

ANALYTICAL RESULTS
LE 1A*

Case No.: LV2838 Memo #08
Site: Newmark
Lab.: Region IX, Las Vegas
Reviewer: Chris Davis, ESAT/ICF Technology, Inc.
Date: May 11, 1992

Analysis Type: Low Level Water Samples
for SAS Volatiles

Concentration in ug/L

| Sample I.D. Compound | SY0173 | | SY0174 | | SY0175 | | SY0176 | | SY0177 PB | | SY0178 | | SY0179 | |
|-------------------------|--------|---------|--------|---------|--------|---------|--------|---------|-----------|---------|--------|---------|--------|---------|
| | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com |
| Methylene Chloride | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | |
| 1,1-Dichloroethane | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | |
| cis-1,2-Dichloroethane | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | |
| Chloroform | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | |
| 1,1,1-Trichloroethane | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | |
| 1,2-Dichloropropane | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | | 2 U | |
| Trichloroethene | 2 U | | 2 U | | 0.4 L | J A | 2 U | | 2 U | | 2 U | | 2 U | |
| Tetrachloroethene | 2 U | | 2 U | | 0.7 L | J A | 0.3 L | J A | 2 U | | 2 U | | 2 U | |
| Toluene | 2 U | | 2 U | | 2 U | | 2 U | | 15 | | 2 U | | 2 U | |
| Ethylbenzene | 2 U | | 2 U | | 2 U | | 2 U | | 1 L | J A | 2 U | | 2 U | |
| Xylene (total) | 2 U | | 2 U | | 2 U | | 2 U | | 7 | | 2 U | | 2 U | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

ANALYTICAL RESULTS
LE 1A*

Case No.: LV2838 Memo #08
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Lab.: Region IX, Las Vegas
Reviewer: Chris Davis, ESAT/ICF Technology, Inc.
Date: May 11, 1992

Analysis Type: Low Level Water Samples
for SAS Volatiles

Concentration in ug/L

| Sample I.D. Compound | SY0180 | | | SY0181 | | | SY0182 | | | SY0183 TB | | | SY0184 | | | SY0185 | | | SY0186 TB | | |
|-------------------------|--------|-----|-----|--------|-----|-----|--------|-----|-----|-----------|-----|-----|--------|-----|-----|--------|-----|-----|-----------|-----|-----|
| | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| Methylene Chloride | 0.3 | L | J A | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | |
| 1,1-Dichloroethane | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 1 | L | J A | 2 | U | |
| cis-1,2-Dichloroethane | 0.3 | L | J A | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 3 | | | 2 | U | |
| Chloroform | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 0.2 | L | J A | 2 | U | |
| 1,1,1-Trichloroethane | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 0.2 | L | J A | 2 | U | |
| 1,2-Dichloropropane | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 0.2 | L | J A | 2 | U | |
| Trichloroethene | 0.2 | L | J A | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 6 | | | 2 | U | |
| Tetrachloroethene | 0.5 | L | J A | 2 | U | | 2 | U | | 2 | U | | 0.4 | L | J A | 22 | | | 2 | U | |
| Toluene | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | J B | 2 | U | J B | 2 | U | |
| Ethylbenzene | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | |
| Xylene (total) | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

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ANALYTICAL RESULTS

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E 1A*

Case No.: LV2838 Memo #08
 Site: Newmark
 Lab.: Region IX, Las Vegas
 Reviewer: Chris Davis, ESAT/ICF Technology, Inc.
 Date: May 11, 1992

Analysis Type: Low Level Water Samples
 for SAS Volatiles

Concentration in ug/L

| Sample I.D. | SY0187 | | | SY0188 | | | SY0189 FB | | | SY0190 | | | SY0191 | | | SY0192 | | | Method Blank VBLK1 | | |
|------------------------|--------|-----|-----|--------|-----|-----|-----------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|-----------------------|-----|-----|
| | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| Methylene Chloride | 0.3 | L | J A | 0.3 | L | J A | 2 | U | | 0.4 | L | J A | 2 | U | | 2 | U | | 2 | U | |
| 1,1-Dichloroethane | 0.9 | L | J A | 0.4 | L | J A | 2 | U | | 1 | L | J A | 2 | U | | 2 | U | | 2 | U | |
| cis-1,2-Dichloroethene | 1 | L | J A | 1 | L | J A | 2 | U | | 2 | | | 2 | U | | 2 | U | | 2 | U | |
| Chloroform | 0.2 | L | J A | 2 | U | | 2 | U | | 0.3 | L | J A | 2 | U | | 0.5 | L | J A | 2 | U | |
| 1,1,1-Trichloroethane | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | | 2 | U | |
| 1,2-Dichloropropane | 2 | U | | 2 | U | | 2 | U | | 0.2 | L | J A | 2 | U | | 2 | U | | 2 | U | |
| Trichloroethene | 5 | | | 3 | | | 2 | U | | 7 | | | 2 | U | | 2 | U | | 2 | U | |
| Tetrachloroethene | 22 | | | 15 | | | 2 | U | | 32 | | | 2 | U | | 2 | U | | 2 | U | |
| Toluene | 2 | U | | 2 | U | | 11 | | | 2 | U | | 2 | U | | 2 | U | | 2 | U | |
| Ethylbenzene | 2 | U | | 2 | U | | 1 | L | J A | 2 | U | | 2 | U | | 2 | U | | 2 | U | |
| Xylene (total) | 2 | U | | 2 | U | | 7 | | | 2 | U | | 2 | U | | 2 | U | | 2 | U | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

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ANALYTICAL RESULTS

Page 4 of 4

T E 1A*

Case No.: LV2838 Memo #08
 Site: Newmark
 Lab.: Region IX, Las Vegas
 Reviewer: Chris Davis, ESAT/ICF Technology, Inc.
 Date: May 11, 1992

Analysis Type: Low Level Water Samples
 for SAS Volatiles

Concentration in ug/L

| Sample I.D. Compound | Method Blank VBLK2 | | | Method Blank VBLK3 | | | CRQL | | | | | | | | | | | |
|-------------------------|-----------------------|-----|-----|-----------------------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|
| | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| Methylene Chloride | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| 1,1-Dichloroethane | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| cis-1,2-Dichloroethene | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| Chloroform | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| 1,2-Dichloropropane | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| Trichloroethene | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| Tetrachloroethene | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| Toluene | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| Ethylbenzene | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |
| Xylene (total) | 2 | U | | 2 | U | | 2 | | | | | | | | | | | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

TABLE 1B
DATA QUALIFIERS

NO QUALIFIERS indicates that the data are acceptable both qualitatively and quantitatively.

- U Indicates that the compound is not detected above the concentration listed.
- L Indicates results which fall below the Contract Required Quantitation Limit. Results are considered estimates and usable for limited purposes.
- J Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable.
- N Presumptive evidence of the presence of the material. The compound identification is considered to be tentative. The data are usable for limited purposes.
- R Results are rejected and data are invalid for all purposes.

TABLE 1C
Detected Tentatively Identified Compounds (TICs)

Case No.: LV2S38 Memo #08
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Chris Davis
 ESAT/ICF Technology, Inc.
 Date: May 11, 1992

| <u>Sample Number</u> | <u>Compound</u> | <u>Fraction</u> | <u>Retention Time, min.</u> | <u>Concentration (ug/L)</u> | <u>Rating* (Remarks)</u> |
|----------------------|------------------------|-----------------|-----------------------------|-----------------------------|--------------------------|
| SY0173 | None Found | VOA | | | |
| SY0174 | None Found | VOA | | | |
| SY0175 | None Found | VOA | | | |
| SY0176 | None Found | VOA | | | |
| SY0177FB | Substituted Benzene | VOA | 17.27 | 5 J | C |
| | Substituted Benzene | VOA | 17.70 | 1 J | C |
| | Substituted Benzene | VOA | 18.87 | 1 J | C |
| SY0178 | None Found | VOA | | | |
| SY0179 | None Found | VOA | | | |
| SY0180 | None Found | VOA | | | |
| SY0181 | None Found | VOA | | | |
| SY0182 | None Found | VOA | | | |
| SY0183 | None Found | VOA | | | |
| SY0184 | None Found | VOA | | | |
| SY0185 | Dichlorofluoromethane | VOA | 3.09 | 5 J | A |
| | Trichlorofluoromethane | VOA | 3.22 | 12 J | A |
| SY0186 | None Found | VOA | | | |
| SY0187 | Dichlorofluoromethane | VOA | 3.13 | 5 J | A |
| | Trichlorofluoromethane | VOA | 3.24 | 10 J | A |

J (estimated): Value is considered usable for limited purposes.

*Rating codes--probability that identification is correct:

A - High

B - Moderate

C - Low

TABLE 1C
(continued)

| <u>Sample Number</u> | <u>Compound</u> | <u>Fraction</u> | <u>Retention Time, min.</u> | <u>Concentration (ug/L)</u> | <u>Rating^a (Remarks)</u> |
|----------------------|------------------------|-----------------|-----------------------------|-----------------------------|-------------------------------------|
| SYO188 | Dichlorofluoromethane | VOA | 3.18 | 2 J | A |
| | Trichlorofluoromethane | VOA | 3.30 | 5 J | A |
| SYO189FB | Substituted Benzene | VOA | 17.39 | 5 J | C |
| | Substituted Benzene | VOA | 17.44 | 1 J | C |
| | Substituted Benzene | VOA | 18.06 | 1 J | C |
| | Substituted Benzene | VOA | 18.17 | 3 J | C |
| SYO190 | Dichlorofluoromethane | VOA | 3.08 | 5 J | A |
| | Trichlorofluoromethane | VOA | 3.24 | 10 J | A |
| SYO191 | None Found | VOA | | | |
| SYO192 | None Found | VOA | | | |

J (estimated): Value is considered usable for limited purposes.

^aRating codes--probability that identification is correct:

A - High

B - Moderate

C - Low

TABLE 2
Sample Quantitation Limits

Case No.: LV2S38 Memo #08
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Chris Davis
 ESAT/ICF Technology, Inc.
 Date: May 11, 1992

| <u>Volatile Compounds</u> | <u>Units, ug/L</u> | <u>Q</u> | <u>C</u> |
|----------------------------|--------------------|----------|----------|
| Chloromethane | 2 | | |
| Bromomethane | 2 | | |
| Vinyl chloride | 2 | | |
| Chloroethane | 2 | J | D |
| Methylene chloride | 2 | | |
| Acetone | 10 | | |
| Carbon disulfide | 2 | | |
| 1,1-Dichloroethene | 2 | | |
| 1,1-Dichloroethane | 2 | | |
| 1,2-Dichloroethene (total) | 2 | | |
| Chloroform | 2 | | |
| 1,2-Dichloroethane | 2 | | |
| 2-Butanone | 10 | | |
| 1,1,1-Trichloroethane | 2 | | |
| Carbon tetrachloride | 2 | | |
| Bromodichloromethane | 2 | | |
| 1,1,2,2-Tetrachloroethane | 2 | | |
| 1,2-Dichloropropane | 2 | | |
| trans-1,3-Dichloropropene | 2 | | |
| Trichloroethene | 2 | | |
| Dibromochloromethane | 2 | | |
| 1,1,2-Trichloroethane | 2 | | |
| Benzene | 2 | | |
| cis-1,3-Dichloropropene | 2 | | |
| Bromoform | 2 | | |
| 2-Hexanone | 10 | J | C |
| 4-Methyl-2-pentanone | 10 | | |
| Tetrachloroethene | 2 | | |
| Toluene | 2 | | |
| Chlorobenzene | 2 | | |
| Ethylbenzene | 2 | | |
| Styrene | 2 | | |
| Total Xylenes | 2 | | |

Q - Qualifier

C - Comment

TABLE 2
(cont'd)

To calculate the sample quantitation limits, multiply CRQL by the following factors:

| <u>Sample No.</u> | <u>Volatiles</u> |
|-------------------|------------------|
| All Samples | 1 |
| Method Blanks | 1 |

