

Report Date: June 5, 2002 Order Number: A02051716  
N/A Maralo

Page Number: 1 of 3  
Jay Anotheny Ranch

## Summary Report

Before the OCC  
Case 13142 - De Novo  
OCD Ex. 5

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.

Sample - Field Code	BTEX					TPH TRPHC (ppm)
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (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.

Report Date: June 5, 2002 Order Number: A02051716  
N/A MaraloPage Number: 2 of 3  
Jay Anotheny Ranch*Sample 197262 continued ...*

Param	Flag	Result	Units
<b>Sample: 197262 - North Area-2'</b>			
Param	Flag	Result	Units
Chloride		2.66	mg/Kg

<b>Sample: 197263 - North Area-4'-6'</b>			
Param	Flag	Result	Units
Chloride		3.12	mg/Kg

<b>Sample: 197264 - North Area-6-8'</b>			
Param	Flag	Result	Units
Chloride		7.56	mg/Kg

<b>Sample: 197265 - North Area-10-12'</b>			
Param	Flag	Result	Units
Chloride		5.87	mg/Kg

<b>Sample: 197266 - North Area-15'-17'</b>			
Param	Flag	Result	Units
Chloride		3.37	mg/Kg

<b>Sample: 197267 - North Area-20-22'</b>			
Param	Flag	Result	Units
Chloride		18.1	mg/Kg

<b>Sample: 197268 - North Area-25-27'</b>			
Param	Flag	Result	Units
Chloride		66.9	mg/Kg

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

**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.*

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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 33:1 unless otherwise noted.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of Trace Analysis, Inc.



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

<sup>1</sup>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.

N/A

Maralo

Jay Anotheny Ranch

**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
4-BFB	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

<sup>2</sup>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.

<sup>3</sup>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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	5	0.506	mg/Kg	50	1	50	70 - 130
BFB	6	2.59	mg/Kg	50	1	259	70 - 130

<sup>4</sup>High surrogate recovery due to peak interference.

<sup>5</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

<sup>6</sup>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
4-BFB	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

<sup>7</sup>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.

<sup>8</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

<sup>9</sup>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	<sup>10</sup>	0.381	mg/Kg	50	1	38	70 - 130
4-BFB	<sup>11</sup>	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

<sup>10</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

<sup>11</sup>High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	<sup>12</sup>	0.463	mg/Kg	100	1	46	70 - 130
4-BFB	<sup>13</sup>	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

Param	Flag	Result	Units	Dilution	RDL
TRPHC		25400	mg/Kg	30	10

**Sample: 197271 - SW Area 15'**

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		0.12	mg/Kg	100	0.001
Toluene		<0.100	mg/Kg	100	0.001
Ethylbenzene		0.432	mg/Kg	100	0.001
M,P,O-Xylene		0.672	mg/Kg	100	0.001
Total BTEX		1.22	mg/Kg	100	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	<sup>14</sup>	0.661	mg/Kg	100	1	66	70 - 130
4-BFB	<sup>15</sup>	2.33	mg/Kg	100	1	233	70 - 130

**Sample: 197271 - SW Area 15'**

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		<10.0	mg/Kg	10	1

<sup>12</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

<sup>13</sup>High surrogate recovery due to peak interference.

<sup>14</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

<sup>15</sup>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	<sup>16</sup>	0.405	mg/Kg	10	1	40	70 - 130
4-BFB	<sup>17</sup>	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 ...

<sup>16</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

<sup>17</sup>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	<sup>18</sup>	0.562	mg/Kg	10	1	56	70 - 130
4-BFB	<sup>19</sup>	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

<sup>18</sup>Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.  
<sup>19</sup>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
4-BFB	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
4-BFB	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	<sup>20</sup> 24.02	<sup>21</sup> 23.88	mg/Kg	1	12.50	12.82	192	0	90 - 110	20
Sulfate	<sup>22</sup> 25.58	<sup>23</sup> 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	<sup>24</sup> 24.02	<sup>25</sup> 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 ...

