SITE CHARACTERIZATION AND CONTAMINATED SOIL REMEDIATION REPORT

Pace Industries Oil Release April 26, 1999

Located At:
2119 Mildred Street W.
Fircrest, Washington
May 5, 1999

Prepared For:

Metal Marine Pilot, Inc.
Wood Freeman Autopilot
2119 Mildred Street W.
Fircrest, Washington

Prepared By:

Creative Environmental Technologies, Inc.
PO Box 1803
Tacoma, Washington 98401-1803
(253) 627-3347

1203 E. D Street, Suite 109 ⊛ P.O. Box 1803 ⊛ Tacoma, Washington 98401- 1803
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1.0 Introduction

Creative Environmental Technologies, Inc. (CETI) was retained by Metal Marine Pilot, Inc. and Mr. Michael Freeman to supervise the remedial activities for an oil / water waste product release on to the north end of Metal Marines property by Pace Industries, a local metal fabricator.

Pace Industries uses a special lubricating paraffin oil in their machining process (MSDS sheets attached). This oil is collected in several areas throughout their facility. One of these collection areas discharges from the rear of Pace's building in an underground four inch PVC piping system. This piping system runs along the southern end of Pace's building and discharges into a holding system for treatment prior to disposal into the City of Fircrest sanitary sewer system. Along this piping is a clean out that protrudes at a 45 degree angle out of the ground. This is the point of release. CETI was told by Jeff Bartunek, Pace's casting / maintenance manager & CPD Safety Director, that the system backed up and the pressure blew the cap of the clean out. At this time it is unclear the amount of oil / water released.

The release was noticed by Pace and Metal Marine employees Monday morning April 26, 1999. Pace immediately implemented a cleanup action by pumping all standing fluid from Paces's property and Metal Marines Property into 55 gallon drums. The exact amount of waste product versus standing water collected is unknown. The released material pooled in the general vicinity of the release point then flowed following the natural gradient to the east. Prior to the release, Metal Marine trenched an area along their eastern property boundary to collect surface storm water and channel it for storm water runoff control. The released material followed the storm water trench for approximately two hundred feet along Metal Marine's eastern property boundary. Pace recovered all the water and released product from the trench line. It is unclear if the trench line had standing water prior to the release.

CETI identified oil range hydrocarbon contamination in the surface and sub-surface soils at the site during a site walk approximately 24 hours following the release. Foss Environmental Services was initially contacted by Pace following the collection of the standing water. CETI technicians samples the soil prior to the remedial activity and following the remedial activity by Foss. The sample results from this first round of sampling indicated further remedial activity would be required. At CETI's request, Pace contacted a local environmental contracted, Clean Service, to complete the remedial activity. CETI supervised the remedial activity and collected samples following the removal of all soil impacted by the release on Metal Marine's property. There still exists contamination on Pace's property directly adjacent to Metal Marine's property. This area was fenced impeding remedial activities.

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2.0 Site Description and Limits of the Contamination

Metal Marine's property is located in the City of Fircrest, in Pierce County, Washington at 2119 Mildred Street West. The property has been owned by the Freeman family for over fifty years. It covers approximately 10 acres fronting Mildred street. Pace Puget occupies the property directly adjacent to the north of Metal Marine. The piping system where the release occurred runs along the southern end of Pace's building approximately twenty four (24) inches from Metal Marines property line (Figure 2). The release point is inside a fenced area. The gradient of the immediate area adjacent to the release point slopes to the south onto Metal Marine's property then slopes to the east.

The released material pooled in a twenty by thirty (approximate) foot area before flowing down-slope to the east. The flow limited the horizontal extent of contamination to a path twenty to forty inches wide. The material released was a milky white, emulsified oil / water waste product. The color of the material helped in tracing the flow. There were several hay bails placed on the northeast corner of Metal Marines property prior to the release directly in the path of the flow. These hay bails acted at a barrier and significantly reduced the amount of contamination along the eastern storm water trench.

The horizontal extent of contamination was observed along Metal Marine's eastern storm water ditch line. On site sampling indicated clean up levels outlined by MTCA[1] (Model Toxic Control Act) were not exceeded in surface and sub-surface soils past two hundred feet from the northeast property corner of Metal Marine's property and the start of the eastern ditch line.

Generally, vertical extent of contamination was observed from the surface to twenty four inches below ground surface (BGS). Where the contamination pooled, the vertical extent of contamination was greater.

[1] The Model Toxic Control Act (MTCA) Cleanup Regulations sets requirements for allowable petroleum and other potentially harmful constituents and there clean up limits in surface and sub-surface soils and groundwater in the state of Washington. These limits are found in Washington Administrative Code (WAC) 173-340.

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3.0 Geologic Conditions

In the area where the released occurred, the soil consisted of light to medium gray silt and glacial till sand with few rounded coarse to fine gravels. According to Mr. Freeman, the majority of the surface soils have been imported over the past 15 years.

4.0 Contaminated Soil Removal

Remedial activities were started on April 27, 1999 and finished on April 29, 1999, on soil contaminated by the release from Pace Puget on April 19, 1990, and identified by CETI through on-site soil sampling. Soil was removed along Metal Marine's northern property line and along the eastern storm water ditch. Approximately eighty cubic tons of contaminated soil were excavated and removed from the property.

On April 27, 1999, Foss Environmental Services started excavating contaminated soils by hand but soon learned that the contamination was greater than first thought. CETI was on site sampling soils and recommended that Clean Service be hired to excavate the remaining contaminated soil. A track hoe was delivered on April 28, 1999 by Clean Service. Under CETI's supervision, soils that were screened by CETI and found to contain hydrocarbons exceeding MTCA limits were excavated and trucked off-site for disposal. The soil was disposed of at TPS, a local hydrocarbon contaminated soil disposal facility.

The area most significantly contaminated was near the release point where the contaminate had pooled. Soil was excavated in this area to a depth of twenty four to thirty six inches BGS. This excavated area was approximately twenty feet by thirty feet. The path the released material followed along the northern property boundary, approximately one hundred sixty feet to the hay bails on the northeast corner of the property was excavated to six inches BGS. Twelve to eighteen inches of soil was excavated in an area fifteen feet by twenty feet around the hay bail location. The storm water ditch following the eastern property line was the final area excavated. The ditch started on the northeast corner of the property and runs the entire eastern length of the property. CETI screened the ditch bottom and found oil contamination exceeding the MTCA limits for approximately 200 feet along the ditch line. Six to twelve inches of soil was removed from the bottom and side walls of the ditch, removing all contamination.

Confirmatory samples were collected from the excavated areas. These samples showed no levels of oil exceeding the MTCA limits.

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5.0 Soil Sampling

CETI collected soils samples from the excavation area along the perimeter and the bottom of the excavated areas. Soil collection depths followed the final excavation depth and varied through out the area (Figure 2 - Soil Sample Location Map)

Soil sampling procedures followed the Washington State Department Of Ecology Toxics Cleanup Program Guidance on Sampling and Data Analysis Methods, Publication Number 94-49. The soil samples were collected from the excavation using a stainless steel sampling spoon. Select soil was placed in a EPA approved 4 oz glass sample collection jar with a Teflon™ lined lid. All samples were stored in a cooler at 40° F. to maintain and preserve the integrity of the sample until delivered to the laboratory for analysis.

The soil samples were submitted to Spectra laboratories for analysis between April 27 and April 29, 1999. Analysis performed was for Total Petroleum Hydrocarbons- diesel extended (WTPH-D Extended).

6.0 Analytical Results

Washington administrative code (WAC) 173-340-745 Method A sets an action level (maximum allowable limit) of 200 ppm (mg/kg) petroleum hydrocarbon oils in soil.

