# Summary Report



Wayne Price
OCD
1220 S. Saint Francis Dr.
Santa Fe, NM 87505

Report Date: June 5, 2002

Order ID Number: A02051716

Project Number: N/A
Project Name: Maralo
Project Location: Jay Anotheny Ranch

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 197262 | North Area-2' | Soil | 5/16/02 | 9:29 | 5/17/02 |
| 197263 | North Area-4'-6' | Soil | 5/16/02 | 9:49 | 5/17/02 |
| 197264 | North Area-6-8' | Soil | 5/16/02 | 10:00 | 5/17/02 |
| 197265 | North Area-10-12' | Soil | 5/16/02 | 10:17 | 5/17/02 |
| 197266 | North Area-15'-17' | Soil | 5/16/02 | 10:42 | 5/17/02 |
| 197267 | North Area-20-22' | Soil | 5/16/02 | 11:25 | 5/17/02 |
| 197268 | North Area-25-27' | Soil | 5/16/02 | 12:20 | 5/17/02 |
| 197269 | SW Area 5' | Soil | 5/16/02 | 13:38 | 5/17/02 |
| 197270 | SW Area 10' | Soil | 5/16/02 | 13:59 | 5/17/02 |
| 197271 | SW Area 15' | Soil | 5/16/02 | 14:13 | 5/17/02 |
| 197272 | SW Area 20' | Soil | 5/16/02 | 14:53 | 5/17/02 |
| 197273 | SW Area 27'-28' | Soil | 5/16/02 | 15:57 | 5/17/02 |

0 This report consists of a total of 3 page(s) and is intended only as a summary of results for the sample(s) listed above.

| | BTEX | | | | | TPH |
|---|---|---|---|---|---|---|
| Sample - Field Code | Benzene (ppm) | Toluene (ppm) | Ethylbenzene (ppm) | M,P,O-Xylene (ppm) | Total BTEX (ppm) | TRPHC (ppm) |
| 197262 - North Area-2' | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 9040 |
| 197263 - North Area-4'-6' | <0.010 | <0.010 | <0.010 | 0.016 | 0.016 | 8710 |
| 197264 - North Area-6-8' | <0.050 | <0.050 | <0.050 | 0.277 | 0.277 | 10900 |
| 197265 - North Area-10-12' | <0.100 | <0.100 | 0.22 | 0.583 | 0.803 | 12900 |
| 197266 - North Area-15'-17' | 0.0937 | <0.050 | 0.305 | 0.96 | 1.36 | 14900 |
| 197267 - North Area-20-22' | 0.0723 | <0.050 | 0.151 | 0.576 | 0.799 | 12700 |
| 197268 - North Area-25-27' | <0.100 | <0.100 | 0.274 | 0.921 | 1.20 | 12600 |
| 197269 - SW Area 5' | 0.111 | <0.050 | 0.402 | 0.741 | 1.25 | 18800 |
| 197270 - SW Area 10' | 0.179 | <0.100 | 0.38 | 0.792 | 1.35 | 25400 |
| 197271 - SW Area 15' | 0.12 | <0.100 | 0.432 | 0.672 | 1.22 | 13100 |
| 197272 - SW Area 20' | <0.010 | <0.010 | 0.038 | 0.0155 | 0.0535 | 56.8 |
| 197273 - SW Area 27'-28' | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 143 |

*Continued on next page ...*

*This is only a summary. Please, refer to the complete report package for quality control data.*

*Sample 197262 continued ...*

| Param | Flag | Result | Units |
|---|---|---|---|

**Sample: 197262 - North Area-2'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 2.66 | mg/Kg |

**Sample: 197263 - North Area-4'-6'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 3.12 | mg/Kg |

**Sample: 197264 - North Area-6-8'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 7.56 | mg/Kg |

**Sample: 197265 - North Area-10-12'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 5.87 | mg/Kg |

**Sample: 197266 - North Area-15'-17'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 3.37 | mg/Kg |

**Sample: 197267 - North Area-20-22'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 18.1 | mg/Kg |

**Sample: 197268 - North Area-25-27'**

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 66.9 | mg/Kg |

## Sample: 197269 - SW Area 5'

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 54.1 | mg/Kg |

## Sample: 197270 - SW Area 10'

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 5.83 | mg/Kg |

## Sample: 197271 - SW Area 15'

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | <10.0 | mg/Kg |

## Sample: 197272 - SW Area 20'

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 10.2 | mg/Kg |

## Sample: 197273 - SW Area 27'-28'

| Param | Flag | Result | Units |
|---|---|---|---|
| Chloride | | 10.3 | mg/Kg |

*This is only a summary. Please, refer to the complete report package for quality control data.*

TRACEANALYSIS, INC.

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# Analytical and Quality Control Report

Wayne Price
OCD
1220 S. Saint Francis Dr.
Santa Fe, NM 87505

Report Date: June 5, 2002

Order ID Number: A02051716

Project Number: N/A
Project Name: Maralo
Project Location: Jay Anotheny Ranch

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 97262 | North Area-2' | Soil | 5/16/02 | 9:29 | 5/17/02 |
| 97263 | North Area-4'-6' | Soil | 5/16/02 | 9:49 | 5/17/02 |
| 97264 | North Area-6-8' | Soil | 5/16/02 | 10:00 | 5/17/02 |
| 97265 | North Area-10-12' | Soil | 5/16/02 | 10:17 | 5/17/02 |
| 97266 | North Area-15'-17' | Soil | 5/16/02 | 10:42 | 5/17/02 |
| 97267 | North Area-20-22' | Soil | 5/16/02 | 11:25 | 5/17/02 |
| 97268 | North Area-25-27' | Soil | 5/16/02 | 12:20 | 5/17/02 |
| 97269 | SW Area 5' | Soil | 5/16/02 | 13:38 | 5/17/02 |
| 97270 | SW Area 10' | Soil | 5/16/02 | 13:59 | 5/17/02 |
| 97271 | SW Area 15' | Soil | 5/16/02 | 14:13 | 5/17/02 |
| 97272 | SW Area 20' | Soil | 5/16/02 | 14:53 | 5/17/02 |
| 97273 | SW Area 27'-28' | Soil | 5/16/02 | 15:57 | 5/17/02 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.
Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.