<sup>20</sup>The Soil blank should be subtracted from the spikes; giving a %EA of 90  
<sup>21</sup>The Soil blank should be subtracted from the spikes; giving a %EA of 90  
<sup>22</sup>The Soil blank should be subtracted from the spikes; giving a %EA of 90  
<sup>23</sup>The Soil blank should be subtracted from the spikes; giving a %EA of 90  
<sup>24</sup>The Soil blank should be subtracted from the spikes; giving a %EA of 90  
<sup>25</sup>The Soil blank should be subtracted 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	<sup>26</sup> 0.549	mg/Kg	10	1	83	54	70 - 130
4-BFB	<sup>27</sup> 0.682	<sup>28</sup> 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

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	0.781	0.88	mg/Kg	10	1	78	88	70 - 130
4-BFB	0.714	0.725	mg/Kg	10	1	71	72	70 - 130

**Matrix Spikes**      QCBatch:    QC20561

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

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

**Matrix Spikes**      QCBatch:    QC20562

<sup>26</sup> Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.  
<sup>27</sup> Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.  
<sup>28</sup> 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
1,2,4-Trimethylbenzene		mg/L	0.30	0.279	93	85 - 115	5/17/02

ICV (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	0.0942	94	85 - 115	5/17/02
benzene		mg/L	0.10	0.0965	96	85 - 115	5/17/02
toluene		mg/L	0.10	0.0958	95	85 - 115	5/17/02
ethylbenzene		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

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0925	92	85 - 115	5/17/02
Benzene		mg/L	0.10	0.0939	93	85 - 115	5/17/02
Toluene		mg/L	0.10	0.0936	93	85 - 115	5/17/02
Ethylbenzene		mg/L	0.10	0.091	91	85 - 115	5/17/02
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	5/17/02

CCV (2)            QCBatch:    QC20528

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0895	89	85 - 115	5/17/02
Benzene		mg/L	0.10	0.0952	95	85 - 115	5/17/02
Toluene		mg/L	0.10	0.0892	89	85 - 115	5/17/02
Ethylbenzene		mg/L	0.10	0.093	93	85 - 115	5/17/02
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	5/17/02

ICV (1)            QCBatch:    QC20528

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0871	87	85 - 115	5/17/02
Benzene		mg/L	0.10	0.0929	92	85 - 115	5/17/02
Toluene		mg/L	0.10	0.0965	96	85 - 115	5/17/02
Ethylbenzene		mg/L	0.10	0.0961	96	85 - 115	5/17/02
M,P,O-Xylene		mg/L	0.30	0.307	102	85 - 115	5/17/02

CCV (1)            QCBatch:    QC20561

Param	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:    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

Param	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

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:    QC20562

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:    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	11.25	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

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

ICV (1)            QCBatch:    QC20761

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

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# Trace Analysis, Inc.

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1 (888) 588-3443

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: **NM OCD** Phone #: **505-476-3487**

Address: (Street, City, Zip) **1220 S SAWYER FRAVCS DR. SUITE 201 NM 87505** Fax #: **87505**

Contact Person: **WAYNE PRICE**

Invoice to: (different from above)

Project #: **NRAL0**

Project Location: **5741 AUSTIN RANCH - 32.5 25.40 N / 103.12 52.09 W**

FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		
			WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE
NORTH AREA - 2'	1	4oz	X	X	X	X	X	X	X	X	X	5/16/02	09:31
" " 4'-6'	1	"	X	X	X	X	X	X	X	X	X	"	09:41
" " 6-8'	1	"	X	X	X	X	X	X	X	X	X	"	10:00
" " 10-12'	1	"	X	X	X	X	X	X	X	X	X	"	10:17
" " 15-17'	1	"	X	X	X	X	X	X	X	X	X	"	10:27
" " 20-22'	1	"	X	X	X	X	X	X	X	X	X	"	11:25
" " 25-27'	1	"	X	X	X	X	X	X	X	X	X	"	12:20

Relinquished by: **Wayne Price** Date: **5/16/02** Time: **5:30 PM**

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

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

ANALYSIS REQUEST  
(Circle or Specify Method No.)

