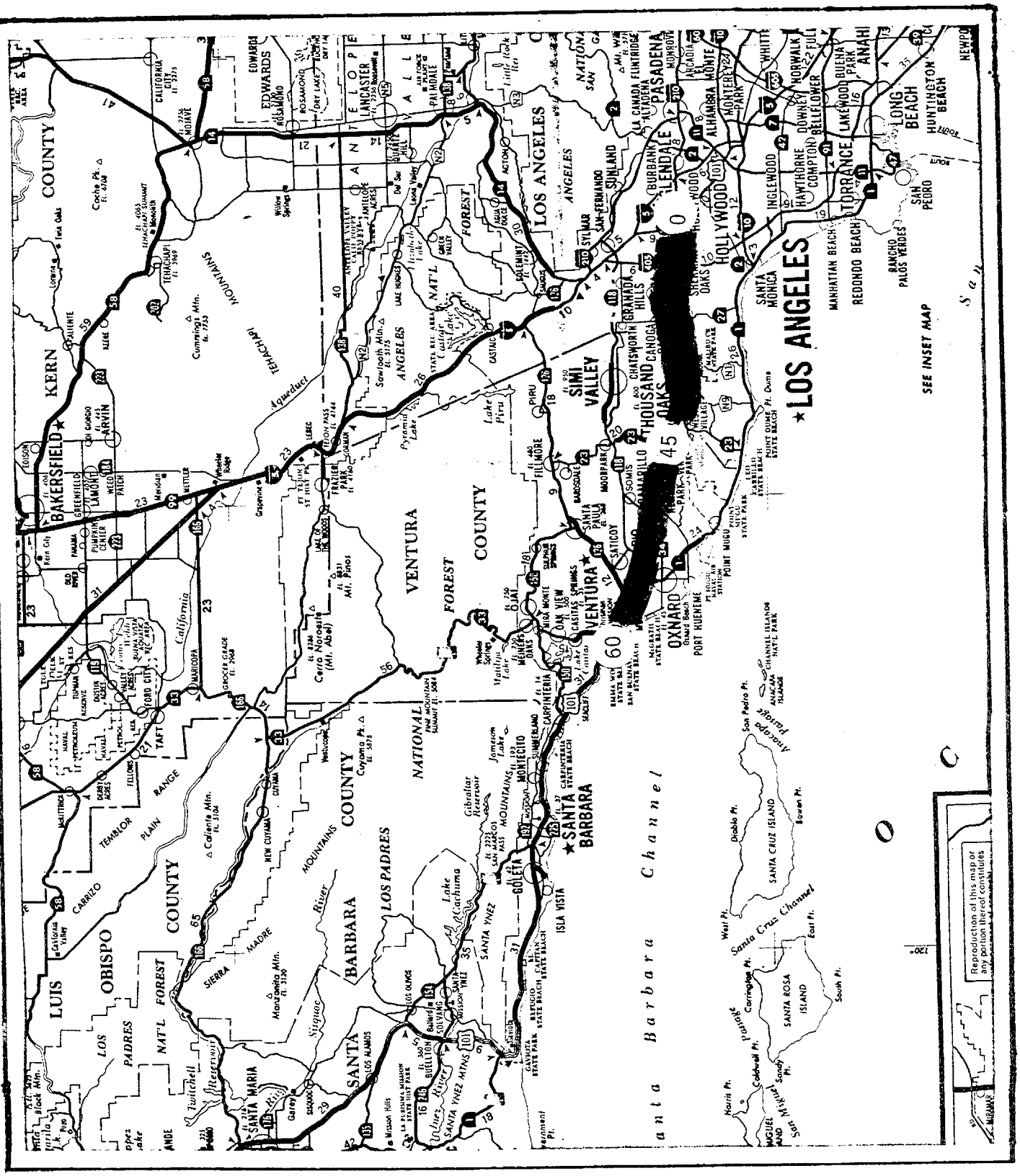
TRAVERSE START: 1240 PDT, 6/22/82 AT HOLLISTON & DEL MAR (PASADENA)
TRAVERSE END: 1308 PDT AT BURBANK BLVD & BUENA VISTA (BURBANK)
TRAVERSE ROUTE: E ON 210, 134

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 4 |
| 5 | 4 |
| 10 | 3 |
| 15 | 3 |

# OFFSHORE DISPERSION FIELD STUDY






THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 6 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

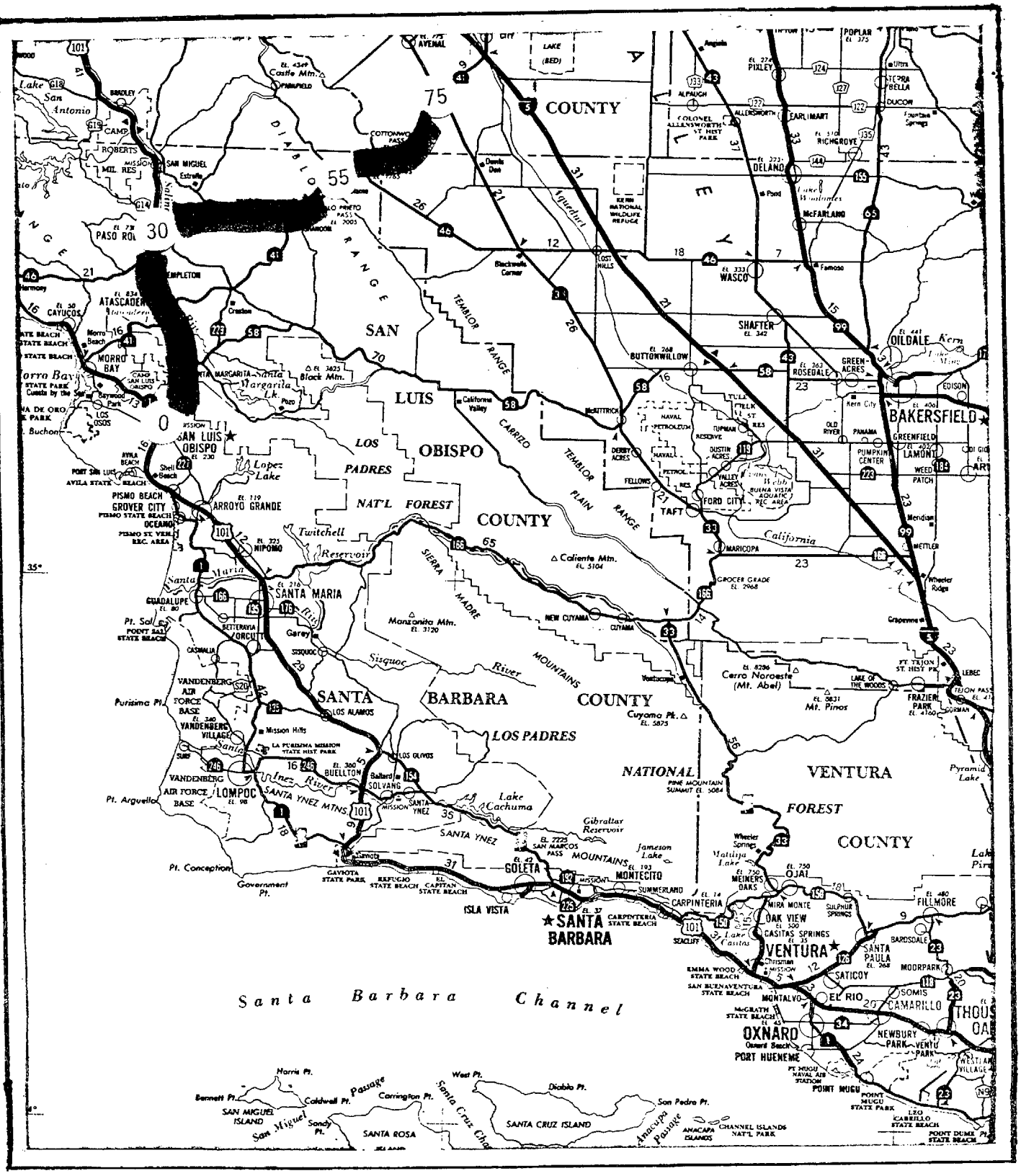
TRAVERSE START: 1348 PDT, 6/22/82 AT BURBANK BLVD & BUENA VISTA (BURBANK)
TRAVERSE END: 1453 PDT AT 33 & 101 (VENTURA)
TRAVERSE ROUTE: N ON 101

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 4 |
| 5 | 4 |
| 10 | 3 |
| 15 | 3 |
| 20 | 4 |
| 25 | 3 |
| 30 | 4 |
| 35 | 4 |
| 40 | 4 |
| 45 | 3 |
| 50 | 3 |
| 55 | 8 |
| 60 | 2 |

# OFFSHORE DISPERSION FIELD STUDY

## 2-7




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 7 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

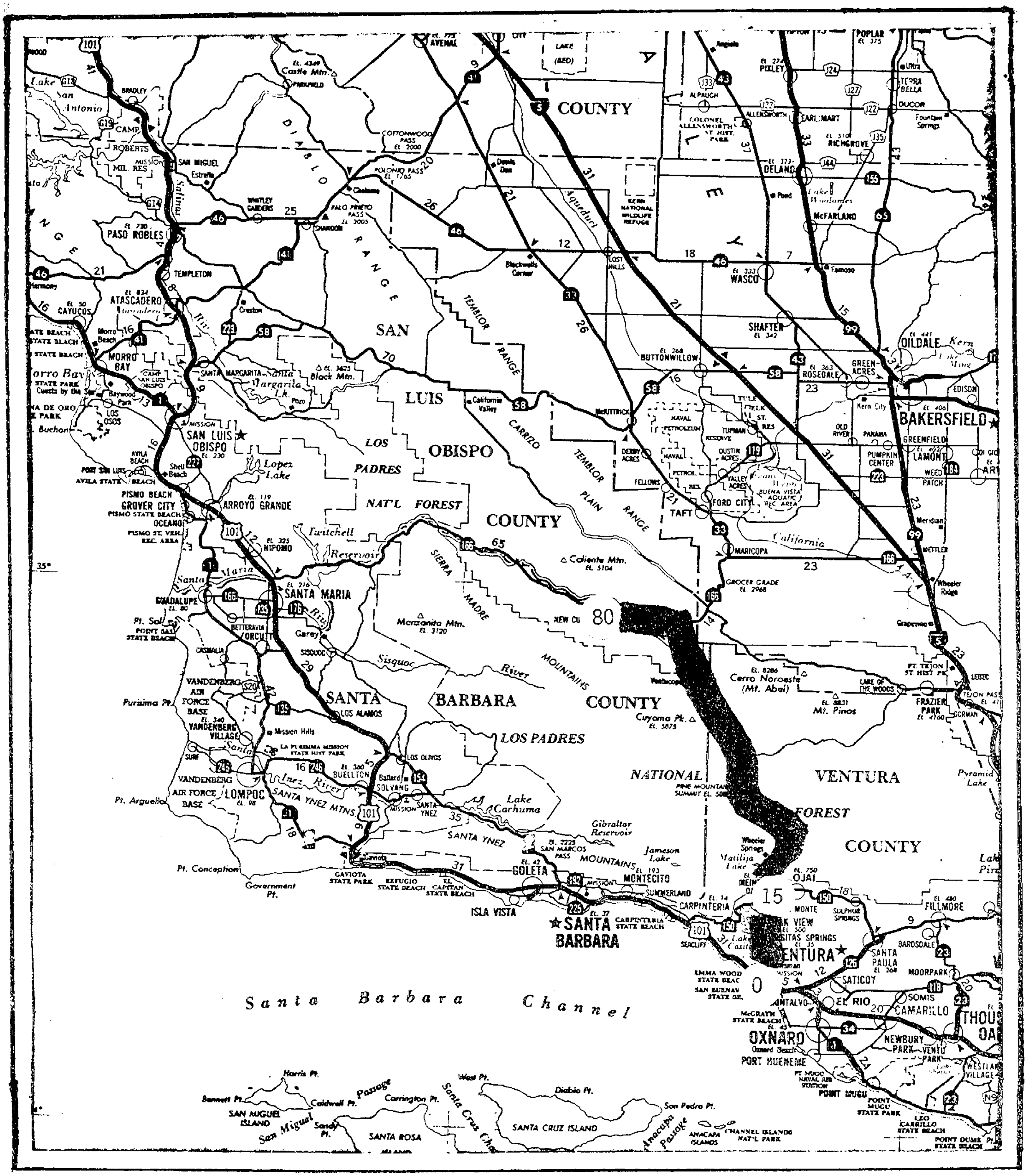
TRAVERSE START: 1359 PDT, 6/22/82 AT 101 & MADONNA (SAN LUIS OBISPO)
TRAVERSE END: 1518 PDT AT 41 & 33
TRAVERSE ROUTE: N ON 101; E ON 46; NE ON 41