Dr. Blair Leftwich, Director

# Analytical Report

## Sample: 197262 - North Area-2'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | QC Batch: | QC20528 | Date Analyzed: | 5/17/02 |
| Analyst: | CG | Preparation Method: | S 5035 | Prep Batch: | PB19598 | Date Prepared: | 5/17/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.010 | mg/Kg | 10 | 0.001 |
| Toluene | | <0.010 | mg/Kg | 10 | 0.001 |
| Ethylbenzene | | <0.010 | mg/Kg | 10 | 0.001 |
| M,P,O-Xylene | | <0.010 | mg/Kg | 10 | 0.001 |
| Total BTEX | | <0.010 | mg/Kg | 10 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.846 | mg/Kg | 10 | 1 | 84 | 70 - 130 |
| 4-BFB | | 0.708 | mg/Kg | 10 | 1 | 70 | 70 - 130 |

## Sample: 197262 - North Area-2'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | Ion Chromatography (IC) | Analytical Method: | E 300.0 | QC Batch: | QC20761 | Date Analyzed: | 6/5/02 |
| Analyst: | JSW | Preparation Method: | N/A | Prep Batch: | PB19790 | Date Prepared: | 6/4/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 2.66 | mg/Kg | 2 | 1 |

## Sample: 197262 - North Area-2'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | TPH | Analytical Method: | E 418.1 | QC Batch: | QC20561 | Date Analyzed: | 5/24/02 |
| Analyst: | KM | Preparation Method: | N/A | Prep Batch: | PB19623 | Date Prepared: | 5/19/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 9040 | mg/Kg | 100 | 10 |

## Sample: 197263 - North Area-4'-6'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | QC Batch: | QC20519 | Date Analyzed: | 5/17/02 |
| Analyst: | CG | Preparation Method: | S 5035 | Prep Batch: | PB19591 | Date Prepared: | 5/17/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.010 | mg/Kg | 10 | 0.001 |
| Toluene | | <0.010 | mg/Kg | 10 | 0.001 |
| Ethylbenzene | | <0.010 | mg/Kg | 10 | 0.001 |
| M,P,O-Xylene | | 0.016 | mg/Kg | 10 | 0.001 |
| Total BTEX | | 0.016 | mg/Kg | 10 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.897 | mg/Kg | 10 | 1 | 89 | 70 - 130 |
| 4-BFB | | 0.749 | mg/Kg | 10 | 1 | 74 | 70 - 130 |

## Sample: 197263 - North Area-4'-6'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 3.12 | mg/Kg | 2 | 1 |

## Sample: 197263 - North Area-4'-6'

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20561 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 8710 | mg/Kg | 100 | 10 |

## Sample: 197264 - North Area-6-8'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20528 Date Analyzed: 5/17/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19598 Date Prepared: 5/17/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.050 | mg/Kg | 50 | 0.001 |
| Toluene | | <0.050 | mg/Kg | 50 | 0.001 |
| Ethylbenzene | | <0.050 | mg/Kg | 50 | 0.001 |
| M,P,O-Xylene | | 0.277 | mg/Kg | 50 | 0.001 |
| Total BTEX | | 0.277 | mg/Kg | 50 | 0.001 |
| Test Comments | [1] | * | mg/Kg | 1 | |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.747 | mg/Kg | 50 | 1 | 74 | 70 - 130 |

## Sample: 197264 - North Area-6-8'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 7.56 | mg/Kg | 5 | 1 |

[1] Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of 0.0318 which is lower than the RDL but greater than the MDL of 0.01183.

## Sample: 197264 - North Area-6-8'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | TPH | Analytical Method: | E 418.1 | QC Batch: | QC20561 | Date Analyzed: | 5/24/02 |
| Analyst: | KM | Preparation Method: | N/A | Prep Batch: | PB19623 | Date Prepared: | 5/19/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 10900 | mg/Kg | 30 | 10 |

## Sample: 197265 - North Area-10-12'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | QC Batch: | QC20528 | Date Analyzed: | 5/17/02 |
| Analyst: | CG | Preparation Method: | S 5035 | Prep Batch: | PB19598 | Date Prepared: | 5/17/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.100 | mg/Kg | 100 | 0.001 |
| Toluene | | <0.100 | mg/Kg | 100 | 0.001 |
| Ethylbenzene | | 0.22 | mg/Kg | 100 | 0.001 |
| M,P,O-Xylene | | 0.583 | mg/Kg | 100 | 0.001 |
| Total BTEX | | 0.803 | mg/Kg | 100 | 0.001 |
| Test Comments | [2] | * | mg/Kg | 1 | |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.963 | mg/Kg | 100 | 1 | 96 | 70 - 130 |
| 4BFB | [3] | 2.24 | mg/Kg | 50 | 1 | 224 | 70 - 130 |

## Sample: 197265 - North Area-10-12'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | Ion Chromatography (IC) | Analytical Method: | E 300.0 | QC Batch: | QC20761 | Date Analyzed: | 6/5/02 |
| Analyst: | JSW | Preparation Method: | N/A | Prep Batch: | PB19790 | Date Prepared: | 6/4/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 5.87 | mg/Kg | 5 | 1 |

## Sample: 197265 - North Area-10-12'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | TPH | Analytical Method: | E 418.1 | QC Batch: | QC20561 | Date Analyzed: | 5/24/02 |
| Analyst: | KM | Preparation Method: | N/A | Prep Batch: | PB19623 | Date Prepared: | 5/19/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 12900 | mg/Kg | 30 | 10 |

## Sample: 197266 - North Area-15'-17'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | QC Batch: | QC20528 | Date Analyzed: | 5/17/02 |
| Analyst: | CG | Preparation Method: | S 5035 | Prep Batch: | PB19598 | Date Prepared: | 5/17/02 |

[2]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of 0.0202 which is lower than the RDL but greater than the MDL of 0.0237.
[3]High surrogate recovery due to peak interference.