Soil Analysis
Heavy Oil Release Excavation
Method: WTPH-418.1

Sample ID	Sample Location	Heavy Oils (ppm)	Action Level
S1-42799	Release Point	14,000	200 ppm
S2-42799	Trench Following Hay Bails	1,000	200 ppm
S3-42799	Release Path Before Hay Bails	81,000	200 ppm
S4-42799	30' Following Hay Bails	3,900	200 ppm
S5-42799	60' Following Hay Bails	1,800	200 ppm
S6-42799	Beginning Of Flow After Pooling	1,400	200 ppm
S7-42799	Release Path Before Hay Bails	1,100	200 ppm
S10-42899	Northeast Corner of Excavation	<100	200 ppm
S11-42899	East Wall of Excavation	<100	200 ppm
S12-42899	Southeast Corner of Excavation	<100	200 ppm

CURRENT MTCA METHOD → 2,000

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Sample ID	Sample Location	Heavy Oils (ppm)	Action Level
S13-42899	Southwest Corner of Excavation	<100	200 ppm
S14-42899	South Wall of Excavation (West)	1,100	200 ppm
S15-42899	Bottom of Excavation (West)	<100	200 ppm
S16-42899	Bottom of Excavation (East)	<100	200 ppm
S17-42899	South Wall of Excavation (East)	<100	200 ppm
S23-42899	Release Path 90' Before Hay Bails	<100	200 ppm
S24-42899	Release Path 60' Before Hay Bails	<100	200 ppm
S25-42899	Release Path 30' Before Hay Bails	<100	200 ppm
S26-42899	Soil Beneath Hay Bales	<100	200 ppm
S27-42899	Northwest Corner of Excavation	<100	200 ppm
S28-42899	West Wall of Excavation	<100	200 ppm
S29-42899	Below Pipe Break at Release Point	5,800	200 ppm
S30-43099	Soil Beneath Hay Bales	<100	200 ppm
S31-43099	20' Following Hay Bales	<100	200 ppm
S32-43099	Blank	<100	200 ppm
S33-43099	50' Following Hay Bales	<100	200 ppm
S34-43099	80' Following Hay Bales	<100	200 ppm
S35-43099	110' Following Hay Bales	<100	200 ppm
S36-43099	140' Following Hay Bales	<100	200 ppm
S37-43099	170' Following Hay Bales	<100	200 ppm
S38-43099	20' Down Gradient East of S37	<100	200 ppm

Analytical results for samples taken in contaminated soil excavation August 5, 1998

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7.0 Conclusions

Based on the results of the laboratory soil analysis, on site soil screening and on site observations, it is CETI's opinion that the remaining subsurface soils located in the area identified during the site delineation on Metal Marine's property following the remedial activity, are free of petroleum hydrocarbons. Pace Industries property immediately adjacent to Metal Marines norther property boundary were the release originated, is still heavily contaminated. Sub-surface soil samples in this area (samples location S-29) revealed oil range hydrocarbon levels exceeding 5000 mg/Kg (parts per million). Current MTCA method A limits are 200 mg/Kg (ppm). If the contaminated soil is left, there is a strong possibility that the contaminate will migrate across property lines and re-contaminate Metal Marines Property. CETI has advised Metal Marine to adamantly pursue the removal of all contaminated soil by Pace Industries, that is posing an immediate threat to Metal Marine's property.

Creative Environmental Technologies, Inc. extends its appreciation for the opportunity to provide environmental services on this project. If there are any questions regarding this report please do not hesitate to contact us.

Respectfully Submitted,

By: _____

Stephen Spencer
Creative Environmental Technologies, Inc.

Approved By: _____

John R. Spencer, BBA, LLB
President
Creative Environmental Technologies, Inc.

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Appendix A - Site Location Map, Site Map, Sample Location Map, Plat Drawing, Photographs of Site

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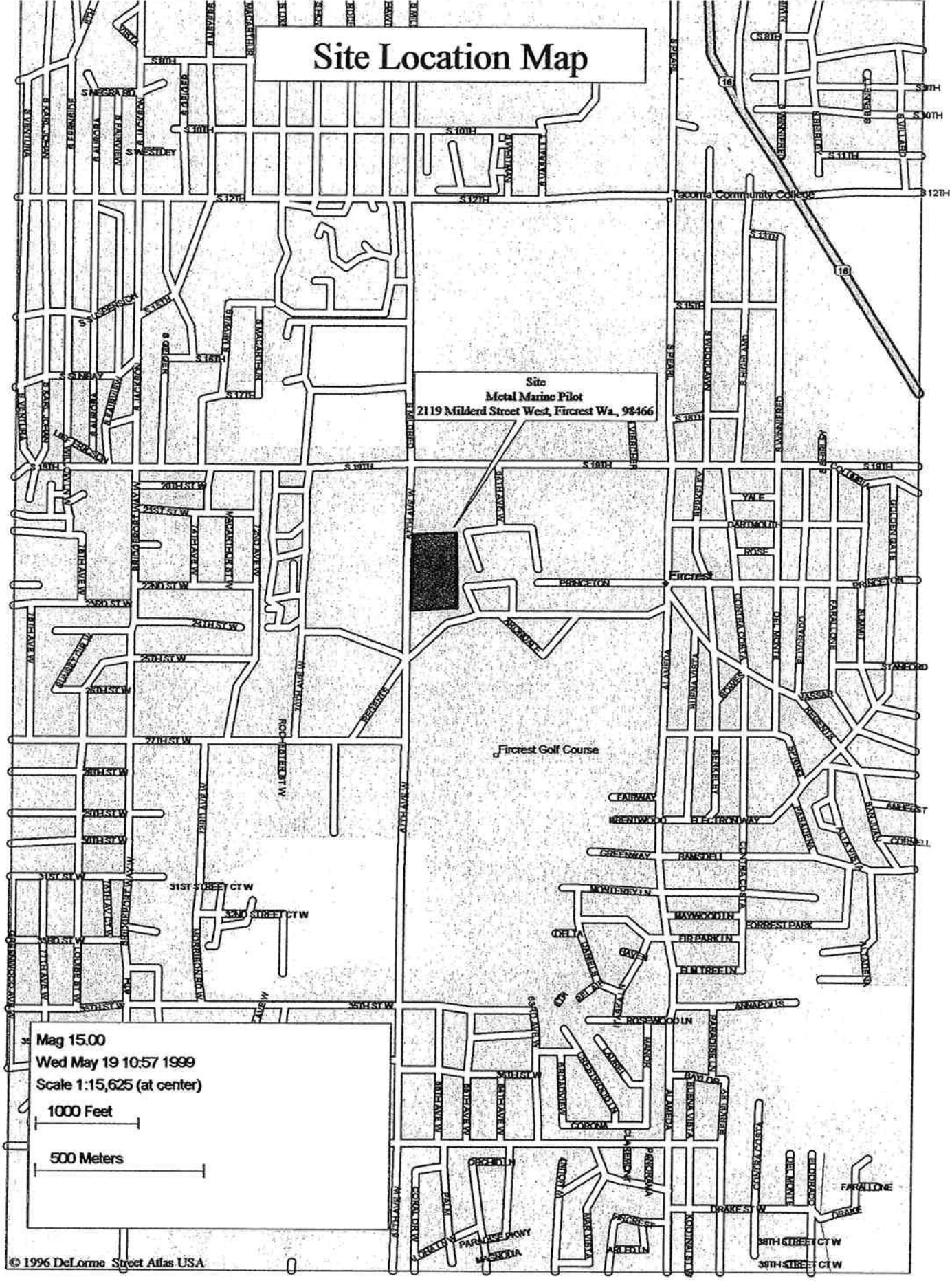
Site Location Map