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 0 |
| 5 | 2 |
| 10 | 4 |
| 15 | 4 |
| 20 | 4 |
| 25 | 3 |
| 30 | 2 |
| 35 | 2 |
| 40 | 3 |
| 45 | 3 |
| 50 | 3 |
| 55 | 4 |
| 60 | 4 |
| 65 | 3 |
| 70 | 3 |
| 75 | 4 |

# OFFSHORE DISPERSION FIELD STUDY

## 2-8




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY
## AUTOMOBILE TRAVERSE 8 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

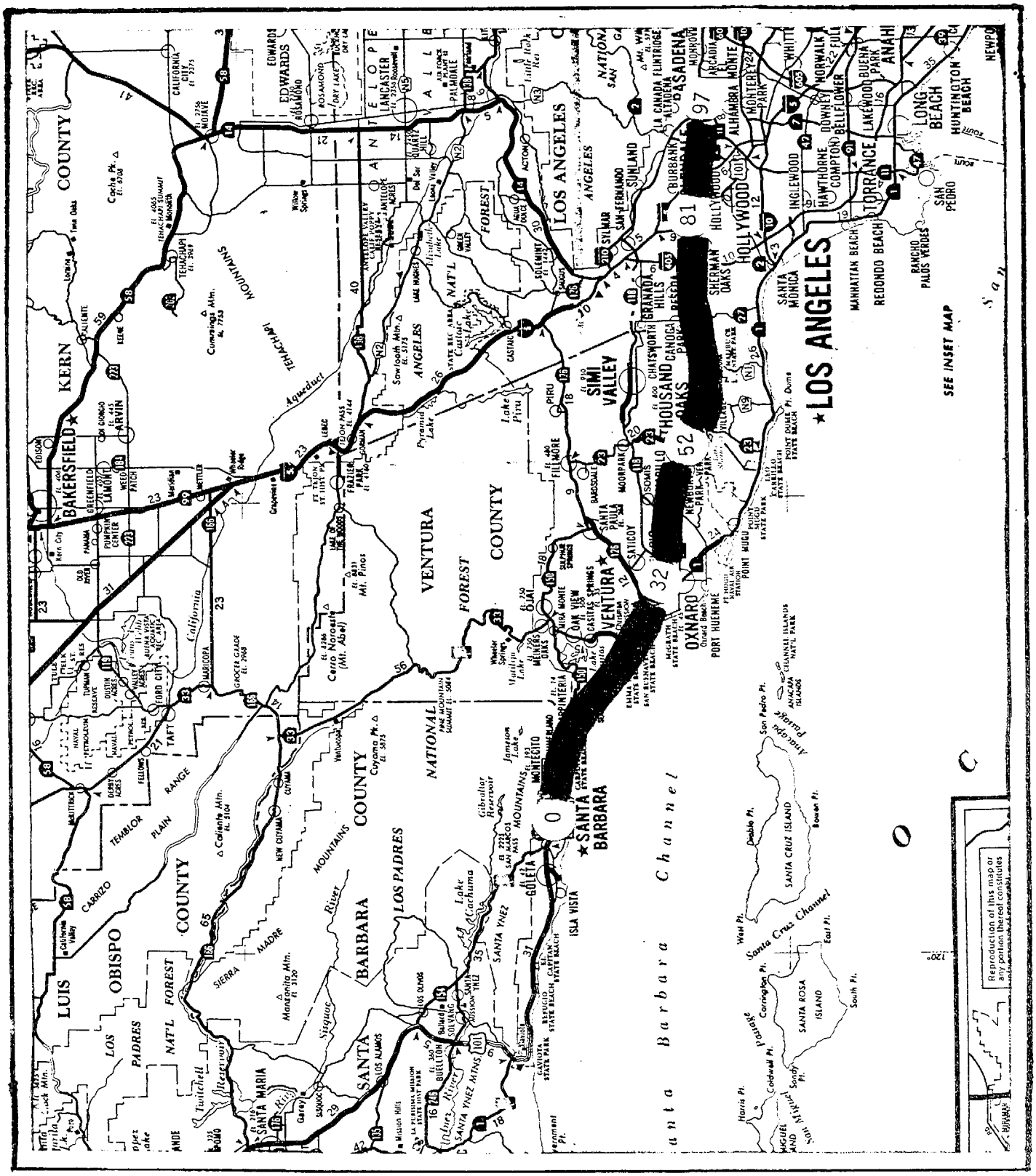
TRAVERSE START: 1534 PDT, 6/22/82 AT 33 & 101 (VENTURA)
TRAVERSE END: 1723 PDT AT NEWSOME & 166 (NEW CUYAMA)
TRAVERSE ROUTE: N ON 33; W ON 166

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 2 |
| 5 | 4 |
| 10 | 4 |
| 15 | 3 |
| 20 | 6 |
| 25 | 9 |
| 30 | 8 |
| 35 | 7 |
| 40 | 9 |
| 45 | 12 |
| 50 | 9 |
| 55 | 10 |
| 60 | 7 |
| 65 | 7 |
| 70 | 5 |
| 75 | 7 |
| 80 | 4 |

# OFFSHORE DISPERSION FIELD STUDY

## 2-9




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY

## AUTOMOBILE TRAVERSE 9 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1626 PDT, 6/22/82 AT 101 & CABRILLO (SANTA BARBARA)
TRAVERSE END: 1813 PDT AT 210 & HILL (PASADENA)
TRAVERSE ROUTE: S ON 101; E ON 134, 210

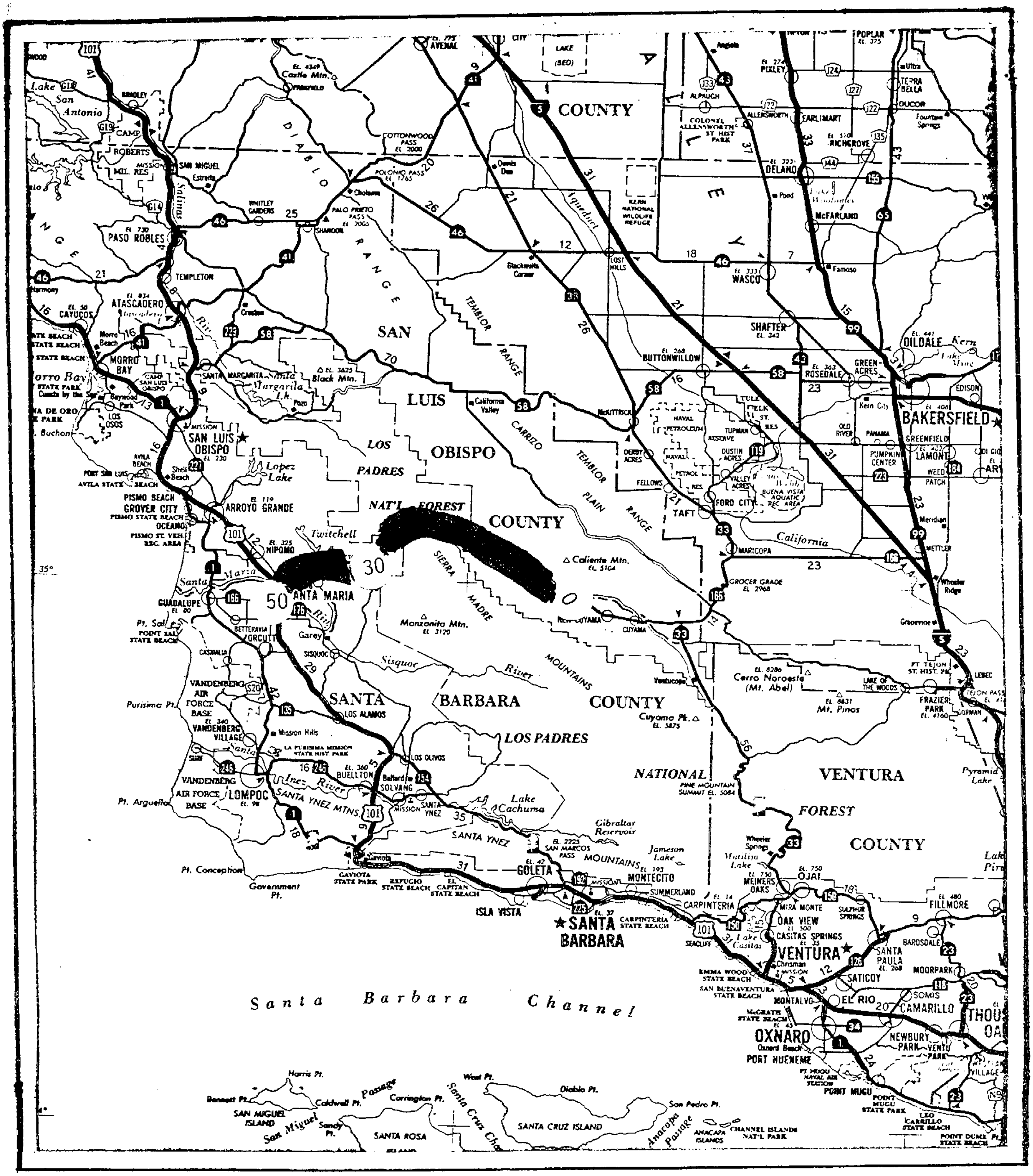
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 2 |
| 5 | 3 |
| 10 | 7 |
| 15 | 2 |
| 20 | 1 |
| 25 | 3 |
| 30 | 3 |
| 35 | 2 |
| 40 | 1 |
| 45 | 2 |
| 50 | 1 |
| 55 | 2 |
| 60 | 4 |
| 65 | 3 |
| 70 | 2 |
| 75 | 6 |
| 80 | 5 |
| 85 | 2 |
| 90 | 2 |
| 95 | 9 |
| 97 | 12 |

TEST-2

# OFFSHORE DISPERSION FIELD STUDY

## 2-10




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE DISPERSION FIELD STUDY
## AUTOMOBILE TRAVERSE 10 OF DAY 2

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

TRAVERSE START: 1818 PDT, 6/22/82 AT NEWSOME & 166 (NEW CUYAMA)
TRAVERSE END: 1910 PDT AT CARMEN LANE & 135 (SANTA MARIA)
TRAVERSE ROUTE: W ON 166

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 0 | 6 |
| 5 | 6 |
| 10 | 6 |
| 15 | 7 |
| 20 | 9 |
| 25 | 11 |
| 30 | 6 |
| 35 | 5 |
| 40 | 3 |
| 45 | 0 |
| 50 | 0 |

TEST-2

# Offshore Field Studies

## Appendix B3

## Grab Samples

## for

## Test 2

## Conducted Starting June 21, 1982

# SANTA MARIA GRAB SAMPLES OS-1

RELEASE: 25 LBS SF6/HR (3.15 GR/SEC) OFFSHORE 3 MI DUE W OF PISMO BEACH
RELEASE TIME: 1221-1800 PDT, 6/21/82 & 1339-2000 PDT, 6/22/82

SAMPLING LOCATION: THE VANDENBURG INN ON BROADWAY NEAR STOWELL (SANTA MARIA)
DURATION OF SAMPLING: 1415 PDT, 6/21/82 TO 0745 PDT, 6/24/82

* DENOTES MISSING DATA

| TIME PDT | [SF6] PPT | TIME PDT | [SF6] PPT |
|---|---|---|---|
| 1415 | 2 | 2121 | 3 |
| 1430 | 3 | 2142 | 0 |
| 1445 | 3 | 2200 | 3 |
| 1500 | 0 | 6/24/82 | |
| 1515 | 1 | 0700 | 0 |
| 1530 | 2 | 0730 | 10 |
| 1545 | 2 | 0745 | 0 |
| 1600 | 0 | | |
| 1615 | 2 | | |
| 1630 | 2 | | |
| 1645 | 2 | | |
| 1700 | 0 | | |
| 1715 | 2 | | |
| 1730 | 3 | | |
| 1745 | 44 | | |
| 1800 | 1 | | |
| 2030 | 1 | | |
| 6/22/82 | | | |
| 2206 | 56 | | |
| 2239 | 74 | | |
| 6/23/82 | | | |
| 0708 | 4 | | |
| 0758 | 6 | | |
| 0810 | 4 | | |
| 1904 | 2 | | |