REMARKS:

6/6/1p

Check If Special Reporting Limits Are Needed

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

ORIGINAL COPY

Carrier # **Boyd 902 878 0354**

## 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 our 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 skill 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 our 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 is 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 provisions 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 performed 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 no 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 level 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 substances.

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 direct. 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 them.

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 authorized to 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 we 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 change. 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 reason 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 and 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 incorrect. 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 not to 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 until 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 in 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 testing 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 cost 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 liable 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 recommend 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 or 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 obtain 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 efforts 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 more 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 attorney's 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 breach 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 of 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, understanding, 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 date of this agreement. In no event will the printed terms or conditions stated in a purchase of work order, other than an agreed upon Chain of Custody/Analysis Request, be considered a part of this agreement, even if the 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 you.

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 matters 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, labor 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. Upon 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 after the effective time of a suspension or termination directive. We will be compensated for services rendered and expenses incurred prior to termination that cannot reasonably be avoided.

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

# Trace Analysis, Inc.

155 McCandless, Suite H  
El Paso, Texas 79932  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (888) 868-3443

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: **NMOC D** Phone #: **505-476-3487**

Address: (Street, City, Zip) **1220 S. SAWT FRANKS SWTH FE NM 87505** Fax #:

Contact Person: **WAYNE PRICE**

Invoice to: (if different from above) **WAYNE PRICE**

Project #: **WAYNE PRICE** Project Name: **MARALO**

Project Location: **SAY ANOTHERY RANCH-** Sampler Signature: *[Signature]*

FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		
			WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE
SW AREA 5'	1	4oz	X	X	X	X	X	X	X	X	X	5/16/02	1338
" " 10'	1	"	X	X	X	X	X	X	X	X	X	"	1359
" " 15'	1	"	X	X	X	X	X	X	X	X	X	"	1413
" " 20'	1	"	X	X	X	X	X	X	X	X	X	"	1453
" " 27-28'	1	"	X	X	X	X	X	X	X	X	X	"	1557
SOUTH AREA 5'	1	"	X	X	X	X	X	X	X	X	X	"	
" " 10'	1	"	X	X	X	X	X	X	X	X	X	"	
" " 15'	1	"	X	X	X	X	X	X	X	X	X	"	
" " 27-28'	1	"	X	X	X	X	X	X	X	X	X	"	
" " 25'	1	"	X	X	X	X	X	X	X	X	X	"	

Telinquished by: **AD** Date: **5/16/02** Time: **5:20 PM**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Telinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

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

**ORIGINAL COPY**

MTBE 8021B/602	X
BTEX 8021B/602	X
TPH 418.1 TX1005	X
PAH 8270C	X
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	X
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	X
TCLP Volatiles	X
TCLP Semi Volatiles	X
TCLP Pesticides	X
RCI	X
GC/MS Vol. 8260B/624	X
GC/MS Semi. Vol. 8270C/625	X
PCB's 8082/608	X
Pesticides 8081A/608	X
BOD, TSS, pH	X
<b>CHLORIDES</b>	X

ANALYSIS REQUEST  
(Circle or Specify Method No.)

Carrier # **TRIA 902 878 035 4**

LAB USE ONLY

REMARKS:

Check If Special Reporting Limits Are Needed

Turn Around Time if different from standard

Hold

#### Article 1: General

1.1 The words "we", "us", and "our" refer to TraceAnalysis. You will send us samples to us for analysis, accompanied, or preceded by, a signed Chain of Custody/Analysis Request defining the scope and timing of our 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 skill 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 our 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 are 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 provisions 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 performed 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

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