



"SEMCO"

James C. Bateman Petroleum Services  
Environmental Contractors

Res (at work)



01-1235

6547803

\*\*\*\* JUST THE FAX \*\*\*\*

DATE:

5/29/91

TIME:

FAX TO:

FAX #:

834-4130

ATTENTION:

George Friedman

COMMENTS:

Results for Precision Time

TOTAL NUMBER OF PAGES INCLUDING COVER PAGE:

11

SENDER:

Shirley Kiper

FAX #: (415) 572-9734

TEL. #: (415) 572-8033



SEMCO

1741 LESLIE STREET  
SAN MATEO, CA. 94403



# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

DHS #1332

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 53639  
CLIENT: SEMCO  
CLIENT JOB NO.: PRECISION TUNE

DATE RECEIVED: 05/17/91  
DATE REPORTED: 05/28/91

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/kg) Diesel Range
1	#1-550	66*
2	#2-550	ND<10
3	#3-550	ND<10
4	#4-550	ND<10
5	#5-550	**

*Where are these samples collected?*

*highest oil + grease sample as shown on page 2 highest gasoline sample (page 3)*

\* - Does not match typical Diesel pattern.  
\*\* - Result not available at reporting time.  
mg/kg - parts per million (ppm)

Minimum Detection Limit for Gasoline and Diesel in Soil: 10mg/kg

### QA/QC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15%  
MS/MSD Average Recovery = 76% Duplicate RPD = 3.0%

Richard S. ... Ph.D.

Laboratory Director

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE UNIT I • SAN FRANCISCO, CA 94124 • PIONEER (415) 647-2081

DHS #1332

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 53639  
CLIENT: SENCOR  
CLIENT JOB NO.: PRECISIONTUNE

DATE RECEIVED: 05/17/91  
DATE REPORTED: 05/28/91

### ANALYSIS FOR TOTAL PETROLEUM OIL AND GREASE by Method 5520F (formerly 503E)

LAD #	Sample Identification	Concentration (mg/kg) Total oil & grease
1	#1-550	630 - 8' 20' - 40'
2	#2-550	83 8' 10' - 40'
3	#3-550	69 100' S
4	#4-550	ND<50 100' S
5	#5-550	3000 5' S

mg/kg - parts per million (ppm)

Minimum Detection Limit for oil & grease in Soil: 50mg/kg

#### QA/QC Summary:

MS/MSD average recovery = 93%  
Duplicate RPD = 1.1%

Richard Ornes, Ph.D.

  
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

# SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

DHS #1332

## CERTIFICATE OF ANALYSIS

LABORATORY NO.: 53639  
CLIENT: SEMCO  
CLIENT JOB NO.: PRECISONTUNE

DATE RECEIVED: 05/17/91  
DATE REPORTED: 05/28/91

ANALYSTS FOR TOTAL PETROLEUM HYDROCARBONS  
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/kg) Gasoline Range
1	#1-550	ND<1
2	#2-550	ND<1
3	#3-550	ND<1
4	#4-550	ND<1
5	#5-550	400

mg/kg - parts per million (ppm)  
Minimum Detection Limit for Gasoline in Soil: 1mg/kg

### QA/QC Summary:

Daily Standard run at 2mg/l.: %DIFF Gasoline = <15%  
MS/MSD Average Recovery = 83%; Duplicate RPD = 3.7%

Richard Srna, Ph.D.

  
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

**SUPERIOR ANALYTICAL LABORATORY, INC.**

1555 BURKE UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

DHS #1332

**CERTIFICATE OF ANALYSIS**

LABORATORY NO.: 53639  
CLIENT: SEMCO  
CLIENT JOB NO.: PRECISONTUNE

DATE RECEIVED: 05/17/91  
DATE REPORTED: 05/28/91

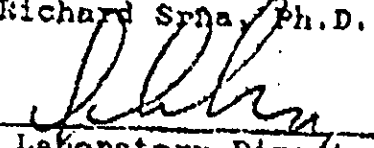
ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

#	Sample Identification	Concentration (ug/kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	#1-550				
2	#2-550	3	ND<3	ND<3	13
3	#3-550	ND<3	ND<3	ND<3	ND<3
4	#4-550	ND<3	ND<3	ND<3	ND<3
5	#5-550	ND<3	ND<3	ND<3	ND<3
		ND<150	3200	2900	23000

g/kg - parts per billion (ppb)

Minimum Detection Limit in Soil: 3.0ug/kg

QAQC Summary:  
Daily Standard run at 20ug/L: %DIFF = <16%  
MS/MSD Average Recovery = 90% : Duplicate RPD = 6.8%

Richard Srna, Ph.D.  
  