Offshore Field Studies

Appendix C1

Hourly Averaged Data

for

Test 3

Conducted Starting September 8, 1982

# OFFSHORE FIELD STUDY

Conducted September 8-10, 1982

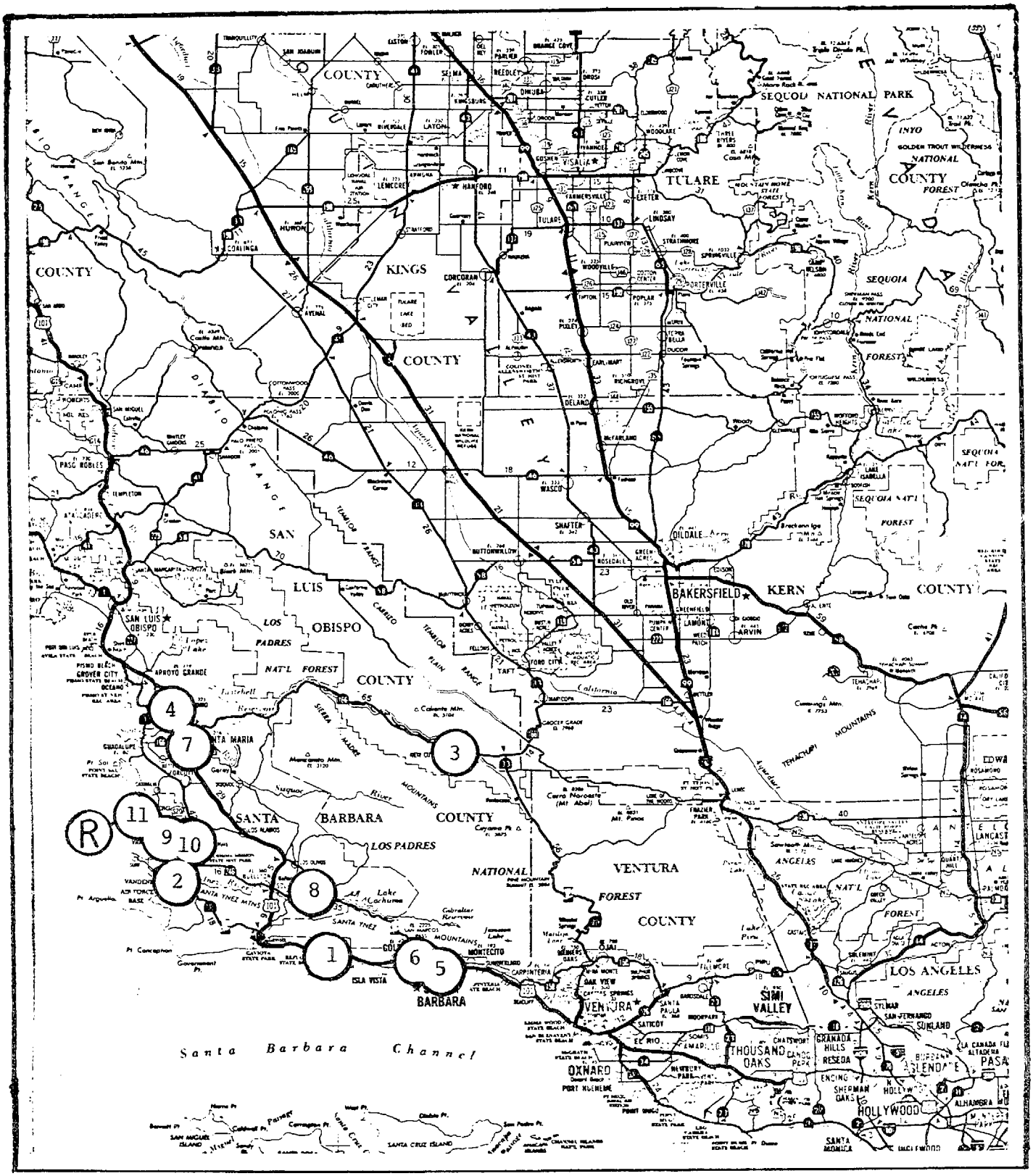
Fixed Sites

| | Location | Abbreviation |
|---|---|---|
| 1. | El Capitan | EL C |
| 2. | Lompoc | LOMP |
| 3. | New Cuyama | N CU |
| 4. | Nipomo | NIPO |
| 5. | Santa Barbara | S BA |
| 6. | Santa Barbara A.P.C.D. | APCD |
| 7. | Santa Maria | S MA |
| 8. | Santa Ynez | S YN |
| 9. | Vandenburg A.F.B. Herado St. | V-HE |
| 10. | Vandenburg A.F.B. Lift Station | V-LS |
| 11. | Vandenburg A.F.B. Watt Rd. | V-WA |

TEST-3

# OFFSHORE FIELD STUDY

Fixed Sites
Hourly Averaged Data
September 8-10, 1982




(#) INDICATES SAMPLER LOCATIONS

R INDICATES RELEASE LOCATION

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

RELEASE TIME: 0715-1340 PDT, 9/8/82

TEST-3

Test: Offshore Dispersion Field Study

Conducted: September 8-10, 1982

Release Location: Offshore From THE YELLOW TAIL

Release Rate: 106 Lbs. SF6/Hr (13.3 GR/Sec)

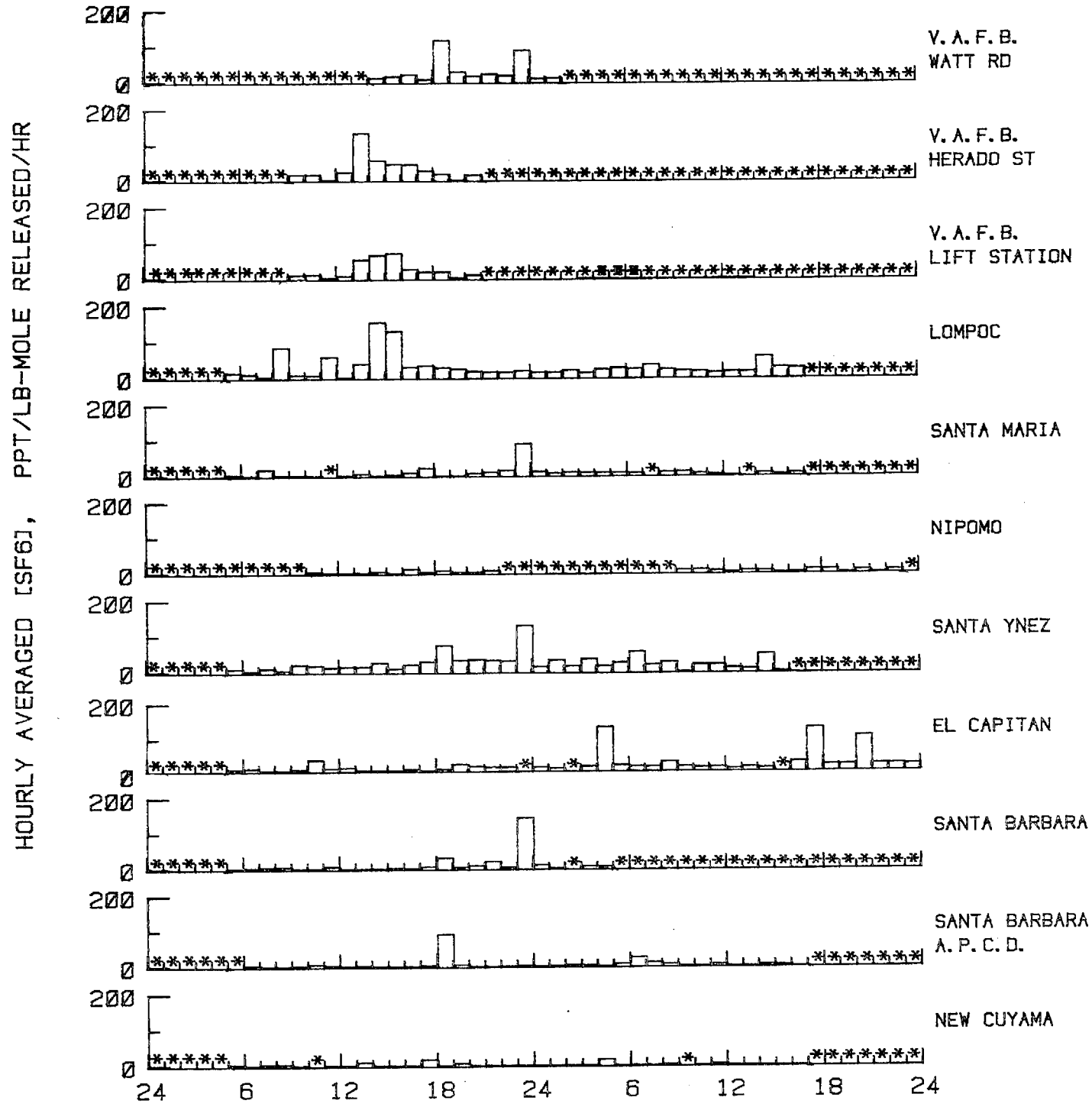
Release Time: 0715 - 1340 PDT, 9/8/82

| No. | Site | Location | Distance From Rel. Site (Miles) | $[SF_6]$ Max (PPT) | Time From Start of Release (Hours) | Apparent Wind Speed (MPH) |
|---|---|---|---|---|---|---|
| 1. | 11 | V - WA | 6 | 86 | 11 | 0.5 |
| 2. | 9 | V - HE | 10 | 97 | 6 | 1.7 |
| 3. | 10 | V - LS | 12 | 51 | 8 | 1.5 |
| 4. | 2 | LOMP | 15 | 113 | 7 | 2.1 |
| 5. | 7 | S MA | 22 | 66 | 16 | 1.4 |
| 6. | 4 | NIPO | 25 | - | - | |
| 7. | 8 | S YN | 36 | 95 | 16 | 2.25 |
| 8. | 1 | EL C | 43 | 90/88 | 21/34 | 2.0/1.3 |
| 9. | 5 | S BA | 56 | 105 | 16 | 3.5 |
| 10. | 6 | A PCD | 60 | 67 | 11 | 5.5 |
| 11. | 3 | N CU | 60 | 13 | 10 | 6.0 |
| 12. | | | | | | |
| 13. | | | | | | |
| 14. | | | | | | |
| 15. | | | | | | |
| 16. | | | | | | |
| 17. | | | | | | |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
| 24. | | | | | | |
| 25. | | | | | | |
| 26. | | | | | | |
| 27. | | | | | | |
| 28. | | | | | | |
| 29. | | | | | | |
| 30. | | | | | | |

TEST-3

# OFFSHORE FIELD STUDY

## HOURLY AVERAGED SAMPLES - 9/8-9/82




RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE
RELEASE TIME: 0715-1340 PDT, 9/8/82

* INDICATES MISSING DATA

LOCATIONS ORDERED BY DISTANCE FROM RELEASE

TEST-3

OFFSHORE FIELD STUDY

SEPTEMBER 8, 1982
HOURLY AVERAGED SAMPLES
SF6 CONCENTRATION IN PPT

| SITE | HOUR (PDT) | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| EL C | | | | | | 2 | 4 | 0 | 0 | 2 | 22 | 4 | 6 | 0 | 0 | 0 | 2 | 0 | 3 | 13 | 9 | 7 | 7 | |
| LOMP | | | | | | 9 | 6 | 0 | 61 | 5 | 4 | 42 | 0 | 28 | 113 | 95 | 21 | 24 | 20 | 17 | 12 | 11 | 10 | 13 |
| N CU | | | | | | 2 | 0 | 3 | 3 | 0 | | 0 | 0 | 7 | 0 | 0 | 0 | 13 | 0 | 4 | 0 | 0 | 0 | 0 |
| NIPO | | | | | | | | | | | 2 | 0 | 0 | 1 | 3 | 0 | 8 | 2 | 5 | 2 | 2 | 5 | | |
| S BA | | | | | | 0 | 2 | 3 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 4 | 23 | 3 | 6 | 15 | 3 | 105 |
| APCD | | | | | | | 2 | 0 | 0 | 1 | 4 | 3 | 0 | 2 | 0 | 0 | 0 | 2 | 67 | 4 | 0 | 0 | 0 | 2 |
| S MA | | | | | | 2 | 0 | 13 | 0 | 0 | 0 | | 1 | 4 | 0 | 2 | 6 | 16 | 0 | 0 | 5 | 7 | 11 | 66 |
| S YN | | | | | | 6 | 1 | 7 | 3 | 15 | 13 | 9 | 11 | 11 | 19 | 7 | 15 | 21 | 54 | 24 | 25 | 24 | 22 | 95 |
| V-HE | | | | | | | | | | 11 | 11 | 0 | 16 | 97 | 41 | 33 | 32 | 19 | 12 | 0 | 10 | | | |
| V-LS | | | | | | | | | | 7 | 8 | 1 | 5 | 38 | 47 | 51 | 19 | 13 | 13 | 1 | 7 | | | |
| V-WA | | | | | | | | | | | | | | | 8 | 11 | 15 | 5 | 86 | 21 | 12 | 16 | 13 | 65 |