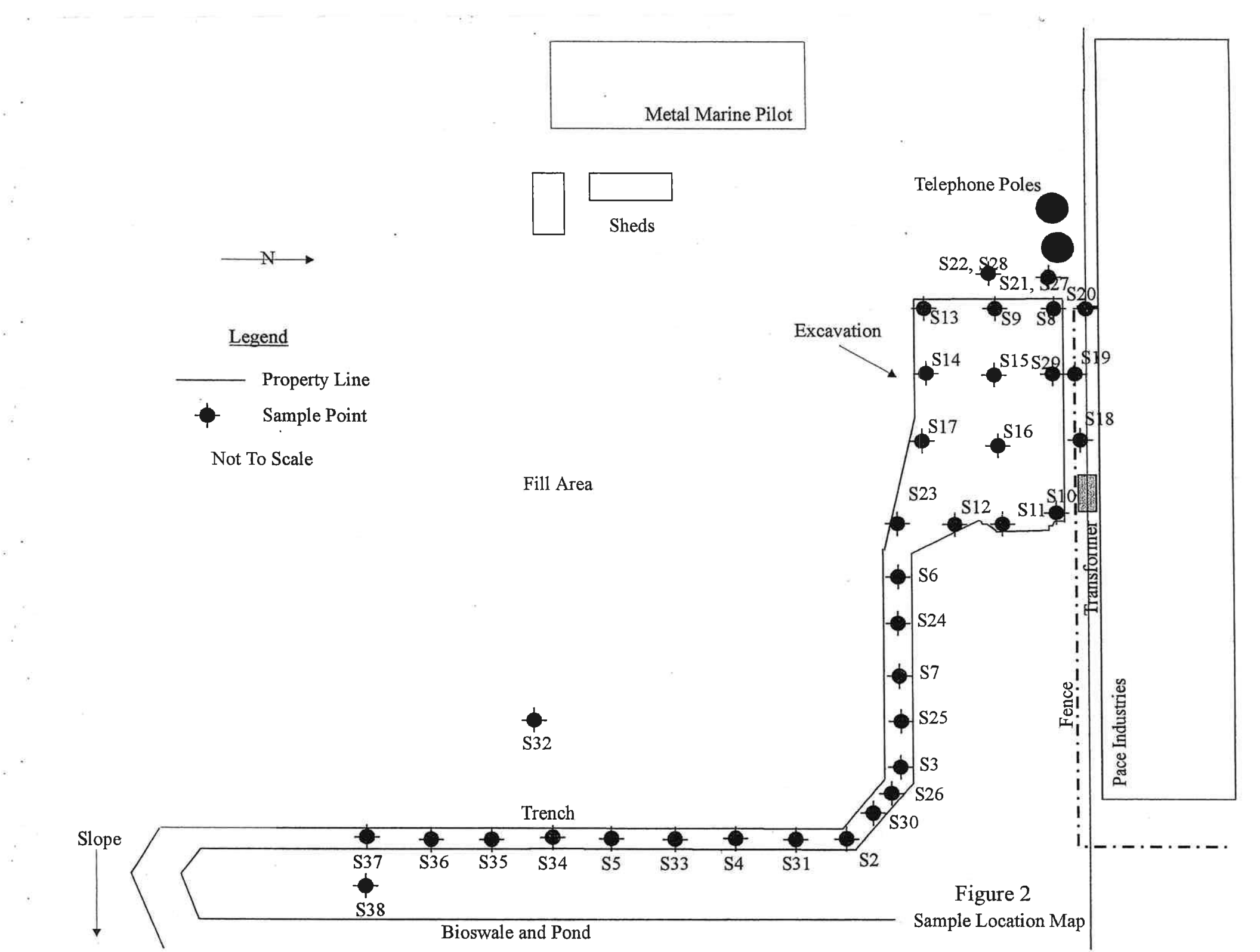
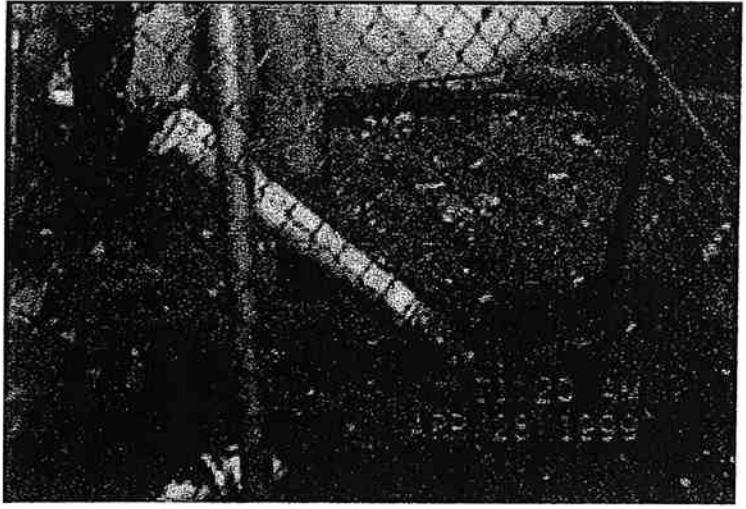
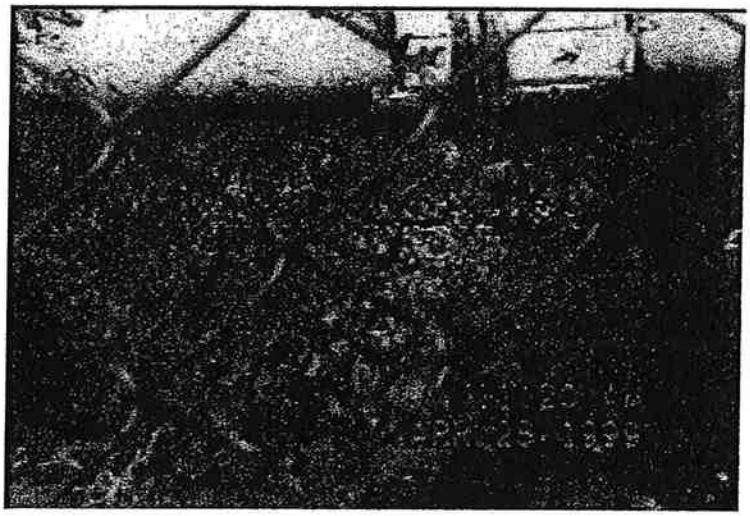


