485124

# FAX COVER SHEET

DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIATION DIVISION
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**DATE:** 10/30/00 **TOTAL NUMBER OF PAGES** 11 (INCLUDING COVER SHEET)

**TO:** Paul Peronard
303-312-6808

**FAX #:** 303-312-6962

**FROM:** John Constan
DEQ

**RC#:** 435021

**COMMENTS:** Paul - here is the Data From the Petro dig-outs Material will be going to the land Farm @ the mine Grace (Peter) will be work w/ DEQ Petro people to fill out proper paperwork prior to moving. Call if you have questions

***If you have received any part of this fax in error please call ***

Talk to you Soon —

John

URS
317 Mineral Avenue
Libby, MT 59923
Tel: 406/293-3984
Fax: 406/293-3749

TO: John Constan
FIRM: MDEQ
FAX: 406-444-1901

FROM: Pete Pendak - URS
DATE: 10/30/00
10 Pages including cover

MESSAGE:

John,

These are the results of the soil samples collected from the foundation excavation at the Great Plant. The Lead 1 Sample is a direct sample of the product in the soil. Please call with questions or comments.

Thanks - Pete

**Confidentiality Notice**

The information contained in this facsimile transmission is intended solely for the stated recipient above. If you have received this fax in error, please notify the sender immediately by telephone. If you are not the intended recipient, please be advised that dissemination, distribution, or copying of the information contained herein is strictly prohibited.

ENERGY LABORATORIES

**Client:** URS Corp

**Login No.:** 00-90875
**Date:** 25-Oct-00

## EXTRACTABLE PETROLEUM HYDROCARBONS SCREENING ANALYSIS REPORT

EXPORT PLANT-317 MINERAL AVE. LIBBY, MT 59923

Received:18-Oct-00

| Lab No./Sample Information | Total Extractable Hydrocarbons | Units | Q | Date/Time Analyzed | Date Extracted | Surrogate %Rec. |
|---|---|---|---|---|---|---|
| 001-00-90875 | 1240 | µg/g(ppm) | | 24-Oct-00 16:31 | 20-Oct-00 | 56 |
| LOAD 1 | | | | | | |
| 18-Oct-00 15:50 | | | | Batch I.D.:EPH-GRPS001019 | | Analyst:skw |
| 002-00-90875 | < 10 | µg/g(ppm) | | 24-Oct-00 12:11 | 20-Oct-00 | 73 |
| EAST WALL | | | | | | |
| 18-Oct-00 18:00 | | | | Batch I.D.:EPH-GRPS001019 | | Analyst:skw |
| 003-00-90875 | < 10 | µg/g(ppm) | | 24-Oct-00 12:50 | 20-Oct-00 | 85 |
| WEST WALL | | | | | | |
| 18-Oct-00 18:00 | | | | Batch I.D.:EPH-GRPS001019 | | Analyst:skw |
| 004-00-90875 | < 10 | µg/g(ppm) | | 24-Oct-00 13:29 | 20-Oct-00 | 68 |
| SOUTH WALL | | | | | | |
| 18-Oct-00 18:00 | | | | Batch I.D.:EPH-GRPS001019 | | Analyst:skw |
| 005-00-90875 | 16 | µg/g(ppm) | | 24-Oct-00 14:08 | 20-Oct-00 | 65 |
| BOTTOM | | | | | | |
| 18-Oct-00 18:00 | | | | Batch I.D.:EPH-GRPS001019 | | Analyst:skw |
| 006-00-90875 | 222 | µg/g(ppm) | | 24-Oct-00 14:50 | 20-Oct-00 | 58 |
| INTERMEDIATE | | | | | | |
| 18-Oct-00 18:00 | | | | Batch I.D.:EPH-GRPS001019 | | Analyst:skw |

**Qualifiers(Q) and Notes**

NOTE1: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time. This value is equivalent to EPA 8015M as Diesel.

