APPENDIX E

DATA VALIDATION REPORTS

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Bechtel Environmental
1230 Columbia Street, Suite 400
San Diego, CA 92101
Attn: Mr. James Jordan

December 4, 2002

Project Name : NAF El Centro
Project # : CTO 043

On November 20, 2002 the following data packages were received by Laboratory Data Consultants, Inc. from Bechtel Environmental. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 9405:

SDG #	Fraction
39493, 39505, 39521, 39540, 39560, 39540/39572/39573, 39572, 39573, 39603, 39614, 39643, 39649	Volatiles, Chlorinated Pesticides & PCBs, Metals, Wet Chemistry, TPH as Gasoline, TPH as Diesel

The above SDGs were reviewed using Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- NFESC Special Publication SP-2056-ENV, Navy Installation Restoration Chemical Data Quality Manual, Naval Facilities Engineering Command, September 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, February 1994
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

The data validators did utilize their professional judgement when evaluating the data to achieve the most complete and accurate assessment of the data. The data packages were reviewed according to the above stated validation procedures.

For GC/MS volatile analyses, the primary findings consisted of:

a) Initial and continuing calibration factors exceeded acceptance criteria in

SDGs 39493, 39505, 39521, 39540, 39560, 39572, 39573, 39603, 39614, 39643, and 39649. The associated non-detect results for tert-butyl alcohol were qualified as unusable in these SDGs. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Methylene chloride was detected in the method and field blanks. Since the laboratory met the protocol requirement, this finding should be considered advisory.

c) Surrogate percent recoveries exceeded acceptance criteria for sample C043G001 in SDG 39573.

d) Matrix spike/matrix spike duplicate analyses were not performed for all batches in SDGs 39493, 39505, 39521, 39540, 39560, 39572, 39573, 39614, and 39643.

e) Matrix spike/matrix spike duplicate percent recoveries exceeded acceptance criteria for tert-butyl alcohol in SDGs 39643 and 39649. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Laboratory control sample relative percent differences exceeded acceptance criteria for hexachlorobutadiene and naphthalene in SDGs 39614 and 39643.

g) Internal standard areas exceeded acceptance criteria for samples C043G007 and C043T022 in SDG 39649 and several samples in SDG 39643. Since the laboratory met the protocol requirement, this finding should be considered advisory

h) Naphthalene in sample C043G029 in SDG 39493, benzene in sample C043G006 in SDG 39603, and several compounds in samples C043G051 and C043G052 in SDG 39643 were reported above the calibration range. Since the laboratory met the protocol requirement, this finding should be considered advisory.

i) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.1

For pesticides and PCBs analyses, the primary findings consisted of:

a) Continuing calibration factors exceeded acceptance criteria for several compounds in SDG 39540/39572/39573. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Matrix spike/matrix spike duplicate percent recoveries exceeded acceptance criteria for several compounds in SDG 39540/39572/39573. Since the laboratory met the protocol requirement, this finding should be considered advisory.

c) Laboratory control sample analyses percent recoveries exceeded acceptance criteria for endrin ketone in SDG 39540/39572/39573.

For TPH as gasoline analyses, the primary findings consisted of:

a) Continuing calibration factors exceeded acceptance criteria in SDGs 39573 and 39614.

b) Surrogate percent recoveries exceeded acceptance criteria for samples C043G051 and C043G052 in SDG 39643. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Matrix spike/matrix spike duplicate analyses were not performed for all batches in SDGs 39505, 39521, 39540, 39560, 39573, 39603, 39614, 39643, and 39649.

c) Matrix spike/matrix spike duplicate percent recoveries and relative percent differences exceeded acceptance criteria in SDGs 39493 and 39643. Since the laboratory met the protocol requirement, this finding should be considered advisory.

d) TPH as gasoline in samples C043G051 and C043G052 in SDG 39643 exceeded calibration range. Since the laboratory met the protocol requirement, this finding should be considered advisory.

e) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

For TPH as diesel analyses, the primary findings consisted of:

a) Surrogate percent recoveries exceeded acceptance criteria for samples C043G029 and C043G044 in SDG 39493. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Matrix spike/matrix spike duplicate analyses were not performed for all batches in SDGs 39493, 39505, 39521, 39573. 39603, 39614, 39643, and 39649.

c) TPH as diesel in samples C043G029 and C043G044 in SDG 39493 and sample C043G024 in SDG 39505 exceeded calibration range. Since the

laboratory met the protocol requirement, this finding should be considered advisory.

d) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

For metals analyses, the primary findings consisted of:

a) Zinc was detected in the blanks. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) ICP interference check sample analysis was not spiked for tin in SDGs 39572, 39540, 39560, 39573, and 39614.

c) ICP interference check sample percent recoveries exceeded acceptance criteria for zinc, potassium and iron, in SDG 39572, zinc in SDGs 39560 and 39573, and zinc and iron in SDG 39614.

d) Matrix spike and duplicate analyses were not performed for all batches in SDG 39572., 396573, and 39614

e) Calcium, magnesium and sodium in samples C043G023 and C043G014 in SDG 39572 and sample C043G021 in SDG 39560, calcium and sodium in samples C043G022 and C043G042 in SDG 39614 and sodium in sample C043G016 in SDG 39572 and samples C043G015 and C043G017 in SDG 39573 exceeded calibration range. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

For wet chemistry analyses, the primary findings consisted of:

a) A blank was not used to establish the Initial calibration for chloride, fluoride, nitrate as nitrogen, nitrite as nitrogen , phosphate as P, and sulfate in SDGs 39540, 39560, 39572, and 39614.

b) Matrix spike and duplicate analyses were not performed for all batches in SDGs 39572 and 39614.

c) Matrix spike percent recoveries exceeded acceptance criteria for chloride, sulfate and nitrite as nitrogen in SDG 39560. Since the laboratory met the protocol requirement, this finding should be considered advisory.

d) Duplicate sample analysis relative percent difference exceeded acceptance criteria for sulfate in SDG 39560. Since the laboratory met the protocol requirement, this finding should be considered advisory.

e) Chloride and sulfate in sample C043G021 in SDG 39560 and samples C043G022 and C043G042 in SDG 39614 and sulfate in sample C043G023 in SDG 39572 exceeded calibration range. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

In general, the data for all analyses appear usable with the limitations noted in the Data Validation Reports. Data validation flags were noted on the Laboratory Form 1s and included with each validation report.

Sincerely,

Richard M. Amano
President/Principal Chemist

Attachment 1

LDC #9405 (Bechtel Environmental-San Diego / NAF El Centro, CTO#43)

LDC	SDG#	DATE REC'D	DATE DUE	VOA (8260B)		Pest. /PCBs (8081/2)		Metals (SW846)		Cu (6010B)		TPH-G (8015)		TPH-D (8015)		Alk (2320B)		Cl, F, SO_4, P (300.0)		NO_3-N NO_2-N (300.0)		TDS (160.1)		pH (150.1)													
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	39493	11-20-02	12-6-02	5	0	-	-	-	-	-	-	7	0	6	0	-	-	-	-	-	-	-	-	-	-												
B	39505	11-20-02	12-6-02	8	0	-	-	-	-	-	-	6	0	6	0	-	-	-	-	-	-	-	-	-	-												
C	39521	11-20-02	12-6-02	8	0	-	-	-	-	-	-	7	0	3	0	-	-	-	-	-	-	-	-	-	-												
D	39540	11-20-02	12-6-02	7	0	-	-	1	0	-	-	7	0	1	0	1	0	1	0	1	0	-	-	-	-												
E	39560	11-20-02	12-6-02	4	0	-	-	5	0	-	-	4	0	-	-	5	0	5	0	5	0	5	0	3	0												
F	39540/39572/39573	11-20-02	12-6-02	-	-	8	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
F	39540/39572/39573	11-20-02	12-6-02	-	-	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
G	39572	11-20-02	12-6-02	3	0	-	-	3	0	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0												
G	39572	11-20-02	12-6-02	0	0	-	-	4	0	-	-	-	-	-	-	1	0	1	0	1	0	1	0	1	0												
H	39573	11-20-02	12-6-02	6	0	-	-	5	0	1	0	2	0	1	0	-	-	-	-	-	-	-	-	-	-												
I	39603	11-20-02	12-6-02	6	0	-	-	-	-	-	-	5	0	4	0	-	-	-	-	-	-	-	-	-	-												
J	39614	11-20-02	12-6-02	4	0	-	-	5	0	-	-	4	0	3	0	3	0	3	0	3	0	3	0	3	0												
K	39643	11-20-02	12-6-02	9	0	-	-	-	-	-	-	9	0	4	0	-	-	-	-	-	-	-	-	-	-												
L	39649	11-20-02	12-6-02	2	0	-	-	-	-	-	-	2	0	1	0	-	-	-	-	-	-	-	-	-	-												
Total	B			62	0	9	0	23	0	1	0	53	0	29	0	10	0	10	0	10	0	9	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Level IV validation (all other cells are Level III validation)

9405ST.BEC

NAF El Centro, CTO 043
Data Validation Reports
LDC# 9405

Volatiles

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 2, 2002

LDC Report Date: December 3, 2002

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39493

Sample Identification

C043G028
C043G029
C043G029DL
C043R001
C043T001

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/14/02	tert-Butyl alcohol	0.0045 (≥0.05)	C043G028 C043G029 C043R001 C043T001 021014W-MB 021015W-MB	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/15/02	tert-Butyl alcohol	0.0051 (≥0.05)	C043R001 021015W-MB	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T001 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C043T001	10/2/02	Methylene chloride	0.52 ug/L	C043G028 C043G029 C043R001

Sample C043R001 was identified as an equipment rinsate. No volatile contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C043R001	10/2/02	Methylene chloride Chloroform	1.6 ug/L 0.20 ug/L	C043G028 C043G029

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
C043G028	Methylene chloride	1.1 ug/L	1.1U ug/L
C043G029	Methylene chloride	1.4 ug/L	1.4U ug/L
C043R001	Methylene chloride	1.6 ug/L	1.6U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G028 C043G029 C043T001	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G029	Naphthalene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G029	Naphthalene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 39493

SDG	Sample	Compound	Flag	A or P	Reason
39493	C043G028 C043G029 C043R001 C043T001	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
39493	C043R001	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
39493	C043G028 C043G029 C043T001	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
39493	C043G029	Naphthalene	J (all detects)	A	Compound quantitation and CRQLs
39493	C043G029	Naphthalene	R	A	Overall assessment of data

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 39493

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 39493

SDG	Sample	Compound	Modified Final Concentration	A or P
39493	C043G028	Methylene chloride	1.1U ug/L	A
39493	C043G029	Methylene chloride	1.4U ug/L	A
39493	C043R001	Methylene chloride	1.6U ug/L	A

94057A.

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G028
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39198
QCG: $86U2-021014B-53523

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1014S14
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:16 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G028
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39198
QCG: $86U2-021014B-53523

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	0.32 J	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.1 U(6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	99.8	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1014S14
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 10/30/02 11:57:17 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G029
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39199
QCG: $86U2-021014B-53523

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	42	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected U	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	12	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected U	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	12	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected U	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

E = The reported value exceeds linear range.

Run #: 1014S15
Instrument: Sweetpea
Sequence: S021014
Dilution Factor: 1.0
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:17 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G029
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39199
QCG: $86U2-021014B-53523

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	1.9	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected U	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	17	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected U	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	4.3	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	13	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected U	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.4 U(6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	3.9	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	6.2	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	130 E R(14)	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	8.3	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	3.8	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	2.7	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	4.7	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	1.5	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	106	62-139		%	10/15/02	10/15/02

E = The reported value exceeds linear range.

Run #: 1014S15
Instrument: Sweetpea
Sequence: S021014
Dilution Factor: 1.0
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:17 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39493
APPL ID: AP39199

CLIENT ID: C043G029

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1,2,3,4-TETRAMETHYLBENZENE	488-23-3	23.93	T	24	UG/L	15-Oct-20
EPA 8260B	1,2,4,5-TETRAMETHYLBENZENE	95-93-2	24.68	T	42	UG/L	15-Oct-20
EPA 8260B	1-ETHYL-2,4-DIMETHYLBENZENE	874-41-9	23.18	T	16	UG/L	15-Oct-20
EPA 8260B	1-ETHYL-2-METHYL-BENZENE	611-14-3	21	T	22	UG/L	15-Oct-20
EPA 8260B	1-ETHYL-3-METHYLBENZENE	620-14-4	20.46	T	17	UG/L	15-Oct-20
EPA 8260B	1-METHYL-3-(1-METHYLETHYL) BENZENE	535-77-3	23.05	T	8.0	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-	496-11-7	22.63	T	16	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	17059-48-2	24.35	T	8.7	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-4-METHYL-	824-22-6	24.85	T	40	UG/L	15-Oct-20
EPA 8260B	2,3-DIHYDRO-1-METHYLINDENE	27133-93-3	23.54	T	30	UG/L	15-Oct-20
EPA 8260B	2,3-DIHYDRO-5-METHYL-1H-INDENE	874-35-1	24.53	T	14	UG/L	15-Oct-20
EPA 8260B	BENZENE, (2-METHYL-1-PROPENYL)-	768-49-0	23.39	T	20	UG/L	15-Oct-20
EPA 8260B	BENZENE, 2-ETHYL-1,3-DIMETHYL-	2870-04-4	23.74	T	15	UG/L	15-Oct-20
EPA 8260B	DIETHYL BENZENE (PARA?)	25340-17-4	22.38	T	14	UG/L	15-Oct-20

12/3/02

Printed: 10/30/02 4:15:02 PM

EPA 8260B Water - UST - Dilution

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G029
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39199
QCG: $86UWD-021015A-53527

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Naphthalene	87	5.0	0.80	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	113	62-139		%	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 4-Bromofluorobenz	105	75-125		%	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: Dibromofluorometh	101	75-125		%	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: Toluene-D8	99.0	75-125		%	10/15/02	10/15/02

Run #: 1015S07
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 10
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:17 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043R001
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39201
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S05
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:18 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043R001
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39201
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	0.20 J	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected U	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.6 U (18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (SA 5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	97.2	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S05
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:18 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043T001
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39202
QCG: $86U2-021014B-53523

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1014S17
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:19 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043T001
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39202
QCG: $86U2-021014B-53523

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	0.52 J	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	87.9	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1014S17
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:19 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39493

CLIENT ID: C043T001

APPL ID: AP39202

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1-METHYL-NAPHTHALENE	90-12-0	17.15	T	5.8 N	UG/L	15-Oct-20

12/3/02

Printed: 10/30/02 4:15:02 PM

LDC #: 9405A1
SDG #: 39493
Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 11-25-02
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/02/02
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD, r^2
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	none/P (1,2,5) C043G030 MS/D (3,4)
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	SW ~~N~~	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	SW ~~A~~	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	TB= 5 ER= 4