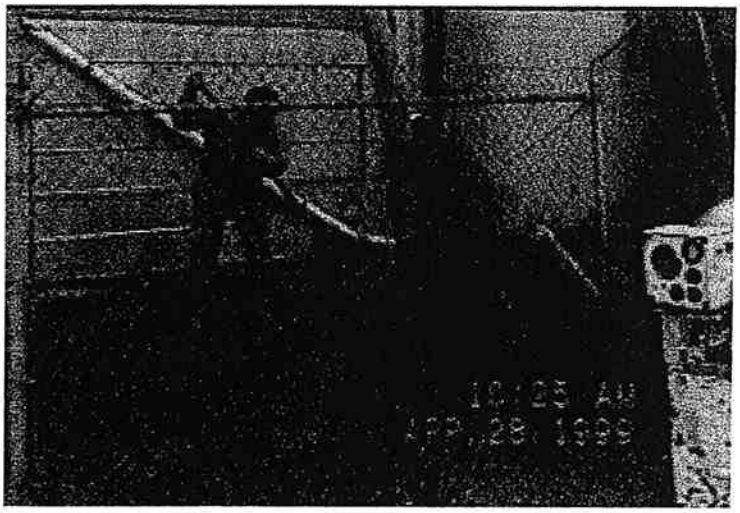
Figure 2
Sample Location Map



Clean Out - Source Of Contamination

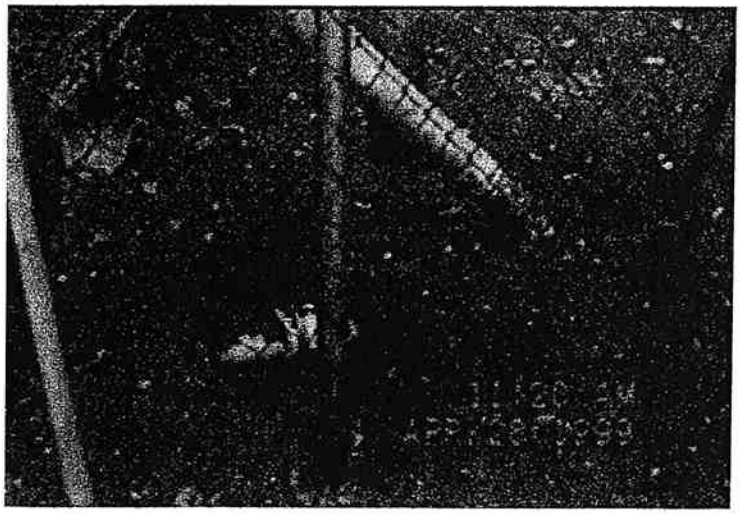


Below Clean Out - Leaking Piping Syste

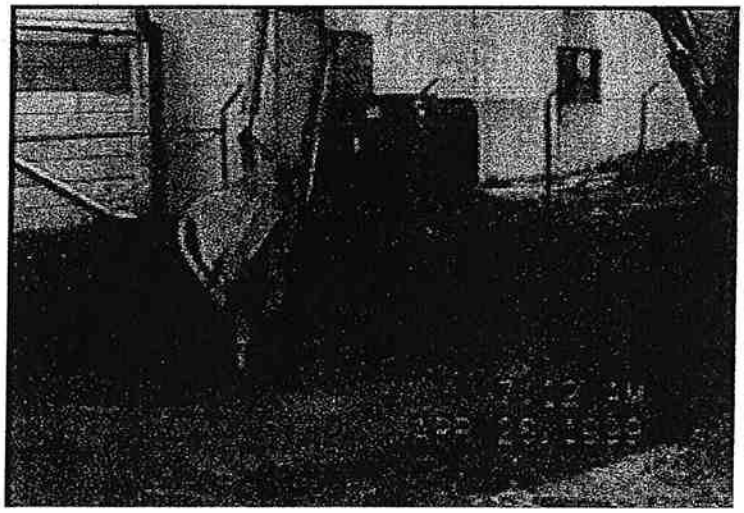


Removal of contaminated surface soil

Removal of surface water and contaminate

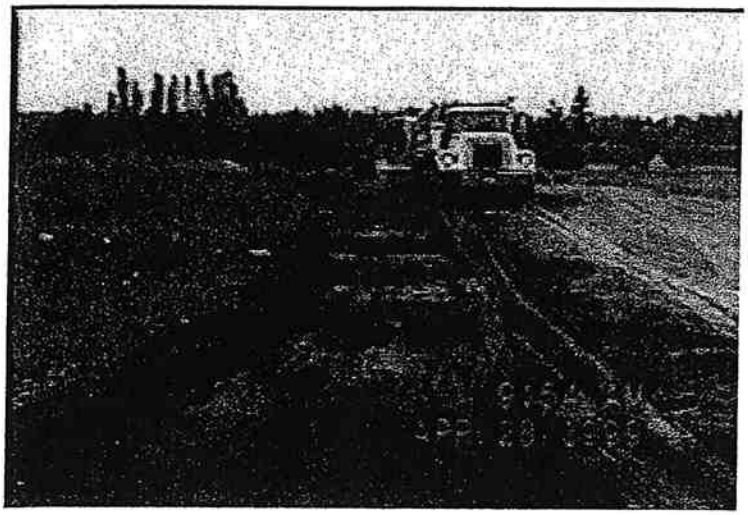


Clean out and sub-surface piping

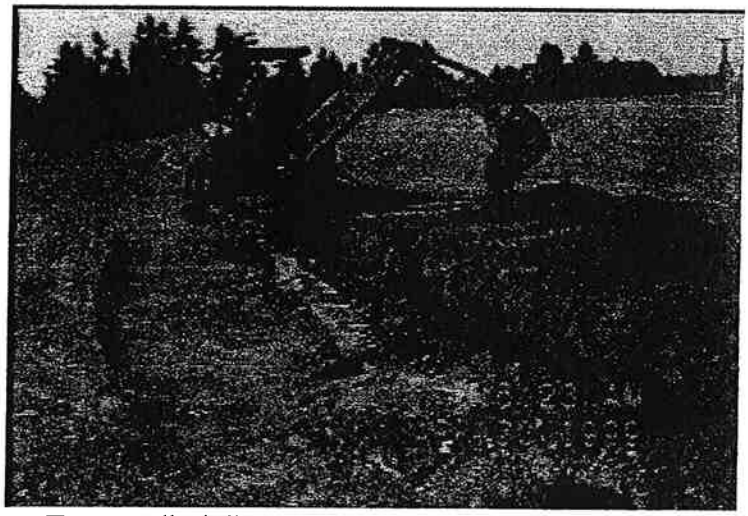


Excavation of contaminated soil

Site Photographs
Pace Industries Soil Clean up
Metal Marine Pilot, Inc Site
2119 Mildred Street W.



Norther area following contaminated soil removal



Eastern ditch line during contaminated soil removal

Eastern ditch line following contaminated soil removal

Site Photographs
Pace Industries Soil Clean up
Metal Marine Pilot, Inc Site
2119 Mildred Street W.

Appendix B - Analytical Results, Chromatographs, Chains of Custody

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SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

April 29, 1999

Creative Environmental Technologies, Inc.
P.O. Box 1803
Tacoma, WA 98401

Attn: Steven Spencer

Project: Metal Marine 103-1
Sample Matrix: Soil
Date Sampled: 4-28-99
Date Received: 4-28-99
Date Analyzed: 4-28-99
Spectra Project: S904-210
RUSH

WTPH-D EXTENDED

Spectra #	Sample ID:	WTPH-D mg/Kg dry wt.	Heavy Oils mg/Kg dry wt.	Surrogate Recovery p-Terphenyl
1977	S1	<25	14,000	114%
1978	S2	<25	1,000	117%
1979	S3	74	81,000	109%
1980	S4	<25	3,900	118%
1981	S5	<25	1,800	112%
1982	S6	<25	1,400	117%
1983	S7	<25	1,100	115%
Method Blank		<25	<100	125%

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

April 30, 1999

Creative Environmental Technologies, Inc.
PO Box 1803
Tacoma, WA 98401

Attn: Steven Spencer

PO #103-1
Project: Marine Metal
Sample Matrix: Soil
Date Sampled: 4- 28-99
Date Received: 4-28-99
Date Analyzed: 4-29-99
Spectra Project: S904-225
RUSH

WTPH-D EXTENDED

Spectra #	Sample ID:	WTPH-D mg/Kg dry wt.	Heavy Oils mg/Kg dry wt.	Surrogate Recovery p-Terphenyl
2015	S10-42899	<25	<100	123%
2016	S11-42899	<25	<100	127%
2017	S12-42899	<25	<100	136%
2018	S13-42899	<25	<100	132%
2019	S14-42899	<25	1,100	132%
2020	S15-42899	<25	<100	132%
2021	S16-42899	<25	<100	132%
2022	S17-42899	<25	<100	127%
2023	S23-42899	<25	<100	129%
2024	S24 -42899	<25	<100	128%
2025	S25 -42899	<25	<100	129%
2026	S26-42899	<25	<100	131%
2027	S27-42899	<25	<100	130%
2028	S28-42899	<25	<100	128%
2029	S29-42899	<25	5,800	127%
Method Blank		<25	<100	139%

SPECTRA LABORATORIES, INC.