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

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DHS #1332

**C E R T I F I C A T E O F A N A L Y S I S**

LABORATORY NO.: 53639-1  
 CLIENT: SEMCO  
 JOB NO.: Precision Tune

DATE SAMPLED: 05/15/91  
 DATE RECEIVED: 05/17/91  
 DATE ANALYZED: 05/23/91

EPA SW-846 METHOD 8010  
 HALOGENATED VOLATILE ORGANICS  
 SAMPLE: #1-550

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	5	39
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	8
1,4-Dichlorobenzene	5	ND
Cis-1,2-Dichloroethene	5	ND

MDL = Method Detection Limit  
 ug/kg = parts per billion (ppb)  
 QA/QC Summary: Daily Standard %DIFF = <15%  
 MS/MSD average recovery = 105 % :MS/MSD RPD = < 2 %

Richard Srna, Ph.D.

Laboratory Director

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DHS #1332

**C E R T I F I C A T E O F A N A L Y S I S**

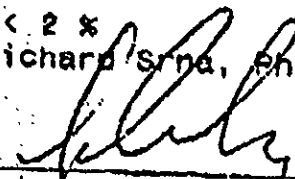
LABORATORY NO.: 53639-2  
 CLIENT: SEMCO  
 JOB NO.: Precision Tune

DATE SAMPLED: 05/15/91  
 DATE RECEIVED: 05/17/91  
 DATE ANALYZED: 05/23/91

EPA SW-846 METHOD 8010  
 HALOGENATED VOLATILE ORGANICS  
 SAMPLE: #2-550

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	5	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethane	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND
Cis-1,2-Dichloroethene	5	ND

MDL = Method Detection Limit  
 ug/kg = parts per billion (ppb)  
 QA/QC Summary: Daily Standard %DIFF = <15%  
 MS/MSD average recovery = 105 % ; MS/MSD RPD = < 2 %

Richard Sina, Ph.D.  
  
 Laboratory Director

**SUPERIOR ANALYTICAL LABORATORY, INC.**

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DHS #1332

**C E R T I F I C A T E   O F   A N A L Y S I S**

LABORATORY NO.: 53539-3  
 CLIENT: SEMCO  
 JOB NO.: Precision Tune

DATE SAMPLED: 05/15/91  
 DATE RECEIVED: 05/17/91  
 DATE ANALYZED: 05/23/91

EPA SW-846 METHOD 8010  
 HALOGENATED VOLATILE ORGANICS  
 SAMPLE: #3-550

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethene	5	ND
Methylene Chloride	5	ND
trans-1,2-Dichloroethene	5	ND
1,1-Dichloroethane	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND
Cis-1,2-Dichloroethene	5	ND

MDL = Method Detection Limit

ug/kg = parts per billion (ppb)

QA/QC Summary: Daily Standard %DIFF = <15%

MS/MSD average recovery = 105 % ; MS/MSD RPD = < 2 %

Richard Srna, Ph.D.

*[Signature]*  
 Laboratory Director



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DHS #1332

**C E R T I F I C A T E O F A N A L Y S I S**

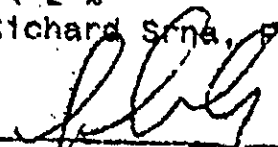
LABORATORY NO.: 53639-5  
 CLIENT: SEMCO  
 JOB NO.: Precision Tune

DATE SAMPLED: 05/15/91  
 DATE RECEIVED: 05/17/91  
 DATE ANALYZED: 05/23/91

EPA SW-846 METHOD 8010  
 HALOGENATED VOLATILE ORGANICS  
 SAMPLE: #5-550

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	100	ND
Bromomethane/Chloroethane	100	ND
Trichlorofluoromethane	50	ND
1,1-Dichloroethene	50	ND
Methylene Chloride	50	ND
trans-1,2-Dichloroethene	50	ND
1,1-Dichloroethane	50	ND
Chloroform	50	ND
1,1,1-Trichloroethane	50	ND
Carbon tetrachloride	50	ND
1,2-Dichloroethane	50	ND
Trichloroethylene	50	ND
1,2-Dichloropropane	50	ND
Bromodichloromethane	50	ND
Cis-1,3-Dichloropropene	50	ND
trans-1,3-Dichloropropene	50	ND
1,1,2-Trichloroethane	50	ND
Tetrachloroethene	50	ND
Dibromochloromethane	50	ND
Chlorobenzene	50	ND
Bromoform	50	ND
1,1,2,2-Tetrachloroethane	50	ND
1,3-Dichlorobenzene	50	ND
1,2-Dichlorobenzene	50	540
1,4-Dichlorobenzene	50	120
Cis-1,2-Dichloroethene	50	ND

MDL = Method Detection Limit  
 ug/kg = parts per billion (ppb)  
 QA/QC Summary: Daily Standard %DIFF = <15%  
 MS/MSD average recovery = 105 % :MS/MSD RPD = <2 %

Richard Srna, Ph.D.  
  