TPO: [] ACTION [X] FYI

Region IX

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. LV2S38 Memo #08 LABORATORY Region 9

SDG NO. SY0173 DATA USER _____

SOW 3/90 (Revised 7/91) REVIEW COMPLETION DATE May 11, 1992

NO. OF SAMPLES 20 WATER _____ SOIL _____ OTHER _____

REVIEWER [] ESD [X] ESAT [] OTHER, CONTRACT/CONTRACTOR _____

| | VOA | BNA | PEST | OTHER |
|------------------------------|------------|-------|-------|-------|
| 1. HOLDING TIMES | <u>0</u> | _____ | _____ | _____ |
| 2. GC-MS TUNE/GC PERFORMANCE | <u>0</u> | _____ | _____ | _____ |
| 3. INITIAL CALIBRATIONS | <u>0/X</u> | _____ | _____ | _____ |
| 4. CONTINUING CALIBRATIONS | <u>0/X</u> | _____ | _____ | _____ |
| 5. FIELD QC | <u>X</u> | _____ | _____ | _____ |
| 6. LABORATORY BLANKS | <u>0</u> | _____ | _____ | _____ |
| 7. SURROGATES | <u>0</u> | _____ | _____ | _____ |
| 8. MATRIX SPIKE/DUPLICATES | <u>0</u> | _____ | _____ | _____ |
| 9. REGIONAL QC | <u>F</u> | _____ | _____ | _____ |
| 10. INTERNAL STANDARDS | <u>0</u> | _____ | _____ | _____ |
| 11. COMPOUND IDENTIFICATION | <u>0</u> | _____ | _____ | _____ |
| 12. COMPOUND QUANTITATION | <u>0</u> | _____ | _____ | _____ |
| 13. SYSTEM PERFORMANCE | <u>0</u> | _____ | _____ | _____ |
| 14. OVERALL ASSESSMENT | <u>X</u> | _____ | _____ | _____ |

- O - No problems or minor problems that do not affect data usability.
- X - No more than about 5% of the data points are qualified as either estimated or unusable.
- M - More than about 5% of the data points are qualified as estimated.
- Z - More than about 5% of the data points are qualified as unusable.
- F - Not applicable

TPO ACTION ITEMS: _____
 AREAS OF CONCERN: Both field blanks were contaminated with ethylbenzene, toluene, xylene, and various substituted benzenes.

TO: Jerry Vail, ESAT Team Manager
FROM: Terry Stumph, ESAT Regional Project Officer *Terry Stumph*

4/20/92

For Completion by EPA

- Request for Unvalidated Data Summary Report (Table 1A)
- Request for Data Validation

Program: \$F 110-034 Non-\$F 110-035
Lab Key 9 Case # _____ SAS # LV2538 SDG # SY0173

Tracking Dates

Data Package Received at Region 9: 04/20/92
Table 1A/Validation Requested:
Date Due: 05/14/92
Table 1A/Data Validation Report Received:
Days Late:
Completed and Sent to RPM/PM:

EPA Work-Unit Requestor: JACOB SILVA

For Completion by ESAT

(Please complete and return this form with the completed task.)

Site Newmark Project _____
Site ID # _____ Memo # 08
Analyses SAS-OR Matrix W Number 20

List the Sample Numbers:

SY0173 → SY0172

Describe the Analyses:

Low level for SAS Volatiles (624)



Blanks: SY0177(FB), SY0183(TB), SY0186(TB)
SY0189(FB),

Background: } None

Duplicates: }

Date(s) Sampled:

03/12, 13, 23, 24, 25/92

EPA Project Officer/Mail Code: Kevin Mayer / H-6-4

Sampler/Agency: Larry Zinky / URS

Date Table 1A/Validation Assigned: 04/20/92 04/20/92

Date Table 1A/Validation Completed: 04/24/92 05/14/92

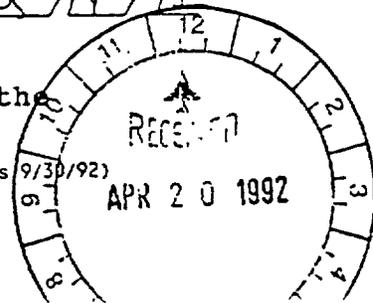
Date Table 1A/Validation Sent to EPA: 05/14/92 05/14/92

Reviewer/Staff: Chris Davis Due: 05/15/92

Please indicate if the Laboratory did not comply with the contract, and/or if the SAS request was not adequate.

Table 1A's to Sampler

Version B (expires 9/30/92)



URS CONSULTANTS, INC.

AUG 11 1992

RECEIVED

AUG 13 1992
MEMORANDUM

DATE: August 5, 1992
SUBJECT: Review of Analytical Data
FROM: Carolyn Studeny
ESAT Senior Organic Data Reviewer
ICF Technology, Inc.
THROUGH: Roseanne Sakamoto *RS*
Environmental Protection Specialist
Quality Assurance Management Section
Environmental Services Branch, OPM (P-3-2)
TO: Kevin Mayer
Remedial Project Manager
South Coast Groundwater Section (H-6-4)

Attached are comments resulting from Region 9 review of the following analytical data:

SITE: Newmark
EPA SITE ID NO: J5
CASE/SAS NO.: LV2S38 Memo #27
SDG NO.: YK629

LABORATORY: Region IX, Las Vegas
ANALYSIS: RAS Semivolatiles

SAMPLE NO.: YK625 through YK635

COLLECTION DATE: June 24 and 25, 1992

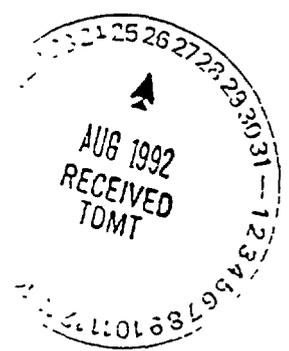
REVIEWER: Carolyn Studeny
ESAT/ICF Technology, Inc.
TELEPHONE NUMBER: (415) 882-3184

If there are any questions, please contact the reviewer.

Attachment

cc: Brenda Bettencourt, Chief, Laboratory Support Section
Larry Zinky, URS Sac

TPO: [] For Action [] For Attention [X] FYI



COPY

Data Validation Report

Case No.: LV2S38 Memo #27
Site: Newmark
Laboratory: Region IX, Las Vegas
Reviewer: Carolyn Studeny, ESAT/ICF Technology, Inc.
Date: August 5, 1992

I. Case Summary

SAMPLE INFORMATION:

BNA Sample Numbers: YK625 through YK635
Concentration and Matrix: Water
Analysis: RAS Semivolatiles
SOW: 3/90
Collection Date: June 24 and 25, 1992
Sample Receipt Date: June 26 and 27, 1992
Extraction Date: June 29 and 30, 1992
Analysis Date: July 7 and 8, 1992

FIELD QC:

Field Duplicates (D1): YK631 and YK632
Field Blanks (FB): None
Equipment Blanks (EB): None

METHOD BLANKS AND ASSOCIATED SAMPLES:

WBLK (6/29/92): YK629 through YK633, YK635, YK635MS, YK635MSD
and YK635DIL
WBLK (6/30/92): YK625 through YK628 and YK634

TABLES:

1A: Analytical Results with Qualifications
1B: Data Qualifiers
1C: Tentatively Identified Compounds
2: Sample Quantitation Limits of Target Compound
List (TCL) Analytes

ADDITIONAL COMMENTS:

This report was prepared according to the EPA draft document, "National Functional Guidelines for Organic Data Review," December, 1990 (6/91 Revision).

II. Validation Summary

| | VOA | | BNA | | PEST | |
|---------------------------|--------------------|-----|--------------------|-----|--------------------|-----|
| | Acceptable/Comment | | Acceptable/Comment | | Acceptable/Comment | |
| HOLDING TIMES | [] | [] | [Y] | [C] | [] | [] |
| GC/MS TUNE/GC PERFORMANCE | [] | [] | [Y] | [] | [] | [] |
| CALIBRATIONS | [] | [] | [N] | [] | [] | [] |
| FIELD QC | [] | [] | [Y] | [] | [] | [] |
| LABORATORY BLANKS | [] | [] | [N] | [B] | [] | [] |
| SURROGATES | [] | [] | [Y] | [] | [] | [] |
| MATRIX SPIKE/DUPLICATES | [] | [] | [Y] | [] | [] | [] |
| INTERNAL STANDARDS | [] | [] | [Y] | [] | [] | [] |
| COMPOUND IDENTIFICATION | [] | [] | [Y] | [] | [] | [] |
| COMPOUND QUANTITATION | [] | [] | [Y] | [A] | [] | [] |
| SYSTEM PERFORMANCE | [] | [] | [Y] | [D] | [] | [] |

N/A - Not Applicable

III. Validity and Comments

A. The result reported in Table 1A for the following analytes is considered an estimate (J) and usable for limited purposes only:

- All results below the Contract Required Quantitation Limits (denoted with an "L" qualifier)

Results below the Contract Required Quantitation Limits (CRQL) are considered to be qualitatively acceptable but quantitatively unreliable due to the uncertainty in analytical precision near the limit of detection.

B. Due to laboratory blank contamination problems, the results reported in Table 1A for the following analyte are considered as estimates (J) and usable for limited purposes only (see Table 2):

- bis(2-Ethylhexyl)phthalate in sample numbers YK628, YK629 and YK634

Bis(2-ethylhexyl)phthalate was found in method blank WBLK (6/29/92) at a concentration of 4 ug/L. Although bis(2-ethylhexyl)phthalate was not detected in method blank (6/30/92), which is the blank associated with samples YK628 and YK634, historically it has been found as a common laboratory contaminant. It is the opinion of the reviewer that the bis(2-ethylhexyl)phthalate detected in samples YK628 and YK634 is an artifact. The results for the samples listed above are considered as non-detected and estimated (U,J) and the quantitation limits have been increased where appropriate, according to the blank qualification rules.

- C. The 40 CFR 136 technical holding times were not exceeded for any of the samples analyzed.
- D. All other results are considered valid and usable for all purposes. All quality control criteria have been met and are considered acceptable.

ANALYTICAL RESULTS
TABLE 1A*

Case No.: LV2538 Memo #27
Site: Newmark
Lab.: Region IX, Las Vegas
Reviewer: Carolyn Studeny, ESAT/ICF Technology, Inc.
Date: August 5, 1992

Analysis Type: Low Level Water Samples
for RAS Semivolatiles

Concentration in ug/L

| Sample Location Sample I.D. | YK625 | | YK626 | | YK627 | | YK628 | | YK629 | | YK630 | | YK631 D1 | |
|--------------------------------|--------|---------|--------|---------|--------|---------|----------|---------|----------|---------|--------|---------|----------|---------|
| | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com |
| bis(2-Ethylhexyl)phthalate | 10 U | | 10 U | | 10 U | | 14 U J B | | 10 U J B | | 10 U | | 10 U | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

ANALYTICAL RESULTS

TABLE 1A*

Case No.: LV2S38 Memo #27
 Site: Newmark
 Lab.: Region IX, Las Vegas
 Reviewer: Carolyn Studeny, ESAT/ICP Technology, Inc.
 Date: August 5, 1992

Analysis Type: Low Level Water Samples
 for RAS Semivolatiles

Concentration in ug/L

| Sample Location Sample I D. Date Extracted Compound | YK632 D1 | | | YK633 | | | YK634 | | | YK635 | | | Method Blank WBLK 6/29/92 | | | Method Blank WBLK 6/30/92 | | | CRQL | | |
|--|----------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|---------------------------------|-----|-----|---------------------------------|-----|-----|--------|-----|-----|
| | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| bis(2-Ethylhexyl)phthalate | 10 | U | | 10 | U | | 10 | U | J B | 10 | U | | 4 | L | J A | 10 | U | | 10 | U | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

TABLE 1B
DATA QUALIFIERS

NO QUALIFIERS indicates that the data are acceptable both qualitatively and quantitatively.