Michael Deckert

Michael Deckert, Chemist

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

May 4, 1999

Creative Environmental Technologies, Inc.
P.O. Box 1803
Tacoma, WA 98401

Attn: Steven Spencer

Project: Metal Marine
Sample Matrix: Soil
Date Sampled: 4-30-99
Date Received: 4-30-99
Date Analyzed: 4-30-99
Spectra Project: S904-248
RUSH

WTPH-D EXTENDED

Spectra #	Sample ID:	WTPH-D mg/Kg dry wt.	Heavy Oils mg/Kg dry wt.	Surrogate Recovery
2104	S30-43099	<25	<100	139%
2105	S31-43099	<25	<100	140%
2106	S32-43099	<25	<100	140%
2107	S33-43099	<25	<100	135%
2108	S34-43099	<25	<100	133%
2109	S35-43099	<25	<100	138%
2110	S36-43099	<25	<100	136%
2111	S37-43099	<25	<100	137%
2112	S38-43099	<25	<100	135%
Method Blank		<25	<100	99%

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

March 29, 1999

Pace Industries Puget Division
2101 Mildred St. W.
Tacoma, WA 98466

Attn: Jeff

Sample ID: Effluent Grab
Project: Wastewater Monitoring
Sample Matrix: Water
Date Sampled: 3-17-99
Date Received: 3-17-99
Spectra Project: S903-175
Spectra #1237

pH	5.58
Total Phenols, mg/L	<0.05
Total Petroleum Hydrocarbons, mg/L	1.3
Fats, Oil and Grease, mg/L	8

pH testing performed by EPA Method 150.1
Total Phenols testing performed by EPA Method 420.1
Total Petroleum Hydrocarbons testing performed by EPA Method 418.1
Fats, Oil and Grease testing performed by EPA Method 413.2

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

March 29, 1999

Pace Industries Puget Division
2101 Mildred St. W.
Tacoma, WA 98466

Attn: Jeff

Sample ID: Effluent Comp.
Project: Wastewater Monitoring
Sample Matrix: Water
Date Sampled: 3-17-99
Date Received: 3-17-99
Spectra Project: S903-175
Spectra #1238

Total Recoverable Metals, mg/L

Lead	(Pb)	<0.04
Copper	(Cu)	<0.01
Zinc	(Zn)	0.26

Total Recoverable Metals testing performed by EPA Method 200.7

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

March 29, 1999

Pace Industries Puget Division
2101 Mildred St. W.
Tacoma, WA 98466

Attn: Jeff

METHOD BLANK
Date Analyzed: 3-18-99
Spectra Project: S903-175
Applies to Spectra #1238

Total Recoverable Metals, mg/L

Lead	(Pb)	<0.04
Copper	(Cu)	<0.01
Zinc	(Zn)	<0.006

Total Recoverable Metals testing performed by EPA Method 200.7

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

March 29, 1999

Pace Industries Puget Division
2101 Mildred St. W.
Tacoma, WA 98466

Attn: Jeff

EPA Method: 418.1
Sample Matrix: Water
Spectra Project: S903-175
Applies to Spectra #1237

HYDROCARBON ANALYSIS
QUALITY CONTROL RESULTS

MS/MSD

Spiked Sample: Method Blank
Units: mg/L

Date Analyzed: 3-24-99

Compound	Sample Result	Spike Amount	Spike Result	% Recovery	Dup. Result	Dup. Recovery	% RPD
TPH	<0.5	5.92	4.90	83	5.15	87	5

METHOD BLANK

Date Extracted: 3-26-99

Date Analyzed: 3-26-99

Total Petroleum Hydrocarbons, mg/L

<0.5

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

March 29, 1999

Pace Industries Puget Division
2101 Mildred St. W.
Tacoma, WA 98466

Attn: Jeff

EPA Method 413.2
Sample Matrix: Water
Spectra Project: S903-175
Applies to Spectra #1237

OIL AND GREASE
QUALITY CONTROL RESULTS

MS/MSD

Spiked Sample: Method Blank
Units: mg/L

Date Analyzed: 3-24-99

Compound	Sample Result	Spike Amount	Spike Result	% Recovery	Dup. Result	Dup. Recovery	% RPD
Oil and Grease	<0.5	5.92	5.12	86.5	5.55	93.7	8

METHOD BLANK

Date Extracted: 3-26-99

Date Analyzed: 3-26-99

Oil and Grease, mg/L

<0.5

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

CHAIN OF CUSTODY

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

CLIENT: PACE Industries

PROJECT: Wastewater Monitoring

CONTACT: Jeff

PHONE:

PURCHASE ORDER #:

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D	TPH (H_2SO_4)	F.O.G. 413.1/413.2 (H_2SO_4)	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)	T. Phenol (H_2SO_4)				NORMAL / RUSH
Eff-grab	3-17	13:20	WW							X	X															X					X				
Eff comp	3-16/17	13:20	↓																				X												

Column groups: HYDROCARBONS (WTPH-HCID to F.O.G.); ORGANICS (8260 VOA to 8082 PCB); TCLP D-LIST (TCLP METALS (8) to TCLP HERB.); METALS (TOTAL METALS ICP/DCP to TOTAL LEAD); OTHER (pH 9040/9045 to NORMAL / RUSH).

RETUR[N]

DISPOS[AL]

Fee appl[...]

LAB ID

SPECIAL INSTRUCTIONS/COMMENTS:

T-metals: Pb, Cu, Zn
Samples were chilled &/or preserved on site

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TI[ME]
RELINQUISHED BY	[signature]	K E Kuester	Misquality Environmental	3-17	13:[...]
RECEIVED BY	[signature]	Barb Minner	Spectra	3/17/99	1[...]
RELINQUISHED BY					
RECEIVED BY					