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | 0.0937 | mg/Kg | 50 | 0.001 |
| Toluene | | <0.050 | mg/Kg | 50 | 0.001 |
| Ethylbenzene | | 0.305 | mg/Kg | 50 | 0.001 |
| M,P,O-Xylene | | 0.96 | mg/Kg | 50 | 0.001 |
| Total BTEX | | 1.36 | mg/Kg | 50 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.9 | mg/Kg | 50 | 1 | 90 | 70 - 130 |
| 4-BFB | [4] | 3.32 | mg/Kg | 100 | 1 | 332 | 70 - 130 |

## Sample: 197266 - North Area-15'-17'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 3.37 | mg/Kg | 2 | 1 |

## Sample: 197266 - North Area-15'-17'

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20561 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 14900 | mg/Kg | 30 | 10 |

## Sample: 197267 - North Area-20-22'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20528 Date Analyzed: 5/17/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19598 Date Prepared: 5/17/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | 0.0723 | mg/Kg | 50 | 0.001 |
| Toluene | | <0.050 | mg/Kg | 50 | 0.001 |
| Ethylbenzene | | 0.151 | mg/Kg | 50 | 0.001 |
| M,P,O-Xylene | | 0.576 | mg/Kg | 50 | 0.001 |
| Total BTEX | | 0.799 | mg/Kg | 50 | 0.001 |

| urrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| FT | [5] | 0.506 | mg/Kg | 50 | 1 | 50 | 70 - 130 |
| -BFB | [6] | 2.59 | mg/Kg | 50 | 1 | 259 | 70 - 130 |

[4] High surrogate recovery due to peak interference.
[5] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[6] High surrogate recovery due to peak interference.

## Sample: 197267 - North Area-20-22'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 18.1 | mg/Kg | 2 | 1 |

## Sample: 197267 - North Area-20-22'

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20561 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 12700 | mg/Kg | 30 | 10 |

## Sample: 197268 - North Area-25-27'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20528 Date Analyzed: 5/17/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19598 Date Prepared: 5/17/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.100 | mg/Kg | 100 | 0.001 |
| Toluene | | <0.100 | mg/Kg | 100 | 0.001 |
| Ethylbenzene | | 0.274 | mg/Kg | 100 | 0.001 |
| M,P,O-Xylene | | 0.921 | mg/Kg | 100 | 0.001 |
| Total BTEX | | 1.20 | mg/Kg | 100 | 0.001 |
| Test Comments | [7] | * | mg/Kg | 1 | |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | [8] | 0.557 | mg/Kg | 100 | 1 | 55 | 70 - 130 |
| 4BFB | [9] | 3.19 | mg/Kg | 50 | 1 | 319 | 70 - 130 |

## Sample: 197268 - North Area-25-27'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 66.9 | mg/Kg | 5 | 1 |

## Sample: 197268 - North Area-25-27'

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20561 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

[7] Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of 0.0801 which is lower than the RDL but greater than the MDL of 0.02366.
[8] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[9] High surrogate recovery due to peak interference.

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 12600 | mg/Kg | 30 | 10 |

## Sample: 197269 - SW Area 5'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20528 Date Analyzed: 5/17/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19598 Date Prepared: 5/17/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | 0.111 | mg/Kg | 50 | 0.001 |
| Toluene | | <0.050 | mg/Kg | 50 | 0.001 |
| Ethylbenzene | | 0.402 | mg/Kg | 50 | 0.001 |
| M,P,O-Xylene | | 0.741 | mg/Kg | 50 | 0.001 |
| Total BTEX | | 1.25 | mg/Kg | 50 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | [10] | 0.381 | mg/Kg | 50 | 1 | 38 | 70 - 130 |
| 4-BFB | [11] | 3.07 | mg/Kg | 100 | 1 | 307 | 70 - 130 |

## Sample: 197269 - SW Area 5'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 54.1 | mg/Kg | 50 | 1 |

## Sample: 197269 - SW Area 5'

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20561 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 18800 | mg/Kg | 30 | 10 |

## Sample: 197270 - SW Area 10'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20528 Date Analyzed: 5/17/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19598 Date Prepared: 5/17/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | 0.179 | mg/Kg | 100 | 0.001 |
| Toluene | | <0.100 | mg/Kg | 100 | 0.001 |
| Ethylbenzene | | 0.38 | mg/Kg | 100 | 0.001 |
| M,P,O-Xylene | | 0.792 | mg/Kg | 100 | 0.001 |
| Total BTEX | | 1.35 | mg/Kg | 100 | 0.001 |

[10] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[11] High surrogate recovery due to peak interference.

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | [12] | 0.463 | mg/Kg | 100 | 1 | 46 | 70 - 130 |
| 4-BFB | [13] | 3.09 | mg/Kg | 50 | 1 | 309 | 70 - 130 |

## Sample: 197270 - SW Area 10'

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 5.83 | mg/Kg | 5 | 1 |

## Sample: 197270 - SW Area 10'

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20562 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

| aram | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| RPHC | | 25400 | mg/Kg | 30 | 10 |

## ample: 197271 - SW Area 15'

nalysis: BTEX Analytical Method: S 8021B QC Batch: QC20528 Date Analyzed: 5/17/02
nalyst: CG Preparation Method: S 5035 Prep Batch: PB19598 Date Prepared: 5/17/02

| aram | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| enzene | | 0.12 | mg/Kg | 100 | 0.001 |
| oluene | | <0.100 | mg/Kg | 100 | 0.001 |
| hylbenzene | | 0.432 | mg/Kg | 100 | 0.001 |
| ,P,O-Xylene | | 0.672 | mg/Kg | 100 | 0.001 |
| otal BTEX | | 1.22 | mg/Kg | 100 | 0.001 |

| rrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| FT | [14] | 0.661 | mg/Kg | 100 | 1 | 66 | 70 - 130 |
| BFB | [15] | 2.33 | mg/Kg | 100 | 1 | 233 | 70 - 130 |

## mple: 197271 - SW Area 15'

alysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20761 Date Analyzed: 6/5/02
alyst: JSW Preparation Method: N/A Prep Batch: PB19790 Date Prepared: 6/4/02

| ram | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| loride | | <10.0 | mg/Kg | 10 | 1 |

[12] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[13] High surrogate recovery due to peak interference.
[14] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[15] High surrogate recovery due to peak interference.