- U Indicates that the compound is not detected above the concentration listed.
- L Indicates results which fall below the Contract Required Quantitation Limit. Results are considered estimates and usable for limited purposes.
- J Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable.
- N Presumptive evidence of the presence of the material. The compound identification is considered to be tentative. The data are usable for limited purposes.
- R Results are rejected and data are invalid for all purposes.

TABLE 1C
Detected Tentatively Identified Compounds (TICs)

Case No.: LV2S38 Memo #27
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Carolyn Studeny
 ESAT/ICF Technology, Inc.
 Date: August 5, 1992

| <u>Sample Number</u> | <u>Compound</u> | <u>Fraction</u> | <u>Retention Time, min.</u> | <u>Concentration (ug/L)</u> | <u>Rating* (Remarks)</u> |
|----------------------|-----------------------------------|-----------------|-----------------------------|-----------------------------|--------------------------|
| YK625 | Benzothiazole | BNA | 15.48 | 4 J | B |
| YK626 | Benzothiazole | BNA | 15.48 | 10 J | B |
| YK627 | Benzothiazole | BNA | 15.47 | 4 J | B |
| YK628 | Benzothiazole | BNA | 15.47 | 6 J | B |
| YK629 | Benzothiazole | BNA | 15.48 | 6 J | B |
| | Unknown | BNA | 28.95 | 40 J | |
| YK630 | Benzothiazole | BNA | 15.48 | 6 J | B |
| | 4-(2-Benzothiazolo) morpholine | BNA | 25.82 | 4 J | B |
| YK631 | Unknown | BNA | 9.27 | 6 J | |
| | 2,2'-Oxybisethanol | BNA | 10.82 | 70 J | C |
| | Unknown | BNA | 11.88 | 4 J | |
| | Benzothiazole | BNA | 15.48 | 10 J | B |
| | 4-(2-Benzothiazolo) morpholine | BNA | 25.82 | 5 J | B |
| YK632 | 2,2'-Oxybisethanol | BNA | 10.80 | 60 J | C |
| | Benzothiazole | BNA | 15.48 | 10 J | B |
| | 4-(2-Benzothiazolo) morpholine | BNA | 25.82 | 5 J | B |
| YK633 | Oxybisethanol | BNA | 10.78 | 60 J | C |
| | Benzothiazole | BNA | 15.48 | 20 J | B |
| | 4-(2-Benzothiazolo) morpholine | BNA | 25.82 | 8 J | B |
| YK634 | Unknown | BNA | 9.23 | 4 J | |
| | 2,2'-Oxybisethanol | BNA | 10.80 | 60 J | C |
| | Unknown | BNA | 10.85 | 8 J | |
| | Unknown | BNA | 13.58 | 6 J | |

J (estimated): Value is considered usable for limited purposes.

*Rating codes--probability that identification is correct:

A - High B - Moderate C - Low

TABLE 1C
(continued)

| <u>Sample Number</u> | <u>Compound</u> | <u>Fraction</u> | <u>Retention Time, min.</u> | <u>Concentration (ug/L)</u> | <u>Rating* (Remarks)</u> |
|----------------------|----------------------------------|-----------------|-----------------------------|-----------------------------|--------------------------|
| YK634 (con't) | Benzothiazole | BNA | 15.48 | 40 J | B |
| | Unknown | BNA | 21.75 | 9 J | |
| | Unknown | BNA | 25.18 | 3 J | |
| | 4-(2-Benzothiazol) morpholine | BNA | 25.82 | 30 J | B |
| | Unknown | BNA | 25.87 | 4 J | |
| | | | | | |
| YK635 | 2,2'-Oxybisethanol | BNA | 12.23 | 1000 J | C |
| | Benzothiazole | BNA | 15.52 | 100 J | B |
| | Unknown | BNA | 17.05 | 20 J | |
| | Unknown | BNA | 21.85 | 50 J | |
| | Unknown | BNA | 23.33 | 20 J | |
| | Unknown | BNA | 25.32 | 100 J | |
| | Unknown | BNA | 25.67 | 30 J | |
| | 4-(2-Benzothiazol) morpholine | BNA | 25.85 | 70 J | B |
| | Unknown | BNA | 27.28 | 30 J | |
| | Unknown | BNA | 28.62 | 30 J | |
| | Unknown | BNA | 29.52 | 10 J | |

J (estimated): Value is considered usable for limited purposes.

*Rating codes--probability that identification is correct:

A - High B - Moderate C - Low

TABLE 2
Sample Quantitation Limits

Case No.: LV2S38 Memo #27
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Carolyn Studeny
 ESAT/ICF Technology, Inc.
 Date: August 5, 1992

| <u>Semivolatile Compounds</u> | <u>Units, ug/L</u> | <u>Q</u> | <u>C</u> |
|-------------------------------|--------------------|----------|----------|
| Phenol | 10 | | |
| bis(2-Chloroethyl)ether | 10 | | |
| 2-Chlorophenol | 10 | | |
| 1,3-Dichlorobenzene | 10 | | |
| 1,4-Dichlorobenzene | 10 | | |
| 1,2-Dichlorobenzene | 10 | | |
| 2-Methylphenol | 10 | | |
| 2,2'-oxybis(1-Chloropropane) | 10 | | |
| 4-Methylphenol | 10 | | |
| N-Nitroso-di-N-propylamine | 10 | | |
| Hexachloroethane | 10 | | |
| Nitrobenzene | 10 | | |
| Isophorone | 10 | | |
| 2-Nitrophenol | 10 | | |
| 2,4-Dimethylphenol | 10 | | |
| bis(2-Chloroethoxy)methane | 10 | | |
| 2,4-Dichlorophenol | 10 | | |
| 1,2,4-Trichlorobenzene | 10 | | |
| Naphthalene | 10 | | |
| 4-Chloroaniline | 10 | | |
| Hexachlorobutadiene | 10 | | |
| 4-Chloro-3-methylphenol | 10 | | |
| 2-Methylnaphthalene | 10 | | |
| Hexachlorocyclopentadiene | 10 | | |
| 2,4,6-Trichlorophenol | 10 | | |
| 2,4,5-Trichlorophenol | 25 | | |
| 2-Chloronaphthalene | 10 | | |
| 2-Nitroaniline | 25 | | |
| Dimethylphthalate | 10 | | |
| Acenaphthylene | 10 | | |
| 3-Nitroaniline | 25 | | |

Q - Qualifier
 C - Comment

TABLE 2
(cont'd)

| <u>Semivolatile Compounds</u> | <u>Units, ug/L</u> | <u>Q</u> | <u>C</u> |
|-------------------------------|--------------------|----------|----------|
| Acenaphthene | 10 | | |
| 2,4-Dinitrophenol | 25 | | |
| 4-Nitrophenol | 25 | | |
| Dibenzofuran | 10 | | |
| 2,4-Dinitrotoluene | 10 | | |
| 2,6-Dinitrotoluene | 10 | | |
| Diethylphthalate | 10 | | |
| 4-Chlorophenyl-phenylether | 10 | | |
| Fluorene | 10 | | |
| 4-Nitroaniline | 25 | | |
| 4,6-Dinitro-2-methylphenol | 25 | | |
| N-Nitrosodiphenylamine | 10 | | |
| 4-Bromophenyl-phenylether | 10 | | |
| Hexachlorobenzene | 10 | | |
| Pentachlorophenol | 25 | | |
| Phenanthrene | 10 | | |
| Anthracene | 10 | | |
| Carbazole | 10 | | |
| Di-n-butylphthalate | 10 | | |
| Fluoranthene | 10 | | |
| Pyrene | 10 | | |
| Butylbenzylphthalate | 10 | | |
| 3,3'-Dichlorobenzidine | 10 | | |
| Benzo(a)anthracene | 10 | | |
| bis(2-Ethylhexyl)phthalate | 10 | J | B |
| Chrysene | 10 | | |
| Di-n-octyl phthalate | 10 | | |
| Benzo(b)fluoranthene | 10 | | |
| Benzo(k)fluoranthene | 10 | | |
| Benzo(a)pyrene | 10 | | |
| Indeno(1,2,3-cd)pyrene | 10 | | |
| Dibenz(a,h)anthracene | 10 | | |
| Benzo(g,h,i)perylene | 10 | | |

Q - Qualifier

C - Comment

TABLE 2
(cont'd)

To calculate the sample quantitation limits, multiply CRQL by the following factors:

| <u>Sample No.</u> | <u>Semivolatiles</u> |
|-------------------|----------------------|
| All samples | 1.0 |
| Method blanks | 1.0 |

TPO: [] ACTION [X] FYI

Region IX

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. LV2S38 Memo #27 LABORATORY Region IX, Las Vegas

SDG NO. YK629 DATA USER _____

SOW 3/90 REVIEW COMPLETION DATE August 5, 1992

NO. OF SAMPLES 11 WATER _____ SOIL _____ OTHER _____

REVIEWER [] ESD [X] ESAT [] OTHER, CONTRACT/CONTRACTOR _____

| | VOA | BNA | PEST | OTHER |
|--|-------|----------|-------|-------|
| 1. HOLDING TIMES | _____ | <u>0</u> | _____ | _____ |
| 2. GC-MS TUNE/GC PERFORMANCE | _____ | <u>0</u> | _____ | _____ |
| 3. INITIAL CALIBRATIONS | _____ | <u>0</u> | _____ | _____ |
| 4. CONTINUING CALIBRATIONS | _____ | <u>0</u> | _____ | _____ |
| 5. FIELD BLANKS ("F" = not applicable) | _____ | <u>0</u> | _____ | _____ |
| 6. LABORATORY BLANKS | _____ | <u>X</u> | _____ | _____ |
| 7. SURROGATES | _____ | <u>0</u> | _____ | _____ |
| 8. MATRIX SPIKE/DUPLICATES | _____ | <u>0</u> | _____ | _____ |
| 9. REGIONAL QC ("F" = not applicable) | _____ | <u>F</u> | _____ | _____ |
| 10. INTERNAL STANDARDS | _____ | <u>0</u> | _____ | _____ |
| 11. COMPOUND IDENTIFICATION | _____ | <u>0</u> | _____ | _____ |
| 12. COMPOUND QUANTITATION | _____ | <u>0</u> | _____ | _____ |
| 13. SYSTEM PERFORMANCE | _____ | <u>0</u> | _____ | _____ |
| 14. OVERALL ASSESSMENT | _____ | <u>0</u> | _____ | _____ |

- O - No problems or minor problems that do not affect data usability.
- X - No more than about 5% of the data points are qualified as either estimated or unusable.
- M - More than about 5% of the data points are qualified as estimated.
- Z - More than about 5% of the data points are qualified as unusable.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

In Reference to Case No(s):

LV2S38

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: July 25 and 30, 1992

Laboratory Name: Region IX, Las Vegas

Lab Contact: Tim Vonnahme and George Fratus

Region: IX

Regional Contact: Carolyn Studeny

Call Initiated By: Laboratory X Region

In reference to data for the following sample number(s):

All samples, blanks and spikes

Summary of Questions/Issues Discussed:

1. The surrogate recoveries were miscalculated on the Form 2 for all samples, blanks and spikes due to software problems.
2. A TIC for the method blank WBLK (6/29/92) was misidentified as an unknown instead of bis(2-ethylhexyl)phthalate.

Summary of Resolution:

1. The lab will look into this software problem.
2. Received the corrected Form 1's and library spectra for the method blank by facsimile on August 5, 1992.

Signature

August 5, 1992

Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

160 Spear Street, Suite 1380
San Francisco, California
94105-1535

415/957-0110

URS TDMT Only TDCN: 0686
Project #: 62172 Loc: 09.71 Type: 71



ICF TECHNOLOGY INCORPORATED

MEMORANDUM

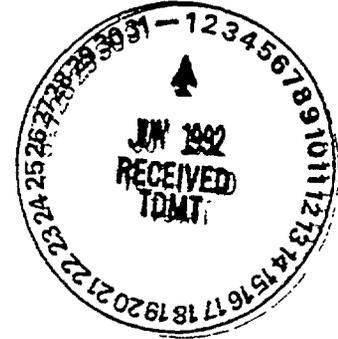
DATE: May 28, 1992

SUBJECT: Review of Analytical Data

FROM: Carolyn Studeny
ESAT Senior Organic Data Reviewer
ICF Technology, Inc.