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank
ER= Equipment Rinsate

Validated Samples:
All H_2Os

1 1	C043G028	11		21		31	
2 1	C043G029	12		22		32	
3 2	C043G029DL	13		23		33	
4 2	C043R001	14		24		34	
5 1	C043T001	15		25		35	
6 1	021014W-MB	16		26		36	
7 2	021015W-MB	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. Benzyl chloride
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Diethyl ether	FFF. 1,3-Dichlorobenzene	XXX. Ethyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 940SA1
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
(Y) N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
(Y) N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? $r^2 \geq 0.990$
(Y) N N/A Did the initial calibration meet the acceptance criteria?
Y (N) N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-14-02	ICAL	ZZZ		0.0045	~~All~~ BUCS, 1-2,4-5	J/UJ/A R

INICAL1SB

LDC #: 9405A1
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-15-02	1015S02W	ZZZ		0.0051	4, 021015W-MB	J/UJ/A R

CONCAL1SB

SDG #: 39493

Field Blanks

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-2-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: 1, 2, 4, ~~5~~

Compound	Blank ID	Sample Identification								
	5	1	2	4						
Methylene chloride	0.52	1.1/u	1.4/u	1.6/u						
Acetone										
Chloroform										
CRQL										

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-2-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: 1, 2

Compound	Blank ID	Sample Identification								
	4	1	2							
Methylene chloride	1.6	1.1/u	1.4/u							
Acetone										
Chloroform	0.20									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.1S

LDC #: 940SA1
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and CRQLs

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		2	MMM >Calib. range		J dets / A

Comments: See sample calculation verification worksheet for recalculations

COMQUA.1SB

LDC #: 94051
SDG #: 39293

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: a
2nd Reviewer: r

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		2	MNM not used		R/A

Comments:

OVR.1SB

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 3, 2002

LDC Report Date: December 3, 2002

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39505

Sample Identification

C043G030
C043G031
C043G025
C043G024
C043R002
C043T002
C043G030MS
C043G030MSD

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/14/02	tert-Butyl alcohol	0.0045 (≥0.05)	All samples in SDG 39505	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/15/02	tert-Butyl alcohol	0.0051 (≥0.05)	All samples in SDG 39505	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T002 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C043T002	10/3/02	Methylene chloride	1.3 ug/L	C043G030 C043G031 C043G025 C043G024 C043R002

Sample C043R002 was identified as an equipment rinsate. No volatile contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C043R002	10/3/02	Methylene chloride Chloroform Bromodichloromethane Dibromochloromethane Trichloroethene	1.2 ug/L 0.34 ug/L 0.37 ug/L 0.34 ug/L 0.32 ug/L	C043G030 C043G031 C043G025 C043G024

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
C043G030	Methylene chloride	1.0 ug/L	1.0U ug/L
C043G031	Methylene chloride	1.0 ug/L	1.0U ug/L
C043G025	Methylene chloride	1.2 ug/L	1.2U ug/L
C043R002	Methylene chloride	1.2 ug/L	1.2U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 39505

SDG	Sample	Compound	Flag	A or P	Reason
39505	C043G030 C043G031 C043G025 C043G024 C043R002 C043T002	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
39505	C043G030 C043G031 C043G025 C043G024 C043R002 C043T002	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
39505	C043G030 C043G031 C043G025 C043G024 C043R002 C043T002	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 39505

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 39505

SDG	Sample	Compound	Modified Final Concentration	A or P
39505	C043G030	Methylene chloride	1.0U ug/L	A
39505	C043G031	Methylene chloride	1.0U ug/L	A
39505	C043G025	Methylene chloride	1.2U ug/L	A
39505	C043R002	Methylene chloride	1.2U ug/L	A

9405B

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G030
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39247
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S09
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 3:29:49 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G030
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39247
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	0.40 J	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected U	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.0 U (6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	0.26 J	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected U	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	0.50	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected U	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A,5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	0.38 J	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	104	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S09
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

1/3/03

GC w/ MDL SelfCalc: 10/30/02 3:29:49 PM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39505
APPL ID: AP39247

CLIENT ID: C043G030

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1,4-DIETHYL-BENZENE	105-05-5	22.54	T	5.2	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 1-ETHYL-2,3-DIHYDRO-	4830-99-3	25.67	T	7.0	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1,3-TRIMETH	2613-76-5	26.69	T	21	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1,6-TRIMETH	14276-95-0	25.97	T	13	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	4912-92-9	25.79	T	53	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,2-DIMETHYL-	17057-82-8	24.17	T	9.9	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,3-DIMETHYL-	4175-53-5	24.52	T	14	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,4,7-TRIMETH	54340-87-3	26.41	T	7.6	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	17059-48-2	25.52	T	33	UG/L	15-Oct-20
EPA 8260B	3,4-DIHYDRO-1-METHYLNAPHTHALENE	4373-13-1	21.51	T	4.6	UG/L	15-Oct-20
EPA 8260B	4-ETHYLINDAN	66256-38-0	23.54	T	8.5	UG/L	15-Oct-20
EPA 8260B	BENZENE, 1-ETHYL-4-(1-METHYLETHYL)-	4218-48-8	23.37	T	4.9	UG/L	15-Oct-20

12/3/02

Printed: 10/30/02 3:32:16 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G031
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39248
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S10
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:20 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G031
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39248
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.0 U (6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	0.50	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected U	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A,5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	0.38 J	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	89.2	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S10
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:20 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39505

APPL ID: AP39248

CLIENT ID: C043G031

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1-METHYL-3-(1-METHYLETHYL) BENZENE	535-77-3	23.44	T	5.2 NJ	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1,5-TRIMETH	40650-41-7	26.12	T	27.6	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,3-DIMETHYL-	4175-53-5	23.77	T	9.4	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	17059-48-2	24.53	T	17	UG/L	15-Oct-20
EPA 8260B	BENZENE, (2,2-DIMETHYL-1-METHYLENE	5676-29-9	25.76	T	6.3	UG/L	15-Oct-20
EPA 8260B	BENZENE, (2-METHYL-1-BUTENYL)-	56253-64-6	23.55	T	11	UG/L	15-Oct-20
EPA 8260B	BENZENE, 1,4-DIMETHYL-2-(1-METHYLET	4132-72-3	24.8	T	6.7	UG/L	15-Oct-20
EPA 8260B	BENZENE, PENTAMETHYL-	700-12-9	27.72	T	19.9	UG/L	15-Oct-20

1/23/02

Printed: 10/30/02 3:32:16 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G025
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39249
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

Run #: 1015S11
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

10/31/02

GC w/ MDL SelfCalc: 10/30/02 11:57:20 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G025
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39249
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.2 U (6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A,5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	91.3	62-139		%	10/15/02	10/15/02

Run #: 1015S11
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

10/22/02

GC w/ MDL SelfCalc: 10/30/02 11:57:21 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39505
APPL ID: AP39249

CLIENT ID: C043G025

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	4912-92-9	23.77	T	3.9	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,3-DIMETHYL-	4175-53-5	24.52	T	6.9	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	17059-48-2	25.77	T	7.0	UG/L	15-Oct-20
EPA 8260B	BENZENE, (1,1-DIMETHYL-2-PROPENYL)-	18321-36-3	24.18	T	4.2	UG/L	15-Oct-20
EPA 8260B	BUTANE, 2,3-DIMETHYL-	79-29-8	8.42	T	6.6	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,2,3-TRIMETHYL-, (1.A	2613-69-6	14.21	T	2.9	UG/L	15-Oct-20

10/31/02

Printed: 10/30/02 3:32:16 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G024
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39250
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	0.41	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	18	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected U	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S12
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:21 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G024
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39250
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	4.1	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	0.70	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	0.37 J	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	Not detected	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	3.2	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	180 J (5A, 5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	0.61	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	97.3	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1015S12
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:21 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39505
APPL ID: AP39250

CLIENT ID: C043G024

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1,2,4,5-TETRAMETHYLBENZENE	95-93-2	23.44	T	30 NJ	UG/L	15-Oct-20
EPA 8260B	1,4-DIETHYL-BENZENE	105-05-5	22.39	T	52	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,3-DIMETHYL-	4175-53-5	25.81	T	44	UG/L	15-Oct-20
EPA 8260B	2,3-DIHYDRO-1-METHYL-1H-INDENE	767-58-8	23.55	T	44	UG/L	15-Oct-20
EPA 8260B	ACETONE	67-64-1	7.31	T	9.6	UG/L	15-Oct-20
EPA 8260B	BUTANE, 2,3-DIMETHYL-	79-29-8	8.42	T	73	UG/L	15-Oct-20
EPA 8260B	BUTANE, 2-METHYL-	78-78-4	6.07	T	34	UG/L	15-Oct-20
EPA 8260B	CYCLOHEXANE, 1,1,3-TRIMETHYL-	3073-66-3	16.88	T	44	UG/L	15-Oct-20
EPA 8260B	CYCLOHEXANE, 1,1-DIMETHYL-	590-66-9	15.61	T	30	UG/L	15-Oct-20
EPA 8260B	CYCLOHEXANE, 1,3-DIMETHYL-, TRANS	2207-03-6	15.91	T	41	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,1,3-TRIMETHYL-	4516-69-2	13.5	T	29	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,1-DIMETHYL-	1638-26-2	12.11	T	69	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,2,4-TRIMETHYL-, (1.A	16883-48-0	13.97	T	30	UG/L	15-Oct-20
EPA 8260B	PENTANE, 2,3-DIMETHYL-	565-59-3	11.68	T	31	UG/L	15-Oct-20
EPA 8260B	PENTANE, 3-METHYL-	96-14-0	8.96	T	32	UG/L	15-Oct-20

12/3/02

Printed: 10/30/02 3:32:16 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043R002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39251
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	0.37 J J	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1015S13
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:22 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043R002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39251
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	0.34	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected U	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	0.34 J	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected U	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.2 U (18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	0.32 J	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected U	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A, 5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	85.8	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S13
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:22 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043T002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39252
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

Run #: 1015S08
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/9/02

GC w/ MDL SelfCalc: 10/30/02 11:57:22 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043T002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39252
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.3	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R15A,5B	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	106	62-139		%	10/15/02	10/15/02

Run #: 1015S08
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:22 AM

LDC #: 9405B1

SDG #: 39505

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11-25-02

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10-3-02
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD, r^2
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	ER = 5 TB = 6

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank
ER = Equipment Rinsate

Validated Samples:
All H_2Os

1	C043G030	11		21		31	
2	C043G031	12		22		32	
3	C043G025	13		23		33	
4	C043G024	14		24		34	
5	C043R002	15		25		35	
6	C043T002	16		26		36	
7	C043G030MS	17		27		37	
8	C043G030MSD	18		28		38	
9	021015W-MB	19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. Benzyl chloride
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Diethyl ether	FFF. 1,3-Dichlorobenzene	XXX. Ethyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 940581
SDG #: 39505

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? $r^2 \geq 0.990$
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-14-02	ICAL	222		0.0045	All + BLK	J/~~UJ~~/A R

INICAL1SB

LDC #: 9405B1
SDG #: 39505

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-15-02	1015S02W	ZZZ		0.0051	All + BLK	J/~~UJ~~/A
							R

CONCAL1SB

SDG #: 91505

Field Blanks

Page: 1 of 1
Reviewer: DM
2nd Reviewer: K

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-3-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples: 1-5

Compound	Blank ID	Sample Identification								
	6	1	2	3	5					
Methylene chloride	1.3	1.0/u	1.0/u	1.2/u	1.2/u					
Acetone										
Chloroform										
CRQL										

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-3-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples: 1-4

Compound	Blank ID	Sample Identification								
	5	1	2	3						
Methylene chloride	1.2	1.0/u	1.0/u	1.2/u						
Acetone										
Chloroform	0.34									
P	0.37									
T	0.34									
S	0.32									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.1S

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 4, 2002

LDC Report Date: December 3, 2002

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39521

Sample Identification

C043G026
C043G043
C043G027
C043G032
C043G036
C043G037
C043R003
C043T003

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/14/02	tert-Butyl alcohol	0.0045 (≥0.05)	All samples in SDG 39521	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/15/02	tert-Butyl alcohol	0.0051 (≥0.05)	C043G026 C043G043 C043G027 C043G032 021015W-MB	J (all detects) R (all non-detects)	A
10/16/02	tert-Butyl alcohol	0.0043 (≥0.05)	C043G036 C043G037 C043R003 C043T003 021016W-MB	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T003 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C043T003	10/4/02	Methylene chloride	1.1 ug/L	C043G026 C043G043 C043G027 C043G032 C043G036 C043G037 C043R003

Sample C043R003 was identified as an equipment rinsate. No volatile contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C043R003	10/4/02	Methylene chloride Chloroform Bromodichloromethane Dibromochloromethane	3.2 ug/L 0.31 ug/L 0.35 ug/L 0.32 ug/L	C043G026 C043G043 C043G027 C043G032 C043G036 C043G037

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
C043G026	Methylene chloride	0.57 ug/L	1.0U ug/L
C043G043	Methylene chloride	0.72 ug/L	0.72U ug/L
C043G027	Methylene chloride	1.7 ug/L	1.7U ug/L
C043G032	Methylene chloride	0.78 ug/L	1.0U ug/L
C043G036	Methylene chloride	0.90 ug/L	1.0U ug/L
C043R003	Methylene chloride	3.2 ug/L	3.2U ug/L
C043G037	Methylene chloride	14 ug/L	14U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G036 C043G037 C043R003 C043T003	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 39521

SDG	Sample	Compound	Flag	A or P	Reason
39521	C043G026 C043G043 C043G027 C043G032 C043G036 C043G037 C043R003 C043T003	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
39521	C043G026 C043G043 C043G027 C043G032 C043G036 C043G037 C043R003 C043T003	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
39521	C043G036 C043G037 C043R003 C043T003	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 39521

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 39521

SDG	Sample	Compound	Modified Final Concentration	A or P
39521	C043G026	Methylene chloride	1.0U ug/L	A
39521	C043G043	Methylene chloride	0.72U ug/L	A
39521	C043G027	Methylene chloride	1.7U ug/L	A
39521	C043G032	Methylene chloride	1.0U ug/L	A
39521	C043G036	Methylene chloride	1.0U ug/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
39521	C043R003	Methylene chloride	3.2U ug/L	A
39521	C043G037	Methylene chloride	14U ug/L	A

C

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G026
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39313
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1015S16
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:23 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G026
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39313
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	0.42 J J	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected U	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	0.58	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected U	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	0.57 J 1.0 U (6,8)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	2.6	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected U	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	0.88	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	92.3	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1015S16
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:23 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39521
APPL ID: AP39313