## Sample: 197271 - SW Area 15'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | TPH | Analytical Method: | E 418.1 | QC Batch: | QC20562 | Date Analyzed: | 5/24/02 |
| Analyst: | KM | Preparation Method: | N/A | Prep Batch: | PB19623 | Date Prepared: | 5/19/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 13100 | mg/Kg | 30 | 10 |

## Sample: 197272 - SW Area 20'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | QC Batch: | QC20528 | Date Analyzed: | 5/17/02 |
| Analyst: | CG | Preparation Method: | S 5035 | Prep Batch: | PB19598 | Date Prepared: | 5/17/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.010 | mg/Kg | 10 | 0.001 |
| Toluene | | <0.010 | mg/Kg | 10 | 0.001 |
| Ethylbenzene | | 0.038 | mg/Kg | 10 | 0.001 |
| M,P,O-Xylene | | 0.0155 | mg/Kg | 10 | 0.001 |
| Total BTEX | | 0.0535 | mg/Kg | 10 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | [16] | 0.405 | mg/Kg | 10 | 1 | 40 | 70 - 130 |
| 4-BFB | [17] | 0.368 | mg/Kg | 100 | 1 | 36 | 70 - 130 |

## Sample: 197272 - SW Area 20'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | Ion Chromatography (IC) | Analytical Method: | E 300.0 | QC Batch: | QC20760 | Date Analyzed: | 6/5/02 |
| Analyst: | JSW | Preparation Method: | N/A | Prep Batch: | PB19791 | Date Prepared: | 6/4/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 10.2 | mg/Kg | 10 | 1 |

## Sample: 197272 - SW Area 20'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | TPH | Analytical Method: | E 418.1 | QC Batch: | QC20562 | Date Analyzed: | 5/24/02 |
| Analyst: | KM | Preparation Method: | N/A | Prep Batch: | PB19623 | Date Prepared: | 5/19/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 56.8 | mg/Kg | 1 | 10 |

## Sample: 197273 - SW Area 27'-28'

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Analysis: | BTEX | Analytical Method: | S 8021B | QC Batch: | QC20528 | Date Analyzed: | 5/17/02 |
| Analyst: | CG | Preparation Method: | S 5035 | Prep Batch: | PB19598 | Date Prepared: | 5/17/02 |

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Benzene | | <0.010 | mg/Kg | 10 | 0.001 |

*Continued ...*

[16] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[17] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

*...Continued* Sample: 197273 Analysis: BTEX

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Toluene | | <0.010 | mg/Kg | 10 | 0.001 |
| Ethylbenzene | | <0.010 | mg/Kg | 10 | 0.001 |
| M,P,O-Xylene | | <0.010 | mg/Kg | 10 | 0.001 |
| Total BTEX | | <0.010 | mg/Kg | 10 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | [18] | 0.562 | mg/Kg | 10 | 1 | 56 | 70 - 130 |
| 4-BFB | [19] | 0.477 | mg/Kg | 10 | 1 | 47 | 70 - 130 |

**Sample: 197273 - SW Area 27'-28'**

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20760 Date Analyzed: 6/5/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19791 Date Prepared: 6/4/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| Chloride | | 10.3 | mg/Kg | 10 | 1 |

**Sample: 197273 - SW Area 27'-28'**

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC20562 Date Analyzed: 5/24/02
Analyst: KM Preparation Method: N/A Prep Batch: PB19623 Date Prepared: 5/19/02

| Param | Flag | Result | Units | Dilution | RDL |
|---|---|---|---|---|---|
| TRPHC | | 143 | mg/Kg | 1 | 10 |

[18] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[19] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

# Quality Control Report
# Method Blank

## Method Blank

QCBatch: QC20519

| Param | Flag | Results | Units | Reporting Limit |
|---|---|---|---|---|
| Benzene | | <0.010 | mg/Kg | 0.001 |
| Toluene | | <0.010 | mg/Kg | 0.001 |
| Ethylbenzene | | <0.010 | mg/Kg | 0.001 |
| M,P,O-Xylene | | <0.010 | mg/Kg | 0.001 |
| Total BTEX | | <0.010 | mg/Kg | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.923 | mg/Kg | 10 | 1 | 92 | 70 - 130 |
| 4-BFB | | 0.835 | mg/Kg | 10 | 1 | 83 | 70 - 130 |

## Method Blank

QCBatch: QC20528

| Param | Flag | Results | Units | Reporting Limit |
|---|---|---|---|---|
| Benzene | | <0.010 | mg/Kg | 0.001 |
| Toluene | | <0.010 | mg/Kg | 0.001 |
| Ethylbenzene | | <0.010 | mg/Kg | 0.001 |
| M,P,O-Xylene | | <0.010 | mg/Kg | 0.001 |
| Total BTEX | | <0.010 | mg/Kg | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| TFT | | 0.948 | mg/Kg | 10 | 1 | 94 | 70 - 130 |
| 4-BFB | | 0.812 | mg/Kg | 10 | 1 | 81 | 70 - 130 |

## Method Blank

QCBatch: QC20561

| Param | Flag | Results | Units | Reporting Limit |
|---|---|---|---|---|
| TRPHC | | <25.0 | mg/Kg | 10 |

## Method Blank

QCBatch: QC20562

| Param | Flag | Results | Units | Reporting Limit |
|---|---|---|---|---|
| TRPHC | | <25.0 | mg/Kg | 10 |

## Method Blank

QCBatch: QC20760

| Param | Flag | Results | Units | Reporting Limit |
|---|---|---|---|---|
| Chloride | | 12.82 | mg/Kg | 1 |

## Method Blank

QCBatch: QC20761

| Param | Flag | Results | Units | Reporting Limit |
|---|---|---|---|---|
| Chloride | | <12.82 | mg/Kg | 1 |

# Quality Control Report
# Lab Control Spikes and Duplicate Spikes

## Laboratory Control Spikes

QCBatch: QC20519

| Param | LCS Result | LCSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | 0.966 | 0.958 | mg/Kg | 10 | 1 | <0.010 | 96 | 0 | 70 - 130 | 20 |
| Benzene | 0.966 | 0.966 | mg/Kg | 10 | 1 | <0.010 | 96 | 0 | 70 - 130 | 20 |
| Toluene | 0.958 | 0.957 | mg/Kg | 10 | 1 | <0.010 | 95 | 0 | 70 - 130 | 20 |
| Ethylbenzene | 0.932 | 0.945 | mg/Kg | 10 | 1 | <0.010 | 93 | 1 | 70 - 130 | 20 |
| M,P,O-Xylene | 2.91 | 2.83 | mg/Kg | 10 | 3 | <0.010 | 97 | 2 | 70 - 130 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dilution | Spike Amount | LCS % Rec | LCSD % Rec | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| TFT | 0.924 | 0.925 | mg/Kg | 10 | 1 | 92 | 92 | 70 - 130 |
| 4BFB | 0.889 | 0.816 | mg/Kg | 10 | 1 | 88 | 81 | 70 - 130 |