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

RELEASE TIME: 0715-1340 PDT, 9/8/82

TEST-3

OFFSHORE FIELD STUDY

SEPTEMBER 9, 1982
HOURLY AVERAGED SAMPLES
SF6 CONCENTRATION IN PPT

| SITE | HOUR (PDT) 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EL C | 7 | 5 | | 9 | 90 | 11 | 9 | 8 | 18 | 8 | 6 | 7 | 4 | 7 | 5 | | 18 | 88 | 12 | 12 | 71 | 13 | 13 | 12 |
| LOMP | 10 | 10 | 14 | 9 | 16 | 19 | 17 | 25 | 16 | 13 | 12 | 9 | 11 | 11 | 42 | 20 | 19 | | | | | | | |
| N CU | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 2 | | 0 | 3 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| NIPO | | | | | | | | | | 6 | 7 | 4 | 2 | 5 | 4 | 0 | 2 | 7 | 7 | 0 | 5 | 0 | 5 | |
| S BA | 7 | 0 | | 5 | 4 | | | | | | | | | | | | | | | | | | | |
| APCD | 0 | 1 | 3 | 2 | 0 | 5 | 19 | 8 | 5 | 0 | 0 | 4 | 0 | 0 | 4 | 3 | 0 | | | | | | | |
| S MA | 8 | 5 | 7 | 6 | 6 | 6 | 5 | | 7 | 8 | 5 | 2 | 0 | | 5 | 2 | 5 | | | | | | | |
| S YN | 11 | 24 | 12 | 26 | 12 | 19 | 41 | 15 | 20 | 0 | 15 | 15 | 8 | 6 | 36 | 1 | | | | | | | | |
| V-HE | | | | | | | | | | | | | | | | | | | | | | | | |
| V-LS | | | | | | | | | | | | | | | | | | | | | | | | |
| V-WA | 7 | 8 | | | | | | | | | | | | | | | | | | | | | | |