le ID : 1977 ceti

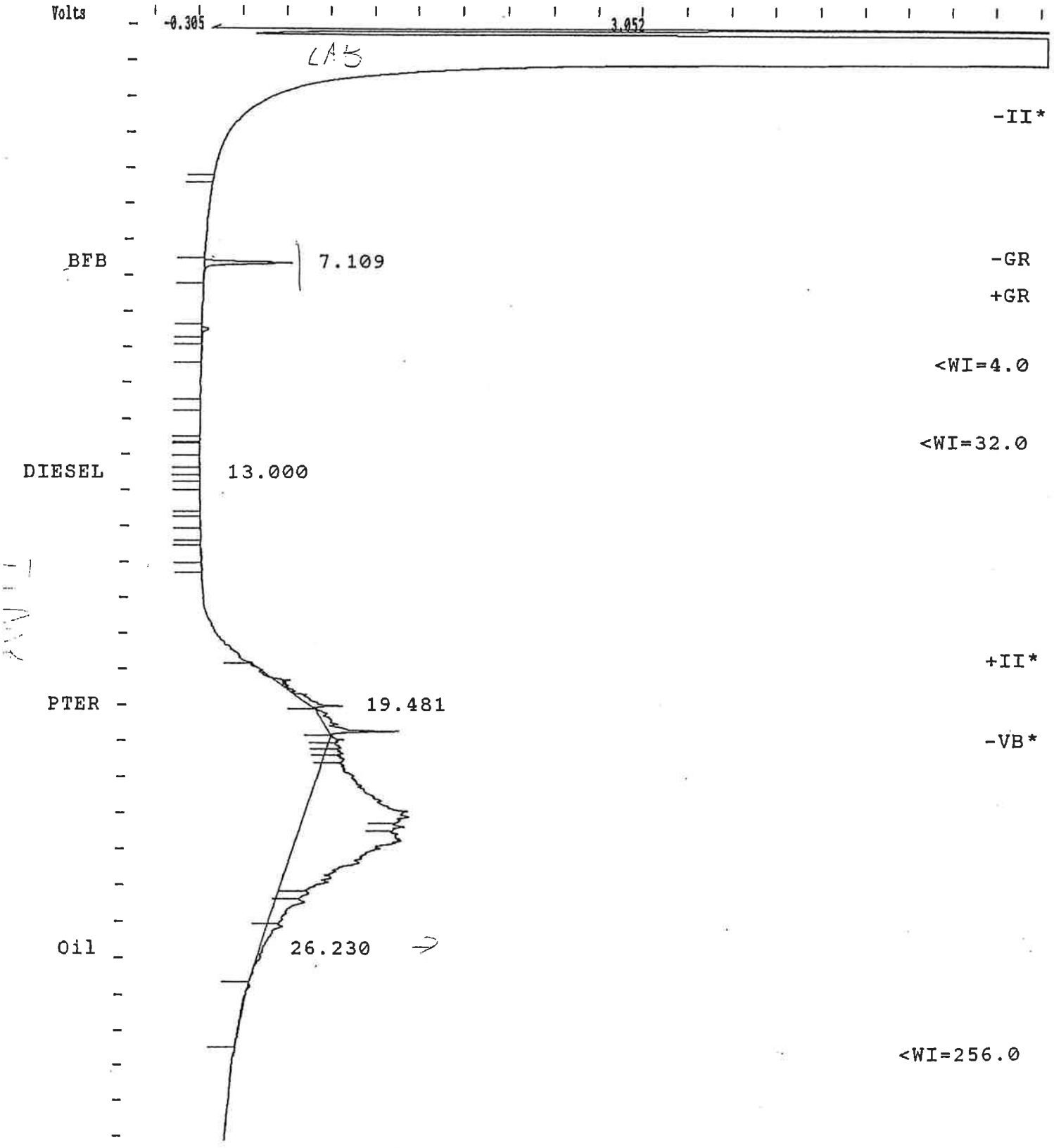
ction Date: 28-APR-99 12:49 PM Calculation Date: 28-APR-99 1:21 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ıple ID : 1977ms ceti

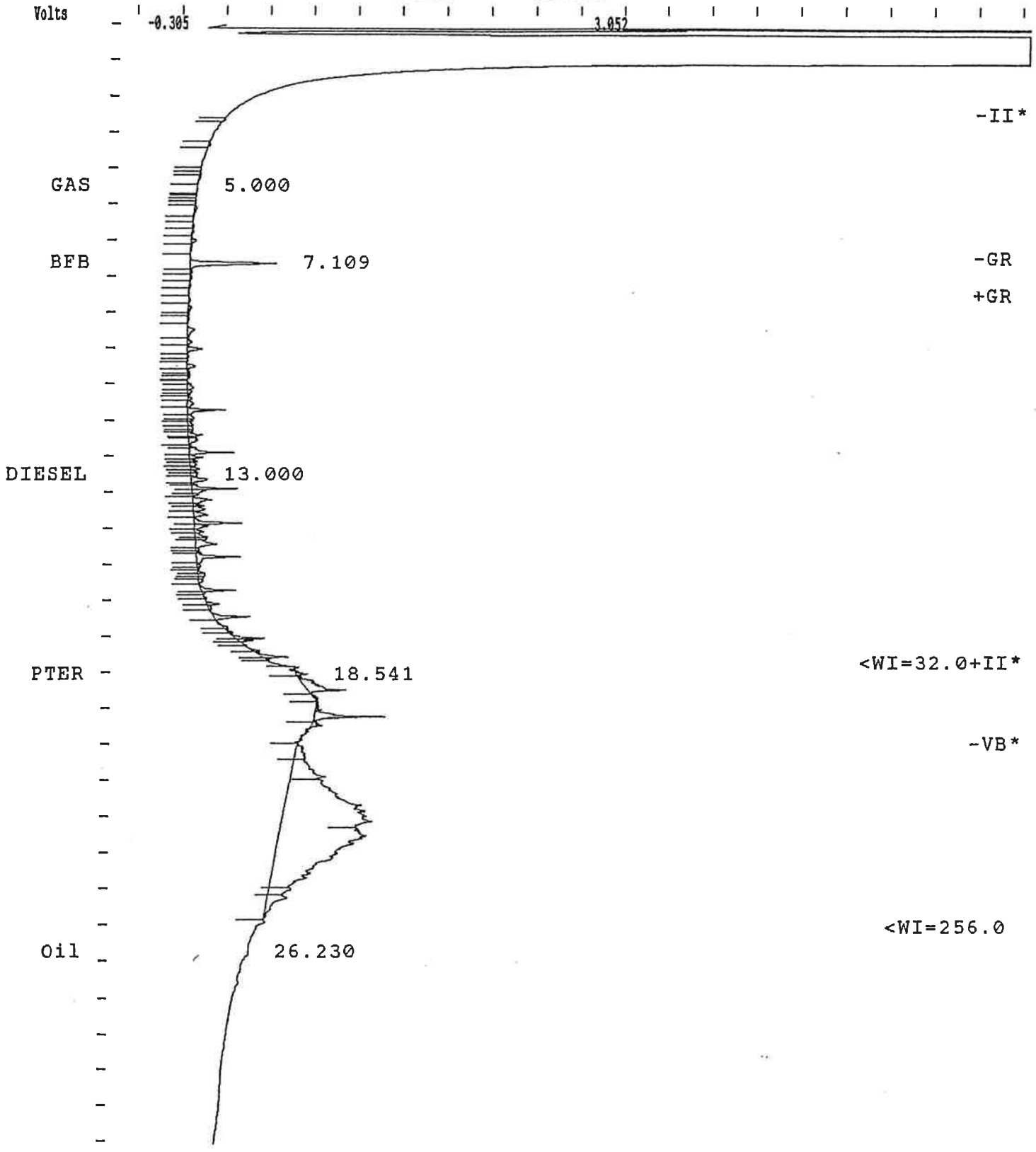
jection Date: 28-APR-99 1:28 PM Calculation Date: 28-APR-99 2:00 PM

rator : MD
:kstation: MS-DOS_6
strument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******** Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
ırt Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 1977msd ceti