CLIENT ID: C043G026

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1,4-PENTADIENE, 2,3,3-TRIMETHYL-	756-02-5	16.13	T	28 NJ	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	4912-92-9	25.8	T	59	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,6-DIMETHYL-	17059-48-2	24.18	T	17	UG/L	15-Oct-20
EPA 8260B	2,3-DIHYDRO-5-METHYL-1H-INDENE	874-35-1	23.55	T	18	UG/L	15-Oct-20
EPA 8260B	BENZENE, 1,2-DIETHYL-	135-01-3	22.39	T	44	UG/L	15-Oct-20
EPA 8260B	BUTANE, 2,3-DIMETHYL-	79-29-8	8.42	T	71	UG/L	15-Oct-20
EPA 8260B	CYCLOHEXANE, 1,2-DIMETHYL-, TRANS-	6876-23-9	15.91	T	31	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,1,3-TRIMETHYL-	4516-69-2	13.51	T	31	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,2,3-TRIMETHYL-, (1.A	2613-69-6	15.25	T	17	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,2,4-TRIMETHYL-, (1.A	16883-48-0	13.97	T	25	UG/L	15-Oct-20
EPA 8260B	INDAN, 5,6-DIMETHYL-	1075-22-5	25.53	T	26	UG/L	15-Oct-20
EPA 8260B	PENTANE, 2,3,3-TRIMETHYL-	560-21-4	14.41	T	15	UG/L	15-Oct-20
EPA 8260B	PENTANE, 2,3-DIMETHYL-	565-59-3	11.68	T	18	UG/L	15-Oct-20

17/3/02

Printed: 10/31/02 11:31:36 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G043
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39314
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 17
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

10/30/02

GC w/ MDL SelfCalc: 10/30/02 11:57:23 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G043
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39314
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	0.55	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected U	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected U	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	0.72 J1.0(6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	2.6	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected U	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R15A.5B	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	0.89	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	87.1	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 17
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:24 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39521

APPL ID: AP39314

CLIENT ID: C043G043

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	1,4-PENTADIENE, 2,3,3-TRIMETHYL-	756-02-5	16.13	T	28 NJ	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1,5-TRIMETH	40650-41-7	26.69	T	24	UG/L	15-Oct-20
EPA 8260B	1H-INDENE, 2,3-DIHYDRO-1,1-DIMETHYL-	4912-92-9	23.77	T	14	UG/L	15-Oct-20
EPA 8260B	2,3-DIHYDRO-1-METHYL-1H-INDENE	767-58-8	23.55	T	16	UG/L	15-Oct-20
EPA 8260B	BENZENE, 1,3-DIETHYL-	141-93-5	22.38	T	39	UG/L	15-Oct-20
EPA 8260B	BUTANE, 2,3-DIMETHYL-	79-29-8	8.42	T	75	UG/L	15-Oct-20
EPA 8260B	CYCLOHEXANE, 1,2-DIMETHYL-	2207-01-4	15.9	T	32	UG/L	15-Oct-20
EPA 8260B	CYCLOHEXENE, 1,2-DIMETHYL-	1674-10-8	18.08	T	18	UG/L	15-Oct-20
EPA 8260B	CYCLOPENTANE, 1,2,3-TRIMETHYL-, (1.A	2613-69-6	15.24	T	17	UG/L	15-Oct-20
EPA 8260B	INDAN, 5,6-DIMETHYL-	1075-22-5	25.53	T	20	UG/L	15-Oct-20
EPA 8260B	PENTANE, 2,3-DIMETHYL-	565-59-3	11.68	T	18	UG/L	15-Oct-20

12/3/02

Printed: 10/31/02 11:31:36 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G027
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39315
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

12/3/02

Run #: 1015S18
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:24 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G027
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39315
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	1.7 U(6,8)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	89.7	62-139		%	10/15/02	10/15/02

Run #: 1015S18
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:24 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G032
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39316
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/15/02	10/15/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/15/02	10/15/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/15/02	10/15/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/15/02	10/15/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/15/02	10/15/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

Run #: 1015S19
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:24 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G032
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39316
QCG: $86U2-021015A-53531

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/15/02	10/15/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	Methylene chloride	0.78 J!(6,18)	1.0	0.19	ug/L	10/15/02	10/15/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/15/02	10/15/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/15/02	10/15/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/15/02	10/15/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/15/02	10/15/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/15/02	10/15/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/15/02	10/15/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/15/02	10/15/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/15/02	10/15/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/15/02	10/15/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	82.3	62-139		%	10/15/02	10/15/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1015S19
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: LF

GC w/ MDL SelfCalc: 10/30/02 11:57:25 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G036
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39317
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S05
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

10/31/02

GC w/ MDL SelfCalc: 10/30/02 11:57:25 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G036
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39317
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	0.90 J 1.0 (6,18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	116	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S05
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:25 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G037
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39318
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	0.49 J	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S06
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 10/30/02 11:57:25 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G037
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39318
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	0.59	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected U	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	14	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	14 U(6)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	118	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S06
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:26 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043R003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39319
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	0.35 J	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S07
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:26 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043R003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39319
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	0.31	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected U	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	0.32 J	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected U	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	3.2 U (18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A 5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	115	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S07
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 10/30/02 11:57:26 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043T003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39321
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

12/3/02

Run #: 1016S04
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 10/30/02 11:57:27 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043T003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39321
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	1.1	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	113	62-139		%	10/16/02	10/16/02

Run #: 1016S04
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 10/30/02 11:57:27 AM

LDC #: 9405C1
SDG #: 39521
Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 11-25-02
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10-4-02
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD, r²
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	none/p (5-8) C043G030 MS/D (1-4)
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	ER=7 TB=8

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank
ER = Equipment Rinsate

Validated Samples:
All H_2OS

1 1	C043G026	11		21		31	
2 1	C043G0~~42~~3	12		22		32	
3 1	C043G027	13		23		33	
4 1	C043G032	14		24		34	
5 2	C043G036	15		25		35	
6 2	C043G037	16		26		36	
7 2	C043R003	17		27		37	
8 2	C043T003	18		28		38	
9 1	021015W-MB	19		29		39	
10 2	021016W-MB	20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. Benzyl chloride
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Diethyl ether	FFF. 1,3-Dichlorobenzene	XXX. Ethyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 940SC1
SDG #: 39521

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: SM
2nd Reviewer: SC

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? r²≥0.990
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-19-02	ICAL	ZZZ		0.0045	All + BLKS	J/UJ/A R

INICAL.1SB

LDC #: 94051
SDG #: 39521

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-15-02	1015S02W	ZZZ		0.0051	1-4, 021015W-MB	J/~~UJ~~/A R
	10-16-02	1016S01W	ZZZ		0.0043	5-8, 021016W-MB	J/~~UJ~~/A R

CONCAL1SB

SDG #: 39521

Field Blanks

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-4-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples: 1-7

Compound	Blank ID	Sample Identification								
	8	1	2	3	4	5	~~6~~	7		
Methylene chloride	1.1	0.57/1.0u	0.72/1.0u	1.7/u	0.78/1.0u	0.90/1.0u	~~14/u~~	3.2/u		
Acetone							x			
Chloroform										
CRQL										

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-4-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples: 1-6

Compound	Blank ID	Sample Identification								
	7	1	2	3	4	5	6			
Methylene chloride	3.2	0.57/1.0u	0.72/1.0u	1.7/u	0.78/1.0u	0.90/1.0u	14/u			
Acetone										
Chloroform	0.31									
P	0.35									
T	0.32									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.1S

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 7, 2002

LDC Report Date: December 3, 2002

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39540

Sample Identification

C043G033
C043G034
C043G045
C043G035
C043T004
C043R004
C043B001

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/14/02	tert-Butyl alcohol	0.0045 (≥0.05)	All samples in SDG 39540	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/16/02	tert-Butyl alcohol	0.0043 (≥0.05)	All samples in SDG 39540	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T004 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C043T004	10/7/02	Methylene chloride	1.6 ug/L	C043G033 C043G034 C043G045 C043G035 C043R004 C043B001

Sample C043R004 was identified as an equipment rinsate. No volatile contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C043R004	10/7/02	Methylene chloride Chloroform	3.2 ug/L 0.21 ug/L	C043G033 C043G034 C043G045 C043G035

Sample C043B001 was identified as a source blank. No volatile contaminants were found in this blank with the following exceptions:

Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C043B001	10/7/02	Methylene chloride Methyl-tert-butyl ether	1.7 ug/L 0.41 ug/L	C043G033 C043G034 C043G045 C043G035

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
C043G033	Methylene chloride	1.3 ug/L	1.3U ug/L
C043G034	Methylene chloride	0.85 ug/L	1.0U ug/L
C043G045	Methylene chloride	0.83 ug/L	1.0U ug/L
C043G035	Methylene chloride	1.4 ug/L	1.4U ug/L
C043R004	Methylene chloride	3.2 ug/L	3.2U ug/L
C043B001	Methylene chloride	1.7 ug/L	1.7U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39540	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C043G034 and C043G045 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	C043G034	C043G045	
1,2-Dichloroethane	0.47	0.47	0
Methylene chloride	0.85	0.83	2.4

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 39540

SDG	Sample	Compound	Flag	A or P	Reason
39540	C043G033 C043G034 C043G045 C043G035 C043T004 C043R004 C043B001	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
39540	C043G033 C043G034 C043G045 C043G035 C043T004 C043R004 C043B001	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
39540	C043G033 C043G034 C043G045 C043G035 C043T004 C043R004 C043B001	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 39540

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 39540

SDG	Sample	Compound	Modified Final Concentration	A or P
39540	C043G033	Methylene chloride	1.3U ug/L	A
39540	C043G034	Methylene chloride	1.0U ug/L	A
39540	C043G045	Methylene chloride	1.0U ug/L	A
39540	C043G035	Methylene chloride	1.4U ug/L	A
39540	C043R004	Methylene chloride	3.2U ug/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
39540	C043B001	Methylene chloride	1.7U ug/L	A

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G033
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39402
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

Run #: 1016S08
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

1/3/02

GC w/ MDL SelfCalc: 11/4/02 10:26:46 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G033
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39402
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	1.3 U (6,18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	116	62-139		%	10/16/02	10/16/02

12/3/02

Run #: 1016S08
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:46 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G034
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39403
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected U	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	0.47 J	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected U	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S09
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 11/4/02 10:26:46 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G034
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39403
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	0.85 J1 U(6,8)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	124	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S09
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/2/02

GC w/ MDL SelfCalc: 11/4/02 10:26:47 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G045
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39404
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected U	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	0.47 J	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected U	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S10
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 11/4/02 10:26:47 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G045
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39404
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	0.83 J 1.0 U (6,10)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	124	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S10
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:47 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G035
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39405
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

12/3/02

Run #: 1016S11
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:47 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G035
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39405
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	1.4 U (6,18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A, 5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	124	62-139		%	10/16/02	10/16/02

12/3/02

Run #: 1016S11
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:48 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T004
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39406
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

12/3/02

Run #: 1016S12
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:48 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T004
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39406
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	1.6	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	119	62-139		%	10/16/02	10/16/02

12/3/02

Run #: 1016S12
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:48 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R004
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39408
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S13
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:48 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R004
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39408
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	0.21 J	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	3.2 U (18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	120	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

11/21/02

Run #: 1016S13
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:49 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39540
APPL ID: AP39408

CLIENT ID: C043R004

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	ACETONE	67-64-1	7.32	T	6.6 N	UG/L	16-Oct-20

11/3/02

Printed: 11/4/02 3:29:40 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043B001
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39409
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S14
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:49 AM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043B001
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39409
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	0.41 J	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	1.7 U (18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(SA,SB)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	118	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S14
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/4/02 10:26:49 AM

TIC REPORT

EPA 8260B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 39540
APPL ID: AP39409

CLIENT ID: C043B001

Method	Analyte	CAS #	Ret. Time	Qual.	Result	Units	Analysis Date
EPA 8260B	ACETONE	67-64-1	7.31	T	5.4 NJ	UG/L	16-Oct-20

MH 12/4/02

Printed: 11/4/02 3:29:41 PM

LDC #: 9405D1

SDG #: 39540

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11-25-02

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10-7-02
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD, r^2
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	none/f
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 2+3
XVII.	Field blanks	SW	TB=5 ER=6 SB=7

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank
ER = Equipment Rinsate
SB = Source Blank

Validated Samples:
All H_2Os

1	C043G033	11		21		31	
2	C043G034	12		22		32	
3	C043G045	13		23		33	
4	C043G035	14		24		34	
5	C043T004	15		25		35	
6	C043R004	16		26		36	
7	C043B001	17		27		37	
8	021016W-MB	18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. Benzyl chloride
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Diethyl ether	FFF. 1,3-Dichlorobenzene	XXX. Ethyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 9405D1
SDG #: 39540

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? $r^2 \geq 0.990$
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-14-02	ICAL	ZZZ		0.0045	All + BLK	J/~~UJ~~/A R

INICAL1SB

LDC #: 940501
SDG #: 39540

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-16-02	1016S01W	ZZZ		0.0043	All + BLK	J/UJ/A
							R

CONCAL1SB

SDG #: 39540

Field Blanks

Page: ___ of ___

Reviewer: DM

2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L

Sampling date: 10-7-02

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: Source Blank Associated Samples: 1-4, 6a

Compound	Blank ID	Sample Identification								
	7	1	2	3	4	~~6~~				
Methylene chloride	1.7	1.3/u	0.85/1.0u	0.83/1.0u	1.4/u	~~3.2/ugc~~				
Acetone										
Chloroform										
LL	0.41									
CRQL										

Blank units:_____ Associated sample units:_____

Sampling date:_____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples:_____

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
Chloroform										
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.1S

SDG #: 39540

Field Blanks

Page: 1 of 2
Reviewer: DM
2nd Reviewer: DR

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-7-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: 1-4, 6, 7

Compound	Blank ID	Sample Identification								
	5	1	2	3	4	6	7			
Methylene chloride	1.6	1.3/u	0.85/1.0u	0.83/1.0u	1.4/u	3.2/u	1.7/u			
Acetone										
Chloroform										
CRQL										

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-7-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: 1-4, ~~7~~ 8

Compound	Blank ID	Sample Identification								
	6	1	2	3	4	~~7~~				
Methylene chloride	3.2	1.3/u	0.85/1.0u	0.83/1.0u	1.4/u	~~1.7/u~~ 8				
Acetone										
Chloroform	0.21									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.1S

LDC #: 940SD1
SDG #: 39540

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/L)		RPD
	2	3	
L	0.47	0.47	Ø
E	0.85	0.83	2.4

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 8, 2002

LDC Report Date: December 3, 2002

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39560

Sample Identification

C043G038
C043T005
C043G039
C043R007

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/14/02	tert-Butyl alcohol	0.0045 (≥0.05)	All samples in SDG 39560	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/16/02	tert-Butyl alcohol	0.0043 (≥0.05)	All samples in SDG 39560	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T005 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C043T005	10/8/02	Methylene chloride Toluene	0.83 ug/L 0.55 ug/L	C043G038 C043G039 C043R007