THROUGH: Jacob Silva
Environmental Scientist
Quality Assurance Management Section
Environmental Services Branch, OPM (P-3-2)

TO: Kevin Mayer
Remedial Project Manager
South Coast Groundwater Section (H-6-4)



Attached are comments resulting from Region 9 review of the following analytical data:

SITE: Newmark
EPA SITE ID NO: J5
CASE/SAS NO.: LV2S38 Memo #19
SDG NO.: YK618

LABORATORY: Region IX, Las Vegas
ANALYSIS: RAS Semivolatiles

SAMPLE NO.: YK618 through YK624

COLLECTION DATE: April 7 through 21, 1992

REVIEWER: Ian Jensen
ESAT/ICF Technology, Inc.

TELEPHONE NUMBER: (415) 882-3187

If there are any questions, please contact the reviewer.

Attachment

TPO: [] For Action [X] FYI

cc: Brenda Bettencourt
Larry Zinky - URS SAC

Data Validation Report

Case No.: LV2S38 Memo #19
Site: Newmark
Laboratory: Region IX, Las Vegas
Reviewer: Ian Jensen, ESAT/ICF Technology, Inc.
Date: May 28, 1992

I. Case Summary

SAMPLE INFORMATION:

BNA Sample Numbers: YK618 through YK624
Concentration and Matrix: Low Level Water
Analysis: RAS Semivolatiles
SOW: 3/90
Collection Date: April 7 through 21, 1992
Sample Receipt Date: April 8 through 22, 1992
Extraction Date: April 9 through 23, 1992
Analysis Date: April 17 through May 6, 1992

FIELD QC:

Trip Blanks (TB): None
Field Blanks (FB): None
Equipment Blanks (EB): YK619
Background Samples (BG): None
Field Duplicates (D1): None

METHOD BLANKS AND ASSOCIATED SAMPLES:

WBLK1: YK618, YK619, YK620, YK621, YK620MS and
YK620MSD
WBLK2: YK622
WBLK3: YK623 and YK624

TABLES:

1A: Analytical Results with Qualifications
1B: Data Qualifiers
1C: Tentatively Identified Compounds
2: Sample Quantitation Limits of Target Compound
List (TCL) Analytes

ADDITIONAL COMMENTS:

This report was prepared according to the EPA draft document, "National Functional Guidelines for Organic Data Review," December, 1990 (6/91 Revision).

II. Validation Summary

| | VOA | | BNA | | PEST | |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment |
| HOLDING TIMES | [] | [] | [Y] | [D] | [] | [] |
| GC/MS TUNE/GC PERFORMANCE | [] | [] | [Y] | [] | [] | [] |
| CALIBRATIONS | [] | [] | [N] | [B,C] | [] | [] |
| FIELD QC | [] | [] | [Y] | [A] | [] | [] |
| LABORATORY BLANKS | [] | [] | [Y] | [] | [] | [] |
| SURROGATES | [] | [] | [Y] | [] | [] | [] |
| MATRIX SPIKE/DUPLICATES | [] | [] | [Y] | [] | [] | [] |
| INTERNAL STANDARDS | [] | [] | [Y] | [] | [] | [] |
| COMPOUND IDENTIFICATION | [] | [] | [Y] | [] | [] | [] |
| COMPOUND QUANTITATION | [] | [] | [Y] | [] | [] | [] |
| SYSTEM PERFORMANCE | [] | [] | [Y] | [E] | [] | [] |

N/A - Not Applicable

III. Validity and Comments

- A. Due to equipment blank contamination problems, the results reported in Table 1A for the following analyte are considered as estimates (J) and usable for limited purposes only:

- bis(2-Ethylhexyl)phthalate in sample numbers YK620, YK621, YK623 and YK624

bis(2-Ethylhexyl)phthalate was found in equipment blank YK619 at a concentration of 71 ug/L. The results for the samples listed above are considered as nondetected and estimated (U,J) and the quantitation limits have been increased where appropriate, according to the blank qualification rules.

- B. Due to low Relative Response Factors in the Initial and Continuing Calibrations, the quantitation limits for the following analytes are considered as estimates (J) and usable for limited purposes only (see Table 2):

- 2,4-Dinitrophenol in sample numbers YK618 through YK622 and method blanks WBLK1 and WBLK2
- 4,6-Dinitro-2-methylphenol in sample numbers YK623 and YK624 and WBLK3

An Average Relative Response Factor of 0.040 was observed for 2,4-dinitrophenol in the Initial Calibration performed on March 4, 1992. Relative Response Factors of 0.032 and 0.042 were observed for 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol, respectively, in the Continuing Calibration performed on March 6, 1992. These values are below the 0.05 QC limit.

Since the results for these analytes are non-detected, false negatives may exist.

- C. Due to large percent Differences (%Ds) in the Continuing Calibrations, the quantitation limit for the following analyte is

considered an estimate (J) and usable for limited purposes only (see Table 2):

- 4,6-Dinitro-2-methylphenol in all samples and method blanks

Percent Differences of 33% and 35% were observed for 4,6-dinitro-2-methylphenol in the Continuing Calibrations performed on April 17 and March 6, 1992, respectively. These values exceed the $\leq \pm 25\%$ QC limit.

- D. The 40 CFR 136 technical holding times were not exceeded for any of the samples analyzed.
- E. All other results are considered valid and usable for all purposes. All quality control criteria have been met and are considered acceptable.

ANALY L RESULTS
TABLE 1A*

Case No.: LV2538 Memo #19
Site: Newmark
Lab.: Region IX, Las Vegas
Reviewer: Ian Jensen, ESAT/ICP Technology, Inc.
Date: May 28, 1992

Analysis Type: Low Level Water Samples
for RAS Semivolatiles

Concentration in ug/L

| Sample Location Sample I.D. | YK618 | | | YK619 EB | | | YK620 | | | YK621 | | | YK622 | | | YK623 | | | YK624 | | |
|--------------------------------|-----------------------|-----|-----|-----------------------|-----|-----|-----------------------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|
| Compound | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| bis(2-Ethylhexyl)phthalate | 10 | U | | 71 | | | 42 | U | J A | 40 | U | J A | 10 | U | | 10 | U | J A | 20 | U | J A |
| Sample Location Sample I.D. | Method Blank WBLK1 | | | Method Blank WBLK2 | | | Method Blank WBLK3 | | | CRQL | | | | | | | | | | | |
| Compound | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| bis(2-Ethylhexyl)phthalate | 10 | U | | 10 | U | | 10 | U | | 10 | | | | | | | | | | | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

TABLE 1B
DATA QUALIFIERS

NO QUALIFIERS indicates that the data are acceptable both qualitatively and quantitatively.

- U Indicates that the compound is not detected above the concentration listed.
- L Indicates results which fall below the Contract Required Quantitation Limit. Results are considered estimates and usable for limited purposes.
- J Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable.
- N Presumptive evidence of the presence of the material. The compound identification is considered to be tentative. The data are usable for limited purposes.
- R Results are rejected and data are invalid for all purposes.

TABLE 1C
Detected Tentatively Identified Compounds (TICs)

Case No.: LV2S38 Memo #19
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Ian Jensen
 ESAT/ICF Technology, Inc.
 Date: May 28, 1992

| <u>Sample Number</u> | <u>Compound</u> | <u>Fraction</u> | <u>Retention Time, min.</u> | <u>Concentration (ug/L)</u> | <u>Rating^a (Remarks)</u> |
|----------------------|----------------------|-----------------|-----------------------------|-----------------------------|-------------------------------------|
| YK618 | Ethyl hexanol | BNA | 12.33 | 10 J | B |
| | Methyl pyrrolidinone | BNA | 12.62 | 40 J | B |
| YK619 | Ethyl hexanol | BNA | 12.33 | 20 J | B |
| YK620 | Ethyl hexanol | BNA | 12.33 | 4 J | B |
| YK621 | Ethyl hexanol | BNA | 12.33 | 5 J | B |
| YK622 | Ethyl hexanol | BNA | 12.33 | 10 J | B |
| YK623 | Ethyl hexanol | BNA | 12.18 | 3 J | B |
| | Methyl pyrrolidinone | BNA | 12.43 | 10 J | B |
| YK624 | Ethyl hexanol | BNA | 12.18 | 6 J | B |
| | Methyl pyrrolidinone | BNA | 12.48 | 200 J | B |

J (estimated): Value is considered usable for limited purposes.

^aRating codes--probability that identification is correct:

A - High B - Moderate C - Low

TABLE 2
Sample Quantitation Limits

Case No.: LV2S38 Memo #19.
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Ian Jensen
 ESAT/ICF Technology, Inc.
 Date: May 28, 1992

| <u>Semivolatiles Compounds</u> | <u>Units. ug/L</u> | <u>Q</u> | <u>C</u> |
|--------------------------------|--------------------|----------|----------|
| Phenol | 10 | | |
| bis(2-Chloroethyl)ether | 10 | | |
| 2-Chlorophenol | 10 | | |
| 1,3-Dichlorobenzene | 10 | | |
| 1,4-Dichlorobenzene | 10 | | |
| 1,2-Dichlorobenzene | 10 | | |
| 2-Methylphenol | 10 | | |
| 2,2'-oxybis(1-Chloropropane) | 10 | | |
| 4-Methylphenol | 10 | | |
| N-Nitroso-di-N-propylamine | 10 | | |
| Hexachloroethane | 10 | | |
| Nitrobenzene | 10 | | |
| Isophorone | 10 | | |
| 2-Nitrophenol | 10 | | |
| 2,4-Dimethylphenol | 10 | | |
| bis(2-Chloroethoxy)methane | 10 | | |
| 2,4-Dichlorophenol | 10 | | |
| 1,2,4-Trichlorobenzene | 10 | | |
| Naphthalene | 10 | | |
| 4-Chloroaniline | 10 | | |
| Hexachlorobutadiene | 10 | | |
| 4-Chloro-3-methylphenol | 10 | | |
| 2-Methylnaphthalene | 10 | | |
| Hexachlorocyclopentadiene | 10 | | |
| 2,4,6-Trichlorophenol | 10 | | |
| 2,4,5-Trichlorophenol | 25 | | |
| 2-Chloronaphthalene | 10 | | |
| 2-Nitroaniline | 25 | | |
| Dimethylphthalate | 10 | | |
| Acenaphthylene | 10 | | |
| 3-Nitroaniline | 25 | | |

Q - Qualifier
 C - Comment

TABLE 2
(cont'd)

| <u>Semivolatiles Compounds</u> | <u>Units. ug/L</u> | <u>Q</u> | <u>C</u> |
|--------------------------------|--------------------|----------|----------|
| Acenaphthene | 10 | | |
| 2,4-Dinitrophenol | 25 | J | B |
| 4-Nitrophenol | 25 | | |
| Dibenzofuran | 10 | | |
| 2,4-Dinitrotoluene | 10 | | |
| 2,6-Dinitrotoluene | 10 | | |
| Diethylphthalate | 10 | | |
| 4-Chlorophenyl-phenylether | 10 | | |
| Fluorene | 10 | | |
| 4-Nitroaniline | 25 | | |
| 4,6-Dinitro-2-methylphenol | 25 | J | B,C |
| N-Nitrosodiphenylamine | 10 | | |
| 4-Bromophenyl-phenylether | 10 | | |
| Hexachlorobenzene | 10 | | |
| Pentachlorophenol | 25 | | |
| Phenanthrene | 10 | | |
| Anthracene | 10 | | |
| Carbazole | 10 | | |
| Di-n-butylphthalate | 10 | | |
| Fluoranthene | 10 | | |
| Pyrene | 10 | | |
| Butylbenzylphthalate | 10 | | |
| 3,3'-Dichlorobenzidine | 10 | | |
| Benzo(a)anthracene | 10 | | |
| bis(2-Ethylhexyl)phthalate | 10 | | |
| Chrysene | 10 | | |
| Di-n-octyl phthalate | 10 | | |
| Benzo(b)fluoranthene | 10 | | |
| Benzo(k)fluoranthene | 10 | | |
| Benzo(a)pyrene | 10 | | |
| Indeno(1,2,3-cd)pyrene | 10 | | |
| Dibenz(a,h)anthracene | 10 | | |
| Benzo(g,h,i)perylene | 10 | | |