## Laboratory Control Spikes

QCBatch: QC20528

| Param | LCS Result | LCSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | 0.873 | 0.87 | mg/Kg | 10 | 1 | <0.010 | 87 | 0 | 70 - 130 | 20 |
| Benzene | 0.988 | 0.975 | mg/Kg | 10 | 1 | <0.010 | 98 | 1 | 70 - 130 | 20 |
| Toluene | 0.968 | 0.906 | mg/Kg | 120 | 1 | <0.010 | 96 | 6 | 70 - 130 | 20 |
| Ethylbenzene | 0.96 | 0.916 | mg/Kg | 10 | 1 | <0.010 | 96 | 4 | 70 - 130 | 20 |
| M,P,O-Xylene | 3.02 | 2.9 | mg/Kg | 10 | 3 | <0.010 | 100 | 4 | 70 - 130 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dilution | Spike Amount | LCS % Rec | LCSD % Rec | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| TFT | 0.903 | 0.89 | mg/Kg | 10 | 1 | 90 | 89 | 70 - 130 |
| 4BFB | 0.882 | 0.934 | mg/Kg | 10 | 1 | 88 | 93 | 70 - 130 |

## Laboratory Control Spikes

QCBatch: QC20561

| Param | LCS Result | LCSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| TRPHC | 268 | 305 | mg/Kg | 1 | 250 | <25.0 | 107 | 12 | 74 - 110 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spikes

QCBatch: QC20562

| Param | LCS Result | LCSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| TRPHC | 268 | 305 | mg/Kg | 1 | 250 | <25.0 | 107 | 12 | 74 - 110 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spikes

QCBatch: QC20760

| Param | LCS Result | LCSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | [20] 24.02 | [21] 23.88 | mg/Kg | 1 | 12.50 | 12.82 | 192 | 0 | 90 - 110 | 20 |
| Sulfate | [22] 25.58 | [23] 25.59 | mg/Kg | 1 | 12.50 | 14.34 | 204 | 0 | 90 - 110 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spikes

QCBatch: QC20761

| Param | LCS Result | LCSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | [24] 24.02 | [25] 23.9 | mg/Kg | 1 | 12.50 | <12.82 | 192 | 0 | 90 - 110 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Quality Control Report
# Matrix Spikes and Duplicate Spikes

## Matrix Spikes

QCBatch: QC20519

| Param | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.868 | 0.839 | mg/Kg | 10 | 1 | <0.010 | 86 | 3 | 70 - 130 | 20 |

*Continued ...*

[20]The Soil blank should be subracted from the spikes; giving a %EA of 90
[21]The Soil blank should be subracted from the spikes; giving a %EA of 90
[22]The Soil blank should be subracted from the spikes; giving a %EA of 90
[23]The Soil blank should be subracted from the spikes; giving a %EA of 90
[24]The Soil blank should be subracted from the spikes; giving a %EA of 90
[25]The Soil blank should be subracted from the spikes; giving a %EA of 90

... *Continued*

| Param | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | 0.839 | 0.854 | mg/Kg | 10 | 1 | <0.010 | 83 | 1 | 70 - 130 | 20 |
| Ethylbenzene | 0.857 | 0.849 | mg/Kg | 10 | 1 | <0.010 | 85 | 0 | 70 - 130 | 20 |
| M,P,O-Xylene | 2.74 | 2.69 | mg/Kg | 10 | 3 | 0.016 | 90 | 1 | 70 - 130 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dilution | Spike Amount | MS % Rec | MSD % Rec | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| TFT | 0.834 | [26] 0.549 | mg/Kg | 10 | 1 | 83 | 54 | 70 - 130 |
| 4-BFB | [27] 0.682 | [28] 0.475 | mg/Kg | 10 | 1 | 68 | 47 | 70 - 130 |

## Matrix Spikes QCBatch: QC20528

| Param | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.938 | 0.936 | mg/Kg | 10 | 1 | <0.010 | 93 | 0 | 70 - 130 | 20 |
| Toluene | 0.92 | 0.915 | mg/Kg | 10 | 1 | <0.010 | 92 | 0 | 70 - 130 | 20 |
| Ethylbenzene | 0.908 | 0.92 | mg/Kg | 10 | 1 | <0.010 | 90 | 1 | 70 - 130 | 20 |
| M,P,O-Xylene | 2.92 | 2.76 | mg/Kg | 10 | 3 | <0.010 | 97 | 5 | 70 - 130 | 20 |

ercent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| urrogate | MS Result | MSD Result | Units | Dilution | Spike Amount | MS % Rec | MSD % Rec | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| FT | 0.781 | 0.88 | mg/Kg | 10 | 1 | 78 | 88 | 70 - 130 |
| BFB | 0.714 | 0.725 | mg/Kg | 10 | 1 | 71 | 72 | 70 - 130 |

## Matrix Spikes QCBatch: QC20561

| aram | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| RPHC | 40200 | 40500 | mg/Kg | 1 | 250 | 44300 | -1640 | -7 | 70 - 130 | 20 |

ercent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Matrix Spikes QCBatch: QC20562

[6] Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[7] Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[8] Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

| Param | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| TRPHC | 399 | 337 | mg/Kg | 1 | 250 | 143 | 102 | 27 | 70 - 130 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Matrix Spikes

QCBatch: QC20760

| Param | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 30400 | 30377 | mg/Kg | 1 | 12500 | 19500 | 87 | 0 | 35 - 144 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Matrix Spikes

QCBatch: QC20761

| Param | MS Result | MSD Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec | RPD | % Rec Limit | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 589.14 | 590.11 | mg/Kg | 1 | 625 | 54.1 | 85 | 0 | 35 - 144 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Quality Control Report
# Continuing Calibration Verification Standards

## CCV (1)

QCBatch: QC20519

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| MTBE | | mg/L | 0.10 | 0.0979 | 97 | 85 - 115 | 5/17/02 |
| Benzene | | mg/L | 0.10 | 0.0905 | 90 | 85 - 115 | 5/17/02 |
| Toluene | | mg/L | 0.10 | 0.0926 | 92 | 85 - 115 | 5/17/02 |
| Ethylbenzene | | mg/L | 0.10 | 0.0865 | 86 | 85 - 115 | 5/17/02 |
| M,P,O-Xylene | | mg/L | 0.30 | 0.279 | 93 | 85 - 115 | 5/17/02 |