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

RELEASE TIME: 0715-1340 PDT, 9/8/82

# Offshore Field Studies

## Appendix C2

## Automobile Traverse Data

## for

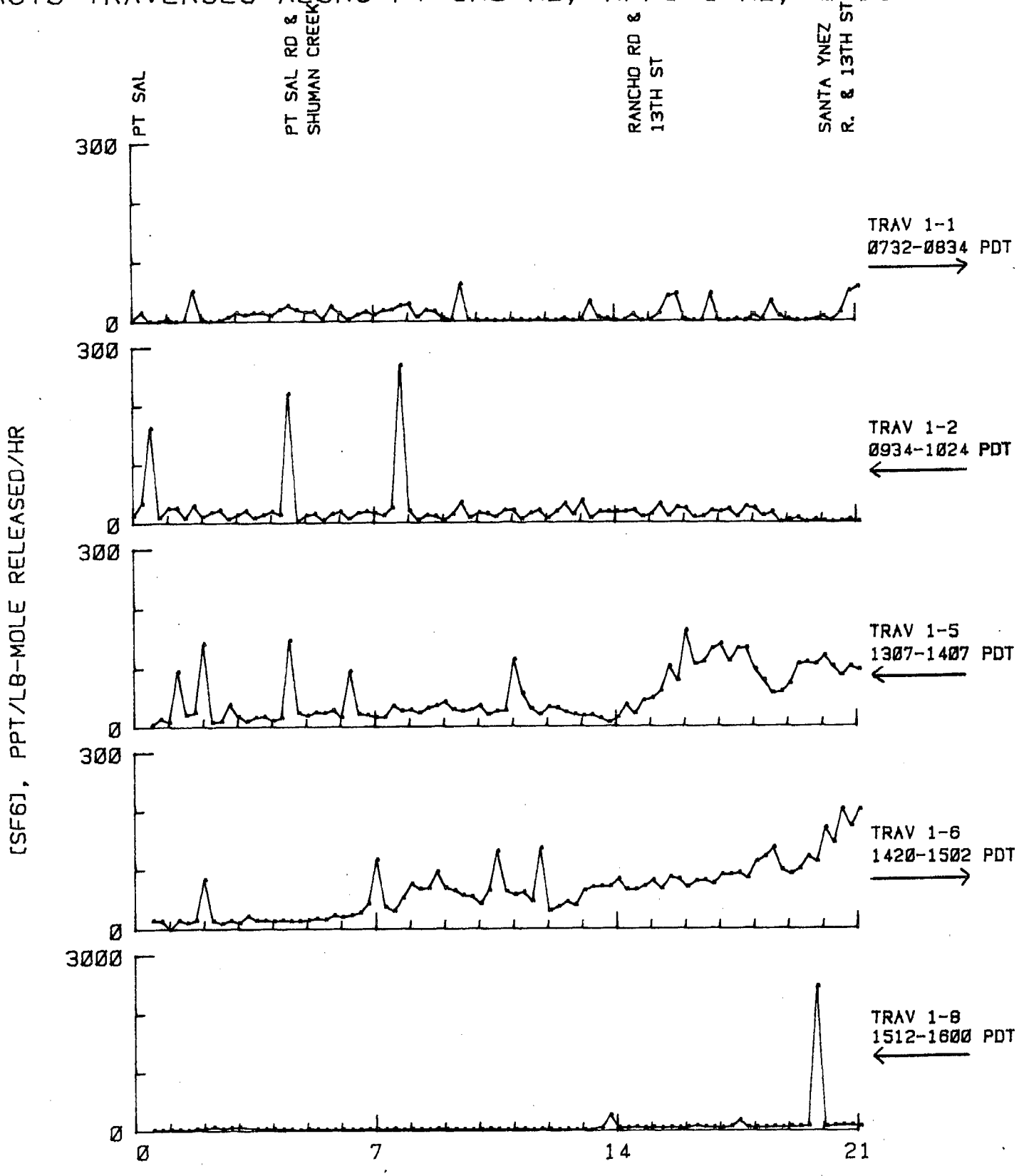
## Test 3

## Conducted Starting September 8, 1982

TEST-3

# OFFSHORE FIELD STUDY - 9/8/82

## AUTO TRAVERSES ALONG PT SAL RD, RANCHO RD, & 13TH ST




→ INDICATES DIRECTION OF TRAVERSE

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM **THE YELLOW TAIL**

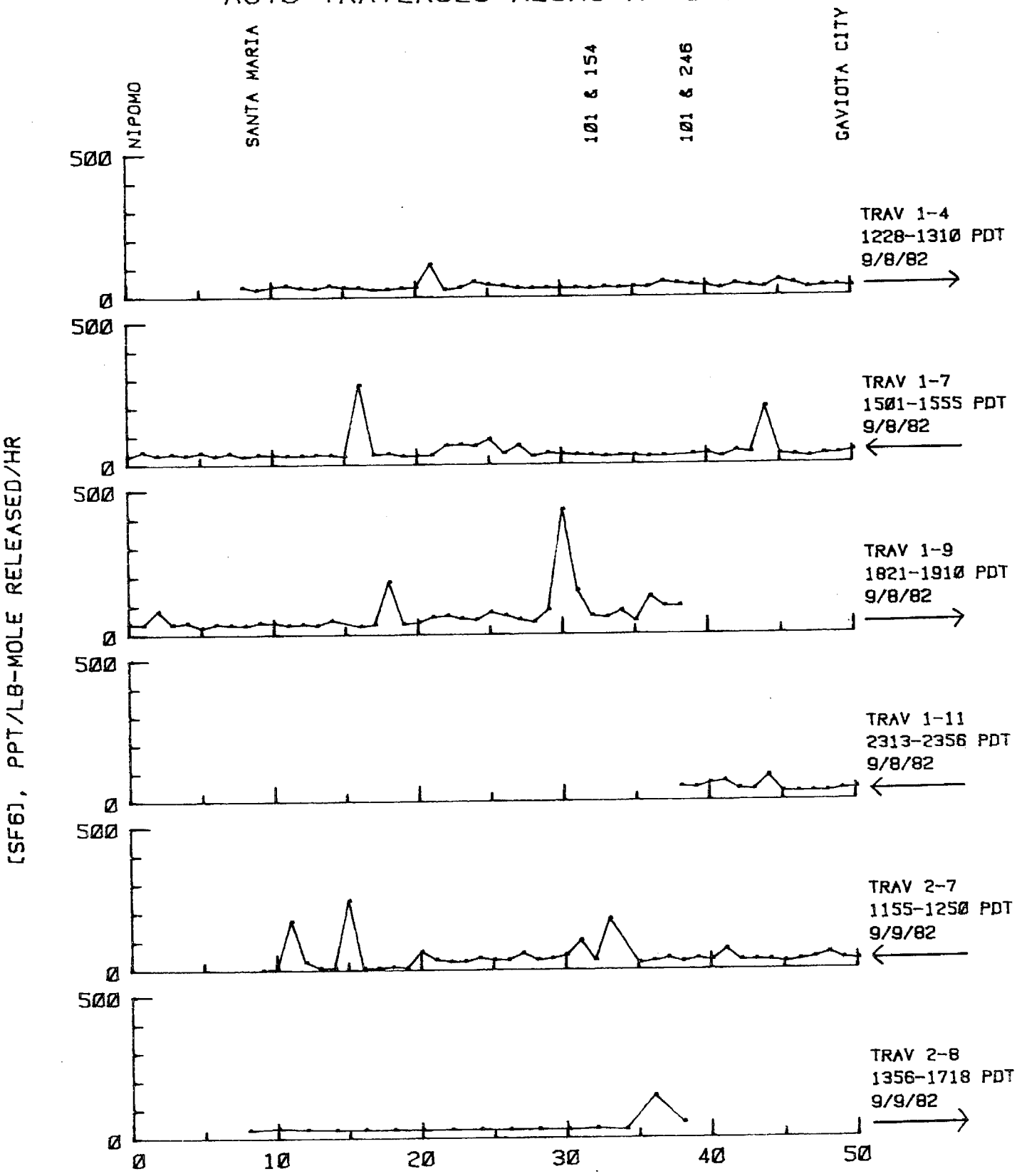
RELEASE TIME: 0715-1340 PDT, 9/8/82

TW 11/17/82

TEST-3

# OFFSHORE FIELD STUDY - 9/8-9/82

## AUTO TRAVERSES ALONG RT 101




→ INDICATES DIRECTION OF TRAVERSE

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

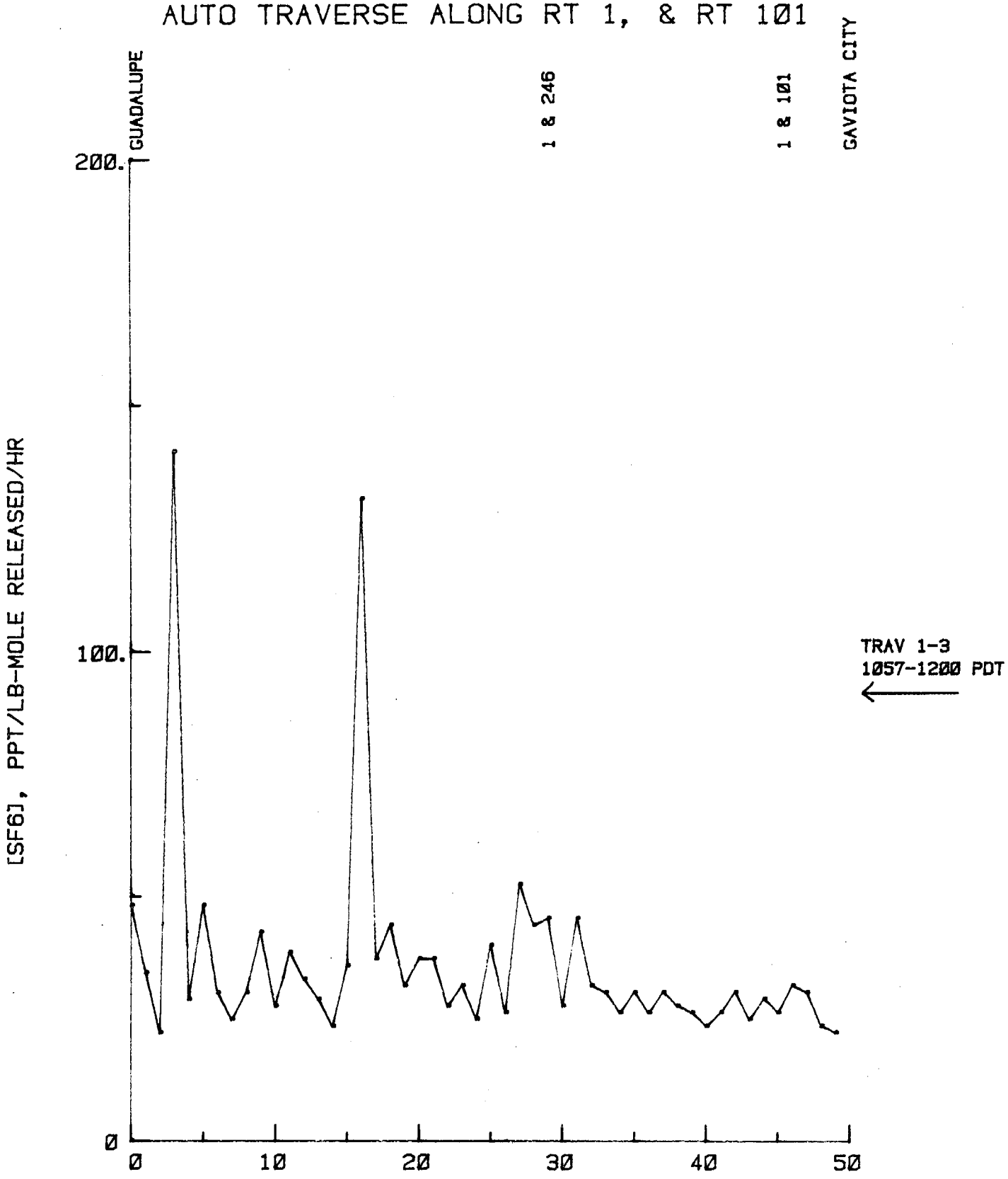
RELEASE TIME: 0715-1340 PDT, 9/8/82

TW 11/17/82

TEST-3

# OFFSHORE FIELD STUDY - 9/8/82

## AUTO TRAVERSE ALONG RT 1, & RT 101




→ INDICATES DIRECTION OF TRAVERSE

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

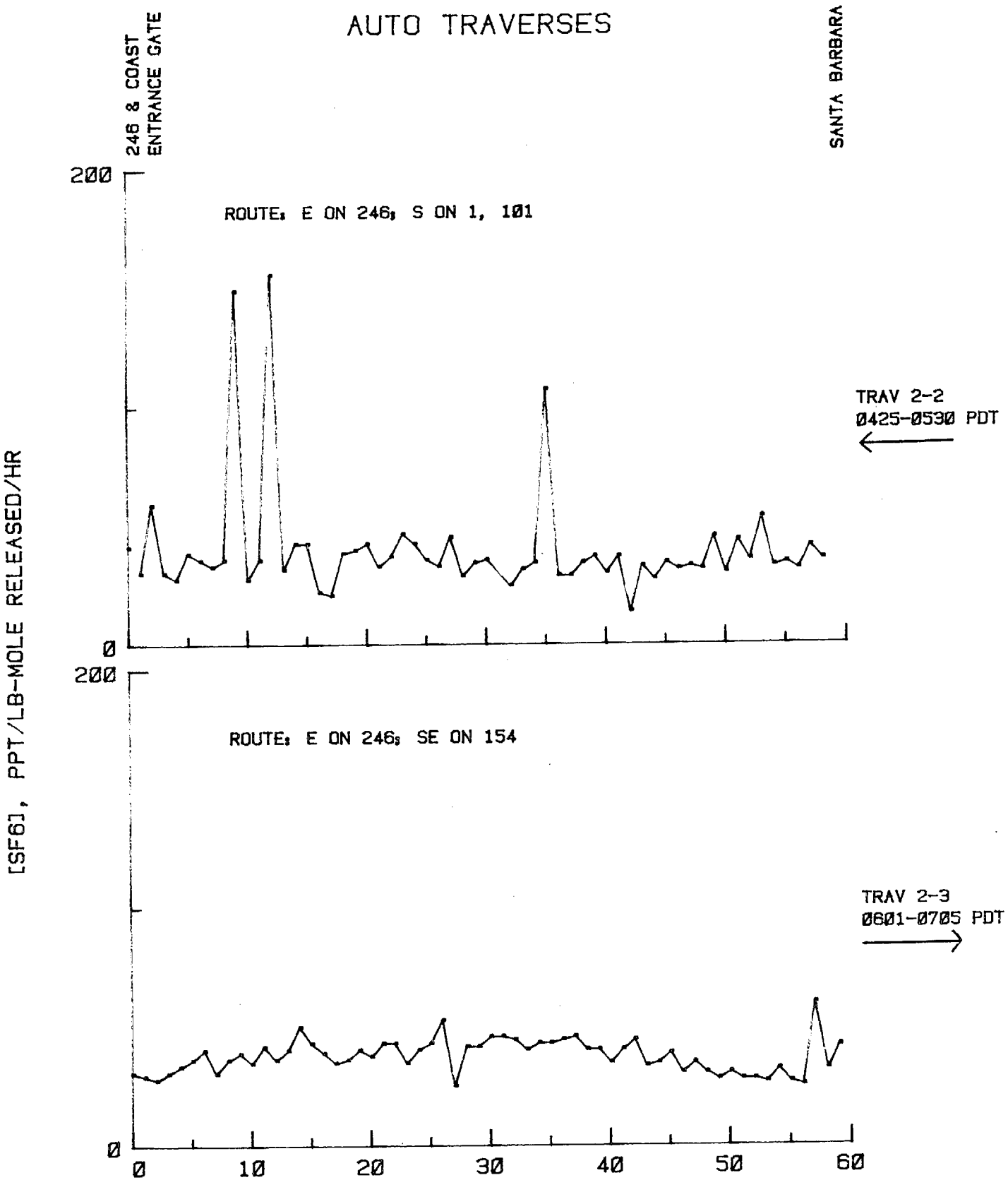
RELEASE TIME: 0715-1340 PDT, 9/8/82

TW 11/18/82

TEST-3

# OFFSHORE FIELD STUDY - 9/9/82

## AUTO TRAVERSES




→ INDICATES DIRECTION OF TRAVERSE

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

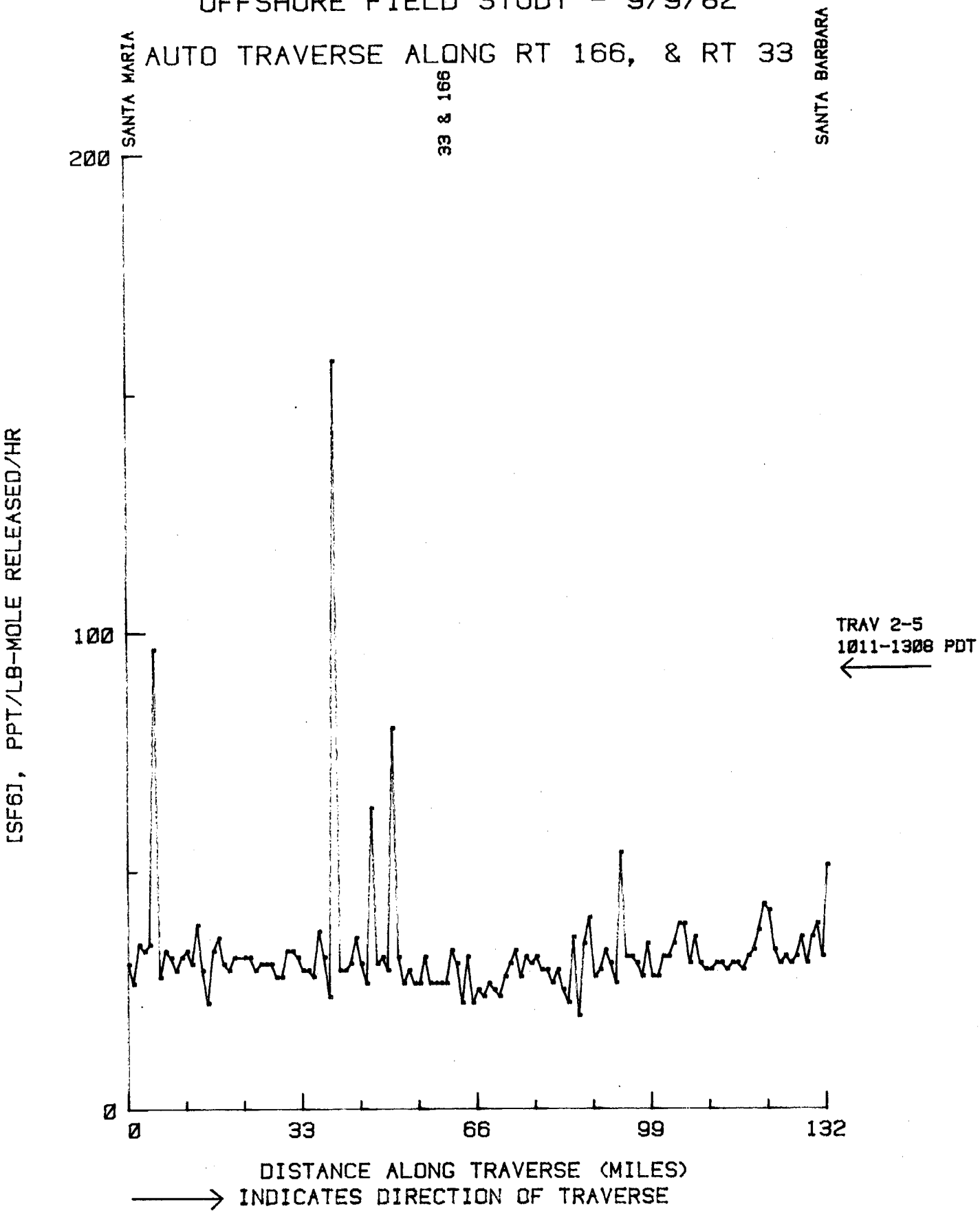
RELEASE TIME: 0715-1340 PDT, 9/8/82

TW 11/18/82

TEST-3

# OFFSHORE FIELD STUDY - 9/9/82

## AUTO TRAVERSE ALONG RT 166, & RT 33




RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

RELEASE TIME: 0715-1340 PDT, 9/8/82

TW 11/18/82

OFFSHORE FIELD STUDY
Automobile Traverses
September 8, 1982

| No. | Day | Start Time | End Time | Start Location | End Location | No. Samples | Route |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 0732 | 0834 | Point Sal | Santa Ynez River | 85 | S on Point Sal Rd<br>S on Rancho Rd<br>S on 13th St |
| 2 | 1 | 0934 | 1024 | Santa Ynez River | Point Sal | 87 | N on 13th St<br>N on Rancho Rd<br>N on Point Sal Rd |
| 3 | 1 | 1057 | 1200 | Gaviota City | 166 & 1 (Guadalupe) | 50 | N on 101<br>N on 1 |
| 4 | 1 | 1228 | 1310 | 101 & 166 (Santa Maria) | Gaviota City | 43 | S on 101 |
| 5 | 1 | 1307 | 1407 | Santa Ynez River | .5 mi S Of Point Sal | 85 | N on 13th St<br>N on Rancho Rd<br>N on Point Sal Rd |
| 6 | 1 | 1420 | 1502 | .5 mi S of Point Sal | Santa Ynez River | 83 | S on Point Sal Rd<br>S on Rancho Rd<br>S on 13th St |
| 7 | 1 | 1501 | 1555 | Gaviota City | Nipomo | 51 | N on 101 |
| 8 | 1 | 1512 | 1600 | Santa Ynez River | .5 mi S of Point Sal | 85 | N on 13th St<br>N on Rancho Rd<br>N on Point Sal Rd |
| 9 | 1 | 1821 | 1910 | Taft & 101 (Nipomo) | On 246 at the Santa Ynez Airport Exit | 47 | S on 101<br>E on 246 |
| 10 | 1 | 1936 | 2046 | On 246 at the Santa Ynez Airport Exit | Ventura | 57 | E on 246<br>SE on 154<br>S on 101 |
| 11 | 1 | 2313 | 2356 | 101 & 154 (Santa Bar.) | 246 & 101 (Buelton) | 40 | N on 101 |