Q - Qualifier

C - Comment

TABLE 2
(cont'd)

To calculate the sample quantitation limits, multiply CRQL by the following factors:

| <u>Sample No.</u> | <u>Semivolatiles</u> |
|-------------------|----------------------|
| YK618 | 1.00 |
| YK619 | 1.00 |
| YK620 | 1.00 |
| YK621 | 1.00 |
| YK622 | 1.00 |
| YK623 | 1.00 |
| YK624 | 1.00 |
| Method Blanks | 1.00 |

TPO: [] ACTION [X] FYI

Region IX

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. LV2S38 Memo #19 LABORATORY Region IX, Las Vegas

SDG NO. YK618 DATA USER _____

SOW 3/90 REVIEW COMPLETION DATE May 28, 1992

NO. OF SAMPLES 7 WATER _____ SOIL _____ OTHER _____

REVIEWER [] ESD [X] ESAT [] OTHER, CONTRACT/CONTRACTOR _____

| | VOA | BNA | PEST | OTHER |
|---------------------------------------|-------|----------|-------|-------|
| 1. HOLDING TIMES | _____ | <u>0</u> | _____ | _____ |
| 2. GC-MS TUNE/GC PERFORMANCE | _____ | <u>0</u> | _____ | _____ |
| 3. INITIAL CALIBRATIONS | _____ | <u>X</u> | _____ | _____ |
| 4. CONTINUING CALIBRATIONS | _____ | <u>X</u> | _____ | _____ |
| 5. FIELD QC | _____ | <u>X</u> | _____ | _____ |
| 6. LABORATORY BLANKS | _____ | <u>0</u> | _____ | _____ |
| 7. SURROGATES | _____ | <u>0</u> | _____ | _____ |
| 8. MATRIX SPIKE/DUPLICATES | _____ | <u>0</u> | _____ | _____ |
| 9. REGIONAL QC ("F" - not applicable) | _____ | <u>F</u> | _____ | _____ |
| 10. INTERNAL STANDARDS | _____ | <u>0</u> | _____ | _____ |
| 11. COMPOUND IDENTIFICATION | _____ | <u>0</u> | _____ | _____ |
| 12. COMPOUND QUANTITATION | _____ | <u>0</u> | _____ | _____ |
| 13. SYSTEM PERFORMANCE | _____ | <u>0</u> | _____ | _____ |
| 14. OVERALL ASSESSMENT | _____ | <u>X</u> | _____ | _____ |

- O - No problems or minor problems that do not affect data usability.
- X - No more than about 5% of the data points are qualified as either estimated or unusable.
- M - More than about 5% of the data points are qualified as estimated.
- Z - More than about 5% of the data points are qualified as unusable.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

URS TDMT Only TDCN: 0679
Project # 62172 Loc: 09.71 Type: 71



ICF TECHNOLOGY INCORPORATED

MAY 18 1992
MEMORANDUM

DATE: May 15, 1992

SUBJECT: Review of Analytical Data

FROM: Carolyn Studeny *CS*
ESAT Senior Organic Data Reviewer
ICF Technology, Inc.

THROUGH: Jacob Silva *J Silva*
Environmental Scientist
Quality Assurance Management Section
Environmental Services Branch, OPM (P-3-2)

TO: Kevin Mayer
Remedial Project Manager
South Coast Ground Water Section (H-6-4)

Attached are comments resulting from Region 9 review of the following analytical data:

SITE: Newmark
EPA SITE ID NO: J5
CASE/SAS NO.: LV2S38 Memo #6
SDG NO.: YK599

LABORATORY: Region IX, Las Vegas
ANALYSIS: RAS Semivolatiles

SAMPLE NO.: YK599, YK601 and YK604 through YK608

COLLECTION DATE: March 10 through 26, 1992

REVIEWER: Ian Jensen
ESAT/ICF Technology, Inc.

TELEPHONE NUMBER: (415) 882-3187

If there are any questions, please contact the reviewer.

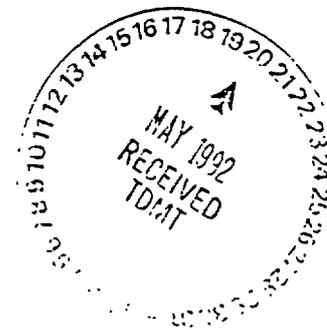
Attachment

TPO: [] For Action [X] FYI

cc: Brenda Bettencourt
Larry Zinky - URS SAC

COPY

h 05/22/92



Data Validation Report

Case No.: LV2S38 Memo #6
Site: Newmark
Laboratory: Region IX, Las Vegas
Reviewer: Ian Jensen, ESAT/ICF Technology, Inc.
Date: May 15, 1992

I. Case Summary

SAMPLE INFORMATION:

BNA Sample Numbers: YK599, YK601 and YK604 through YK608
Concentration and Matrix: Low Level Water
Analysis: RAS Semivolatiles
SOW: 3/90
Collection Date: March 10 through 26, 1992
Sample Receipt Date: March 13 through 27, 1992
Extraction Date: March 16 through 31, 1992
Analysis Date: March 27 through April 7, 1992

FIELD QC:

Trip Blanks (TB): None
Field Blanks (FB): None
Equipment Blanks (EB): YK606 and YK607
Background Samples (BG): None
Field Duplicates (DI): None

METHOD BLANKS AND ASSOCIATED SAMPLES:

WBLK(3/16/92): YK599 and YK601
WBLK(3/26/92): YK604, YK605, YK604-MS and YK604-MSD
WBLK(3/27/92): YK606
WBLK(3/31/92): YK607, YK607-DL and YK608

TABLES:

1A: Analytical Results with Qualifications
1B: Data Qualifiers
1C: Tentatively Identified Compounds
2: Sample Quantitation Limits of Target Compound List (TCL) Analytes

ADDITIONAL COMMENTS:

This report was prepared according to the EPA draft document, "National Functional Guidelines for Organic Data Review," December, 1990 (6/91 Revision).

II. Validation Summary

| | VOA | | BNA | | PEST | |
|---------------------------|-------------|---------|-------------|---------|-------------|---------|
| | Acceptable/ | Comment | Acceptable/ | Comment | Acceptable/ | Comment |
| HOLDING TIMES | [] | [] | [Y] | [B] | [] | [] |
| GC/MS TUNE/GC PERFORMANCE | [] | [] | [Y] | [] | [] | [] |
| CALIBRATIONS | [] | [] | [Y] | [] | [] | [] |
| FIELD QC | [] | [] | [Y] | [A] | [] | [] |
| LABORATORY BLANKS | [] | [] | [Y] | [] | [] | [] |
| SURROGATES | [] | [] | [Y] | [] | [] | [] |
| MATRIX SPIKE/DUPLICATES | [] | [] | [Y] | [] | [] | [] |
| INTERNAL STANDARDS | [] | [] | [Y] | [] | [] | [] |
| COMPOUND IDENTIFICATION | [] | [] | [Y] | [] | [] | [] |
| COMPOUND QUANTITATION | [] | [] | [Y] | [] | [] | [] |
| SYSTEM PERFORMANCE | [] | [] | [Y] | [C] | [] | [] |

N/A - Not Applicable

III. Validity and Comments

A. Due to equipment blank contamination problems, the results reported in Table 1A for the following analyte are considered as estimates (J) and usable for limited purposes only:

- bis(2-Ethylhexyl)phthalate in sample numbers YK601, YK605 and YK608

bis(2-Ethylhexyl)phthalate was found in equipment blank YK607 at a concentration of 88 ug/L. The results for bis(2-ethylhexyl) phthalate in the samples listed above are considered as nondetected and estimated (U,J) and the quantitation limits have been increased where appropriate, according to the blank qualification rules.

- B. The 40 CFR 136 technical holding times were not exceeded for any of the samples analyzed.
- C. All other results are considered valid and usable for all purposes. All quality control criteria have been met and are considered acceptable.

ANAL YSIS RESULTS
TABLE 1A*

Case No.: LV2S38 Memo #6
 Site: Newmark
 Lab.: Region IX, Las Vegas
 Reviewer: Ian Jensen, ESAT/ICP Technology, Inc.
 Date: May 15, 1992

Analysis Type: Low Level Water Samples for
 RAS Semivolatiles

Concentration in ug/L

| Sample Location Sample I.D. | YK599 | | YK601 | | YK604 | | YK605 | | YK606 EB | | YK607 EB | | YK608 | |
|--------------------------------|--------|---------|--------|---------|--------|---------|--------|---------|----------|---------|----------|---------|--------|---------|
| Compound | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com |
| bis(2-Ethylhexyl)phthalate | 10 U | | 21 U | J A | 10 U | | 10 U | J A | 10 U | | 88 | | 16 U | J A |

| Sample Location Sample I.D. | Method Blank WBLK1 | | Method Blank WBLK2 | | Method Blank WBLK3 | | Method Blank WBLK4 | | CRQL | | | | | |
|--------------------------------|-----------------------|---------|-----------------------|---------|-----------------------|---------|-----------------------|---------|--------|---------|--------|---------|--------|---------|
| Compound | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com |
| bis(2-Ethylhexyl)phthalate | 10 U | | 10 U | | 10 U | | 10 U | | 10 | | | | | |

*The other requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

TABLE 1B
DATA QUALIFIERS

NO QUALIFIERS indicates that the data are acceptable both qualitatively and quantitatively.

U Indicates that the compound is not detected above the concentration listed.

L Indicates results which fall below the Contract Required Quantitation Limit. Results are considered estimates and usable for limited purposes.

J Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable.

N Presumptive evidence of the presence of the material. The compound identification is considered to be tentative. The data are usable for limited purposes.

R Results are rejected and data are invalid for all purposes.

TABLE 1C
Detected Tentatively Identified Compounds (TICs)

Case No.: LV2S38 Memo #6
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Ian Jensen
 ESAT/ICF Technology, Inc.
 Date: May 15, 1992

| <u>Sample Number</u> | <u>Compound</u> | <u>Fraction</u> | <u>Retention Time, min.</u> | <u>Concentration (ug/L)</u> | <u>Rating* (Remarks)</u> |
|----------------------|----------------------|-----------------|-----------------------------|-----------------------------|--------------------------|
| YK599 | Methyl pyrrolidinone | BNA | 11.93 | 500 J | B |
| YK601 | Methyl pyrrolidinone | BNA | 11.90 | 200 J | B |
| YK604 | None found | BNA | | | |
| YK605 | Methyl pyrrolidinone | BNA | 11.87 | 200 J | B |
| YK606 | None found | BNA | | | |
| YK607 | None found | BNA | | | |
| YK608 | Methyl pyrrolidinone | BNA | 11.85 | 40 J | B |

J (estimated): Value is considered usable for limited purposes.