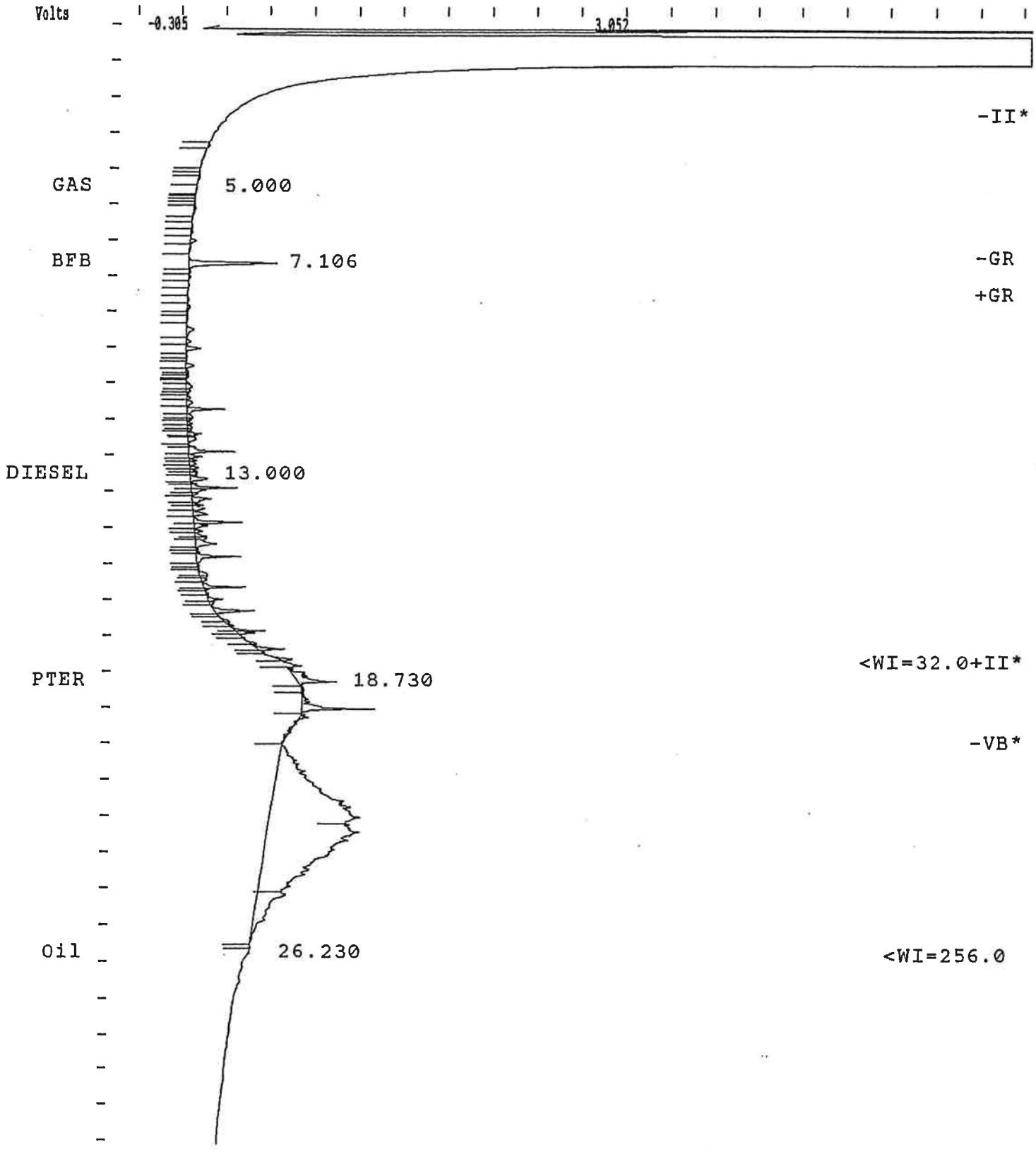
ction Date: 28-APR-99 2:07 PM Calculation Date: 28-APR-99 2:39 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ıple ID : 1978 ceti

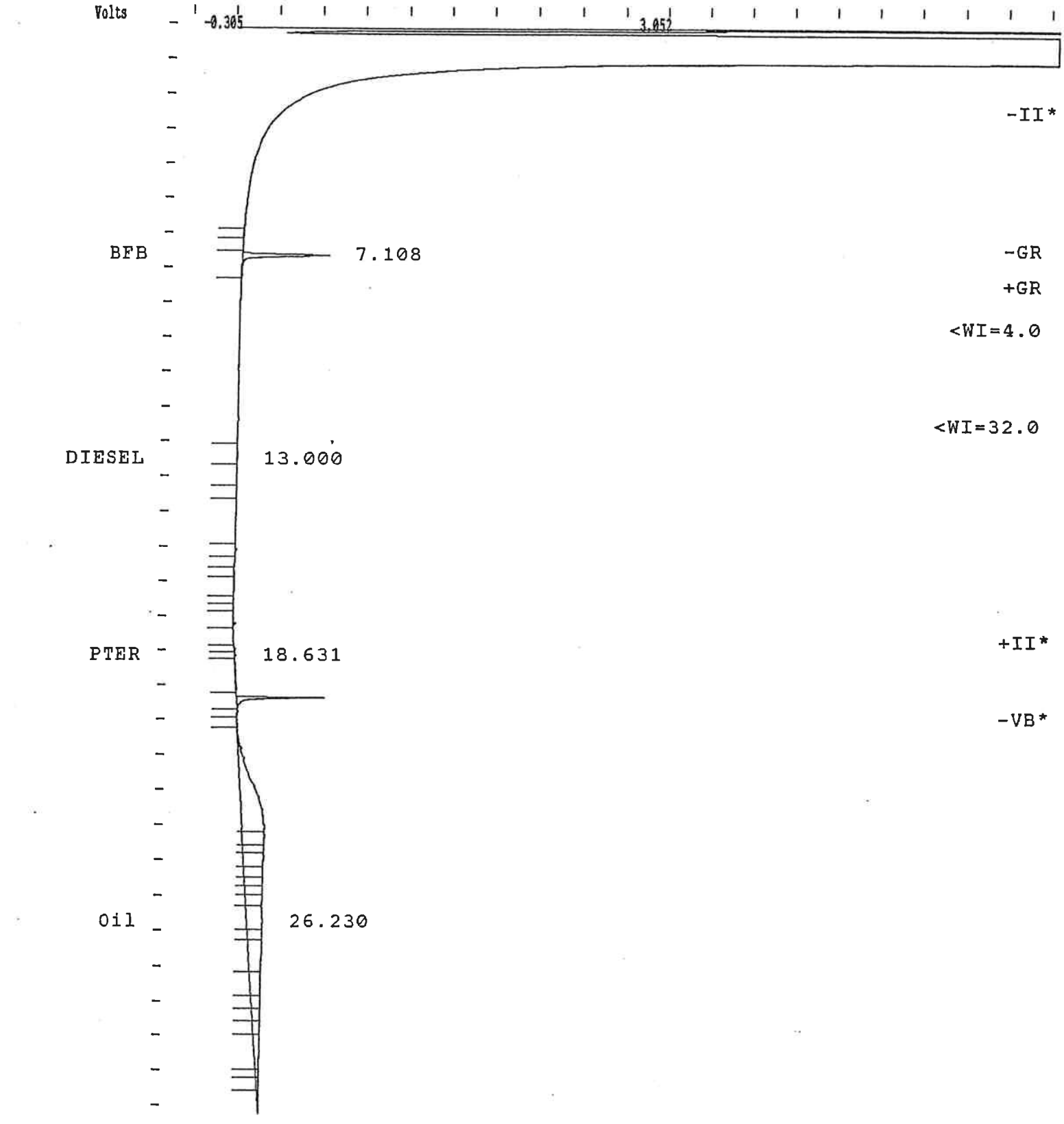
jection Date: 28-APR-99 2:47 PM Calculation Date: 28-APR-99 3:19 PM

ɔrator : MD
ʟkstation: MS-DOS_6
ɜtrument : Varian Star #2
'nnel : B - FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 1979 ceti