Sample C043R007 was identified as an equipment rinsate. No volatile contaminants were found in this blank with the following exceptions:

Equipment Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C043R007	10/8/02	Methylene chloride Chloroform	0.65 ug/L 0.17 ug/L	C043G038 C043G039

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
C043G038	Methylene chloride	1.1 ug/L	1.1U ug/L

Sample	Compound	Reported Concentration	Modified Final Concentration
C043G039	Methylene chloride	0.69 ug/L	1.0U ug/L
C043R007	Methylene chloride	0.65 ug/L	1.0U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39560	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 39560

SDG	Sample	Compound	Flag	A or P	Reason
39560	C043G038 C043T005 C043G039 C043R007	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
39560	C043G038 C043T005 C043G039 C043R007	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
39560	C043G038 C043T005 C043G039 C043R007	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 39560

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 39560

SDG	Sample	Compound	Modified Final Concentration	A or P
39560	C043G038	Methylene chloride	1.1U ug/L	A
39560	C043G039	Methylene chloride	1.0U ug/L	A
39560	C043R007	Methylene chloride	1.0U ug/L	A

9405b

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G038
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39539
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

11/3/02

Run #: 1016S15
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:49 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G038
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39539
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	1.1 U(6,18)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	116	62-139		%	10/16/02	10/16/02

12/3/02

Run #: 1016S15
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:49 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T005
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39540
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

11/3/02

Run #: 1016S16
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:49 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T005
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39540
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	0.83 J	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(SA,SB)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	0.55	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	117	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S16
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:50 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G039
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39542
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S17
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:50 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G039
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39542
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	Not detected U	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	0.69 J1°U(6,8)	1.0	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	123	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S17
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:50 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R007
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39543
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-Tetrachloroethane	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,1-TCA	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2,2-Tetrachloroethane	Not detected	0.4	0.20	ug/L	10/16/02	10/16/02
EPA 8260B	1,1,2-TCA	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCA	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-DCE	Not detected	0.5	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	1,1-Dichloropropene	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichlorobenzene	Not detected	0.5	0.13	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,3-Trichloropropane	Not detected	2.0	0.23	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trichlorobenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2,4-Trimethylbenzene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCA	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-DCB	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dibromo-3-chloropropane	Not detected	2.0	0.72	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-Dichloropropane	Not detected	0.4	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	1,2-EDB	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	1,3,5-Trimethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-DCB	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	1,3-Dichloropropane	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	1,4-DCB	Not detected	0.3	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	1-Chlorohexane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	2,2-Dichloropropane	Not detected	1.0	0.53	ug/L	10/16/02	10/16/02
EPA 8260B	2-Chlorotoluene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	4-Chlorotoluene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Benzene	Not detected	0.4	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromobenzene	Not detected	0.3	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Bromochloromethane	Not detected	0.4	0.16	ug/L	10/16/02	10/16/02
EPA 8260B	Bromodichloromethane	Not detected	0.5	0.12	ug/L	10/16/02	10/16/02
EPA 8260B	Bromoform	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Bromomethane	Not detected	0.5	0.36	ug/L	10/16/02	10/16/02
EPA 8260B	Carbon tetrachloride	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chlorobenzene	Not detected	0.4	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Chloroethane	Not detected	0.5	0.26	ug/L	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

Run #: 1016S18
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

12/3/02

GC w/ MDL SelfCalc: 11/7/02 1:27:50 PM

EPA 8260B VOC Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R007
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39543
QCG: $86U2-021016AS-53581

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	Chloroform	0.17 J	0.3	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Chloromethane	Not detected U	0.5	0.41	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,2-DCE	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Cis-1,3-Dichloropropene	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromochloromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Dibromomethane	Not detected	0.5	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Dichlorodifluoromethane	Not detected	0.5	0.24	ug/L	10/16/02	10/16/02
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Ethylbenzene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Hexachlorobutadiene	Not detected	0.5	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	Isopropylbenzene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	m&p-Xylene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	Methylene chloride	0.65 J	1.0 U(18)	0.19	ug/L	10/16/02	10/16/02
EPA 8260B	n-Butylbenzene	Not detected U	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	n-Propylbenzene	Not detected	0.4	0.10	ug/L	10/16/02	10/16/02
EPA 8260B	Naphthalene	Not detected	0.5	0.08	ug/L	10/16/02	10/16/02
EPA 8260B	o-Xylene	Not detected	0.5	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	p-Isopropyltoluene	Not detected	0.5	0.06	ug/L	10/16/02	10/16/02
EPA 8260B	Sec-Butylbenzene	Not detected	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Styrene	Not detected	0.4	0.07	ug/L	10/16/02	10/16/02
EPA 8260B	TCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.03	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	10/16/02	10/16/02
EPA 8260B	tert-Butylbenzene	Not detected U	0.5	0.05	ug/L	10/16/02	10/16/02
EPA 8260B	Tetrachloroethene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Toluene	Not detected	0.5	0.11	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,2-DCE	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trans-1,3-Dichloropropene	Not detected	0.5	0.14	ug/L	10/16/02	10/16/02
EPA 8260B	Trichlorofluoromethane	Not detected	0.5	0.09	ug/L	10/16/02	10/16/02
EPA 8260B	Vinyl chloride	Not detected	0.5	0.27	ug/L	10/16/02	10/16/02
EPA 8260B	Surrogate recovery: 1,2-DCA-D4	123	62-139		%	10/16/02	10/16/02

J = Estimated value, below quantitation limit.

12/3/02

Run #: 1016S18
Instrument: SWEETPEA
Sequence: S021014
Dilution Factor: 1
Initials: SM

GC w/ MDL SelfCalc: 11/7/02 1:27:51 PM

LDC #: 9405E1

SDG #: 39560

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11-25-02

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10-8-02
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD, r²
IV.	Continuing calibration	SW	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	none / P
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	TB= 2 ER= ~~Equipment~~ 4

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank
ER= Equipment Rinsate

Validated Samples:
All H_2Os

1	C043G038	11		21		31	
2	C043T005	12		22		32	
3	C043G039	13		23		33	
4	C043R007	14		24		34	
5	021016W-MB	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. Benzyl chloride
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Diethyl ether	FFF. 1,3-Dichlorobenzene	XXX. Ethyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 9405E1
SDG #: 39560

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
(Y) N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
(Y) N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? r²≥0.990
(Y) N N/A Did the initial calibration meet the acceptance criteria?
Y (N) N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-19-02	ICAL	ZZZ		0.0045	All + BLK	J/UJ/A R

INICAL1SB

LDC #: 940SE1
SDG #: 39560

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10-16-02	~~10-16-02~~	% ZZZ		0.0043	All +BLK	J/UJ/A
		1016S01W					R

CONCAL1SB

SDG #: 39560

Field Blanks

Page: 1 of 1
Reviewer: DM
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-8-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples: 1, 3, 4

Compound	Blank ID	Sample Identification								
	2	1	3	4						
Methylene chloride	0.83	1.1/4	0.69/1.04	0.65/1.04						
Acetone										
Chloroform										
CC	0.55									
CRQL										

Blank units: ug/L Associated sample units: ug/L
Sampling date: 10-8-02
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples: 1, 3

Compound	Blank ID	Sample Identification								
	4	1	3							
Methylene chloride	0.65	1.1/4	0.69/1.04							
Acetone										
Chloroform	0.17									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.1S

NAF El Centro, CTO 043
Data Validation Reports
LDC# 9405

TPH as Gasoline

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 2, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39493

Sample Identification

C043G028
C043G029
C043G044
C043R001
C043T010
C043G028MS
C043G028MSD

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T010 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R001 was identified as a rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C043G028MS/MSD (All samples in SDG 39493)	TPH as gasoline	18 (67-136)	27 (67-136)	40 (≤30)	J (all detects) UJ (all non-detects)	A

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G029 and C043G044 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/L)		RPD
	C043G029	C043G044	
TPH as gasoline	0.28	0.40	35

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 39493

SDG	Sample	Compound	Flag	A or P	Reason
39493	C043G028 C043G029 C043G044 C043R001 C043T010	TPH as gasoline	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 39493

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 39493

No Sample Data Qualified in this SDG

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G028
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39198
QCG: $GAUW-021004AH-52843

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ	(8,9) 0.1	0.008	mg/L	10/7/02	10/7/02
EPA 8015	Surrogate recovery: a,a,a TFT	103	60-133		%	10/7/02	10/7/02
EPA 8015	Surrogate recovery: Bromofluorobenze	105	74-138		%	10/7/02	10/7/02

12/3/02

Run #: 1007020
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 11:57:28 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G029
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39199
QCG: $GAUW-021004AH-52843

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	0.28 ++	J(8,9) 0.1	0.008	mg/L	10/8/02	10/8/02
EPA 8015	Surrogate recovery: a,a,a TFT	106	60-133		%	10/8/02	10/8/02
EPA 8015	Surrogate recovery: Bromofluorobenze	115	74-138		%	10/8/02	10/8/02

10/3/02

++(G3) The analyst has noted that the chromatogram of this sample includes higher boiling hydrocarbons such as diesel.

Run #: 1007023
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 11:57:28 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G044
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39200
QCG: $GAUW-021004AH-52843

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	0.40 ++J	0.1	0.008	mg/L	10/8/02 (8,9)	10/8/02
EPA 8015	Surrogate recovery: a,a,a TFT	111	60-133		%	10/8/02	10/8/02
EPA 8015	Surrogate recovery: Bromofluorobenze	120	74-138		%	10/8/02	10/8/02

10/3/02

++(G3) The analyst has noted that the chromatogram of this sample includes higher boiling hydrocarbons such as diesel.

Run #: 1007026
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 11:57:29 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043R001
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39201
QCG: $GAUW-021004AH-52843

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected NJ	0.1	0.008	mg/L	10/8/02 (8,9)	10/8/02
EPA 8015	Surrogate recovery: a,a,a TFT	106	60-133		%	10/8/02	10/8/02
EPA 8015	Surrogate recovery: Bromofluorobenze	110	74-138		%	10/8/02	10/8/02

10/3/02

Run #: 1007027
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 11:57:29 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043T010
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39203
QCG: $GAUW-021004AH-52843

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ	0.1	0.008	mg/L	10/8/02 (8,9)	10/8/02
EPA 8015	Surrogate recovery: a,a,a TFT	106	60-133		%	10/8/02	10/8/02
EPA 8015	Surrogate recovery: Bromofluorobenze	111	74-138		%	10/8/02	10/8/02

10/3/02

Run #: 1007028
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 11:57:30 AM

LDC #: 9405A7

SDG #: 39493

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: F7

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/2/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	~~JVG~~ SW A	
IVb.	Matrix spike/Matrix spike duplicates	SW	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	D = 2, 3
X.	Field blanks	ND	R = 4 TB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Water

1	C043G028	11		21		31	
2	C043G029 D	12		22		32	
3	C043G044 D	13		23		33	
4	C043R001 R	14		24		34	
5	C043T010 TB	15		25		35	
6	C043G028MS	16		26		36	
7	C043G028MSD	17		27		37	
8	021007W - 52843	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405A7
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: VVG
2nd Reviewer: FT

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

✓ Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	#6, 7	Gasoline	18 (67-136)	27 (67-136)	40 (30)	~~1 → 5~~ 7 ALL sample	J/UJ/A
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 9405A7
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: VG
2nd reviewer: PT

METHOD: ✓ GC ___ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (mg/L)		%RPD Limit ≤ NA	Qualification Parent only / All Samples
	#2	#3		
Gasoline	0.28	0.40	35	

Compound	Concentration ( )		%RPD Limit ≤ ____	Qualification Parent only / All Samples

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 3, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39505

Sample Identification

C043G030
C043G031
C043G025
C043G024
C043R002
C043T002

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T002 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R002 was identified as a rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G030 C043G031 C043G025 C043G024 C043R002	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 39505

SDG	Sample	Compound	Flag	A or P	Reason
39505	C043G030 C043G031 C043G025 C043G024 C043R002	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 39505

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 39505

No Sample Data Qualified in this SDG

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G030
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39247
QCG: $GAUW-021008BH-53064

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	93.2	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	95.3	74-138		%	10/9/02	10/9/02

10/3/02

Run #: 1008031
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 3:29:50 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G031
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39248
QCG: $GAUW-021008BH-53064

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	93.2	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	102	74-138		%	10/9/02	10/9/02

10/3/02

Run #: 1008032
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 3:30:59 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G025
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39249
QCG: $GAUW-021008BH-53064

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	U 0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	94.2	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	98.3	74-138		%	10/9/02	10/9/02

10/3/02

Run #: 1008033
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 3:31:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G024
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39250
QCG: $GAUW-021008BH-53064

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	0.59 ++	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	99.1	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	104	74-138		%	10/9/02	10/9/02

10/30/02

++(G3) The analyst has noted that the chromatogram of this sample includes higher boiling hydrocarbons such as diesel.

Run #: 1008034
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 3:32:12 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043R002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39251
QCG: $GAUW-021008BH-53064

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	94.5	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	91.2	74-138		%	10/9/02	10/9/02

10/3/02

Run #: 1008035
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 3:32:26 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043T002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39252
QCG: $GAUW-021015AH-53376

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/15/02	10/15/02
EPA 8015	Surrogate recovery: a,a,a TFT	95.8	60-133		%	10/15/02	10/15/02
EPA 8015	Surrogate recovery: Bromofluorobenze	108	74-138		%	10/15/02	10/15/02

10/3/02

Run #: 1015025
Instrument: HARPO
Sequence: 021011
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 3:32:41 PM

LDC #: 9405B7

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

SDG #: 39505

Page: 1 of 1

Laboratory: APPL, Inc.

Reviewer: JVG

2nd Reviewer: FT

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/03/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	~~Client~~ JVG Specified
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	R = 5 TB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Water

1 − 1	C043G030	11		21		31	
2 − 1	C043G031	12		22		32	
3 − 1	C043G025	13		23		33	
4 + 1	C043G024	14		24		34	
5 − 1	C043R002 R	15		25		35	
6 − 2	C043T002 TB	16		26		36	
7 − 1	021009W-53064	17		27		37	
8 − 2	021015W-53376	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405 B7
SDG #: 39505

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: FT

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N (N/A) Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N (N/A) Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
(1)		No MS/MSD Analyzed for 021009W (FT)				1 → 5	none / P
			( )	( )	( )		
			( )	( )	( )		
2		No MS/MSD analyzed for 021015W (FT)				6	~~none / P~~ no qual FT
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 4, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39521

Sample Identification

C043G026
C043G027
C043G032
C043G036
C043G037
C043R003
C043T003

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T003 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R003 was identified as a rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39521	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 39521

SDG	Sample	Compound	Flag	A or P	Reason
39521	C043G026 C043G027 C043G032 C043G036 C043G037 C043R003 C043T003	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 39521

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 39521

No Sample Data Qualified in this SDG

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G026
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39313
QCG: $GAUW-021010AH-53020

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	0.62 ++	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	106	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	107	74-138		%	10/9/02	10/9/02

12/3/02

++(G3) The analyst has noted that the chromatogram of this sample includes higher boiling hydrocarbons such as diesel.