*Rating codes--probability that identification is correct:

A - High B - Moderate C - Low

TABLE 2
Sample Quantitation Limits

Case No.: LV2S38 Memo #6
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Ian Jensen
 ESAT/ICF Technology, Inc.
 Date: May 15, 1992

| <u>Semivolatile Compounds</u> | <u>Units, ug/L</u> | <u>Q</u> | <u>C</u> |
|-------------------------------|--------------------|----------|----------|
| Phenol | 10 | | |
| bis(2-Chloroethyl)ether | 10 | | |
| 2-Chlorophenol | 10 | | |
| 1,3-Dichlorobenzene | 10 | | |
| 1,4-Dichlorobenzene | 10 | | |
| 1,2-Dichlorobenzene | 10 | | |
| 2-Methylphenol | 10 | | |
| 2,2'-oxybis(1-Chloropropane) | 10 | | |
| 4-Methylphenol | 10 | | |
| N-Nitroso-di-N-propylamine | 10 | | |
| Hexachloroethane | 10 | | |
| Nitrobenzene | 10 | | |
| Isophorone | 10 | | |
| 2-Nitrophenol | 10 | | |
| 2,4-Dimethylphenol | 10 | | |
| bis(2-Chloroethoxy)methane | 10 | | |
| 2,4-Dichlorophenol | 10 | | |
| 1,2,4-Trichlorobenzene | 10 | | |
| Naphthalene | 10 | | |
| 4-Chloroaniline | 10 | | |
| Hexachlorobutadiene | 10 | | |
| 4-Chloro-3-methylphenol | 10 | | |
| 2-Methylnaphthalene | 10 | | |
| Hexachlorocyclopentadiene | 10 | | |
| 2,4,6-Trichlorophenol | 10 | | |
| 2,4,5-Trichlorophenol | 25 | | |
| 2-Chloronaphthalene | 10 | | |
| 2-Nitroaniline | 25 | | |
| Dimethylphthalate | 10 | | |
| Acenaphthylene | 10 | | |
| 3-Nitroaniline | 25 | | |

Q - Qualifier

C - Comment

TABLE 2
(cont'd)

| <u>Semivolatile Compounds</u> | <u>Units, ug/L</u> | <u>Q</u> | <u>C</u> |
|-------------------------------|--------------------|----------|----------|
| Acenaphthene | 10 | | |
| 2,4-Dinitrophenol | 25 | | |
| 4-Nitrophenol | 25 | | |
| Dibenzofuran | 10 | | |
| 2,4-Dinitrotoluene | 10 | | |
| 2,6-Dinitrotoluene | 10 | | |
| Diethylphthalate | 10 | | |
| 4-Chlorophenyl-phenylether | 10 | | |
| Fluorene | 10 | | |
| 4-Nitroaniline | 25 | | |
| 4,6-Dinitro-2-methylphenol | 25 | | |
| N-Nitrosodiphenylamine | 10 | | |
| 4-Bromophenyl-phenylether | 10 | | |
| Hexachlorobenzene | 10 | | |
| Pentachlorophenol | 25 | | |
| Phenanthrene | 10 | | |
| Anthracene | 10 | | |
| Carbazole | 10 | | |
| Di-n-butylphthalate | 10 | | |
| Fluoranthene | 10 | | |
| Pyrene | 10 | | |
| Butylbenzylphthalate | 10 | | |
| 3,3'-Dichlorobenzidine | 10 | | |
| Benzo(a)anthracene | 10 | | |
| bis(2-Ethylhexyl)phthalate | 10 | | |
| Chrysene | 10 | | |
| Di-n-octyl phthalate | 10 | | |
| Benzo(b)fluoranthene | 10 | | |
| Benzo(k)fluoranthene | 10 | | |
| Benzo(a)pyrene | 10 | | |
| Indeno(1,2,3-cd)pyrene | 10 | | |
| Dibenz(a,h)anthracene | 10 | | |
| Benzo(g,h,i)perylene | 10 | | |

Q - Qualifier

C - Comment

TABLE 2
(cont'd)

To calculate the sample quantitation limits, multiply CRQL by the following factors:

| <u>Sample No.</u> | <u>Semivolatiles</u> |
|-------------------|----------------------|
| YK599 | 1.00 |
| YK601 | 1.00 |
| YK604 | 1.00 |
| YK605 | 1.00 |
| YK606 | 1.00 |
| YK607 | 1.00 |
| YK608 | 1.00 |
| Method Blanks | 1.00 |

TPO: [] ACTION [X] FYI

Region IX

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. LV2S38 Memo #6 LABORATORY Region IX, Las Vegas

SDG NO. YK599 DATA USER _____

SOW 3/90 REVIEW COMPLETION DATE May 15, 1992

NO. OF SAMPLES 7 WATER _____ SOIL _____ OTHER _____

REVIEWER [] ESD [X] ESAT [] OTHER, CONTRACT/CONTRACTOR _____

| | VOA | BNA | PEST | OTHER |
|---------------------------------------|-------|----------|-------|-------|
| 1. HOLDING TIMES | _____ | <u>0</u> | _____ | _____ |
| 2. GC-MS TUNE/GC PERFORMANCE | _____ | <u>0</u> | _____ | _____ |
| 3. INITIAL CALIBRATIONS | _____ | <u>0</u> | _____ | _____ |
| 4. CONTINUING CALIBRATIONS | _____ | <u>0</u> | _____ | _____ |
| 5. FIELD QC | _____ | <u>X</u> | _____ | _____ |
| 6. LABORATORY BLANKS | _____ | <u>0</u> | _____ | _____ |
| 7. SURROGATES | _____ | <u>0</u> | _____ | _____ |
| 8. MATRIX SPIKE/DUPLICATES | _____ | <u>0</u> | _____ | _____ |
| 9. REGIONAL QC ("F" - not applicable) | _____ | <u>F</u> | _____ | _____ |
| 10. INTERNAL STANDARDS | _____ | <u>0</u> | _____ | _____ |
| 11. COMPOUND IDENTIFICATION | _____ | <u>0</u> | _____ | _____ |
| 12. COMPOUND QUANTITATION | _____ | <u>0</u> | _____ | _____ |
| 13. SYSTEM PERFORMANCE | _____ | <u>0</u> | _____ | _____ |
| 14. OVERALL ASSESSMENT | _____ | <u>X</u> | _____ | _____ |

- O - No problems or minor problems that do not affect data usability.
- X - No more than about 5% of the data points are qualified as either estimated or unusable.
- M - More than about 5% of the data points are qualified as estimated.
- Z - More than about 5% of the data points are qualified as unusable.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

160 Spear Street, Suite 1380
San Francisco, California
94105-1535

415/957-0110

URS TDMT Only TDCN: 0856
Project #: 02172 Loc: 09.71 Type: 71



ICF TECHNOLOGY INCORPORATED

AUG 11 1992

URS CONSULTANTS, INC.

MEMORANDUM

AUG 13 1992

DATE: August 5, 1992

RECEIVED

SUBJECT: Review of Analytical Data

FROM: Carolyn Studeny *KS*
ESAT Senior Organic Data Reviewer
ICF Technology, Inc.

THROUGH: Roseanne Sakamoto *MF*
Environmental Protection Specialist
Quality Assurance Management Section
Environmental Services Branch, OPM (P-3-2)

TO: Kevin Mayer
Remedial Project Manager
South Coast Groundwater Section (H-6-4)

Attached are comments resulting from Region 9 review of the following analytical data:

SITE: Newmark
EPA SITE ID NO: J5
CASE/SAS NO.: LV2S38 Memo #28
SDG NO.: SY0213

LABORATORY: Region IX, Las Vegas
ANALYSIS: SAS Total Petroleum Hydrocarbons (TPH) as Diesel and Gasoline by LUFT Manual Method

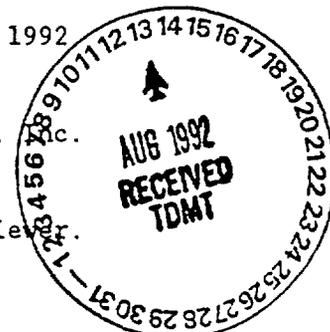
SAMPLE NO.: SY0209 through SY0221

COLLECTION DATE: June 24 through 26, 1992

REVIEWER: Mary Hart
ESAT/ICF Technology, Inc.

TELEPHONE NUMBER: (415) 882-3030

If there are any questions, please contact the reviewer.



Attachment

TPO: [] For Action [] For Attention [X] FYI

cc: Brenda Bettencourt
Larry Zinky - URS SAC

Data Validation Report

Case No.: LV2S38 Memo #28
Site: Newmark
Laboratory: Region IX, Las Vegas
Reviewer: Mary Hart, ESAT/ICF Technology, Inc.
Date: August 5, 1992

I. Case Summary

SAMPLE INFORMATION:

TPH - DIESEL Sample Numbers: SY0209 through SY0219
TPH - GASOLINE Sample Numbers: SY0209 through SY0221
Concentration and Matrix: Low Level Waters
Analysis: SAS Total Petroleum Hydrocarbons (TPH) as Diesel and Gasoline by LUFT Manual Method
SOW: N/A
Collection Date: June 24 through 26, 1992
Sample Receipt Date: June 26 and 27, 1992
Extraction Date: July 2, 1992
Analysis Date: July 6 through 9, 1992

FIELD QC:

Trip Blanks (TB): SY0220 and SY0221
Field Blanks (FB): None
Equipment Blanks (EB): None
Background Samples (BG): None
Field Duplicates (D1): SY0215 and SY0216

METHOD BLANKS AND ASSOCIATED SAMPLES:

DIESEL WBLK: SY0209 through SY0219, SY0219MS and SY0219DS
GASOLINE WBLK (7/6/92): SY0209 through SY0212, SY0218 and SY0221
GASOLINE WBLK (7/7/92): SY0213 through SY0217 and SY0220
GASOLINE WBLK (7/8/92): SY0219, SY0219MS and SY0219DS

TABLES:

1A: Analytical Results with Qualifications
1B: Data Qualifiers
2: Sample Quantitation Limits of Target Compound List (TCL) Analytes

ADDITIONAL COMMENTS:

This report was prepared according to the SAS requirements for the analysis of Total Petroleum Hydrocarbons (TPH) as diesel and gasoline and the EPA draft document, "National Functional Guidelines for Organic Data Review," December, 1990 (6/91 Revision).

MS - Matrix Spike; DS - Duplicate Spike

ESATQA9A-6761/HLVS3828.RPT

II. Validation Summary

| | VOA | | BNA | | TPH | |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment |
| HOLDING TIMES | [] | [] | [] | [] | [Y] | [A] |
| GC/MS TUNE/GC PERFORMANCE | [] | [] | [] | [] | [Y] | [] |
| CALIBRATIONS | [] | [] | [] | [] | [Y] | [] |
| FIELD QC | [] | [] | [] | [] | [Y] | [] |
| LABORATORY BLANKS | [] | [] | [] | [] | [Y] | [] |
| SURROGATES | [] | [] | [] | [] | [N/A] | [] |
| MATRIX SPIKE/DUPLICATES | [] | [] | [] | [] | [Y] | [] |
| INTERNAL STANDARDS | [] | [] | [] | [] | [N/A] | [] |
| COMPOUND IDENTIFICATION | [] | [] | [] | [] | [Y] | [] |
| COMPOUND QUANTITATION | [] | [] | [] | [] | [Y] | [] |
| SYSTEM PERFORMANCE | [] | [] | [] | [] | [Y] | [B] |

N/A - Not Applicable

III. Validity and Comments

- A. The 40 CFR 136 technical holding times were not exceeded for any of the samples analyzed.
- B. All results are considered valid and usable for all purposes. All quality control criteria have been met and are considered acceptable.