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

RELEASE TIME: 0715-1340 PDT, 9/8/82

OFFSHORE FIELD STUDY
Automobile Traverses (cont.)
September 9, 1982

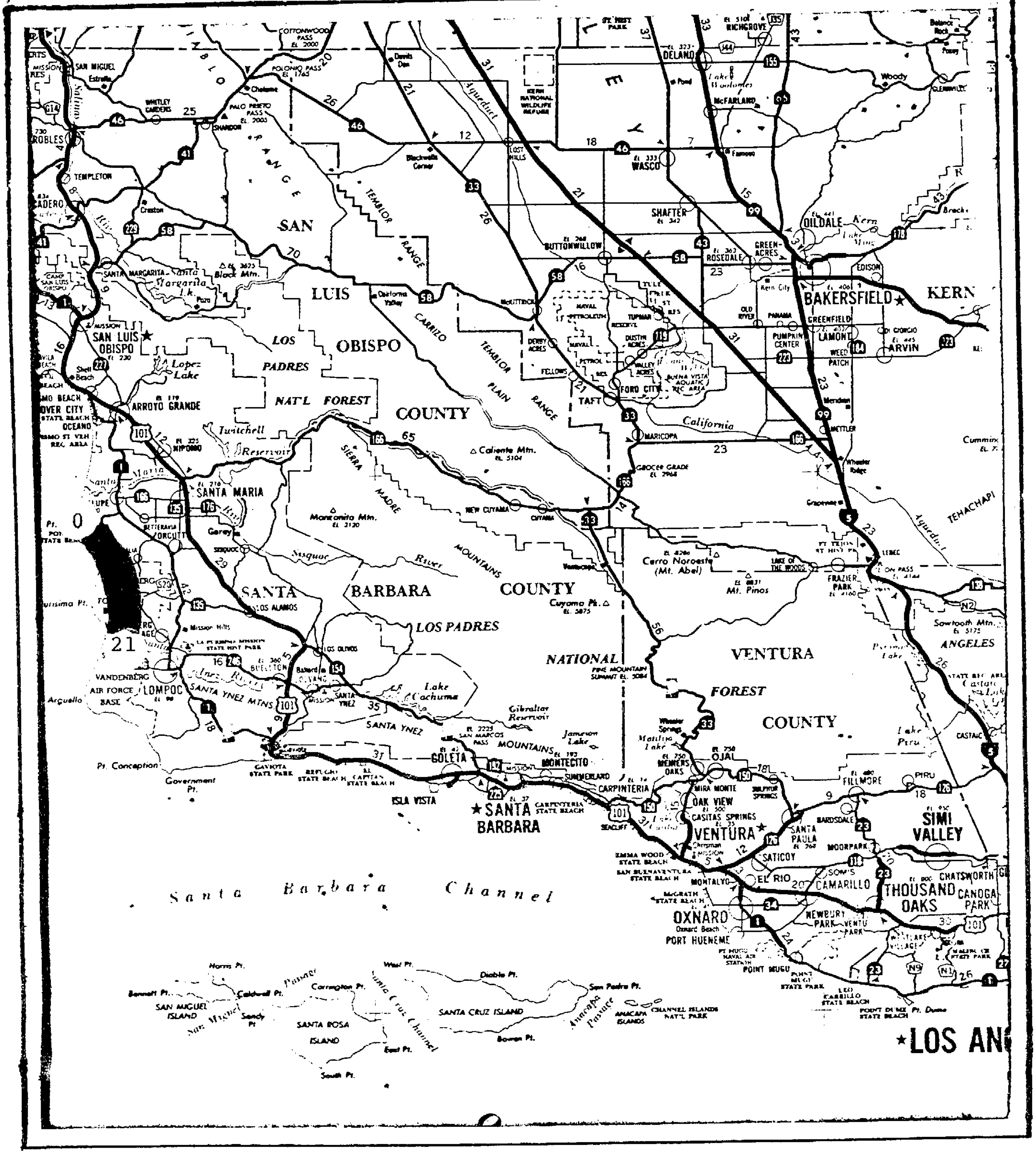
| No. | Day | Start Time | End Time | Start Location | End Location | Dist Btwn Samp (mi) | Route |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 0020 | 0109 | 101 & 246 (Buelton) | 101 & 154 (Santa Bar.) | 33 | E on 246<br>SE on 154 |
| 2 | 2 | 0425 | 0530 | 101 & 154 (Santa Bar.) | 246 & Coast Entrance Gate (E of Surf) | 58 | N on 101<br>N on 1<br>W on 246 |
| 3 | 2 | 0601 | 0705 | 246 & Coast Entrance Gate (E on Surf) | 101 & 154 (Santa Bar.) | 60 | E on 246<br>SE on 154 |
| 4 | 2 | 0717 | 0738 | 101 & San Ysidro Rd (Montecito) | 101 & Main St (Ventura) | 23 | S on 101 |
| 5 | 2 | 1011 | 1308 | 101 & 33 (Ventura) | 101 & 166 (Santa Maria) | 133 | N on 33<br>W on 166 |
| 6 | 2 | 1045 | 1128 | 101 & Seaward Av (Ventura) | 101 & Los Carneros Rd (Santa Bar.) | 39 | N on 101 |
| 7 | 2 | 1155 | 1250 | On 101, 1 mi N on Los Carneros Rd (Santa Bar.) | On 101, 0.6 mi S of Betteravia Rd (Santa Maria) | 61 | N on 101 |
| 8 | 2 | 1356 | 1718 | 101 & Betteravia Rd (Santa Maria) | 101 & Seaward Av (Ventura) | 95 | S on 101<br>E on 246<br>SE on 154<br>S on 101 |
| 9 | 2 | 1400 | 1506 | 101 & Sanjon Rd (Ventura) | 1 & 101 (Gaviota Pass) | 64 | N on 101 |
| 10 | 2 | 1555 | 1813 | 210 & Lake Av (Pasadena) | 223 & 99 (S of Bakers-Field) | 103 | W on 210<br>N on 5<br>N on 99 |
| 11 | 2 | 1817 | 2004 | 223 & 99 (S of Bakers-Field) | 210 & Lake Av (Pasadena) | 101 | S on 99<br>S on 5<br>E on 210 |

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC)
OFFSHORE FROM THE YELLOW TAIL

RELEASE TIME: 0715-1340 PDT, 9/8/82

# OFFSHORE FIELD STUDY

1-1




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

TEST-3

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 1 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 0732 PDT, 9/8/82 AT POINT SAL
TRAVERSE END: 0834 PDT AT 13TH ST & THE SANTA YNEZ RIVER
TRAVERSE ROUTE: S ON POINT SAL RD, RANCHO RD, 13TH ST

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|---|---|
| 0 | 2 | 6.25 | 2 | 12.5 | 3 |
| .25 | 11 | 6.5 | 8 | 12.75 | 0 |
| .5 | 0 | 6.75 | 12 | 13 | 2 |
| .75 | 0 | 7 | 8 | 13.25 | 24 |
| 1 | 4 | 7.25 | 13 | 13.5 | 4 |
| 1.25 | 0 | 7.5 | 14 | 13.75 | 3 |
| 1.5 | 1 | 7.75 | 19 | 14 | 0 |
| 1.75 | 37 | 8 | 21 | 14.25 | 1 |
| 2 | 3 | 8.25 | 5 | 14.5 | 8 |
| 2.25 | 0 | 8.5 | 13 | 14.75 | 0 |
| 2.5 | 1 | 8.75 | 12 | 15 | 1 |
| 2.75 | 5 | 9 | 4 | 15.25 | 9 |
| 3 | 11 | 9.25 | 1 | 15.5 | 30 |
| 3.25 | 8 | 9.5 | 45 | 15.75 | 33 |
| 3.5 | 10 | 9.75 | 1 | 16 | 2 |
| 3.75 | 11 | 10 | 0 | 16.25 | 0 |
| 4 | 7 | 10.25 | 1 | 16.5 | 0 |
| 4.25 | 14 | 10.5 | 0 | 16.75 | 33 |
| 4.5 | 19 | 10.75 | 0 | 17 | 0 |
| 4.75 | 14 | 11 | 1 | 17.25 | 0 |
| 5 | 11 | 11.25 | 1 | 17.5 | 2 |
| 5.25 | 12 | 11.5 | 0 | 17.75 | 0 |
| 5.5 | 3 | 11.75 | 2 | 18 | 7 |
| 5.75 | 18 | 12 | 0 | 18.25 | 2 |
| 6 | 10 | 12.25 | 0 | 18.5 | 24 |

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 1 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 0732 PDT, 9/8/82 AT POINT SAL
TRAVERSE END: 0834 PDT AT 13TH ST & THE SANTA YNEZ RIVER
TRAVERSE ROUTE: S ON POINT SAL RD, RANCHO RD, 13TH ST

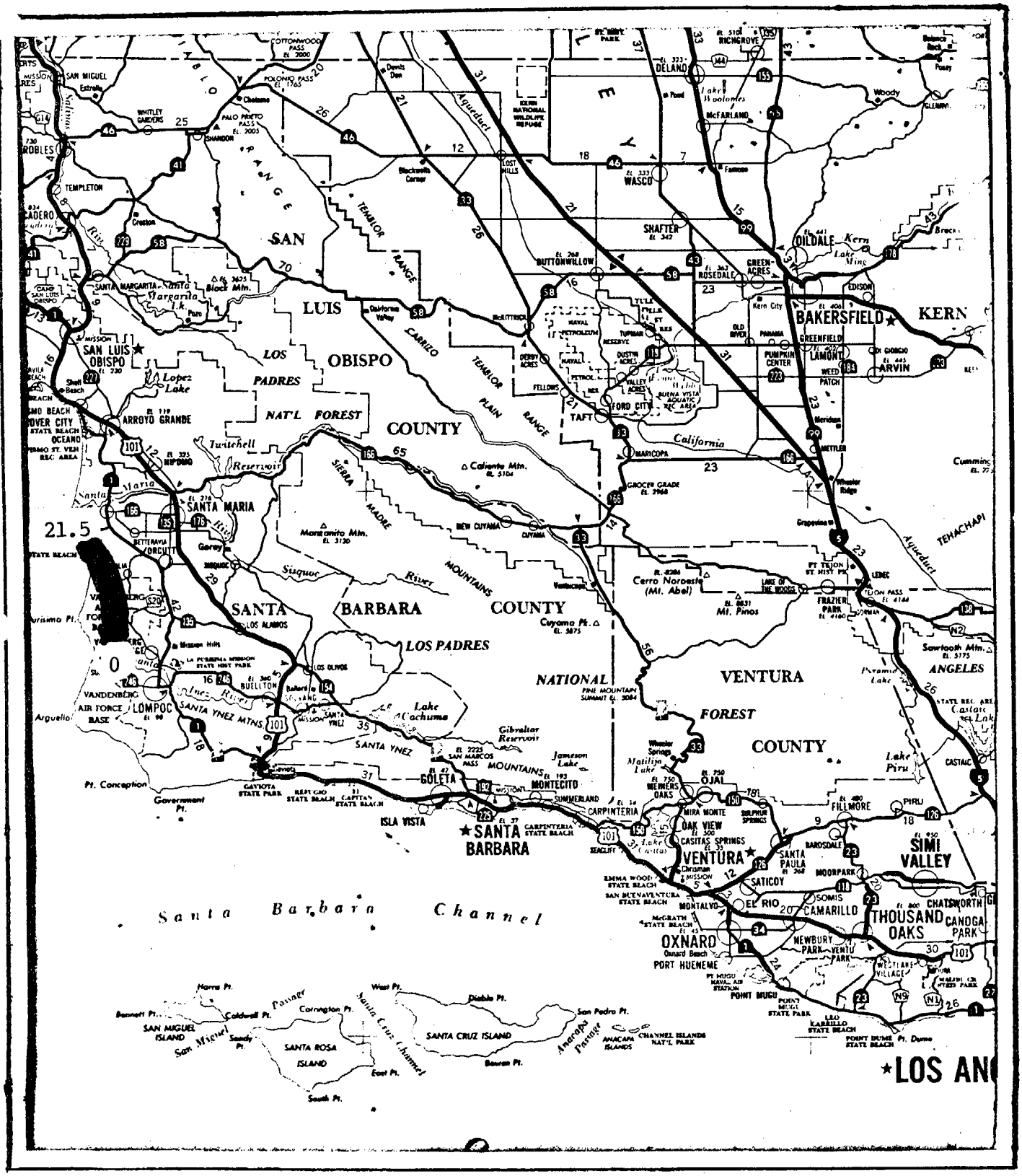
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 18.75 | 6 |
| 19 | 2 |
| 19.25 | 0 |
| 19.5 | 0 |
| 19.75 | * |
| 20 | 5 |
| 20.25 | 0 |
| 20.5 | 10 |
| 20.75 | 36 |
| 21 | 41 |

TEST-3

# OFFSHORE FIELD STUDY

1-2




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 2 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 0934 PDT, 9/8/82 AT 13TH ST AND THE SANTA YNEZ RIVER
TRAVERSE END: 1024 PDT AT POINT SAL
TRAVERSE ROUTE: N ON 13TH ST, RANCHO RD, POINT SAL RD

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|---|---|
| 0 | 0 | 6.25 | 7 | 12.5 | 9 |
| .25 | 3 | 6.5 | 15 | 12.75 | 3 |
| .5 | 1 | 6.75 | 13 | 13 | 15 |
| .75 | 0 | 7 | 13 | 13.25 | 195 |
| 1 | 1 | 7.25 | 13 | 13.5 | 18 |
| 1.25 | 3 | 7.5 | 13 | 13.75 | 9 |
| 1.5 | 0 | 7.75 | 5 | 14 | 12 |
| 1.75 | 5 | 8 | 27 | 14.25 | 14 |
| 2 | 3 | 8.25 | 10 | 14.5 | 12 |
| 2.25 | 0 | 8.5 | 23 | 14.75 | 5 |
| 2.5 | 12 | 8.75 | 13 | 15 | 14 |
| 2.75 | 8 | 9 | 5 | 15.25 | 11 |
| 3 | 17 | 9.25 | 15 | 15.5 | 3 |
| 3.25 | 19 | 9.5 | 11 | 15.75 | 11 |
| 3.5 | 7 | 9.75 | 4 | 16 | 9 |
| 3.75 | 16 | 10 | 15 | 16.25 | 2 |
| 4 | 13 | 10.25 | 15 | 16.5 | 160 |
| 4.25 | 14 | 10.5 | 7 | 16.75 | 10 |
| 4.5 | 7 | 10.75 | 11 | 17 | 14 |
| 4.75 | 6 | 11 | 12 | 17.25 | 10 |
| 5 | 17 | 11.25 | 6 | 17.5 | 6 |
| 5.25 | 18 | 11.5 | 25 | 17.75 | 15 |
| 5.5 | 8 | 11.75 | 10 | 18 | 10 |
| 5.75 | 23 | 12 | 3 | 18.25 | 5 |
| 6 | 10 | 12.25 | 8 | 18.5 | 16 |