Run #: 1008036
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:24:04 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G027
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39315
QCG: $GAUW-021010AH-53020

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	93.3	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	92.4	74-138		%	10/9/02	10/9/02

10/30/02

Run #: 1008038
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:24:22 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G032
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39316
QCG: $GAUW-021010AH-53020

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	94.4	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	93.5	74-138		%	10/9/02	10/9/02

10/3/02

Run #: 1008039
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:24:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G036
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39317
QCG: $GAUW-021010AH-53020

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	96.4	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	96.9	74-138		%	10/9/02	10/9/02

12/3/02

Run #: 1008040
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:27:13 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G037
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39318
QCG: $GAUW-021010AH-53020

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	95.0	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	93.5	74-138		%	10/9/02	10/9/02

10/31/02

Run #: 1008041
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:27:26 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043R003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39319
QCG: $GAUW-021010AH-53020

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/9/02	10/9/02
EPA 8015	Surrogate recovery: a,a,a TFT	94.8	60-133		%	10/9/02	10/9/02
EPA 8015	Surrogate recovery: Bromofluorobenze	98.1	74-138		%	10/9/02	10/9/02

12/3/02

Run #: 1008042
Instrument: HARPO
Sequence: 021004
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:27:40 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043T003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39321
QCG: $GAUW-021017AH-53473

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	110	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017004
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 10/30/02 4:27:54 PM

LDC #: 9405C7

SDG #: 39521

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/04/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	~~Client specified~~ JVG
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	R = 6 TB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Water

1 + 1	C043G026	11		21		31	
2 1	C043G027	12		22		32	
3 1	C043G032	13		23		33	
4 1	C043G036	14		24		34	
5 1	C043G037	15		25		35	
6 1	C043R003 R	16		26		36	
7 2	C043T003 TB	17		27		37	
8 1	021009W-53020	18		28		38	
9 2	021017W-53473	19		29		39	
10		20		30		40	

Notes:

LDC #: 9405 C7
SDG #: 39521

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JG
2nd Reviewer: FJ

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

JG Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
1	No MS / MSD analyzed for ~~021009W~~ FJ					All ~~except #7~~ FJ	none / P
			( )	( )	( )		
2	~~Lab spiked non client sample for 091017W~~ FJ					~~#7~~ FJ	~~none / P~~ FJ
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 7, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39540

Sample Identification

C043G033
C043G034
C043G045
C043G035
C043T013
C043R004
C043B001

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T013 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R004 was identified as a rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043B001 was identified as a source blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39540	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G034 and C043G045 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 39540

SDG	Sample	Compound	Flag	A or P	Reason
39540	C043G033 C043G034 C043G045 C043G035 C043T013 C043R004 C043B001	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 39540

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 39540

No Sample Data Qualified in this SDG

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G033
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39402
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	102	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	105	74-138		%	10/17/02	10/17/02

10/3/02

Run #: 1017005
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:46 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G034
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39403
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	110	74-138		%	10/17/02	10/17/02

12/23/02

Run #: 1017006
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:47 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G045
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39404
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	113	74-138		%	10/17/02	10/17/02

17/3/02

Run #: 1017007
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:47 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G035
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39405
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	104	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	117	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017008
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:48 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T013
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39407
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	106	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	108	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017009
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:48 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R004
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39408
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	107	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017010
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:49 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043B001
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39409
QCG: $GAUW-021017BH-53568

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	110	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017011
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/4/02 10:26:50 AM

LDC #: 9405D7

SDG #: 39540

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JNG

2nd Reviewer: FT

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/7/02
IIa.	Initial calibration	~~SW~~ A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	ND	D = 2, 3
X.	Field blanks	ND	TB = 5 R = 6 SB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB = Source blank

Validated Samples:

1	C043G033	11		21		31	
2	C043G034 D	12		22		32	
3	C043G045 D	13		23		33	
4	C043G035	14		24		34	
5	C043T013 TB	15		25		35	
6	C043R004 R	16		26		36	
7	C043B001 SB	17		27		37	
8	021017W-53568	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405D7
SDG #: 39540

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: FT

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

(Y) N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N (N/A) Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	Lab Spiked non client sample		( )	( )	( )	All	none / P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 8, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39560

Sample Identification

C043G038
C043T014
C043G039
C043R007

Introduction

This data review covers 4 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T014 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R007 was identified as a rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39560	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 39560

SDG	Sample	Compound	Flag	A or P	Reason
39560	C043G038 C043T014 C043G039 C043R007	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 39560

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 39560

No Sample Data Qualified in this SDG

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G038
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39539
QCG: $GAUW-021017CH-53570

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	102	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	110	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017018
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/7/02 1:27:49 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T014
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39541
QCG: $GAUW-021017CH-53570

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	108	74-138		%	10/17/02	10/17/02

12/3/02
a

Run #: 1017019
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/7/02 1:27:50 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G039
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39542
QCG: $GAUW-021017CH-53570

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	111	74-138		%	10/17/02	10/17/02

12/3/02

Run #: 1017020
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/7/02 1:27:50 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R007
Sample Collection Date: 10/8/02

ARF: 39560
APPL ID: AP39543
QCG: $GAUW-021017CH-53570

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	10/17/02	10/17/02
EPA 8015	Surrogate recovery: a,a,a TFT	102	60-133		%	10/17/02	10/17/02
EPA 8015	Surrogate recovery: Bromofluorobenze	104	74-138		%	10/17/02	10/17/02

10/13/02

Run #: 1017021
Instrument: HARPO
Sequence: 021016
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc: 11/7/02 1:27:51 PM

LDC #: 9405E7
SDG #: 39560
Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 11/21/02
Page: 1 of 1
Reviewer: JVG
2nd Reviewer: FT

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/8/02
IIa.	Initial calibration	SW A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	R = 4 TB = 2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
Water

1	C043G038	11		21		31	
2	C043T014 TB	12		22		32	
3	C043G039	13		23		33	
4	C043R007 R	14		24		34	
5	021017W-S3570	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405E7
SDG #: 39560

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Reviewer: JNG
2nd Reviewer: #7

METHOD: ✓ **GC** ___ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 5 point calibration curve performed?
Y N N/A Was a linear fit used for evaluation? If yes, the acceptance criteria for each compound is %RSD less than or equal to 20.0%.
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? _____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Was initial calibration performed at the required frequency?

Level IV Only
Y N N/A Were the retention time windows properly established for all compounds?
Y N N/A Were compounds run at the required concentrations in the initial calibrations?

#	Date	Standard ID	Column/Detector	Compound	RSD Finding ~~RPD~~ Limit ≤20%	Associated Samples	Qualifications
	10/16/02	Gasoline	DB-624	Gasoline	66.8	~~1-4~~ all ~~02101TW-53570~~ BK	~~R~~ / ~~P~~ J/UJ/P

Comments _____

INICALNew.wod

LDC #: 9405E7
SDG #: 39560

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: JVG
2nd Reviewer: PZ

METHOD: √ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y (N) N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N (N/A) Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		Lab spiked (non-)client (sample			( )	All	none / P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

NAF El Centro, CTO 043
Data Validation Reports
LDC# 9405

TPH as Diesel

LDC

LDC Report# 9405A8

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 2, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Diesel

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39493

Sample Identification

C043G028
C043G029
C043G029DL
C043G044
C043G044DL
C043R001

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Diesel.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as diesel contaminants were found in the method blanks.

Sample C043R001 was identified as a rinsate. No total petroleum hydrocarbons as diesel contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C043G029	ortho-Terphenyl	450 (49-128)	TPH as diesel	J (all detects)	A
C043G044	ortho-Terphenyl	370 (49-128)	TPH as diesel	J (all detects)	A

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39493	TPH as diesel	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G029 C043G044	TPH as diesel	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G029 C043G044	TPH as diesel	R	A

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G029 and C043G044 and samples C043G029DL and C043G044DL were identified as field duplicates. No total petroleum hydrocarbons as diesel were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	C043G029	C043G044	
TPH as diesel	34000	37000	8

Compound	Concentration (ug/L)		RPD
	C043G029DL	C043G044DL	
TPH as diesel	31000	34000	9

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Data Qualification Summary - SDG 39493

SDG	Sample	Compound	Flag	A or P	Reason
39493	C043G029 C043G044	TPH as diesel	J (all detects)	A	Surrogate recovery (%R)
39493	C043G028 C043G029 C043G029DL C043G044 C043G044DL C043R001	TPH as diesel	None	P	Matrix spike/Matrix spike duplicates
39493	C043G029 C043G044	TPH as diesel	J (all detects)	A	Compound quantitation and CRQLs
39493	C043G029 C043G044	TPH as diesel	R	A	Overall assessment of data

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Laboratory Blank Data Qualification Summary - SDG 39493

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Field Blank Data Qualification Summary - SDG 39493

No Sample Data Qualified in this SDG

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G028
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39198
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	87.2	49-128		%	10/8/02	10/9/02

12/3/02

Run #: 121
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 1:02:24 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G029
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39199
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	34000 E R(14)	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	450 #	49-128		%	10/8/02	10/9/02

Y 12/3/02

α

E = The reported value exceeds linear range.
# = Recovery (or RPD) is outside QC limits.

Run #: 122
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 1:03:31 PM

EPA 8015B TPHD Diesel W - UST - Dilution

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G029
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39199

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	31000 ++	1000	808.0	ug/L	10/8/02	10/10/02
EPA 8015B	Surrogate: Ortho-Terphenyl	DO	49-128		%	10/8/02	10/10/02

10/3/02

DO = Diluted Out.
++(T3M) The analyst has noted that the chromatogram of this sample is mainly higher boiling hydrocarbons such as asphaltene, waste oil, motor oil, weathered diesel, and hydraulic fluid.

Run #: 140
Instrument: FID02
Sequence: 021002
Dilution Factor: 20
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 1:13:30 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G044
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39200
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	37000 E R(14)	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	370 #	49-128		%	10/8/02	10/9/02

10/30/02

E = The reported value exceeds linear range.
# = Recovery (or RPD) is outside QC limits.

Run #:	123
Instrument:	FID02
Sequence:	021002
Dilution Factor:	1
Initials:	KW

GC w/ MDL SelfCalc: 10/30/02 1:03:45 PM

EPA 8015B TPHD Diesel W - UST - Dilution

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043G044
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39200

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	34000 ++	1000	808.0	ug/L	10/8/02	10/10/02
EPA 8015B	Surrogate: Ortho-Terphenyl	DO	49-128		%	10/8/02	10/10/02

K 12/3/02

DO = Diluted Out.
++(T3M) The analyst has noted that the chromatogram of this sample is mainly higher boiling hydrocarbons such as asphaltene, waste oil, motor oil, weathered diesel, and hydraulic fluid.

Run #: 141
Instrument: FID02
Sequence: 021002
Dilution Factor: 20
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 1:13:51 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 533 & 534
Sample ID: C043R001
Sample Collection Date: 10/2/02

ARF: 39493
APPL ID: AP39201
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	78.8	49-128		%	10/8/02	10/9/02

10/3/02

Run #: 124
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 1:03:55 PM

LDC #: 9405A8

SDG #: 39493

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JVC

2nd Reviewer: [illegible]

METHOD: GC TPH as Diesel (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/2/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	SW	
IVb.	Matrix spike/Matrix spike duplicates	SW	~~Client~~ JVC Specified
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	SW	
VII.	System Performance	N	
VIII.	Overall assessment of data	SW	
IX.	Field duplicates	SW	D1 = 2, 4 D2 = 3, 5
X.	Field blanks	ND	R = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Water

1 −	C043G028	11		21		31	
2 +	C043G029 D1	12		22		32	
3 +	C043G029DL D2	13		23		33	
4 +	C043G044 D1	14		24		34	
5 +	C043G044DL D2	15		25		35	
6 −	C043R001 R	16		26		36	
7 −	021008W-53002	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405 A8
SDG #: 39493

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: FT

METHOD: ✓ GC ___ HPLC

Are surrogates required by the method? Yes ✓ or No ____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2	DB-5	H	450 (49 - 128)	J detect / A
				( )	
				370 ( )	
	4			( )	
				DO ( )	no qual > 2X dil
	3			( )	
				DO ( )	
	5			( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decafluorobiphenyl (DCB)	U	Tripentyltin
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	

LDC #: 9405 A8
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N (N/A) Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N (N/A) Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		NO MS/MSD Analyzed	( )	( )	( )	All	none / P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 9405A8
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: WG
2nd Reviewer: PT

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	Diesel	Exceeded cal range	2, 4	J detect / A

Comments: See sample calculation verification worksheet for recalculations

LDC #: 9405A8
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: FT

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Compound Name	Finding	Associated Samples	Qualifications
	Diesel	Exceeded cal range	2, 4	R/A

Comments:

LDC #: 9405A8
SDG #: 39493

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: JVG
2nd reviewer: FZ

METHOD: ✓ GC ___ HPLC

(Y) N N/A Were field duplicate pairs identified in this SDG?
(Y) N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug /L)		%RPD Limit ≤ NA	Qualification Parent only / All Samples
	# 2	#4		
Diesel	34000	37000	8	

Compound	Concentration (ug /L)		%RPD Limit ≤ NA	Qualification Parent only / All Samples
	# 3	# 5		
Diesel	31000	34000	9	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 3, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Diesel

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39505

Sample Identification

C043G030
C043G031
C043G025
C043G024
C043G024DL
C043R002

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Diesel.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as diesel contaminants were found in the method blanks.

Sample C043R002 was identified as a rinsate. No total petroleum hydrocarbons as diesel contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39505	TPH as diesel	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G024	TPH as diesel	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G024	TPH as diesel	R	A

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Data Qualification Summary - SDG 39505

SDG	Sample	Compound	Flag	A or P	Reason
39505	C043G030 C043G031 C043G025 C043G024 C043G024DL C043R002	TPH as diesel	None	P	Matrix spike/Matrix spike duplicates
39505	C043G024	TPH as diesel	J (all detects)	A	Compound quantitation and CRQLs
39505	C043G024	TPH as diesel	R	A	Overall assessment of data

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Laboratory Blank Data Qualification Summary - SDG 39505

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Field Blank Data Qualification Summary - SDG 39505

No Sample Data Qualified in this SDG

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G030
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39247
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	1200 ++	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	79.9	49-128		%	10/8/02	10/9/02

12/3/02

++(T1M) The analyst has noted that the chromatogram of this sample is mainly a wide range of hydrocarbons which are not necessarily indicative of diesel.