ANALYTICAL RESULTS
TABLE 1A*

Case No.: LV2838 Memo #28
 Site: Newmark
 Lab.: Region IX, Las Vegas
 Reviewer: Mary Hart, ESAT/ICF Technology, Inc.
 Date: August 5, 1992

Analysis Type: Low Level Water Samples for
 SAS TPH as Diesel and Gasoline
 by LUFT Manual Method

Concentration in mg/L

| Sample Location Sample I.D. | SY0209 | | | SY0210 | | | SY0211 | | | SY0212 | | | SY0213 | | | SY0214 | | | SY0215 D1 | | |
|--------------------------------|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|-----------|-----|-----|
| Parameter | Result | Val | Com | Result | Val | Com |
| TPH as Diesel | 0.5 | U | | 0.5 | U | |
| TPH as Gasoline | 5 | U | | 5 | U | | 5 | U | | 5 | U | | 5 | U | | 5 | U | | 5 | U | |

| Sample Location Sample I.D. | SY0216 D1 | | | SY0217 | | | SY0218 | | | SY0219 | | | SY0220 TB | | | SY0221 TB | | | DIESEL WBLK | | |
|--------------------------------|-----------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|-----------|-----|-----|-----------|-----|-----|----------------|-----|-----|
| Parameter | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| TPH as Diesel | 0.5 | U | | 0.5 | U | | 0.5 | U | | 0.5 | U | | NA | | | NA | | | 0.5 | U | |
| TPH as Gasoline | 5 | U | | 5 | U | | 5 | U | | 5 | U | | 5 | U | | 5 | U | | NA | | |

| Sample Location Sample I.D. Date Analyzed | METHOD BLANK WBLK 07/06/92 | | | METHOD BLANK WBLK 07/07/92 | | | METHOD BLANK WBLK 07/08/92 | | | QUANTITATION LIMIT | | | | | | | | | | | |
|---|----------------------------------|-----|-----|----------------------------------|-----|-----|----------------------------------|-----|-----|-----------------------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|
| Parameter | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| TPH as Diesel | NA | | | NA | | | NA | | | 0.5 | | | | | | | | | | | |
| TPH as Gasoline | 5 | U | | 5 | U | | 5 | U | | 5 | | | | | | | | | | | |

*The requested analytes were analyzed for, but "Not Detected". The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

QL-Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

TABLE 1B
DATA QUALIFIERS

NO QUALIFIERS indicates that the data are acceptable both qualitatively and quantitatively.

- U Indicates that the compound is not detected above the concentration listed.
- L Indicates results which fall below the Quantitation Limit. Results are considered estimates and usable for limited purposes.
- J Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable.
- N Presumptive evidence of the presence of the material. The compound identification is considered to be tentative. The data are usable for limited purposes.
- R Results are rejected and data are invalid for all purposes.

TABLE 2
Sample Quantitation Limits

Case No.: LV2S38 Memo #28
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Mary Hart
 ESAT/ICF Technology, Inc.
 Date: August 5, 1992

| <u>TPH</u> | <u>Units, mg/L</u> | <u>Q</u> | <u>C</u> |
|------------|--------------------|----------|----------|
| Diesel | 0.5 | | |
| Gasoline | 5.0 | | |

Q - Qualifier
 C - Comment

To calculate the sample quantitation limits, multiply QL by the following factors:

| <u>Sample No.</u> | <u>TPH as Diesel and Gasoline</u> |
|-------------------|---------------------------------------|
| All samples | 1.00 |
| Method blanks | 1.00 |

TPO: [] ACTION [] ATTENTION [X] FYI

Region IX

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. LV2S38 Memo #28 LABORATORY Region IX, Las Vegas

SDG NO. SY0213 DATA USER _____

SOW LUFT MANUAL REVIEW COMPLETION DATE August 5, 1992

NO. OF SAMPLES 13 WATER _____ SOIL _____ OTHER _____

REVIEWER [] ESD [X] ESAT [] OTHER, CONTRACT/CONTRACTOR _____

| | VOA | BNA | PEST | TPH |
|------------------------------|-------|-------|-------|-----|
| 1. HOLDING TIMES | _____ | _____ | _____ | 0 |
| 2. GC-MS TUNE/GC PERFORMANCE | _____ | _____ | _____ | 0 |
| 3. INITIAL CALIBRATIONS | _____ | _____ | _____ | 0 |
| 4. CONTINUING CALIBRATIONS | _____ | _____ | _____ | 0 |
| 5. FIELD QC | _____ | _____ | _____ | 0 |
| 6. LABORATORY BLANKS | _____ | _____ | _____ | 0 |
| 7. SURROGATES | _____ | _____ | _____ | F |
| 8. MATRIX SPIKE/DUPLICATES | _____ | _____ | _____ | 0 |
| 9. REGIONAL QC | _____ | _____ | _____ | F |
| 10. INTERNAL STANDARDS | _____ | _____ | _____ | F |
| 11. COMPOUND IDENTIFICATION | _____ | _____ | _____ | 0 |
| 12. COMPOUND QUANTITATION | _____ | _____ | _____ | 0 |
| 13. SYSTEM PERFORMANCE | _____ | _____ | _____ | 0 |
| 14. OVERALL ASSESSMENT | _____ | _____ | _____ | 0 |

O - No problems or minor problems that do not affect data usability.
X - No more than about 5% of the data points are qualified as either estimated or unusable.
M - More than about 5% of the data points are qualified as estimated.
Z - More than about 5% of the data points are qualified as unusable.
F - Not applicable.

TPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

160 Spear Street, Suite 1380
San Francisco, California
94105-1535

415/957-0110

| | |
|------------------|---------------------|
| URS TDMT Only | TDCN: 0702 |
| Project #: 62172 | Loc: 09.71 Type: 71 |



ICF TECHNOLOGY INCORPORATED

MEMORANDUM

DATE: June 10, 1992

SUBJECT: Review of Analytical Data

FROM: Carolyn Studeny *CS*
ESAT Senior Organic Data Reviewer
ICF Technology, Inc.

THROUGH: Jacob Silva
Environmental Scientist
Quality Assurance Management Section
Environmental Services Branch, OPM (P-3-2)

TO: Kevin Mayer
Remedial Project Manager
South Coast Groundwater Section (H-6-4)

Attached are comments resulting from Region 9 review of the following analytical data:

| | |
|-------------------|---|
| SITE: | Newmark |
| EPA SITE ID NO: | J5 |
| CASE/SAS NO.: | LV2S38 Memo #22 |
| SDG NO.: | SY0198 |
| LABORATORY: | Region IX, Las Vegas |
| ANALYSIS: | Total Petroleum Hydrocarbons (TPH) as Diesel and Gasoline |
| SAMPLE NO.: | SY0198 through SY0208 |
| COLLECTION DATE: | April 6 through 21, 1992 |
| REVIEWER: | Mary Hart ESAT/ICF Technology, Inc. |
| TELEPHONE NUMBER: | (415) 882-3030 |

If there are any questions, please contact the reviewer.

Attachment

TPO: [] For Action [X] FYI

cc: Brenda Bettencourt
Larry Zinky - URS SAC

Data Validation Report

Case No.: LV2S38 Memo #22
Site: Newmark
Laboratory: Region IX, Las Vegas
Reviewer: Mary Hart, ESAT/ICF Technology, Inc.
Date: June 10, 1992

I. Case Summary

SAMPLE INFORMATION:

GASOLINE Sample Numbers: SY0198 through SY0208
DIESEL Sample Numbers: SY0198, SY0199, SY0201 through SY0203, SY0207
and SY0208
Concentration and Matrix: Low Level Water
Analysis: Total Petroleum Hydrocarbons (TPH) as Diesel
and Gasoline by the Luft Manual Method
SOW: N/A
Collection Date: April 6 through 21, 1992
Sample Receipt Date: April 8, 10 and 22, 1992
DIESEL Extraction Date: April 10 and 27, 1992
Analysis Date: April 16 through May 5, 1992

FIELD QC:

Trip Blanks (TB): SY0200, SY0205 and SY0206
Field Blanks (FB): SY0204
Equipment Blanks (EB): SY0199
Background Samples (BG): None
Field Duplicates (DI): SY0201 and SY0202

METHOD BLANKS AND ASSOCIATED SAMPLES:

DIESEL WBLK 4/20/92: SY0198, SY0199, SY0201 through SY0203,
SY0201MS and SY0201MSD
DIESEL WBLK 5/05/92: SY0207 and SY0208
GASOLINE WBLK 4/16/92: SY0198 through SY0200, and SY0203 through
SY0205
GASOLINE WBLK 4/17/92: SY0201, SY0201MS, SY0201MSD and SY0202
GASOLINE WBLK 5/04/92: SY0206 through SY0208

TABLES:

1A: Analytical Results with Qualifications
1B: Data Qualifiers
2: Sample Quantitation Limits of Target Compound
List (TCL) Analytes

ADDITIONAL COMMENTS:

This report was prepared according to the SAS requirements for analysis of Total Petroleum Hydrocarbons (TPH) as diesel and gasoline and the EPA draft document, "National Functional Guidelines for Organic Data Review," December, 1990 (6/91 Revision).

II. Validation Summary

| | VOA | | BNA | | TPH | |
|---------------------------|--------------------|-----|--------------------|-----|--------------------|-----|
| | Acceptable/Comment | | Acceptable/Comment | | Acceptable/Comment | |
| HOLDING TIMES | [] | [] | [] | [] | [Y] | [A] |
| GC/MS TUNE/GC PERFORMANCE | [] | [] | [] | [] | [Y] | [] |
| CALIBRATIONS | [] | [] | [] | [] | [Y] | [] |
| FIELD QC | [] | [] | [] | [] | [Y] | [] |
| LABORATORY BLANKS | [] | [] | [] | [] | [Y] | [] |
| SURROGATES | [] | [] | [] | [] | [N/A] | [] |
| MATRIX SPIKE/DUPLICATES | [] | [] | [] | [] | [Y] | [] |
| INTERNAL STANDARDS | [] | [] | [] | [] | [N/A] | [] |
| COMPOUND IDENTIFICATION | [] | [] | [] | [] | [Y] | [] |
| COMPOUND QUANTITATION | [] | [] | [] | [] | [Y] | [] |
| SYSTEM PERFORMANCE | [] | [] | [] | [] | [Y] | [B] |

N/A - Not Applicable

III. Validity and Comments

- A. The 40 CFR 136 technical holding times were not exceeded for any of the samples analyzed.
- B. All results are considered valid and usable for all purposes. All quality control criteria have been met and are considered acceptable.

ANALYTICAL RESULTS
TABLE 1A*

Case No.: LV2S38 Memo #22
Site: Newmark
Lab.: Region IX, Las Vegas
Reviewer: Mary Hart, ESAT/ICP Technology, Inc.
Date: June 10, 1992

Analysis Type: Low Level Water Samples
for SAS TPH as Gasoline
and Diesel

Concentration in mg/L

| Sample Location Sample I.D. | SY0198 | | SY0199 EB | | SY0200 TB | | SY0201 D1 | | SY0202 D1 | | SY0203 | | SY0204 FB | |
|--|-----------|---------|-----------|---------|-----------|---------|-----------|---------|--|---------|--|---------|-------------------------------------|---------|
| Compound | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com |
| Total Petroleum Hydrocarbons as Diesel | 0.5 U | | 0.5 U | | NA | | 0.5 U | | 0.5 U | | 0.5 U | | NA | |
| Total Petroleum Hydrocarbons as Gasoline | 5.0 U | | 5.0 U | | 5.0 U | | 5.0 U | | 5.0 U | | 5.0 U | | 5.0 U | |
| Sample Location Sample I.D. Date Extracted | SY0205 TB | | SY0206 TB | | SY0207 | | SY0208 | | DIESEL Method Blank WBLK 4/20/92 | | DIESEL Method Blank WBLK 5/05/92 | | GAS Method Blank WBLK 4/16/92 | |
| Compound | Result | Val Com | Result | Val Com | Result | Val Com | Result | Val Com |
| Total Petroleum Hydrocarbons as Diesel | NA | | NA | | 0.5 U | | 0.5 U | | 0.5 U | | 0.5 U | | NA | |
| Total Petroleum Hydrocarbons as Gasoline | 5.0 U | | 5.0 U | | 5.0 U | | 5.0 U | | NA | | NA | | 5.0 U | |

*The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

ANALYTICAL RESULTS

TABLE 1A*

Case No.: LV2S38 Memo #22
 Site: Newmark
 Lab.: Region IX, Las Vegas
 Reviewer: Mary Hart, ESAT/ICF Technology, Inc.
 Date: June 10, 1992

Analysis Type: Low Level Water Samples
 for SAS TPH as Gasoline
 and Diesel

Concentration in mg/L

| Sample Location Sample I.D. | GAS Method Blank WBLK 4/17/92 | | | GAS Method Blank WBLK 5/04/92 | | | QUANTITATION LIMITS | | | | | | | | | | | |
|---|-------------------------------------|-----|-----|-------------------------------------|-----|-----|------------------------|-----|-----|--------|-----|-----|--------|-----|-----|--------|-----|-----|
| | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com | Result | Val | Com |
| Compound | | | | | | | | | | | | | | | | | | |
| Total Petroleum Hydrocarbons as Diesel* | NA | | | NA | | | 0.5 U | | | | | | | | | | | |
| Total Petroleum Hydrocarbons as Gasoline | 5.0 U | | | 5.0 U | | | 5.0 U | | | | | | | | | | | |
| Sample Location Sample I.D. | | | | | | | | | | | | | | | | | | |
| Compound | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

*The Sample Quantitation Limits are listed in Table 2.