## ICV (1)

QCBatch: QC20519

| aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| ITBE | | mg/L | 0.10 | 0.0942 | 94 | 85 - 115 | 5/17/02 |
| enzene | | mg/L | 0.10 | 0.0965 | 96 | 85 - 115 | 5/17/02 |
| oluene | | mg/L | 0.10 | 0.0958 | 95 | 85 - 115 | 5/17/02 |
| thylbenzene | | mg/L | 0.10 | 0.0899 | 89 | 85 - 115 | 5/17/02 |

*Continued ...*

*.. Continued*

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| M,P,O-Xylene | | mg/L | 0.30 | 0.293 | 97 | 85 - 115 | 5/17/02 |

## CCV (1) QCBatch: QC20528

| aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| ITBE | | mg/L | 0.10 | 0.0925 | 92 | 85 - 115 | 5/17/02 |
| enzene | | mg/L | 0.10 | 0.0939 | 93 | 85 - 115 | 5/17/02 |
| oluene | | mg/L | 0.10 | 0.0936 | 93 | 85 - 115 | 5/17/02 |
| thylbenzene | | mg/L | 0.10 | 0.091 | 91 | 85 - 115 | 5/17/02 |
| I,P,O-Xylene | | mg/L | 0.30 | 0.285 | 95 | 85 - 115 | 5/17/02 |

## CCV (2) QCBatch: QC20528

| aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TBE | | mg/L | 0.10 | 0.0895 | 89 | 85 - 115 | 5/17/02 |
| enzene | | mg/L | 0.10 | 0.0952 | 95 | 85 - 115 | 5/17/02 |
| oluene | | mg/L | 0.10 | 0.0892 | 89 | 85 - 115 | 5/17/02 |
| hylbenzene | | mg/L | 0.10 | 0.093 | 93 | 85 - 115 | 5/17/02 |
| ,P,O-Xylene | | mg/L | 0.30 | 0.293 | 97 | 85 - 115 | 5/17/02 |

## CV (1) QCBatch: QC20528

| ram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TBE | | mg/L | 0.10 | 0.0871 | 87 | 85 - 115 | 5/17/02 |
| nzene | | mg/L | 0.10 | 0.0929 | 92 | 85 - 115 | 5/17/02 |
| luene | | mg/L | 0.10 | 0.0965 | 96 | 85 - 115 | 5/17/02 |
| hylbenzene | | mg/L | 0.10 | 0.0961 | 96 | 85 - 115 | 5/17/02 |
| P,O-Xylene | | mg/L | 0.30 | 0.307 | 102 | 85 - 115 | 5/17/02 |

## CV (1) QCBatch: QC20561

| ram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| PHC | | mg/Kg | 100 | 109 | 109 | 80 - 120 | 5/24/02 |

## CCV (2) QCBatch: QC20561

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TRPHC | | mg/Kg | 100 | 107 | 107 | 80 - 120 | 5/24/02 |

## ICV (1) QCBatch: QC20561

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TRPHC | | mg/Kg | 100 | 111 | 111 | 80 - 120 | 5/24/02 |

## CCV (1) QCBatch: QC20562

| ?aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TRPHC | | mg/Kg | 100 | 109 | 109 | 80 - 120 | 5/24/02 |

## CCV (2) QCBatch: QC20562

| 'aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TRPHC | | mg/Kg | 100 | 107 | 107 | 80 - 120 | 5/24/02 |

## ICV (1) QCBatch: QC20562

| 'aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| TRPHC | | mg/Kg | 100 | 111 | 111 | 80 - 120 | 5/24/02 |

## CCV (1) QCBatch: QC20760

| aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| hloride | | mg/L | 12.50 | 11.19 | 89 | 90 - 110 | 6/5/02 |
| ulfate | | mg/L | 12.50 | 11.25 | 90 | 90 - 110 | 6/5/02 |

## ICV (1) QCBatch: QC20760

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Chloride | | mg/L | 12.50 | 11.19 | 89 | 90 - 110 | 6/5/02 |
| Sulfate | | mg/L | 12.50 | 11.38 | 91 | 90 - 110 | 6/5/02 |

## CCV (1) QCBatch: QC20761

| aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| hloride | | mg/L | 12.50 | 11.19 | 89 | 90 - 110 | 6/5/02 |

## CCV (1) QCBatch: QC20761

| aram | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| hloride | | mg/L | 12.50 | 11.59 | 92 | 90 - 110 | 6/5/02 |

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

# TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: H020251716

Company Name: NM OCD
Phone #: 505-476-3487
Address: (Street, City, Zip) 1220 S SAINT FRANCIS DR. SANTA FE NM 87505
Fax #:
Contact Person: WAYNE PRICE
Invoice to: (If different from above)
Project #:
Project Name: MARALO
Project Location: JAY ANOTHENY RANCH - 32° 5' 25.60" N / 103° 12' 52.09" W
Sampler Signature:

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume/Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H020251716 | NORTH AREA - 2' | 1 | 4oz | | X | | | | | | | X | | 5/16/02 | 0929 |
| 02 | " " 4'-6' | 1 | " | | X | | | | | | | X | | " | 0949 |
| 03 | " " 6-8' | 1 | " | | X | | | | | | | X | | " | 1000 |
| 04 | " " 10-12' | 1 | " | | X | | | | | | | X | | " | 1017 |
| 05 | " " 15-17' | 1 | " | | X | | | | | | | X | | " | 1042 |
| 06 | " " 20-22' | 1 | " | | X | | | | | | | X | | " | 1125 |
| 07 | " " 25-27' | 1 | " | | X | | | | | | | X | | " | 1220 |

ANALYSIS REQUEST (Circle or Specify Method No.)

| MTBE 8021B/602 | BTEX 8021B/602 | TPH 418.1/TX1005 | PAH 8270C | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B/624 | GC/MS Semi. Vol. 8270C/625 | PCB's 8082/608 | Pesticides 8081A/608 | BOD, TSS, pH | CHLORIDES | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X | X | X | | | | | | | | | | | | | X | | |
| | X | X | | | | | | | | | | | | | X | | |
| | X | X | | | | | | | | | | | | | X | | |
| | X | X | | | | | | | | | | | | | X | | |
| | X | X | | | | | | | | | | | | | X | | |
| | X | X | | | | | | | | | | | | | X | | |
| | X | X | | | | | | | | | | | | | X | | |

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
|---|---|---|---|---|---|
| WAYNE PRICE | 5/16/02 | 5:20 PM | | | |
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| Relinquished by: | Date: | Time: | Received at Laboratory by: | Date: | Time: |

LAB USE ONLY
Intact Y N
Headspace Y N
Temp 2
Log-In Review

REMARKS:
6/6F/P

☐ Check If Special Reporting Limits Are Needed

Carrier # BUS 902 878 0354

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

# General Terms and Conditions

**Article 1: General**

1.1 The words "we", "us", and "our" refer to TraceAnalysis. You will deliver samples to us for analysis, accompanied, or preceded by, a signed Chain of Custody/Analysis Request defining the scope and timing of work and stating either the testing criteria you require or identifying the agency to which the results will be submitted.