Batch: EPH-GRPS001019E
Date: 25-Oct-00

## EPH SCREEN BATCH QUALITY ASSURANCE REPORT

| QC Sample I.D. | Diesel Range Organics | Diesel Range Organics as Diesel | Total Extractable Hydrocarbons | Units | Q | Date/Time Analyzed | Date Extracted | Surrogate %Rec. |
|---|---|---|---|---|---|---|---|---|
| Method Blank 1 | < 10 | < 10 | < 10 | µg/g(ppm) | | 23-Oct-00 01:58 | 20-Oct-00 | 86 |

## LABORATORY CONTROL SAMPLE REPORT

Date Analyzed: 23-Oct-00 01:08:00
Date Extracted: 20-Oct-00

| CONSTITUENT | SPIKE ADDED µg/g(ppm) | MS CONC. µg/g(ppm) | MS % Rec. | QC Limits % Rec. | Surrogate %Rec. |
|---|---|---|---|---|---|
| EPH Spiking Mix | 156 | 156 | 101 | 60 to 140 | 88 |

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

### MATRIX SPIKE

Laboratory Number: 002-00-69122
Date Analyzed: 23-Oct-00 15:22:00
Date Extracted: 20-Oct-00

| CONSTITUENT | Spike Added µg/g(ppm) | Sample Conc. µg/g(ppm) | MS Conc. µg/g(ppm) | MS % Rec. | QC Limits %Rec. | Surrogate %Rec. |
|---|---|---|---|---|---|---|
| EPH Spiking Mix | 156 | 44 | 208 | 104 | 60 to 140 | 76 |

### MATRIX SPIKE DUPLICATE

Laboratory Number: 002-00-69122
Date Analyzed: 23-Oct-00 00:21:00
Date Extracted: 20-Oct-00

| CONSTITUENT | Spike Added µg/g(ppm) | MSD Conc. µg/g(ppm) | MSD %Rec. | RPD | QC Limit RPD | QC Limit %Rec. | Surrogate %Rec. |
|---|---|---|---|---|---|---|---|
| EPH Spiking Mix | 156 | 214 | 109 | 5 | 20 | 60 to 140 | 78 |

Analyst: pf

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## EPH ALIPHATICS CONTINUING CALIBRATION REPORT

*This continuing calibration report applies to the following analysis runs:*
*001-00-90875,002-00-90875,003-00-90875,004-00-90875,005-00-90875,006-00-90875*

*Sample Name: cc1 EPH Aliphatics Continuing Cal :1024DROH.cc1*
*Area File: G:\ORG\HP1\1024DROH.01A*
*Date & Time Collected: Oct 24, 2000 11:32:43*
*Method File: G:\ORG\HP1\SH1010A.MET*
*Calibration File: G:\ORG\HP1\ALI0620K.CAL*

| COMPOUND | ACTUAL | MEASURED | %RECOVERY | %RECOVERY LIMITS |
|---|---|---|---|---|
| n-Nonane | 200 | 189 | 94 | 75-125 |
| n-Decane | 200 | 193 | 96 | 75-125 |
| n-Dodecane | 200 | 191 | 95 | 75-125 |
| n-Tetradecane | 200 | 192 | 96 | 75-125 |
| n-Hexadecane | 200 | 192 | 96 | 75-125 |
| n-Octadecane | 200 | 192 | 96 | 75-125 |
| n-Nonadecane | 200 | 192 | 96 | 75-125 |
| n-Eicosane | 200 | 198 | 99 | 75-125 |
| n-Docosane | 200 | 196 | 98 | 75-125 |
| n-Tetracosane | 200 | 194 | 97 | 75-125 |
| n-Hexacosane | 200 | 194 | 97 | 75-125 |
| n-Octacosane | 200 | 196 | 98 | 75-125 |
| n-Triacontane | 200 | 170 | 85 | 75-125 |
| n-Hexatriacontane | 200 | 168 | 84 | 75-125 |
| TOTAL EPH | 2800 | 2676 | 96 | 75-125 |
| *1-Chloro-octadecane | 200 | 171 | 86 | 75-125 |