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 2 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

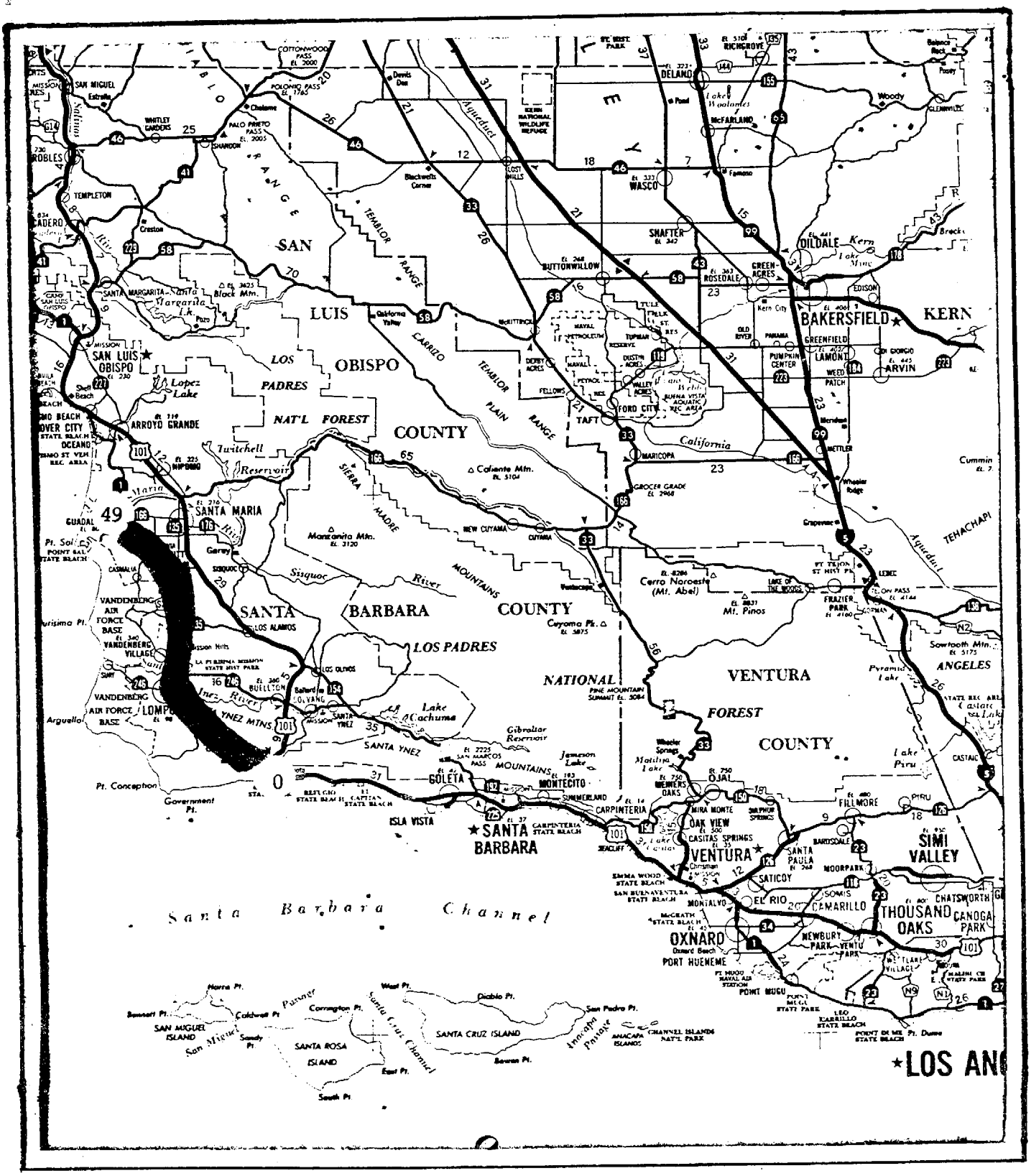
TRAVERSE START: 0934 PDT, 9/8/82 AT 13TH ST AND THE SANTA YNEZ RIVER
TRAVERSE END: 1024 PDT AT POINT SAL
TRAVERSE ROUTE: N ON 13TH ST, RANCHO RD, POINT SAL RD

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 18.75 | 13 |
| 19 | 8 |
| 19.25 | 22 |
| 19.5 | 6 |
| 19.75 | 19 |
| 20 | 18 |
| 20.25 | 7 |
| 20.5 | 118 |
| 20.75 | 24 |
| 21 | 9 |
| 21.25 | 18 |
| 21.5 | 15 |

# OFFSHORE FIELD STUDY






THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 3 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 1057 PDT, 9/8/82 ON 101 IN GAVIOTA CITY
TRAVERSE END: 1200 PDT AT 166 & 1 (GUADALUPE)
TRAVERSE ROUTE: N ON 101, 1

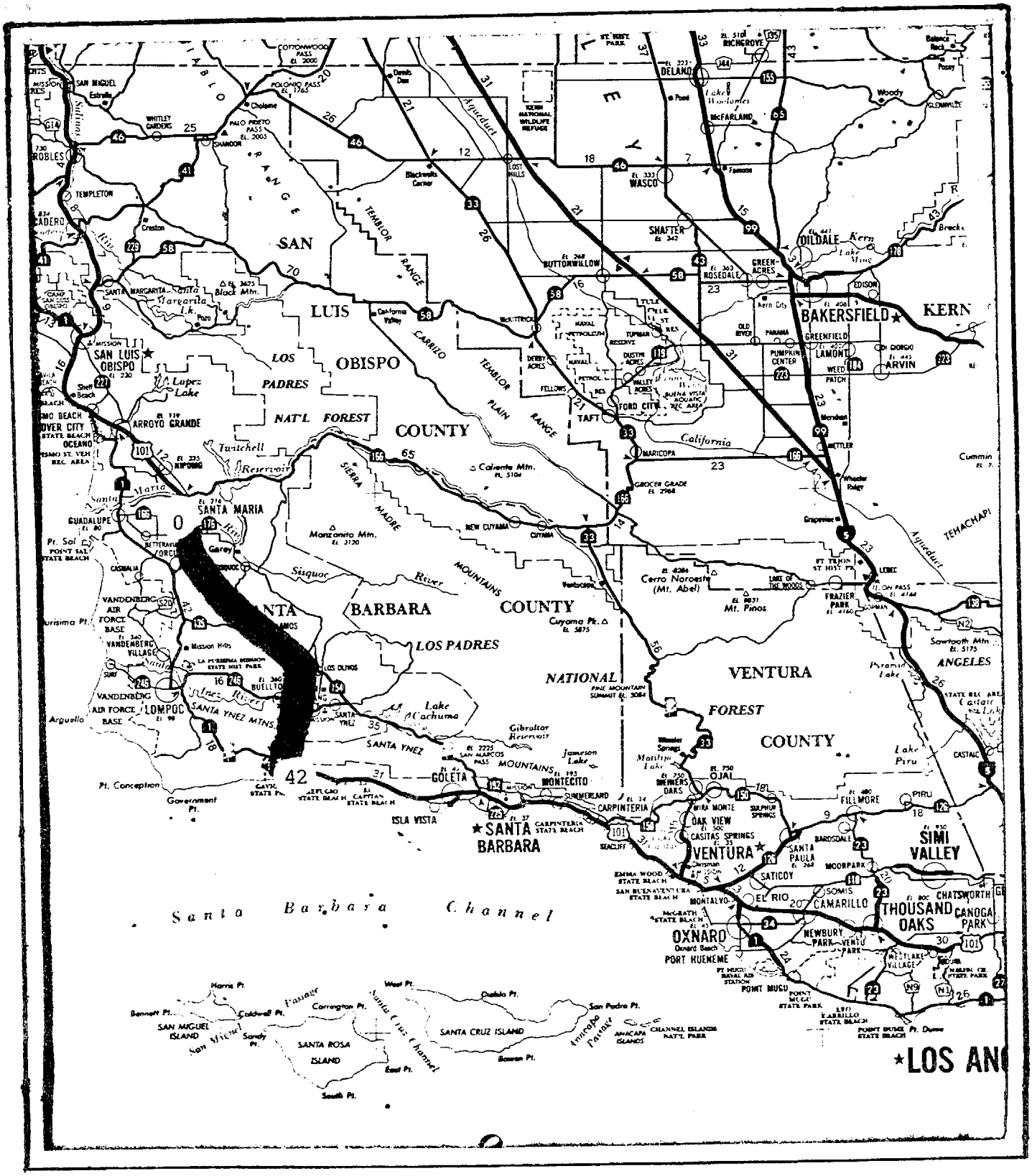
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 16 | 25 | 18 |
| 1 | 17 | 26 | 23 |
| 2 | 22 | 27 | 20 |
| 3 | 23 | 28 | 27 |
| 4 | 19 | 29 | 27 |
| 5 | 21 | 30 | 23 |
| 6 | 18 | 31 | 32 |
| 7 | 22 | 32 | 27 |
| 8 | 19 | 33 | 95 |
| 9 | 17 | 34 | 26 |
| 10 | 19 | 35 | 17 |
| 11 | 20 | 36 | 21 |
| 12 | 22 | 37 | 24 |
| 13 | 19 | 38 | 28 |
| 14 | 22 | 39 | 20 |
| 15 | 19 | 40 | 31 |
| 16 | 22 | 41 | 22 |
| 17 | 23 | 42 | 18 |
| 18 | 33 | 43 | 22 |
| 19 | 20 | 44 | 35 |
| 20 | 33 | 45 | 21 |
| 21 | 32 | 46 | 102 |
| 22 | 38 | 47 | 16 |
| 23 | 19 | 48 | 25 |
| 24 | 29 | 49 | 35 |

TEST-3

# OFFSHORE FIELD STUDY

1-4




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 4 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 1228 PDT, 9/8/82 AT 101 & 166 (SANTA MARIA)
TRAVERSE END: 1310 PDT ON 101 IN GAVIOTA CITY
TRAVERSE ROUTE: S ON 101