Run #: 125
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 3:29:50 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G031
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39248
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	1700 ++	50	40.4	ug/L	10/8/02	10/10/02
EPA 8015B	Surrogate: Ortho-Terphenyl	98.1	49-128		%	10/8/02	10/10/02

10/3/02

++(T1M) The analyst has noted that the chromatogram of this sample is mainly a wide range of hydrocarbons which are not necessarily indicative of diesel.

Run #: 143
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 3:30:59 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G025
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39249
QCG: $TPBD-021008A-53002

Method	Analyte	Result		PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected	U	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	68.0		49-128		%	10/8/02	10/9/02

12/3/02

Run #: 126
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 3:31:42 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G024
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39250
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	4400 E R1(4)	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	72.0	49-128		%	10/8/02	10/9/02

12/3/02

E = The reported value exceeds linear range.

Run #: 130
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 3:32:12 PM

EPA 8015B TPHD Diesel W - UST - Dilution

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043G024
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39250

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	4800 ++	100	80.8	ug/L	10/8/02	10/10/02
EPA 8015B	Surrogate: Ortho-Terphenyl	79.1	49-128		%	10/8/02	10/10/02

12/3/02

++(T2M) The analyst has noted that the chromatogram of this sample is mainly lower boiling hydrocarbons such as mineral spirits, jet fuel, kerosene, stoddard solvent or white gas.

Run #: 142
Instrument: FID02
Sequence: 021002
Dilution Factor: 2
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 3:32:12 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO SITES 539 & 116
Sample ID: C043R002
Sample Collection Date: 10/3/02

ARF: 39505
APPL ID: AP39251
QCG: $TPBD-021008A-53002

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	10/8/02	10/9/02
EPA 8015B	Surrogate: Ortho-Terphenyl	74.6	49-128		%	10/8/02	10/9/02

12/3/02

Run #: 131
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: KW

GC w/ MDL SelfCalc: 10/30/02 3:32:29 PM

LDC #: 9405B8

SDG #: 39505

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: PJ

METHOD: GC TPH as Diesel (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/09/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	~~Client specified~~ JVG
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	SW	
VII.	System Performance	N	
VIII.	Overall assessment of data	SW ~~A~~	
IX.	Field duplicates	N	
X.	Field blanks	ND	R = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1+	C043G030	11		21		31	
2+	C043G031	12		22		32	
3−	C043G025	13		23		33	
4+	C043G024	14		24		34	
5+	C043G024DL	15		25		35	
6−	C043R002 R	16		26		36	
7−	021008W-S3002	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405 B8
SDG #: 39505

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: VVG
2nd Reviewer: FT

METHOD: ✓ **GC** ___ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		NO	MS / MSD analyzed ( )	( )	( )	All	none / P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 9405B8
SDG #: 39505

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	Diesel	Exceeded cal range	4	J detect / A

Comments: See sample calculation verification worksheet for recalculations

LDC #: 9405B8
SDG #: 39505

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: FT

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Compound Name	Finding	Associated Samples	Qualifications
	Diesel	Exceeded cal range	~~0~~ 4	R/A

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 4, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Diesel

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39521

Sample Identification

C043G026
C043G027
C043R003

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Diesel.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as diesel contaminants were found in the method blanks.

Sample C043R003 was identified as a rinsate. No total petroleum hydrocarbons as diesel contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 39521	TPH as diesel	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Data Qualification Summary - SDG 39521

SDG	Sample	Compound	Flag	A or P	Reason
39521	C043G026 C043G027 C043R003	TPH as diesel	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Laboratory Blank Data Qualification Summary - SDG 39521

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Field Blank Data Qualification Summary - SDG 39521

No Sample Data Qualified in this SDG

94050

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G026
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39313
QCG: $TPBD-021010A-53161

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	370 ++	50	40.4	ug/L	10/10/02	10/11/02
EPA 8015B	Surrogate: Ortho-Terphenyl	94.0	49-128		%	10/10/02	10/11/02

++(T2M) The analyst has noted that the chromatogram of this sample is mainly lower boiling hydrocarbons such as mineral spirits, jet fuel, kerosene, stoddard solvent or white gas.

Run #: 155
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: DU

GC w/ MDL SelfCalc: 10/30/02 4:24:04 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043G027
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39315
QCG: $TPBD-021010A-53161

Method	Analyte	Result		PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected	U	50	40.4	ug/L	10/10/02	10/11/02
EPA 8015B	Surrogate: Ortho-Terphenyl	84.8		49-128		%	10/10/02	10/11/02

12/3/02

Run #: 157
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: DU

GC w/ MDL SelfCalc: 10/30/02 4:24:22 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO (SITES 116 & NEX)
Sample ID: C043R003
Sample Collection Date: 10/4/02

ARF: 39521
APPL ID: AP39319
QCG: $TPBD-021010A-53161

Method	Analyte	Result		PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected	U	50	40.4	ug/L	10/10/02	10/11/02
EPA 8015B	Surrogate: Ortho-Terphenyl	84.4		49-128		%	10/10/02	10/11/02

12/3/02

Run #: 158
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: DU

GC w/ MDL SelfCalc: 10/30/02 4:37:09 PM

LDC #: 9405C8

SDG #: 39521

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: PT

METHOD: GC TPH as Diesel (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/04/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	SW	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	R = 3

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1 +	C043G026	11		21		31	
2 −	C043G027	12		22		32	
3 −	C043R003 R	13		23		33	
− 4	021010W-53161	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 9405C8
SDG #: 39521

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: VNG
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y (N) N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N (N/A) Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	No	MS/MSD	analyzed	( )	( )	All	none /P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: October 7, 2002

LDC Report Date: November 22, 2002

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Diesel

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 39540

Sample Identification

C043B001

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Diesel.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as diesel contaminants were found in the method blanks.

Sample C043B001 was identified as a source blank. No total petroleum hydrocarbons as diesel contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Data Qualification Summary - SDG 39540

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Laboratory Blank Data Qualification Summary - SDG 39540

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Diesel - Field Blank Data Qualification Summary - SDG 39540

No Sample Data Qualified in this SDG

9405D

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043B001
Sample Collection Date: 10/7/02

ARF: 39540
APPL ID: AP39409
QCG: $TPBD-021010A-53161

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	10/10/02	10/11/02
EPA 8015B	Surrogate: Ortho-Terphenyl	87.3	49-128		%	10/10/02	10/11/02

12/3/02

Run #: 159
Instrument: FID02
Sequence: 021002
Dilution Factor: 1
Initials: DU

GC w/ MDL SelfCalc: 11/4/02 10:26:50 AM

LDC #: 9405D8

SDG #: 39540

Laboratory: APPL, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 11/21/02

Page: 1 of 1

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: GC TPH as Diesel (EPA SW 846 Method 8015)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 10/7/02
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates F7	~~SW~~ N	No MS/MSD, QC sample
IVc.	Laboratory control samples	A	
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	ND	*SB = 1

*SB = Source Blank

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	C043B001 SB	11		21		31	
2	021010W-53161	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G100
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49577
QCG: $GAUW-030501AH-62300

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	5/1/03	5/1/03
EPA 8015	Surrogate recovery: a,a,a TFT	109	60-133		%	5/1/03	5/1/03
EPA 8015	Surrogate recovery: Bromofluorobenze	112	74-138		%	5/1/03	5/1/03

6/13/03

Run #: 0501023
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:27:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G101
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49578
QCG: $GAUW-030430BH-62299

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	108	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	113	74-138		%	4/30/03	4/30/03

6/13/07

Run #: 0430008
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:27:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G102
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49579
QCG: $GAUW-030501AH-62300

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	1.1	0.5	0.040	mg/L	5/2/03	5/2/03
EPA 8015	Surrogate recovery: a,a,a TFT	113	60-133		%	5/2/03	5/2/03
EPA 8015	Surrogate recovery: Bromofluorobenze	109	74-138		%	5/2/03	5/2/03

6/13/03

Run #: 0501027
Instrument: HARPO
Sequence: 030424
Dilution Factor: 5
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:27:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T025
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49580
QCG: $GAUW-030430BH-62299

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	108	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	116	74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430010
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:27:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G103
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49581
QCG: $GAUW-030430BH-62299

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	0.23	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	114	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	114	74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430011
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:27:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R018
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49582
QCG: $GAUW-030430BH-62299

Method	Analyte	Result		PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	U	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	110		60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	120		74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430012
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:27:42 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G104
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49673
QCG: $GAUW-030424AH-62221

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	104	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	122	74-138		%	4/30/03	4/30/03

6/13/07

Run #: 0430013
Instrument: Harpo
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/22/03 1:48:10 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R011
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49674
QCG: $GAUW-030424AH-62221

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	119	74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430014
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/22/03 1:48:20 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T026
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49676
QCG: $GAUW-030424AH-62221

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	119	74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430015
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/22/03 1:48:33 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G109
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49677
QCG: $GAUW-030424AH-62221

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	113	74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430016
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/22/03 1:48:44 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G110
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49678
QCG: $GAUW-030424AH-62221

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	4/30/03	4/30/03
EPA 8015	Surrogate recovery: a,a,a TFT	107	60-133		%	4/30/03	4/30/03
EPA 8015	Surrogate recovery: Bromofluorobenze	111	74-138		%	4/30/03	4/30/03

6/13/03

Run #: 0430019
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/22/03 1:48:56 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G114
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49732
QCG: $GAUW-030507BH-62344

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ (5B)	0.1	0.008	mg/L	5/6/03	5/6/03
EPA 8015	Surrogate recovery: a,a,a TFT	100	60-133		%	5/6/03	5/6/03
EPA 8015	Surrogate recovery: Bromofluorobenze	99.9	74-138		%	5/6/03	5/6/03

Run #: 0506020
Instrument: HARPO
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G111
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49733
QCG: $GAUW-030507BH-62344

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ (SB)	0.1	0.008	mg/L	5/6/03	5/6/03
EPA 8015	Surrogate recovery: a,a,a TFT	99.4	60-133		%	5/6/03	5/6/03
EPA 8015	Surrogate recovery: Bromofluorobenze	108	74-138		%	5/6/03	5/6/03

Run #: 0506021
Instrument: Harpo
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T027
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49734
QCG: $GAUW-030507BH-62344

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ (5B)	0.1	0.008	mg/L	5/6/03	5/6/03
EPA 8015	Surrogate recovery: a,a,a TFT	100	60-133		%	5/6/03	5/6/03
EPA 8015	Surrogate recovery: Bromofluorobenze	123	74-138		%	5/6/03	5/6/03

Run #: 0506022
Instrument: Harpo
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R019
Sample Collection Date: 4/28/03

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 41400
APPL ID: AP49735
QCG: $GAUW-030507BH-62344

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ(SB)	0.1	0.008	mg/L	5/6/03	5/6/03
EPA 8015	Surrogate recovery: a,a,a TFT	101	60-133		%	5/6/03	5/6/03
EPA 8015	Surrogate recovery: Bromofluorobenze	118	74-138		%	5/6/03	5/6/03

Run #: 0506023
Instrument: Harpo
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/27/03 1:28:13 PM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G115
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49736
QCG: $GAUW-030507BH-62344

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected UJ (SB)	0.1	0.008	mg/L	5/6/03	5/6/03
EPA 8015	Surrogate recovery: a,a,a TFT	104	60-133		%	5/6/03	5/6/03
EPA 8015	Surrogate recovery: Bromofluorobenze	106	74-138		%	5/6/03	5/6/03

Run #: 0506024
Instrument: Harpo
Sequence: 030424
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/27/03 1:28:13 PM

EPA 8015 Water - UST

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APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G112
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49849
QCG: $GAUW-030510BH-62807

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	0.1	0.008	mg/L	5/10/03	5/10/03
EPA 8015	Surrogate recovery: a,a,a TFT	107	60-133		%	5/10/03	5/10/03
EPA 8015	Surrogate recovery: Bromofluorobenze	112	74-138		%	5/10/03	5/10/03

6/13/03

Run #: 0510013
Instrument: HARPO
Sequence: 030508
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/28/03 9:56:40 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R020
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49850
QCG: $GAUW-030510BH-62807

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	5/10/03	5/10/03
EPA 8015	Surrogate recovery: a,a,a TFT	103	60-133		%	5/10/03	5/10/03
EPA 8015	Surrogate recovery: Bromofluorobenze	106	74-138		%	5/10/03	5/10/03

6/13/03

Run #: 0510014
Instrument: HARPO
Sequence: 030508
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/28/03 9:56:40 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T028
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49851
QCG: $GAUW-030510BH-62807

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	5/10/03	5/10/03
EPA 8015	Surrogate recovery: a,a,a TFT	105	60-133		%	5/10/03	5/10/03
EPA 8015	Surrogate recovery: Bromofluorobenze	106	74-138		%	5/10/03	5/10/03

6/13/03

Run #: 0510015
Instrument: HARPO
Sequence: 030508
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

EPA 8015 Water - UST

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APPL Inc.
4203 West Swift Avenue
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Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G113
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49852
QCG: $GAUW-030510BH-62807

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	5/10/03	5/10/03
EPA 8015	Surrogate recovery: a,a,a TFT	104	60-133		%	5/10/03	5/10/03
EPA 8015	Surrogate recovery: Bromofluorobenze	115	74-138		%	5/10/03	5/10/03

6/13/03

Run #: 0510016
Instrument: HARPO
Sequence: 030508
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G116
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49853
QCG: $GAUW-030510BH-62807

Method	Analyte	Result		PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected	U	0.1	0.008	mg/L	5/10/03	5/10/03
EPA 8015	Surrogate recovery: a,a,a TFT	104		60-133		%	5/10/03	5/10/03
EPA 8015	Surrogate recovery: Bromofluorobenze	113		74-138		%	5/10/03	5/10/03

6/13/03

Run #: 0510019
Instrument: HARPO
Sequence: 030508
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

EPA 8015 Water - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G117
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49854
QCG: $GAUW-030510BH-62807

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015	TPH-Gasoline	Not detected U	0.1	0.008	mg/L	5/10/03	5/10/03
EPA 8015	Surrogate recovery: a,a,a TFT	103	60-133		%	5/10/03	5/10/03
EPA 8015	Surrogate recovery: Bromofluorobenze	98.7	74-138		%	5/10/03	5/10/03

pr 6/13/07

Run #: 0510020
Instrument: HARPO
Sequence: 030508
Dilution Factor: 1
Initials: MKG

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

10348t

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G106
Sample Collection Date: 4/23/03

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 41347
APPL ID: AP49465
QCG: $TPBD-030428-62292

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	25000 ++	500	404.0	ug/L	4/28/03	5/8/03
EPA 8015B	Surrogate: Ortho-Terphenyl	70.6	49-128		%	4/28/03	5/8/03

6/13/07

++(T3M) The analyst has noted that the chromatogram of this sample is mainly higher boiling hydrocarbons such as asphaltene, waste oil, motor oil, weathered diesel, and hydraulic fluid.