ENERGY LABORATORIES, INC.
2704 BILLINGS AVE. · HELENA, MT 59601 · P.O. BOX 5568 · HELENA, MT 59604
VOICE/FAX 406-442-0711 · E-MAIL delxq@energylab.com

# LABORATORY ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| UPS Corp | Project ID: | EXPORT PLANT-317 MINERAL AVE. LIBBY, MT 59923 | | |
| Jim Stout | Sample ID: | LOAD 1 | | |
| 317 Mineral Ave | Laboratory ID: | 00-90875-1 | | |
| Libby, MT 59923 | Sample Matrix: | Soil | | |
| | Sample Date: | 18-Oct-00 1550 | | |
| | Received at lab: | 19-Oct-00 | Reported: | 25-Oct-00 |

| | Results | Units | % Spike Rec. | Reporting Limit | Regulatory Limit | Method | Analyzed | |
|---|---|---|---|---|---|---|---|---|
| **TCLP, Zero Headspace Extraction** | | | | | | EPA 1311 | 22-Oct-00 1200 | MS |
| **TCLP Volatiles, ZHE Extraction** | | | | | | | | |
| TCLP Benzene | <0.010 | mg/l | 96 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Carbon Tetrachloride | <0.010 | mg/l | 93 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Chlorobenzene | <0.010 | mg/l | 105 | 0.010 | 100 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Chloroform | <0.010 | mg/l | 103 | 0.010 | 6 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP 1,4-Dichlorobenzene | <0.010 | mg/l | 90 | 0.010 | 7.5 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP 1,2-Dichloroethane | <0.010 | mg/l | 102 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP 1,1-Dichloroethene | <0.010 | mg/l | 99 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Methyl ethyl ketone | <0.20 | mg/l | 100 | 0.20 | 200 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Tetrachloroethene | <0.010 | mg/l | 113 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Trichloroethene | <0.010 | mg/l | 113 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1624 | TRR |
| TCLP Vinyl Chloride | <0.010 | mg/l | 83 | 0.010 | 0.2 | EPA 8260B | 23-Oct-00 1624 | TRR |

ENERGY LABORATORIES

## LABORATORY ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| URS Corp | Project ID: | EXPORT PLANT-317 MINERAL AVE, LIBBY, MT 59923 | | |
| Jim Stout | Sample ID: | EAST WALL- | | |
| 317 Mineral Ave | Laboratory ID: | 00-90875-2 | | |
| Libby, MT 59923 | Sample Matrix: | Soil | | |
| | Sample Date: | 18-Oct-00 1800 | | |
| | Received at lab: | 19-Oct-00 | Reported: | 25-Oct-00 |

| | Results | Units | % Spike Rec. | Reporting Limit | Regulatory Limit | Method | Analyzed | |
|---|---|---|---|---|---|---|---|---|
| **TCLP, Zero Headspace Extraction** | | | | | | EPA 1311 | 22-Oct-00 1200 | MS |
| **TCLP Volatiles, ZHE Extraction** | | | | | | | | |
| TCLP Benzene | <0.010 | mg/l | 104 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Carbon Tetrachloride | <0.010 | mg/l | 101 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Chlorobenzene | <0.010 | mg/l | 106 | 0.010 | 100 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Chloroform | <0.010 | mg/l | 104 | 0.010 | 6 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP 1,4-Dichlorobenzene | <0.010 | mg/l | 110 | 0.010 | 7.5 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP 1,2-Dichloroethane | <0.010 | mg/l | 109 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP 1,1-Dichloroethene | <0.010 | mg/l | 107 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Methyl ethyl ketone | <0.20 | mg/l | 103 | 0.20 | 200 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Tetrachloroethene | <0.010 | mg/l | 108 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Trichloroethene | <0.010 | mg/l | 110 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1735 | TRR |
| TCLP Vinyl Chloride | <0.010 | mg/l | 75 | 0.010 | 0.2 | EPA 8260B | 23-Oct-00 1735 | TRR |