**Article 2: Our General Responsibilities**

2.1 We agree to provide the professional services described in this agreement. We will provide you with written reports containing analytical results. In performing our service, we will use that degree of care and ordinarily exercised under similar circumstances by reputable members of our profession practicing in the same locality.

2.2 Test and observations will be conducted using test procedures and laboratory protocols as specified in accepted Chain of Custody/Analysis Request. If you direct a manner of making tests that varies from standard or recommended procedures, you agree to hold us harmless from all claims, damages, and expenses arising out of your direction.

2.3 We will not release information regarding our services for you or any information that we receive from you, except for information that is in the public domain and except as we are required by law.

**Article 3: Your General Responsibilities**

3.1 On each Chain of Custody/Analysis Request you will designate a representative who has authority to transmit instructions, receive information, and make decisions relative to our work.

3.2 You will respond in a reasonable time to our request for decisions, authorization for changes, additional compensation, or schedule extensions.

3.3 For each Chain of Custody/Analysis Request you will either provide us with the exact methods for analysis of each fraction or you will identify the regulations and agency under which or for which the analysis to be prepared. If permits, consent orders, work plans, quality assurance plans, or correspondence with regulatory agencies address laboratory requirements, you will provide us with copies of the relevant provisi prior to our initiation of the analyses.

**Article 4: Reports and Records**

4.1 We will furnish copies of each report to you as specified in the Chain of Custody and Analysis Request. We will retain analytical data for seven years and financial data for three years relating to the services perfor following transmittal of our final report.

4.2 If you do not pay for our services as agreed, you agree that we may retain all reports and work not yet delivered to you. You also agree that our work will not be used by you for any purpose unless paid for.

**Article 5: Delivery and Acceptance of Samples**

5.1 Until we accept delivery of samples by notation on chain of custody documents or otherwise in writing accept the samples, you are responsible for loss of or damage to samples. Until so accepted, we have responsibility as to samples.

5.2 As to any samples that are suspected of containing hazardous substances or radioactive material, such that would make special handling required, you will specify the suspected or known substances and le and type of radioactive activity. This information will be given to us in writing as a part of the Chain of Custody/Analysis Request and will precede or accompany samples suspected of containing hazardous substanc

5.3 Samples accepted by us remain your property while in our custody. We will retain samples for a period of 14 days following the date of submission of our report. We will extend the retention period if you so dir Following the retention period we will dispose of non-hazardous samples. We may return highly hazardous, acutely toxic, or radioactive samples and samples containers and residues to you. You agree to accept th

5.4 Regardless of a prior acceptance, we may refuse acceptance or revoke acceptance of samples if we determine that the samples present a risk to health, safety, or the environment, or that we are not authorize accept them. If we revoke acceptance of any sample, you will have it removed from our facilities promptly.

**Article 6: Changes to Task Orders**

6.1 No persons other than the designated representatives for each Chain of Custody/Analysis Request are authorized to act regarding changes to a Chain of Custody/Analysis Request. We will notify you promptly if identify any activity that we regard as a change to the terms and conditions of a Chain of Custody/Analysis Request. Our notice will include the date, nature, circumstance, and cause of the activity regarded as a chan We will specify the particular elements of project performance for which we may seek an equitable adjustment.

6.2 You will respond to the notice provided for in paragraph 6.1 promptly. Changes may be made to a Chain of Custody/Analysis Request through issuance of an amendment. The amendment will specify the reas for the change and, as appropriate, include any modified budgets, schedules, scope of work, and other necessary provisions.

6.3 Until agreement is reached concerning the proposed change, we may regard the situation as a suspension directed by you.

**Article 7: Compensation**

7.1 Our pricing for the work is predicated upon your acceptance of the conditions and allocations of risks and responsibilities described in this agreement. You agree to pay for services as stated in our proposal a accepted by you or according to our then current standard pricing documents if there is no other written agreement as to price. An estimate or statement of probable cost is not a firm figure unless stated as such.

7.2 Unless otherwise agreed to elsewhere, you agree to pay invoices within 30 days of receipt unless, within 15 days from receipt of the invoice, you notify us in writing of a particular item that is alleged to be incorre You agree to pay the uncontested portions of the invoices within 30 days of receipt. You agree to pay interest on unpaid balances beginning 60 days after receipt of invoice at the rate of 1.5% per month, but no exceed the maximum rate allowed by law.

7.3 If you direct us to invoice another, we will do so, but you agree to be ultimately responsible for our compensation until you provide us with that third party's written acceptance of all terms of our agreement and u we agree to the substitution.

7.4 You agree to compensate us for our services and expenses if we are required to respond to legal process related to our services for you. Compensable services include hourly charges for all personnel involved the response and attorney fees reasonably incurred in obtaining advice concerning the response, the preparation of the testifier, and appearances related to the legal process.

7.5 If we are delayed by, or the period of performance is materially extended because of, factors beyond our control, or if project condition or the scope or amount of work change, or if the standards or methods of test change, we will give you timely notice of the change and we will receive an equitable adjustment of our compensation.

**Article 8: Risk Allocation, Disputes, and Damages**

8.1 Neither we nor you will be liable to the other for special, incidental, consequential or punitive losses or damages, including but not limited to those arising from delay, loss of use, loss of profits or revenue, or the c of capital.

8.2 We will not be liable to you for damages unless suit is commenced within two years of injury or loss or within two years of the date of the completion of our services, whichever is earlier. In no event will we be lia to you unless you have notified us of the discovery of the negligent act, error, omission or breach within 30 days of the date of its discovery and unless you have given us an opportunity to investigate and to recomme ways of mitigating your damages.

8.3 In the event you fail to pay us within 90 days following the invoice date, we may consider the default a total breach of our agreement and we may, at our option, terminate all of our duties without liability to you to others.