Val-Validity Refer to Data Qualifiers in Table 1B.

Com.-Comments Refer to the Corresponding Section in the Narrative for each letter.

CRQL-Contract Required Quantitation Limits

NA-Not Analyzed

D1, D2, etc.-Field Duplicate Pairs

FB-Field Blank, EB-Equipment Blank, TB-Travel Blank

BG-Background Sample

TABLE 1B
DATA QUALIFIERS

NO QUALIFIERS indicates that the data are acceptable both qualitatively and quantitatively.

- U Indicates that the compound is not detected above the concentration listed.
- L Indicates results which fall below the Quantitation Limit. Results are considered estimates and usable for limited purposes.
- J Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable.
- N Presumptive evidence of the presence of the material. The compound identification is considered to be tentative. The data are usable for limited purposes.
- R Results are rejected and data are invalid for all purposes.

TABLE 2
Sample Quantitation Limits

Case No.: LV2S38 Memo #22
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Mary Hart
 ESAT/ICF Technology, Inc.
 Date: June 10, 1992

| <u>TPH</u> | <u>Units, mg/L</u> | <u>Q</u> | <u>C</u> |
|------------|--------------------|----------|----------|
| Diesel | 0.5 | | |
| Gasoline | 5.0 | | |

Q - Qualifier
 C - Comment

To calculate the sample quantitation limits, multiply QL by the following factors:

| <u>Sample No.</u> | <u>TPH</u> |
|-------------------|------------|
| All Samples | 1.00 |
| Method blanks | 1.00 |

TPO: [] ACTION [X] FYI

Region IX

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. LV2S38 Memo #22 LABORATORY Region IX, Las Vegas

SDG NO. YK0198 DATA USER _____

SOW Luft Manual 1989 REVIEW COMPLETION DATE June 10, 1992

NO. OF SAMPLES 11 WATER _____ SOIL _____ OTHER _____

REVIEWER [] ESD [X] ESAT [] OTHER, CONTRACT/CONTRACTOR _____

| | VOA | BNA | TPH | |
|------------------------------|-------|-------|----------|----------|
| | | | DIESEL | GAS |
| 1. HOLDING TIMES | _____ | _____ | <u>0</u> | <u>0</u> |
| 2. GC-MS TUNE/GC PERFORMANCE | _____ | _____ | <u>0</u> | <u>0</u> |
| 3. INITIAL CALIBRATIONS | _____ | _____ | <u>0</u> | <u>0</u> |
| 4. CONTINUING CALIBRATIONS | _____ | _____ | <u>0</u> | <u>0</u> |
| 5. FIELD QC | _____ | _____ | <u>0</u> | <u>0</u> |
| 6. LABORATORY BLANKS | _____ | _____ | <u>0</u> | <u>0</u> |
| 7. SURROGATES | _____ | _____ | <u>F</u> | <u>F</u> |
| 8. MATRIX SPIKE/DUPLICATES | _____ | _____ | <u>0</u> | <u>0</u> |
| 9. REGIONAL QC | _____ | _____ | <u>F</u> | <u>F</u> |
| 10. INTERNAL STANDARDS | _____ | _____ | <u>F</u> | <u>F</u> |
| 11. COMPOUND IDENTIFICATION | _____ | _____ | <u>0</u> | <u>0</u> |
| 12. COMPOUND QUANTITATION | _____ | _____ | <u>0</u> | <u>0</u> |
| 13. SYSTEM PERFORMANCE | _____ | _____ | <u>0</u> | <u>0</u> |
| 14. OVERALL ASSESSMENT | _____ | _____ | <u>0</u> | <u>0</u> |

- O - No problems or minor problems that do not affect data usability.
- X - No more than about 5% of the data points are qualified as either estimated or unusable.
- M - More than about 5% of the data points are qualified as estimated.
- Z - More than about 5% of the data points are qualified as unusable.
- F - Not Applicable

TPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

TO: Jerry Vail, ESAT Team Manager
FROM: Terry Stumph, ESAT Regional Project Officer

TJ Stumph 5/29/92

For Completion by EPA

- Request for Unvalidated Data Summary Report (Table 1A)
- Request for Data Validation

Program: \$F 110-034 Non-\$F 110-035
 Lab: Reg. 9 Case # _____ SAS # 112538 SDG # 340199

Tracking Dates

Data Package Received at Region 9: 05/29/92
 Table 1A/Validation Requested: _____
 Date Due: 06/25/92
 Table 1A/Data Validation Report Received: _____
 Days Late: _____
 Completed and Sent to RPM/PM: _____

EPA Work-Unit Requestor: JACOB SILVA

For Completion by ESAT

(Please complete and return this form with the completed task.)

Site Newmark Project \$F
 Site ID # _____ Memo # 22
 Analyses SAS - OR Matrix W Number 11

List the Sample Numbers:
SY0198 → SY0208

Describe the Analyses:
Low level for SAS TPH/Gasoline & Diesel



Blanks: SY0199 (EB), 0200 (TB), 0204 (FB), 0205 (TB), 0206 (TB)

Background: None

Date(s) Sampled:
04/06, 07, 09, 20, 21/92

Duplicates: SY0202 & 0201

EPA Project Officer/Mail Code: Kevin Mayer / H-6-4
 Sampler/Agency: Larry Zinky / URS

Date Table 1A/Validation Assigned: 06/01/92 06/01/92
 Date Table 1A/Validation Completed: 06/09/92 6/10/92
 Date Table 1A/Validation Sent to EPA: 6/10/92 6/10/92
 Reviewer/Staff: MARY HART, ICF Due: 06/26/92

Please indicate if the laboratory did not comply with the contract, and/or if the SAS request was not adequate.

Table (A's to Sampler

Version 8 (expires 9/30/92)

ICF RECEIVED JUN 01 1992

| | | |
|------------------|-------------|----------|
| URS TDMT Only | TDCN: C.682 | |
| Project #: 62172 | Loc: 09, 71 | Type: 71 |



ICF TECHNOLOGY INCORPORATED

MAY 22 1992
MEMORANDUM

DATE: May 19, 1992

SUBJECT: Review of Analytical Data

FROM: Carolyn Studeny *CS*
ESAT Senior Organic Data Reviewer
ICF Technology, Inc.

THROUGH: Jacob Silva *J.S.*
Environmental Scientist
Quality Assurance Management Section
Environmental Services Branch, OPM (P-3-2)

TO: Kevin P. Mayer
Remedial Project Manager
South Coast Groundwater Section (H-6-4)



Attached are comments resulting from Region 9 review of the following analytical data:

| | |
|-------------------|---|
| SITE: | Newmark |
| EPA SITE ID NO: | J5 |
| CASE/SAS NO.: | LV2S38 Memo #14 |
| SDG NO.: | SY0153 |
| LABORATORY: | Region IX, Las Vegas |
| ANALYSIS: | SAS TPH as Gasoline & Diesel by the LUFT Method |
| SAMPLE NO.: | 9 Water Samples (See Case Summary) |
| COLLECTION DATE: | March 10 through 26, 1992 |
| REVIEWER: | Margaret L. May ESAT/ICF Technology, Inc. |
| TELEPHONE NUMBER: | (415) 882-3174 |

If there are any questions, please contact the reviewer.

Attachment

TPO: [] For Action [X] FYI

cc: Brenda Bettencourt

~~Larry Zinky, URS SAC~~

Data Validation Report

Case No.: LV2S38 Memo #14
 Site: Newmark
 Laboratory: Region IX, Las Vegas
 Reviewer: Margaret L. May, ESAT/ICF Technology, Inc.
 Date: May 19, 1992

I. Case Summary

SAMPLE INFORMATION:

TPH Sample Numbers: SY0153, SY0172, SY0173, SY0184 through
 SY0186, SY0194, SY0195 and SY0197
 Concentration and Matrix: Low Level Water
 Analysis: SAS TPH as Gasoline & Diesel by the LUFT
 Method
 SOW: Not Applicable
 Collection Date: March 10 through 26, 1992
 Sample Receipt Date: March 13 through 27, 1992
 Extraction Date: March 18 through 30, 1992
 Analysis Date: March 20 through April 1, 1992

FIELD QC:

Trip Blanks (TB): SY0173, SY0186 and SY0197
 Field Blanks (FB): None
 Equipment Blanks (EB): SY0194
 Background Samples (BG): None
 Field Duplicates (D1): SY0195/SY0196*

METHOD BLANKS AND ASSOCIATED SAMPLES:

DWBLK1: SY0153, SY0172 and SY0173
 DWBLK2: SY0184, SY0184MS, SY0184MSD and SY0185
 DWBLK3: SY0194 and SY0195
 GWBLK1: SY0153, SY0172 and SY0173
 GWBLK2: SY0184, SY0184MS, SY0184MSD, SY0185 and
 SY0186
 GWBLK3: SY0194, SY0195 and SY0197

TABLES:

1A: Analytical Results with Qualifications
 1B: Data Qualifiers
 2: Sample Quantitation Limits of Target Compound
 List (TCL) Analytes

ADDITIONAL COMMENTS:

Sample numbers SY0186 and SY0197 were analyzed for TPH as gasoline only.

*Analyses for TPH as gasoline and diesel were not requested for sample number SY0196, the field duplicate of sample number SY0195.

This report was prepared according to the SAS requirements for the analysis of TPH in water and the EPA draft document, "National Functional Guidelines for Organic Data Review," December, 1990 (6/91 Revision).

MS - Matrix Spike; MSD - Matrix Spike Duplicate

ESATQA9A-6346/TLV2S38.RPT

II. Validation Summary

| | VOA | | BNA | | TPH | |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment | Acceptable/Comment |
| HOLDING TIMES | [] | [] | [] | [] | [Y] | [A] |
| GC/MS TUNE/GC PERFORMANCE | [] | [] | [] | [] | [Y] | [] |
| CALIBRATIONS | [] | [] | [] | [] | [Y] | [] |
| FIELD QC | [] | [] | [] | [] | [Y] | [] |
| LABORATORY BLANKS | [] | [] | [] | [] | [Y] | [] |
| SURROGATES | [] | [] | [] | [] | [N/A] | [] |
| MATRIX SPIKE/DUPLICATES | [] | [] | [] | [] | [Y] | [] |
| INTERNAL STANDARDS | [] | [] | [] | [] | [N/A] | [] |
| COMPOUND IDENTIFICATION | [] | [] | [] | [] | [Y] | [] |
| COMPOUND QUANTITATION | [] | [] | [] | [] | [Y] | [] |
| SYSTEM PERFORMANCE | [] | [] | [] | [] | [Y] | [B] |

N/A - Not Applicable

III. Validity and Comments

- A. Sample number SY0153 was collected on March 10, 1992 and extracted, 8 days later, on March 18, 1992. Although this exceeds the 7 day 40 CFR 136 technical holding time by 1 day, this is not expected to affect the quality of the data.

The 40 CFR 136 technical holding times were not exceeded for any of the other samples extracted and analyzed.

- B. All other results are considered valid and usable for all purposes. All other quality control criteria have been met and are considered acceptable.