ENERGY LABORATORIES

## LABORATORY ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| URS Corp | Project ID: | EXPORT PLANT-317 MINERAL AVE. LIBBY, MT 59923 | | |
| Jim Stout | Sample ID: | WEST WALL | | |
| 317 Mineral Ave | Laboratory ID: | 00-90875-3 | | |
| Libby, MT 59923 | Sample Matrix: | Soil | | |
| | Sample Date: | 18-Oct-00 1800 | | |
| | Received at lab: | 19-Oct-00 | Reported: | 25-Oct-00 |

| | Results | Units | % Spike Rec. | Reporting Limit | Regulatory Limit | Method | Analyzed | |
|---|---|---|---|---|---|---|---|---|
| **TCLP, Zero Headspace Extraction** | | | | | | EPA 1311 | 22-Oct-00 1200 | MS |
| **TCLP Volatiles, ZHE Extraction** | | | | | | | | |
| TCLP Benzene | <0.010 | mg/l | 103 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Carbon Tetrachloride | <0.010 | mg/l | 98 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Chlorobenzene | <0.010 | mg/l | 106 | 0.010 | 100 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Chloroform | <0.010 | mg/l | 103 | 0.010 | 6 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP 1,4-Dichlorobenzene | <0.010 | mg/l | 106 | 0.010 | 7.5 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP 1,2-Dichloroethane | <0.010 | mg/l | 109 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP 1,1-Dichloroethene | <0.010 | mg/l | 97 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Methyl ethyl ketone | <0.20 | mg/l | 104 | 0.20 | 200 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Tetrachloroethene | <0.010 | mg/l | 112 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Trichloroethene | <0.010 | mg/l | 112 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1847 | TRR |
| TCLP Vinyl Chloride | <0.010 | mg/l | 72 | 0.010 | 0.2 | EPA 8260B | 23-Oct-00 1847 | TRR |

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## LABORATORY ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| URS Corp | Project ID: | EXPORT PLANT-317 MINERAL AVE. LIBBY, MT 59923 | | |
| Jim Stout | Sample ID: | SOUTH WALL | | |
| 317 Mineral Ave | Laboratory ID: | 00-90875-4 | | |
| Libby, MT 59923 | Sample Matrix: | Soil | | |
| | Sample Date: | 18-Oct-00 1800 | | |
| | Received at lab: | 19-Oct-00 | Reported: | 25-Oct-00 |

| | Results | Units | % Spike Rec. | Reporting Limit | Regulatory Limit | Method | Analyzed | |
|---|---|---|---|---|---|---|---|---|
| **TCLP, Zero Headspace Extraction** | | | | | | EPA 1311 | 22-Oct-00 1200 | MS |
| **TCLP Volatiles, ZHE Extraction** | | | | | | | | |
| TCLP Benzene | <0.010 | mg/l | 101 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Carbon Tetrachloride | <0.010 | mg/l | 99 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Chlorobenzene | <0.010 | mg/l | 111 | 0.010 | 100 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Chloroform | <0.010 | mg/l | 106 | 0.010 | 6 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP 1,4-Dichlorobenzene | <0.010 | mg/l | 113 | 0.010 | 7.5 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP 1,2-Dichloroethane | <0.010 | mg/l | 107 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP 1,1-Dichloroethene | <0.010 | mg/l | 104 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Methyl ethyl ketone | <0.20 | mg/l | 101 | 0.20 | 200 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Tetrachloroethene | <0.010 | mg/l | 118 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Trichloroethene | <0.010 | mg/l | 116 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 1958 | TRR |
| TCLP Vinyl Chloride | <0.010 | mg/l | 68 | 0.010 | 0.2 | EPA 8260B | 23-Oct-00 1958 | TRR |