8.4 If it is claimed by a third party that we did not complete an acceptable analysis, at your request we will seek further review and acceptance of the completed work by the third party and use your best efforts to obt that acceptance. We will assist you as directed.

8.5 You and we agree that disputes will be submitted to "Alternative Dispute Resolution" (ADR) as a condition precedent to litigation and other remedies provided by law. Each of us agrees to exercise good faith effo to resolve disputes through mediation unless we both agree upon another ADR procedure. All disputes will be governed by the law of the place where our services are rendered, or if our services are rendered in mo than one state, you and we agree that the law of the place that services were first rendered will govern.

8.6 If either of us makes a claim against the other as to issues out of the performance of this agreement, the prevailing party will be entitled to recover its reasonable expenses of litigation, including reasonable attorne fees. If we bring lawsuit against you to collect our invoiced fees and expenses, you agree to pay our reasonable collection expenses including attorney fees.

**Article 9: Indemnities**

9.1 We will indemnify and hold you harmless from and against demands, damages, and expenses caused by our negligent acts and omissions and breach of contract and by the negligent acts and omissions and brea of contract of persons for whom we are legally responsible. You will indemnify and hold us harmless from and against demands, damages, and expenses caused by your negligent act and omissions and breach contract and by the negligent acts and omissions and breach of contract of persons for whom you are legally responsible. These indemnities are subject to specific limitations provided for in this agreement.

**Article 10: Miscellaneous Provisions**

10.1 This agreement constitutes the entire agreement between you and us, and it supersedes all prior agreements. Any term, condition, prior course of dealing, course of performance, usage of trade, understandir purchase order conditions, or other agreement purporting to modify, vary, supplement, or explain any provision of this agreement is of no effect until placed in writing and signed by both parties subsequent to the da of this agreement. In no event will the printed terms or conditions stated in a purchase or work order, other than an agreed upon Chain of Custody/Analysis Request, be considered a part of this agreement, even if t document is signed by both of us.

10.2 Neither party will assign this agreement without the express written approval of the other, but we may subcontract laboratory procedures with your approval as we deem necessary to meet our obligations to yo

10.3 If any of the provisions of this agreement are held to be invalid or unenforceable in any respect, the remaining terms will be in full effect and the agreement will be construed as if the invalid or unenforceable matte were never included in it. No waiver of any default will be waiver of any future default.

10.4 Neither you or we will have any liability for nonperformance caused in whole or in part by causes beyond our reasonable control. Such causes include but are not limited to Acts of God, civil unrest and war, lab unrest and strikes, equipment failures, matrix interference, acts of authorities, and failures of subcontractors that could not be reasonably anticipated.

10.5 You may stop our work by giving a written suspension or termination directive, but once work has been suspended, we need not resume work until we agree to change in scope, schedule, and compensation. Up suspension or termination, we will use reasonable care to preserve samples provided that you agree to compensate us for any additional effort, but we will have no responsibility for meeting holding time limitations aft the effective time of a suspension or termination directive. We will be compensated for service rendered and expenses incurred prior to termination that cannot reasonably be avoided.

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El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: H02051210

Company Name: NMOCD
Phone #: 505-476-3487
Address: (Street, City, Zip) 1220 S. SAINT FRANCIS SANTA Fe NM 87505
Fax #:
Contact Person: WAYNE PRICE
Invoice to: (If different from above)
Project #:
Project Name: MARALO
Project Location: JAY ANOTHENY RANCH-
Sampler Signature:

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume/Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | SW AREA 5' | 1 | 4oz | | X | | | | | | | X | | 5/16/02 | 1338 |
| 20 | " " 10' | 1 | " | | X | | | | | | | X | | " | 1359 |
| 21 | " " 15' | 1 | " | | X | | | | | | | X | | " | 1413 |
| 22 | " " 20' | 1 | " | | X | | | | | | | X | | " | 1453 |
| 23 | " " ~~27'~~ 27-28' | 1 | " | | X | | | | | | | X | | " | 1557 |
| | SOUTH AREA 5' | 1 | " | | X | | | | | | | X | | " | |
| | " " 10' | 1 | " | | X | | | | | | | X | | " | |
| | " " 15' | 1 | " | | X | | | | | | | X | | " | |
| | " " ~~20'~~ 27-28' | 1 | " | | X | | | | | | | X | | " | |
| | " " 25' | 1 | " | | X | | | | | | | X | | " | |

### ANALYSIS REQUEST
(Circle or Specify Method No.)

| MTBE 8021B/602 | BTEX 8021B/602 | (TPH 418.1) TX1005 | PAH 8270C | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260B/624 | GC/MS Semi. Vol. 8270C/625 | PCB's 8082/608 | Pesticides 8081A/608 | BOD, TSS, pH | CHLORIDES | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | X | X | | | | | | | | | | | | | X | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

Relinquished by: WAYNE PRICE Date: 5/16/02 Time: 5:20PM
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact Y N
Headspace Y N
Temp
Log-in Review

REMARKS:

☐ Check If Special Reporting Limits Are Needed

Carrier # BUS 902878 035 4

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ORIGINAL COPY

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10.1 This agreement constitutes the entire agreement between you and us, and it supersedes all prior agreements. Any term, condition, prior course of dealing, course of performance, usage of trade, understand purchase order conditions, or other agreement purporting to modify, vary, supplement, or explain any provision of this agreement is of no effect until placed in writing and signed by both parties subsequent to the d of this agreement. In no event will the printed terms or conditions stated in a purchase or work order, other than an agreed upon Chain of Custody/Analysis Request, be considered a part of this agreement, even if document is signed by both of us.

10.2 Neither party will assign this agreement without the express written approval of the other, but we may subcontract laboratory procedures with your approval as we deem necessary to meet our obligations to y

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10.4 Neither you or we will have any liability for nonperformance caused in whole or in part by causes beyond our reasonable control. Such causes include but are not limited to Acts of God, civil unrest and war, la unrest and strikes, equipment failures, matrix interference, acts of authorities, and failures of subcontractors that could not be reasonably anticipated.

10.5 You may stop our work by giving a written suspension or termination directive, but once work has been suspended, we need not resume work until we agree to change in scope, schedule, and compensation. U suspension or termination, we will use reasonable care to preserve samples provided that you agree to compensate us for any additional effort, but we will have no responsibility for meeting holding time limitations a the effective time of a suspension or termination directive. We will be compensated for service rendered and expenses incurred prior to termination that cannot reasonably be avoided.