Run #: 39
Instrument: FID02
Sequence: 030507
Dilution Factor: 10
Initials: SS

GC w/ MDL SelfCalc II: 5/20/03 11:32:16 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G107
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49466
QCG: $TPBD-030428-62292

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	1100 ++	50	40.4	ug/L	4/28/03	5/2/03
EPA 8015B	Surrogate: Ortho-Terphenyl	87.1	49-128		%	4/28/03	5/2/03

6/13/03

++(T3M) The analyst has noted that the chromatogram of this sample is mainly higher boiling hydrocarbons such as asphaltene, waste oil, motor oil, weathered diesel, and hydraulic fluid.

Run #: 25
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/20/03 11:32:16 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G108
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49467
QCG: $TPBD-030428-62292

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	1300 ++	50	40.4	ug/L	4/28/03	5/2/03
EPA 8015B	Surrogate: Ortho-Terphenyl	81.2	49-128		%	4/28/03	5/2/03

6/13/03

++(T3M) The analyst has noted that the chromatogram of this sample is mainly higher boiling hydrocarbons such as asphaltene, waste oil, motor oil, weathered diesel, and hydraulic fluid.

Run #: 26
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/20/03 11:32:17 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R017
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49469
QCG: $TPBD-030428-62292

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	4/28/03	5/2/03
EPA 8015B	Surrogate: Ortho-Terphenyl	74.2	49-128		%	4/28/03	5/2/03

6/13/03

Run #: 27
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/20/03 11:32:17 AM

10398C.

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G100
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49577
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	67 ++	50	40.4	ug/L	4/29/03	5/2/03
EPA 8015B	Surrogate: Ortho-Terphenyl	70.5	49-128		%	4/29/03	5/2/03

6/13/03

++(T2M) The analyst has noted that the chromatogram of this sample is mainly lower boiling hydrocarbons such as mineral spirits, jet fuel, kerosene, stoddard solvent or white gas.

Run #: 35
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 10:59:28 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G101
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49578
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	110 ++	50	40.4	ug/L	4/29/03	5/3/03
EPA 8015B	Surrogate: Ortho-Terphenyl	74.5	49-128		%	4/29/03	5/3/03

6/13/07

++(T2M) The analyst has noted that the chromatogram of this sample is mainly lower boiling hydrocarbons such as mineral spirits, jet fuel, kerosene, stoddard solvent or white gas.

Run #: 36
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 10:59:28 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G102
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49579
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	3400 ++	500	202.0	ug/L	4/29/03	5/8/03
EPA 8015B	Surrogate: Ortho-Terphenyl	77.1	49-128		%	4/29/03	5/8/03

K 6/13/03

++(T2M) The analyst has noted that the chromatogram of this sample is mainly lower boiling hydrocarbons such as mineral spirits, jet fuel, kerosene, stoddard solvent or white gas.

Run #: 32
Instrument: FID02
Sequence: 030507
Dilution Factor: 5
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G103
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49581
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	230 ++	50	40.4	ug/L	4/29/03	5/3/03
EPA 8015B	Surrogate: Ortho-Terphenyl	70.5	49-128		%	4/29/03	5/3/03

6/13/03

++(T2M) The analyst has noted that the chromatogram of this sample is mainly lower boiling hydrocarbons such as mineral spirits, jet fuel, kerosene, stoddard solvent or white gas.

Run #: 38
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R018
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49582
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	4/29/03	5/3/03
EPA 8015B	Surrogate: Ortho-Terphenyl	69.7	49-128		%	4/29/03	5/3/03

5/13/03

Run #: 39
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

1039404

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G104
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49673
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	4/29/03	5/3/03
EPA 8015B	Surrogate: Ortho-Terphenyl	72.0	49-128		%	4/29/03	5/3/03

6/13/03

Run #: 43
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 1:14:21 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R011
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49674
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	4/29/03	5/3/03
EPA 8015B	Surrogate: Ortho-Terphenyl	67.5	49-128		%	4/29/03	5/3/03

6/13/03

Run #: 44
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 1:14:22 PM

EPA 8015B TPHD Diesel W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G105
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49675
QCG: $TPBD-030429AW-62305

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8015B	Diesel Fuel	Not detected U	50	40.4	ug/L	4/29/03	5/3/03
EPA 8015B	Surrogate: Ortho-Terphenyl	70.9	49-128		%	4/29/03	5/3/03

6/13/07

Run #: 45
Instrument: FID02
Sequence: 030429
Dilution Factor: 1
Initials: SS

GC w/ MDL SelfCalc II: 5/22/03 1:14:22 PM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G106
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49465
QCG: $26UW-030505AC-62525

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/5/03	5/5/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/5/03	5/5/03
EPA 8260B	Benzene	6.0	0.4	0.16	ug/L	5/5/03	5/5/03
EPA 8260B	di-Isopropyl Ether	1.1	0.5	0.16	ug/L	5/5/03	5/5/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected U	0.5	0.19	ug/L	5/5/03	5/5/03
EPA 8260B	Ethylbenzene	6.9	0.6	0.23	ug/L	5/5/03	5/5/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected U	0.5	0.19	ug/L	5/5/03	5/5/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/5/03	5/5/03
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A)	100 (5B)	50	ug/L	5/5/03	5/5/03
EPA 8260B	Toluene	0.93 J J	1.1	0.17	ug/L	5/5/03	5/5/03
EPA 8260B	Xylenes	12	0.5	0.19	ug/L	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (BFB)	109	62-139		%	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (DBFM)	103	75-125		%	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (DCA)	101	75-125		%	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (TOL)	92.1	75-125		%	5/5/03	5/5/03

6/18/03

J = Estimated value, below quantitation limit.

Run #: 0505C24
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/20/03 10:51:00 AM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G107
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49466
QCG: $26UW-030505AC-62525

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected UJ (2)	0.6	0.14	ug/L	5/5/03	5/5/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/5/03	5/5/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/5/03	5/5/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/5/03	5/5/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/5/03	5/5/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/5/03	5/5/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/5/03	5/5/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/5/03	5/5/03
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A)	100 (5B)	50	ug/L	5/5/03	5/5/03
EPA 8260B	Toluene	Not detected UJ (2)	1.1	0.17	ug/L	5/5/03	5/5/03
EPA 8260B	Xylenes	0.31 J J	0.5	0.19	ug/L	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (BFB)	102	62-139		%	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (DBFM)	95.7	75-125		%	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (DCA)	87.2	75-125		%	5/5/03	5/5/03
EPA 8260B	Surrogate recovery (TOL)	97.4	75-125		%	5/5/03	5/5/03

K 6/18/03

J = Estimated value, below quantitation limit.

Run #: 0505C25
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/20/03 10:51:00 AM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G108
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49467
QCG: $26UW-030505AC-62525

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100 (5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	101	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	99.0	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	89.7	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	91.5	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0505C26
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/20/03 10:51:00 AM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T024
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49468
QCG: $26UW-030505AC-62525

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5D)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	94.1	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	92.2	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	82.0	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	91.7	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0505C27
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/20/03 10:51:00 AM

EPA 8260B BTEX Oxy W - UST

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Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R017
Sample Collection Date: 4/23/03

ARF: 41347
APPL ID: AP49469
QCG: $26UW-030505AC-62525

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(SA)	100(SB)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	98.9	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	93.4	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	84.8	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	93.4	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0505C28
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/20/03 10:51:01 AM

EPA 8260B BTEX Oxy W - UST

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APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G100
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49577
QCG: $26UW-030506AC-62557

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	107	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	110	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	109	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	92.5	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C05
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 10:59:28 AM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G101
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49578
QCG: $26UW-030506AC-62557

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A)	100 (5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	106	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	105	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	103	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	93.6	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C06
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 10:59:28 AM

EPA 8260B BTEX Oxy W - UST

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4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G102
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49579
QCG: $26UW-030506AC-62557

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	15	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected U	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	3.2	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	3.4	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected U	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	120 J (5A)	100 (5B)	50 (8)	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	108	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	107	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	111	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	87.8	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C07
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

EPA 8260B BTEX Oxy W - UST

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Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T025
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49580
QCG: $26UW-030506AC-62557

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	100	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	98.9	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	89.6	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	95.2	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C08
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G103
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49581
QCG: $26UW-030506AC-62557

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	0.31 J J	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected U	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	103	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	104	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	104	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	89.2	75-125		%	5/6/03	5/6/03

6/18/03

J = Estimated value, below quantitation limit.

Run #: 0506C09
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R018
Sample Collection Date: 4/24/03

ARF: 41372
APPL ID: AP49582
QCG: $26UW-030506AC-62557

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100 (5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	99.8	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	98.1	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	89.3	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	94.5	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C10
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 10:59:29 AM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G104
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49673
QCG: $26UW-030506AC1-62762

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A)	100 (5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	104	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	103	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	97.8	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	95.1	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C14
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:14:21 PM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R011
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49674
QCG: $26UW-030506AC1-62762

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	97.6	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	96.0	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	89.0	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	95.4	75-125		%	5/6/03	5/6/03

6/10/03

Run #: 0506C15
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:14:21 PM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G105
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49675
QCG: $26UW-030506AC1-62762

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	0.35 J J	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected U	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	104	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	106	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	103	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	90.4	75-125		%	5/6/03	5/6/03

Validation 6/18/03

J = Estimated value, below quantitation limit.

Run #: 0506C16
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:14:22 PM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T026
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49676
QCG: $26UW-030506AC1-62762

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/6/03	5/6/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/6/03	5/6/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/6/03	5/6/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/6/03	5/6/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/6/03	5/6/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/6/03	5/6/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (BFB)	104	62-139		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DBFM)	102	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (DCA)	100	75-125		%	5/6/03	5/6/03
EPA 8260B	Surrogate recovery (TOL)	94.2	75-125		%	5/6/03	5/6/03

6/18/03

Run #: 0506C17
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:14:22 PM

EPA 8260B BTEX Oxy W - UST

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APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G109
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49677
QCG: $26UW-030507AC-62763

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(SA)	100(SB)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	104	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	104	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	101	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	92.7	75-125		%	5/7/03	5/7/03

6/18/03

Run #: 0507C06
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:14:22 PM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G110
Sample Collection Date: 4/25/03

ARF: 41389
APPL ID: AP49678
QCG: $26UW-030507AC-62763

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	55 J J(5A)	100(5B)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	105	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	103	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	97.7	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	95.6	75-125		%	5/7/03	5/7/03

6/18/03

J = Estimated value, below quantitation limit.

Run #: 0507C07
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/22/03 1:14:22 PM

103989

EPA 8260B BTEX Oxy W - UST

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1230 Columbia St. Ste 400
San Diego. CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G114
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49732
QCG: $26UW-030507AC1-62802

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A)	100 (5B)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	103	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	105	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	105	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	96.1	75-125		%	5/7/03	5/7/03

6/18/03

Run #: 0507C08
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8260B BTEX Oxy W - UST

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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G111
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49733
QCG: $26UW-030507AC1-62802

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	0.48	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	1.8	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected U	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	0.89	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected U	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	103	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	101	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	97.8	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	93.8	75-125		%	5/7/03	5/7/03

6/18/03

Run #: 0507C09
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T027
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49734
QCG: $26UW-030507AC1-62802

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100 (5B)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	106	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	106	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	103	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	97.1	75-125		%	5/7/03	5/7/03

6/18/03

Run #: 0507C10
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R019
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49735
QCG: $26UW-030507AC1-62802

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(SH)	100(SB)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	105	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	108	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	107	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	93.4	75-125		%	5/7/03	5/7/03

6/18/03

Run #: 0507C11
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/27/03 1:28:12 PM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G115
Sample Collection Date: 4/28/03

ARF: 41400
APPL ID: AP49736
QCG: $26UW-030507AC1-62802

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	0.39 J J	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected U	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	19	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected U	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100(5B)	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	105	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	104	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	102	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	95.0	75-125		%	5/7/03	5/7/03

6/18/03

J = Estimated value, below quantitation limit.

Run #: 0507C12
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/27/03 1:28:13 PM

10398B

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G112
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49849
QCG: $26UW-030507BC-62874

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	104	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	102	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	99.3	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	94.8	75-125		%	5/7/03	5/7/03

6/13/03

Run #: 0507C13
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/28/03 9:56:40 AM

EPA 8260B BTEX Oxy W - UST

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1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043R020
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49850
QCG: $26UW-030507BC-62874

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	109	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	107	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	103	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	100	75-125		%	5/7/03	5/7/03

6/13/03

Run #: 0507C14
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/28/03 9:56:40 AM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
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San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043T028
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49851
QCG: $26UW-030507BC-62874

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected UJ (2)	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R (5A, 5B)	100	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected UJ (2)	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	107	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	103	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	100	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	98.5	75-125		%	5/7/03	5/7/03

6/13/03

Run #: 0507C15
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G113
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49852
QCG: $26UW-030507BC-62874

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(SA,SB)	100	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	108	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	110	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	107	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	96.1	75-125		%	5/7/03	5/7/03

6/13/07

Run #: 0507C16
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

EPA 8260B BTEX Oxy W - UST

Bechtel National/Navy Clean
1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G116
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49853
QCG: $26UW-030507BC-62874

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/7/03	5/7/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/7/03	5/7/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/7/03	5/7/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/7/03	5/7/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A,5B)	100	50	ug/L	5/7/03	5/7/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/7/03	5/7/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (BFB)	103	62-139		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DBFM)	103	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (DCA)	104	75-125		%	5/7/03	5/7/03
EPA 8260B	Surrogate recovery (TOL)	94.0	75-125		%	5/7/03	5/7/03

6/13/03

Run #: 0507C17
Instrument: Chico
Sequence: C030505
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

EPA 8260B BTEX Oxy W - UST

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1230 Columbia St. Ste 400
San Diego, CA 92101

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jimmy Jordan
Project: NAF EL CENTRO
Sample ID: C043G117
Sample Collection Date: 4/29/03

ARF: 41417
APPL ID: AP49854
QCG: $26UW-030509AC-62875

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-Dichloroethane	Not detected U	0.6	0.14	ug/L	5/9/03	5/9/03
EPA 8260B	1,2-Ethylene Dibromide	Not detected	0.6	0.20	ug/L	5/9/03	5/9/03
EPA 8260B	Benzene	Not detected	0.4	0.16	ug/L	5/9/03	5/9/03
EPA 8260B	di-Isopropyl Ether	Not detected	0.5	0.16	ug/L	5/9/03	5/9/03
EPA 8260B	Ethyl-tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/9/03	5/9/03
EPA 8260B	Ethylbenzene	Not detected	0.6	0.23	ug/L	5/9/03	5/9/03
EPA 8260B	Methyl tert-Butyl Ether	Not detected	0.5	0.19	ug/L	5/9/03	5/9/03
EPA 8260B	tert-Amyl Methyl Ether	Not detected	0.5	0.14	ug/L	5/9/03	5/9/03
EPA 8260B	tert-Butyl Alcohol	Not detected R(5A)	100	50	ug/L	5/9/03	5/9/03
EPA 8260B	Toluene	Not detected U	1.1	0.17	ug/L	5/9/03	5/9/03
EPA 8260B	Xylenes	Not detected	0.5	0.19	ug/L	5/9/03	5/9/03
EPA 8260B	Surrogate recovery (BFB)	109	62-139		%	5/9/03	5/9/03
EPA 8260B	Surrogate recovery (DBFM)	106	75-125		%	5/9/03	5/9/03
EPA 8260B	Surrogate recovery (DCA)	106	75-125		%	5/9/03	5/9/03
EPA 8260B	Surrogate recovery (TOL)	94.0	75-125		%	5/9/03	5/9/03

6/13/03

Run #: 0509C17
Instrument: Chico
Sequence: C030509
Dilution Factor: 1
Initials: SHM

GC w/ MDL SelfCalc II: 5/28/03 9:56:41 AM

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 21, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43573

Sample Identification

C043G141
C043G139
C043G140
C043G143
C043T045
C043R029

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles and Oxygenates.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/23/04	tert-Butyl alcohol	0.0031 (≥0.05)	All samples in SDG 43573	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/26/04	tert-Butyl alcohol	0.0038 (≥0.05)	All samples in SDG 43573	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T045 was identified as a trip blank. No volatile contaminants were found in this blank.