ENERGY LABORATORIES

## LABORATORY ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| URS Corp | Project ID: | EXPORT PLANT-317 MINERAL AVE, LIBBY, MT 59923 | | |
| Jim Stout | Sample ID: | BOTTOM | | |
| 317 Mineral Ave | Laboratory ID: | 00-90875-5 | | |
| Libby, MT 59923 | Sample Matrix: | Soil | | |
| | Sample Date: | 18-Oct-00 1800 | | |
| | Received at lab: | 19-Oct-00 | Reported: | 25-Oct-00 |

| | Results | Units | % Spike Rec. | Reporting Limit | Regulatory Limit | Method | Analyzed | |
|---|---|---|---|---|---|---|---|---|
| **TCLP, Zero Headspace Extraction** | | | | | | EPA 1311 | 22-Oct-00 1200 | MS |
| **TCLP Volatiles, ZHE Extraction** | | | | | | | | |
| TCLP Benzene | <0.010 | mg/l | 104 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Carbon Tetrachloride | <0.010 | mg/l | 97 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Chlorobenzene | <0.010 | mg/l | 106 | 0.010 | 100 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Chloroform | <0.010 | mg/l | 104 | 0.010 | 6 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP 1,4-Dichlorobenzene | <0.010 | mg/l | 110 | 0.010 | 7.5 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP 1,2-Dichloroethane | <0.010 | mg/l | 110 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP 1,1-Dichloroethene | <0.010 | mg/l | 101 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Methyl ethyl ketone | <0.20 | mg/l | 105 | 0.20 | 200 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Tetrachloroethene | <0.010 | mg/l | 106 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Trichloroethene | <0.010 | mg/l | 111 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2110 | TRR |
| TCLP Vinyl Chloride | <0.010 | mg/l | 71 | 0.010 | 0.2 | EPA 8260B | 23-Oct-00 2110 | TRR |

ENERGY

# LABORATORY ANALYSIS REPORT

URS Corp
Jim Stout
317 Mineral Ave
Libby, MT 59923

Project ID: EXPORT PLANT-317 MINERAL AVE. LIBBY, MT 59923
Sample ID: INTERMEDIATE
Laboratory ID: 00-90875-6
Sample Matrix: Soil
Sample Date: 18-Oct-00 1800
Received at lab: 19-Oct-00
Reported: 25-Oct-00

| | Results | Units | % Spike Rec. | Reporting Limit | Regulatory Limit | Method | Analyzed | |
|---|---|---|---|---|---|---|---|---|
| TCLP, Zero Headspace Extraction | | | | | | EPA 1311 | 22-Oct-00 1200 | MS |
| TCLP Volatiles, ZHE Extraction | | | | | | | | |
| TCLP Benzene | <0.010 | mg/l | 95 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Carbon Tetrachloride | <0.010 | mg/l | 94 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Chlorobenzene | <0.010 | mg/l | 102 | 0.010 | 100 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Chloroform | <0.010 | mg/l | 99 | 0.010 | 6 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP 1,4-Dichlorobenzene | <0.010 | mg/l | 107 | 0.010 | 7.5 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP 1,2-Dichloroethane | <0.010 | mg/l | 103 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP 1,1-Dichloroethene | <0.010 | mg/l | 96 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Methyl ethyl ketone | <0.20 | mg/l | 98 | 0.20 | 200 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Tetrachloroethene | <0.010 | mg/l | 103 | 0.010 | 0.7 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Trichloroethane | <0.010 | mg/l | 110 | 0.010 | 0.5 | EPA 8260B | 23-Oct-00 2221 | TRR |
| TCLP Vinyl Chloride | <0.010 | mg/l | 73 | 0.010 | 0.2 | EPA 8260B | 23-Oct-00 2221 | TRR |