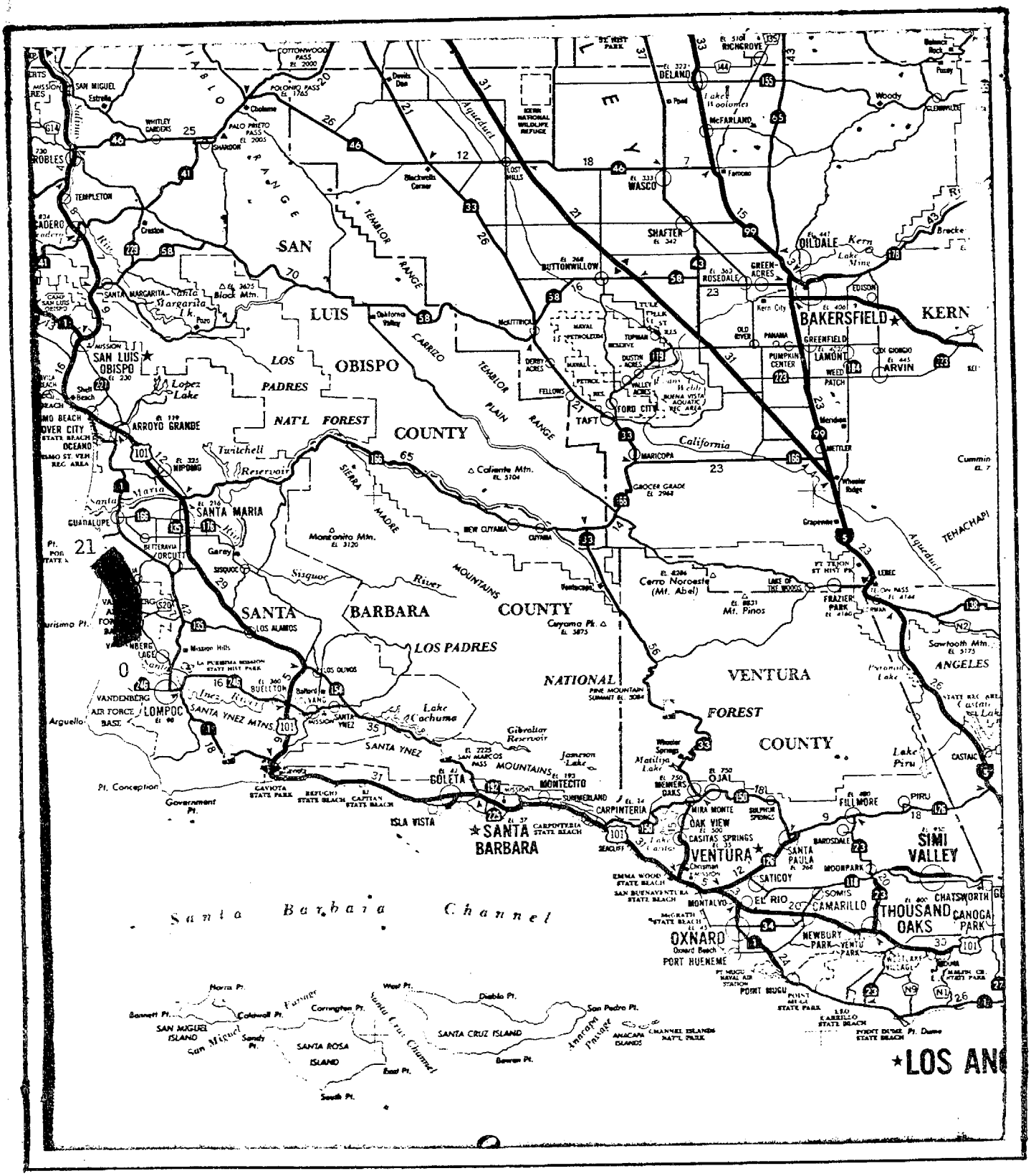
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|
| 0 | 25 | 25 | 22 |
| 1 | 19 | 26 | 20 |
| 2 | 26 | 27 | 23 |
| 3 | 30 | 28 | 22 |
| 4 | 23 | 29 | 35 |
| 5 | 21 | 30 | 31 |
| 6 | 29 | 31 | 27 |
| 7 | 24 | 32 | 25 |
| 8 | 23 | 33 | 18 |
| 9 | 18 | 34 | 29 |
| 10 | 19 | 35 | 24 |
| 11 | 22 | 36 | 20 |
| 12 | 24 | 37 | 38 |
| 13 | 82 | 38 | 30 |
| 14 | 18 | 39 | 18 |
| 15 | 22 | 40 | 22 |
| 16 | 37 | 41 | 23 |
| 17 | 30 | 42 | 20 |
| 18 | 27 | | |
| 19 | 21 | | |
| 20 | 20 | | |
| 21 | 21 | | |
| 22 | 20 | | |
| 23 | 21 | | |
| 24 | 19 | | |

TEST-3

# OFFSHORE FIELD STUDY

1-5




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 5 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 1307 PDT, 9/8/82 AT 13TH ST AND THE SANTA YNEZ RIVER
TRAVERSE END: 1407 PDT .5 MI S OF POINT SAL ON POINT SAL RD
TRAVERSE ROUTE: N ON 13TH ST, RANCHO RD, POINT SAL RD

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|---|---|
| 0 | 97 | 6.25 | 44 | 12.5 | 31 |
| .25 | 121 | 6.5 | 35 | 12.75 | 26 |
| .5 | 70 | 6.75 | 32 | 13 | 23 |
| .75 | 74 | 7 | 16 | 13.25 | 17 |
| 1 | 63 | 7.25 | 27 | 13.5 | 21 |
| 1.25 | 74 | 7.5 | 11 | 13.75 | 20 |
| 1.5 | 87 | 7.75 | 5 | 14 | 26 |
| 1.75 | 77 | 8 | 10 | 14.25 | 12 |
| 2 | 79 | 8.25 | 14 | 14.5 | 12 |
| 2.25 | 77 | 8.5 | 13 | 14.75 | 15 |
| 2.5 | 53 | 8.75 | 15 | 15 | 16 |
| 2.75 | 43 | 9 | 18 | 15.25 | 69 |
| 3 | 41 | 9.25 | 23 | 15.5 | 12 |
| 3.25 | 57 | 9.5 | 24 | 15.75 | 21 |
| 3.5 | 71 | 9.75 | 15 | 16 | 17 |
| 3.75 | 97 | 10 | 22 | 16.25 | 18 |
| 4 | 96 | 10.25 | 41 | 16.5 | 14 |
| 4.25 | 81 | 10.5 | 83 | 16.75 | 17 |
| 4.5 | 102 | 10.75 | 20 | 17 | 107 |
| 4.75 | 96 | 11 | 19 | 17.25 | 11 |
| 5 | 80 | 11.25 | 15 | 17.5 | 8 |
| 5.25 | 77 | 11.5 | 26 | 17.75 | 13 |
| 5.5 | 118 | 11.75 | 21 | 18 | 12 |
| 5.75 | 57 | 12 | 19 | 18.25 | 7 |
| 6 | 74 | 12.25 | 21 | 18.5 | 13 |

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 5 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 1307 PDT, 9/8/82 AT 13TH ST AND THE SANTA YNEZ RIVER
TRAVERSE END: 1407 PDT .5 MI S OF POINT SAL ON POINT SAL RD
TRAVERSE ROUTE: N ON 13TH ST, RANCHO RD, POINT SAL RD

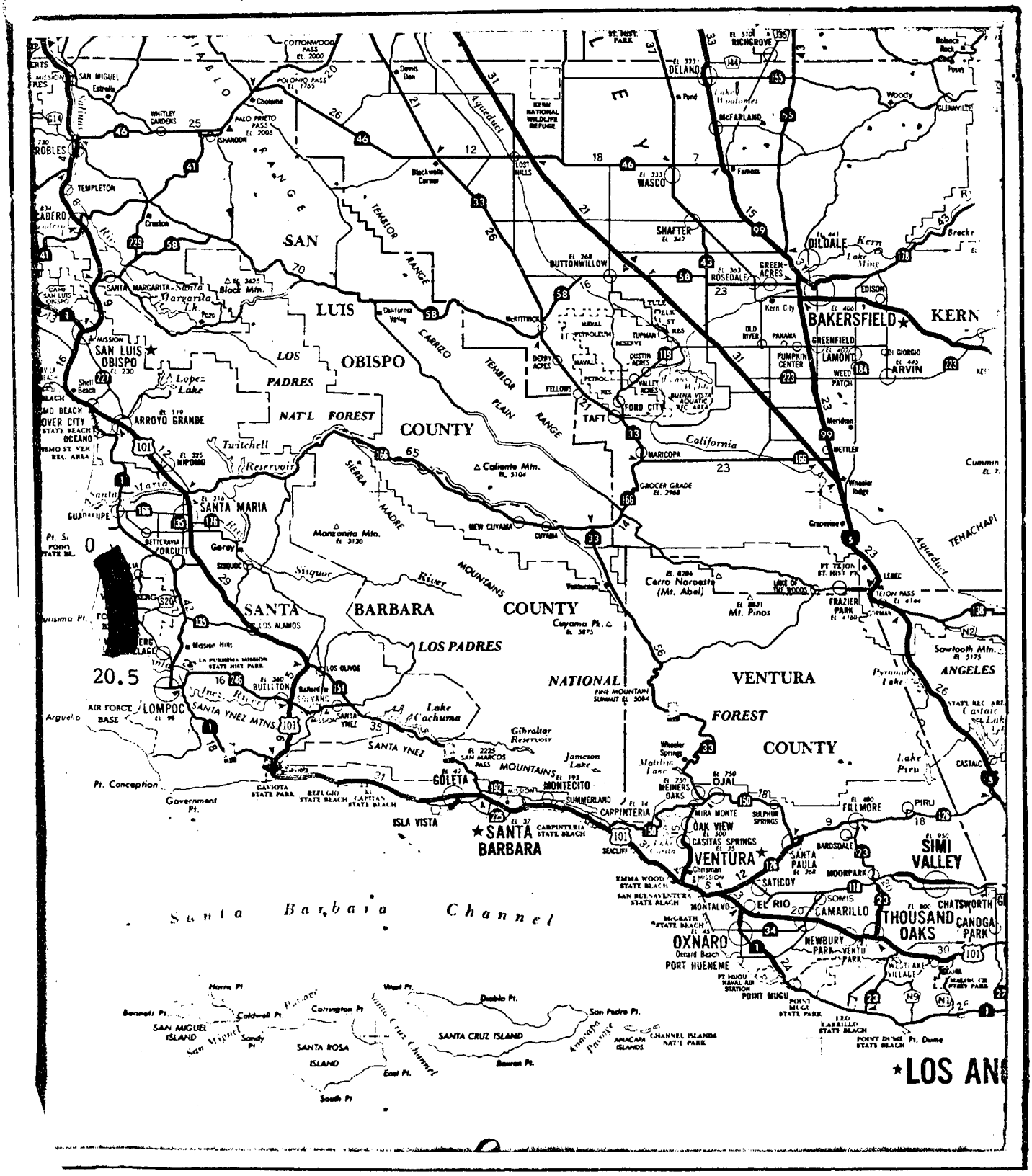
* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 18.75 | 28 |
| 19 | 7 |
| 19.25 | 6 |
| 19.5 | 103 |
| 19.75 | 18 |
| 20 | 15 |
| 20.25 | 69 |
| 20.5 | 6 |
| 20.75 | 10 |
| 21 | 3 |

TEST-3

# OFFSHORE FIELD STUDY

1-6




THE NUMBERS INDICATE THE MILES TRAVELED ALONG THE TRAVERSE ROUTE

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 6 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 1420 PDT, 9/8/82 .5 MI S OF POINT SAL ON POINT SAL RD
TRAVERSE END: 1502 PDT AT 13TH ST AND THE SANTA YNEZ RIVER
TRAVERSE ROUTE: S ON POINT SAL RD, RANCHO RD, 13TH ST

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT | MILEAGE | [SF6] PPT |
|---|---|---|---|---|---|
| 0 | 11 | 6.25 | 31 | 12.5 | 47 |
| .25 | 10 | 6.5 | 85 | 12.75 | 51 |
| .5 | 0 | 6.75 | 27 | 13 | 52 |
| .75 | 11 | 7 | 22 | 13.25 | 52 |
| 1 | 8 | 7.25 | 38 | 13.5 | 61 |
| 1.25 | 11 | 7.5 | 55 | 13.75 | 48 |
| 1.5 | 61 | 7.75 | 49 | 14 | 48 |
| 1.75 | 10 | 8 | 50 | 14.25 | 52 |
| 2 | 7 | 8.25 | 70 | 14.5 | 59 |
| 2.25 | 11 | 8.5 | 50 | 14.75 | 49 |
| 2.5 | 8 | 8.75 | 47 | 15 | 63 |
| 2.75 | 16 | 9 | 41 | 15.25 | 61 |
| 3 | 11 | 9.25 | 40 | 15.5 | 51 |
| 3.25 | 11 | 9.5 | 31 | 15.75 | 58 |
| 3.5 | 10 | 9.75 | 47 | 16 | 59 |
| 3.75 | 11 | 10 | 95 | 16.25 | 55 |
| 4 | 10 | 10.25 | 46 | 16.5 | 66 |
| 4.25 | 10 | 10.5 | 42 | 16.75 | 66 |
| 4.5 | 11 | 10.75 | 45 | 17 | 68 |
| 4.75 | 13 | 11 | 34 | 17.25 | 62 |
| 5 | 12 | 11.25 | 99 | 17.5 | 82 |
| 5.25 | 17 | 11.5 | 22 | 17.75 | 88 |
| 5.5 | 15 | 11.75 | 27 | 18 | 99 |
| 5.75 | 17 | 12 | 33 | 18.25 | 72 |
| 6 | 20 | 12.25 | 29 | 18.5 | 67 |

TEST-3

# OFFSHORE FIELD STUDY
## AUTOMOBILE TRAVERSE 6 OF DAY 1

RELEASE: 106 LBS SF6/HR (13.3 GR/SEC) OFFSHORE FROM THE YELLOW TAIL
RELEASE TIME: 0715-1340 PDT, 9/8/82

TRAVERSE START: 1420 PDT, 9/8/82 .5 MI S OF POINT SAL ON POINT SAL RD
TRAVERSE END: 1502 PDT AT 13TH ST AND THE SANTA YNEZ RIVER
TRAVERSE ROUTE: S ON POINT SAL RD, RANCHO RD, 13TH ST

* DENOTES MISSING DATA

| MILEAGE | [SF6] PPT |
|---|---|
| 18.75 | 73 |
| 19 | 88 |
| 19.25 | 82 |
| 19.5 | 123 |
| 19.75 | 105 |
| 20 | 147 |
| 20.25 | 126 |
| 20.5 | 146 |

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