Sample C043R029 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43573	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C043G139 and C043G140 were identified as field duplicates. No volatiles were detected in any of the samples.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 43573

SDG	Sample	Compound	Flag	A or P	Reason
43573	C043G141 C043G139 C043G140 C043G143 C043T045 C043R029	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
43573	C043G141 C043G139 C043G140 C043G143 C043T045 C043R029	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
43573	C043G141 C043G139 C043G140 C043G143 C043T045 C043R029	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 43573

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 43573

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 22, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43582

Sample Identification

C043G144
C043G149
C043R030
C043G155
C043T046
C043G150
C043G150DL

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles and Oxygenates.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/26/04	tert-Butyl alcohol	0.0256 (≥0.05)	All samples in SDG 43582	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T046 was identified as a trip blank. No volatile contaminants were found in this blank.

Sample C043R030 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43582	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G150	Ethylbenzene Isopropylbenzene m,p-Xylenes o-Xylene Toluene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G150	Ethylbenzene Isopropylbenzene m,p-Xylenes o-Xylene Toluene	R R R R R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 43582

SDG	Sample	Compound	Flag	A or P	Reason
43582	C043G144 C043G149 C043R030 C043G155 C043T046 C043G150 C043G150DL	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
43582	C043G144 C043G149 C043R030 C043G155 C043T046 C043G150 C043G150DL	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
43582	C043G150	Ethylbenzene Isopropylbenzene m,p-Xylenes o-Xylene Toluene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
43582	C043G150	Ethylbenzene Isopropylbenzene m,p-Xylenes o-Xylene Toluene	R R R R R	A	Overall assessment of data

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 43582

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 43582

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 16, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43557

Sample Identification

C043G138
C043R028
C043G136
C043G137
C043G142
C043T043

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles and Oxygenates.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/19/04	tert-Butyl alcohol	0.0243 (≥0.05)	All samples in SDG 43557	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/20/04	tert-Butyl alcohol	0.0301 (≥0.05)	All samples in SDG 43557	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T043 was identified as a trip blank. No volatile contaminants were found in this blank.

Sample C043R028 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43557	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C043G136 and C043G137 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	C043G136	C043G137	
Di-isopropyl ether	0.41	0.42	2
Methyl tert-Butyl Ether	0.47	0.48	2

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 43557

SDG	Sample	Compound	Flag	A or P	Reason
43557	C043G138 C043R028 C043G136 C043G137 C043G142 C043T043	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
43557	C043G138 C043R028 C043G136 C043G137 C043G142 C043T043	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
43557	C043G138 C043R028 C043G136 C043G137 C043G142 C043T043	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 43557

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 43557

No Sample Data Qualified in this SDG

LDC Report# 11534C1

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 13, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43519

Sample Identification

C043G127
C043G125
C043G126
C043T040
C043G128
C043R025

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles and Oxygenates.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
1/15/04	tert-Butyl alcohol	35	All samples in SDG 43519	J (all detects) UJ (all non-detects)	A

Average relative response factors (RRF) for all volatile target compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/15/04	tert-Butyl alcohol	0.0028 (≥0.05)	All samples in SDG 43519	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/16/04	tert-Butyl alcohol	0.0024 (≥0.05)	C043G126 C043T040 C043G128 C043R025 04116A BLK-1WC	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T040 was identified as a trip blank. No volatile contaminants were found in this blank.

Sample C043R025 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43519	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
040116ALCS-1WC	tert-Butyl alcohol	149 (70-130)	C043G126 C043T040 C043G128 C043R025 04116A BLK-1WC	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C043G125 and C043G126 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	C043G125	C043G126	
1,2-Dichloroethane	11	10	10

Compound	Concentration (ug/L)		RPD
	C043G125	C043G126	
Benzene	3.5	3.2	9
Di-isopropyl ether	3.2	2.8	13
tert-Butyl Alcohol	100U	63	200

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 43519

SDG	Sample	Compound	Flag	A or P	Reason
43519	C043G127 C043G125 C043G126 C043T040 C043G128 C043R025	tert-Butyl alcohol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
43519	C043G127 C043G125 C043G126 C043T040 C043G128 C043R025	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
43519	C043G126 C043T040 C043G128 C043R025	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
43519	C043G127 C043G125 C043G126 C043T040 C043G128 C043R025	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
43519	C043G126 C043T040 C043G128 C043R025	tert-Butyl alcohol	J (all detects)	P	Laboratory control samples (%R)

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 43519

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 43519

No Sample Data Qualified in this SDG

LDC Report# 11534B1

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 15, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43541

Sample Identification

C043G132
C043G133
C043R027
C043T042
C043G134
C043G135

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles and Oxygenates.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/19/04	tert-Butyl alcohol	0.0243 (≥0.05)	All samples in SDG 43541	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/20/04	tert-Butyl alcohol	0.0301 (≥0.05)	All samples in SDG 43541	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T042 was identified as a trip blank. No volatile contaminants were found in this blank.

Sample C043R027 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43541	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 43541

SDG	Sample	Compound	Flag	A or P	Reason
43541	C043G132 C043G133 C043R027 C043T042 C043G134 C043G135	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
43541	C043G132 C043G133 C043R027 C043T042 C043G134 C043G135	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
43541	C043G132 C043G133 C043R027 C043T042 C043G134 C043G135	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 43541

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 43541

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 14, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Volatiles

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43528

Sample Identification

C043G129
C043G131
C043G130
C043R026
C043T041
C043G129MS
C043G129MSD

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles and Oxygenates.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
1/15/04	tert-Butyl alcohol	35	All samples in SDG 43528	J (all detects) UJ (all non-detects)	A

Average relative response factors (RRF) for all volatile target compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/15/04	tert-Butyl alcohol	0.0028 (≥0.05)	All samples in SDG 43528	J (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
1/16/04	tert-Butyl alcohol	0.0024 (≥0.05)	All samples in SDG 43528	J (all detects) R (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample C043T041 was identified as a trip blank. No volatile contaminants were found in this blank.

Sample C043R026 was identified as an equipment rinsate. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C043G129MS/MSD (All samples in SDG 43528)	tert-Butyl alcohol	154 (70-130)	-	37.8 (≤20)	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
04116ALCS-1WC	tert-Butyl alcohol	149 (70-130)	All samples in SDG 43528	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Volatiles - Data Qualification Summary - SDG 43528

SDG	Sample	Compound	Flag	A or P	Reason
43528	C043G129 C043G131 C043G130 C043R026 C043T041	tert-Butyl alcohol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
43528	C043G129 C043G131 C043G130 C043R026 C043T041	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Initial calibration (RRF)
43528	C043G129 C043G131 C043G130 C043R026 C043T041	tert-Butyl alcohol	J (all detects) R (all non-detects)	A	Continuing calibration (RRF)
43528	C043G129 C043G131 C043G130 C043R026 C043T041	tert-Butyl alcohol	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
43528	C043G129 C043G131 C043G130 C043R026 C043T041	tert-Butyl alcohol	J (all detects)	P	Laboratory control samples (%R)

NAF El Centro, CTO 43
Volatiles - Laboratory Blank Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Volatiles - Field Blank Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Data Validation Reports
LDC# 11534

TPH as Gasoline

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 21, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43573

Sample Identification

C043G141
C043G139
C043G140
C043G143
C043T045
C043R029

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T045 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R029 was identified as an equipment rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43573	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G139 and C043G140 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 43573

SDG	Sample	Compound	Flag	A or P	Reason
43573	C043G141 C043G139 C043G140 C043G143 C043T045 C043R029	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 43573

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 43573

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 22, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43582

Sample Identification

C043G144
C043G149
C043R030
C043G155
C043T046
C043G150
C043G150DL

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T046 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R030 was identified as an equipment rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C043G150	4-Bromofluorobenzene	229 (60-133)	TPH as gasoline	J (all detects)	A

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43582	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G150	TPH as gasoline	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G150	TPH as gasoline	R	A

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 43582

SDG	Sample	Compound	Flag	A or P	Reason
43582	C043G150	TPH as gasoline	J (all detects)	A	Surrogate recovery (%R)
43582	C043G144 C043G149 C043R030 C043G155 C043T046 C043G150 C043G150DL	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates
43582	C043G150	TPH as gasoline	J (all detects)	A	Compound quantitation and CRQLs
43582	C043G150	TPH as gasoline	R	A	Overall assessment of data

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 43582

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 43582

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 16, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43557

Sample Identification

C043G138
C043R028
C043G136
C043G137
C043G142
C043T043

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T043 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R028 was identified as an equipment rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43557	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G136 and C043G137 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 43557

SDG	Sample	Compound	Flag	A or P	Reason
43557	C043G138 C043R028 C043G136 C043G137 C043G142 C043T043	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 43557

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 43557

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 13, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43519

Sample Identification

C043G127
C043G125
C043G125DL
C043G126
C043G126DL
C043T040
C043G128
C043R025

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T040 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R025 was identified as an equipment rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C043G125	4-Bromofluorobenzene	160 (74-138)	TPH as gasoline	J (all detects)	A
C043G126	4-Bromofluorobenzene	162 (74-138)	TPH as gasoline	J (all detects)	A

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43519	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G125 C043G126	TPH as gasoline	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G125 C043G126	TPH as gasoline	R	A

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G125 and C043G126 and samples C043G125DL and C043G126DL were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/L)		RPD
	C043G125	C043G126	
TPH as gasoline	1.4	1.5	7

Compound	Concentration (mg/L)		RPD
	C043G125DL (10x)	C043G126DL (10x)	
TPH as gasoline	1.4	1.3	7

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 43519

SDG	Sample	Compound	Flag	A or P	Reason
43519	C043G125 C043G126	TPH as gasoline	J (all detects)	A	Surrogate recovery (%R)
43519	C043G127 C043G125 C043G125DL C043G126 C043G126DL C043T040 C043G128 C043R025	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates
43519	C043G125 C043G126	TPH as gasoline	J (all detects)	A	Compound quantitation and CRQLs
43519	C043G125 C043G126	TPH as gasoline	R	A	Overall assessment of data

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 43519

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 43519

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 15, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43541

Sample Identification

C043T042
C043G135

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T042 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43541	TPH as gasoline	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 43541

SDG	Sample	Compound	Flag	A or P	Reason
43541	C043T042 C043G135	TPH as gasoline	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 43541

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 43541

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 14, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43528

Sample Identification

C043G129
C043R026
C043T041
C043G129MS
C043G129MSD

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample C043T041 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample C043R026 was identified as an equipment rinsate. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Data Validation Reports
LDC# 11534

TPH as Extractables

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 22, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43582

Sample Identification

C043G149
C043G155
C043G150

Introduction

This data review covers 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

No field blanks were identified in this SDG.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43582	TPH as extractables	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 43582

SDG	Sample	Compound	Flag	A or P	Reason
43582	C043G149 C043G155 C043G150	TPH as extractables	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 43582

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 43582

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 13, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43519

Sample Identification

C043G127
C043G125
C043G126
C043G128
C043R025

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

Sample C043R025 was identified as an equipment rinsate. No total petroleum hydrocarbons as extractable contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43519	TPH as extractables	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

IX. Field Duplicates

Samples C043G125 and C043G126 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/L)		RPD
	C043G125	C043G126	
TPH as diesel	2200	2100	5

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 43519

SDG	Sample	Compound	Flag	A or P	Reason
43519	C043G127 C043G125 C043G126 C043G128 C043R025	TPH as extractables	None	P	Matrix spike/Matrix spike duplicates

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 43519

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 43519

No Sample Data Qualified in this SDG

LDC Report# 11534B8

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 15, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43541

Sample Identification

C043G132
C043G132DL
C043G133
C043R027
C043G134

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

Sample C043R027 was identified as an equipment rinsate. No total petroleum hydrocarbons as extractable contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C043G132	o-Terphenyl	539 (49-128)	TPH as extractables	J (all detects)	A

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG 43541	TPH as extractables	No MS/MSD associated with these samples.	MS/MSD required.	None	P

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G132	TPH as diesel	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G132	TPH as diesel	R	A

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 43541

SDG	Sample	Compound	Flag	A or P	Reason
43541	C043G132	TPH as extractables	J (all detects)	A	Surrogate recovery (%R)
43541	C043G132 C043G132DL C043G133 C043R027 C043G134	TPH as extractables	None	P	Matrix spike/Matrix spike duplicates
43541	C043G132	TPH as diesel	J (all detects)	A	Compound quantitation and CRQLs
43541	C043G132	TPH as diesel	R	A	Overall assessment of data

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 43541

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 43541

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAF El Centro, CTO 43

Collection Date: January 14, 2004

LDC Report Date: February 13, 2004

Matrix: Water

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 43528

Sample Identification

C043G129
C043G131
C043G130
C043G130DL
C043R026
C043G129MS
C043G129MSD

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

Sample C043R026 was identified as an equipment rinsate. No total petroleum hydrocarbons as extractable contaminants were found in this blank.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C043G130	o-Terphenyl	291 (49-128)	TPH as extractables	J (all detects)	A

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C043G130	TPH as diesel	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C043G130	TPH as diesel	R	A

Data flags have been summarized at the end of this report.

IX. Field Duplicates

No field duplicates were identified in this SDG.

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG 43528

SDG	Sample	Compound	Flag	A or P	Reason
43528	C043G130	TPH as extractables	J (all detects)	A	Surrogate recovery (%R)
43528	C043G130	TPH as diesel	J (all detects)	A	Compound quantitation and CRQLs
43528	C043G130	TPH as diesel	R	A	Overall assessment of data

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG

NAF El Centro, CTO 43
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG 43528

No Sample Data Qualified in this SDG