 Laboratory Director

OUTSTANDING QUALITY AND SERVICE

**SEMCO****JAMES C. BATEMAN PETROLEUM SERVICES, INC.**431 W. Hatch Rd Modesto, Calif. 95361  
General & Engineering Contractors  
(800) 533-9293  
FAX (209) 524-0503**SEMCO****JAMES C. BATEMAN PETROLEUM SERVICES, INC.**1741 Leslie St. San Mateo, Calif. 94402  
General & Engineering Contractors  
(415) 572-8933  
FAX (415) 572-9734**CHAIN OF CUSTODY RECORD**

PROJECT NAME: <i>Precision Tune</i>						Number of Containers	Analysis Required				REMARKS
SAMPLERS (signature): <i>Chuck Kip Semco</i>							<i>IPH-G-D</i>	<i>BTEX</i>	<i>TOB</i>	<i>CLHC</i>	
Station Number	Date	Time	Comp.	Grab	Station Location						
<i>#1-550</i>	<i>5/15/91</i>	<i>2:00</i>		<input checked="" type="checkbox"/>	<i>#1-550-WO-E-8'</i>	<i>1</i>	<i>L</i>	<i>L</i>	<i>L</i>		
<i>#2-550</i>	<i>5/15/91</i>	<i>2:20</i>		<input checked="" type="checkbox"/>	<i>#2-550-WO-W-8'</i>	<i>1</i>	<i>L</i>	<i>L</i>	<i>L</i>		
<i>#3-550</i>	<i>5/15/91</i>	<i>2:25</i>		<input checked="" type="checkbox"/>	<i>#3-550-WO-E-10'6"</i>	<i>1</i>	<i>L</i>	<i>L</i>	<i>L</i>		
<i>#4-550</i>	<i>5/15/91</i>	<i>2:40</i>		<input checked="" type="checkbox"/>	<i>#4-550-WO-W-10'6"</i>	<i>1</i>	<i>L</i>	<i>L</i>	<i>L</i>		
<i>#5-550</i>	<i>5/15/91</i>	<i>3:00</i>		<input checked="" type="checkbox"/>	<i>#5-550-WO-Comp Spth</i>	<i>4</i>	<i>L</i>	<i>L</i>	<i>L</i>		
Relinquished by (signature): <i>Chuck Kip Semco</i>		Date / Time: <i>5/17/91 9:00 AM</i>		Received by (signature): <i>[Signature]</i>		Relinquished by (signature):		Date / Time:		Received by (signature):	
Company or Agency:				Company or Agency:		Company or Agency:				Company or Agency:	
Relinquished by (signature):		Date / Time:		Received by (signature):		Relinquished by:		Date / Time:		Received by (signature):	
Company or Agency:				Company or Agency:		Company or Agency:				Company or Agency:	
Relinquished by (signature):		Date / Time:		Received for Laboratory by (signature):		Date / Time:		Remarks/Shipping Information: <i>Normal Tune</i>			
Company or Agency:											

*Eo. + 8**Spills*

**SUPERIOR ANALYTICAL LABORATORY, INC.**

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DHS #1332

**C E R T I F I C A T E O F A N A L Y S I S**

LABORATORY NO.: 53839-4  
 CLIENT: SEMCO  
 JOB NO.: Precision Tune

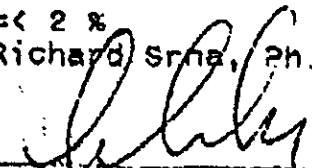
DATE SAMPLED: 05/15/91  
 DATE RECEIVED: 05/17/91  
 DATE ANALYZED: 05/23/91

EPA SW-846 METHOD 8010  
 HALOGENATED VOLATILE ORGANICS  
 SAMPLE: #4-550

Compound	MDL (ug/kg)	RESULTS (ug/kg)
Chloromethane/Vinyl Chloride	10	ND
Bromomethane/Chloroethane	10	ND
Trichlorofluoromethane	5	ND
1,1-Dichloroethane	5	ND
Methylene Chloride	5	ND
trans-1,2-Dichloroethane	5	ND
1,1-Dichloroethane	5	ND
Chloroform	5	ND
1,1,1-Trichloroethane	5	ND
Carbon tetrachloride	5	ND
1,2-Dichloroethane	5	ND
Trichloroethylene	5	ND
1,2-Dichloropropane	5	ND
Bromodichloromethane	5	ND
Cis-1,3-Dichloropropene	5	ND
trans-1,3-Dichloropropene	5	ND
1,1,2-Trichloroethane	5	ND
Tetrachloroethene	5	ND
Dibromochloromethane	5	ND
Chlorobenzene	5	ND
Bromoform	5	ND
1,1,2,2-Tetrachloroethane	5	ND
1,3-Dichlorobenzene	5	ND
1,2-Dichlorobenzene	5	ND
1,4-Dichlorobenzene	5	ND
Cis-1,2-Dichloroethane	5	ND

MDL = Method Detection Limit  
 ug/kg = parts per billion (ppb)  
 QA/QC Summary: Daily Standard %DIFF = <15%  
 MS/MSD average recovery = 105 % ; MS/MSD RPD = < 2 %

Richard Sarna, Ph.D.

  
 Laboratory Director

OUTSTANDING QUALITY AND SERVICE.