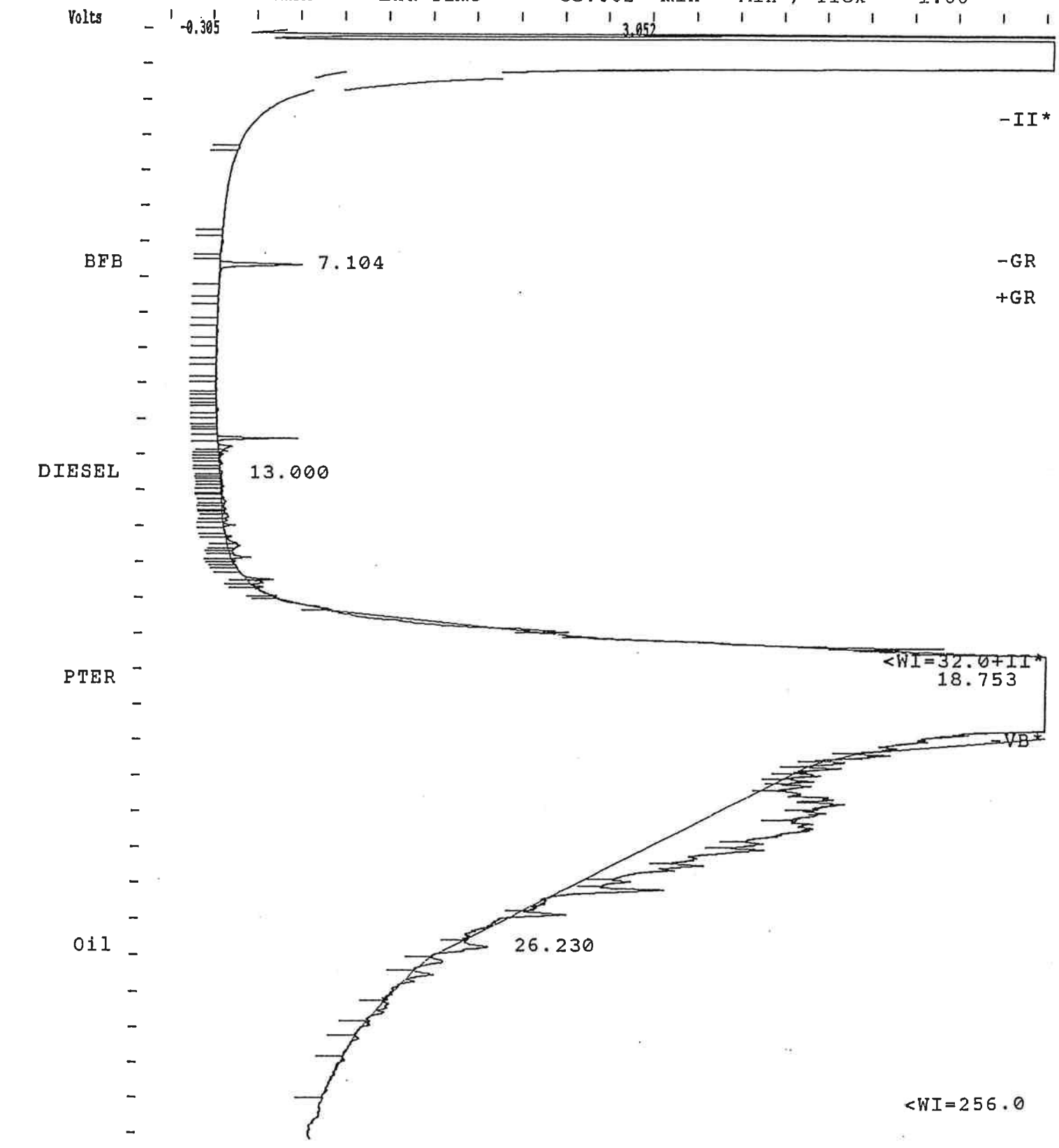
ction Date: 28-APR-99 3:26 PM Calculation Date: 28-APR-99 3:58 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



aple ID : 1980 ceti

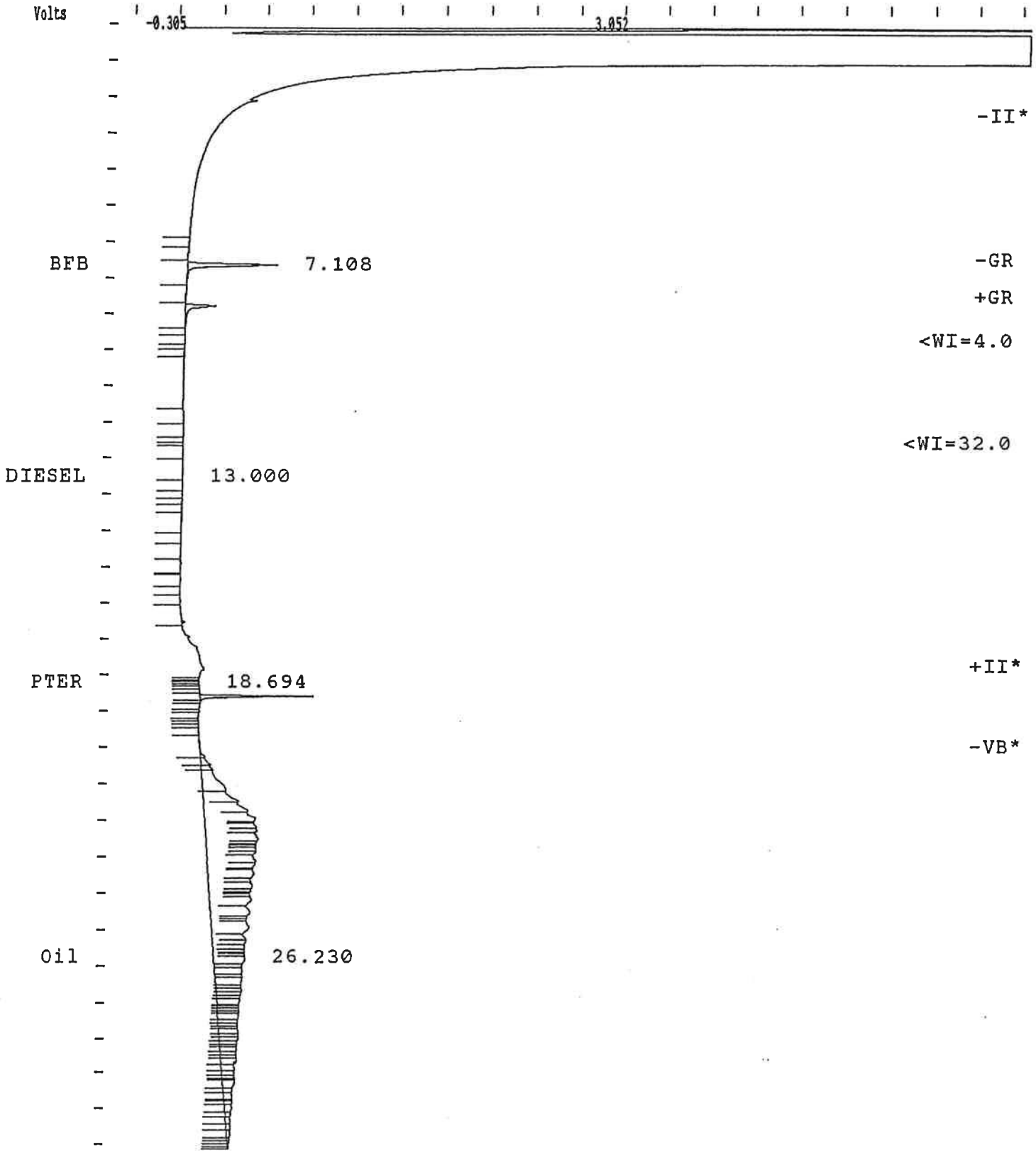
jection Date: 28-APR-99 4:05 PM Calculation Date: 28-APR-99 4:38 PM

erator : MD
rkstation: MS-DOS_6
strument : Varian Star #2
annel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********** Star Chromatography Software ********** Version 4.0 **********

art Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 1981 ceti

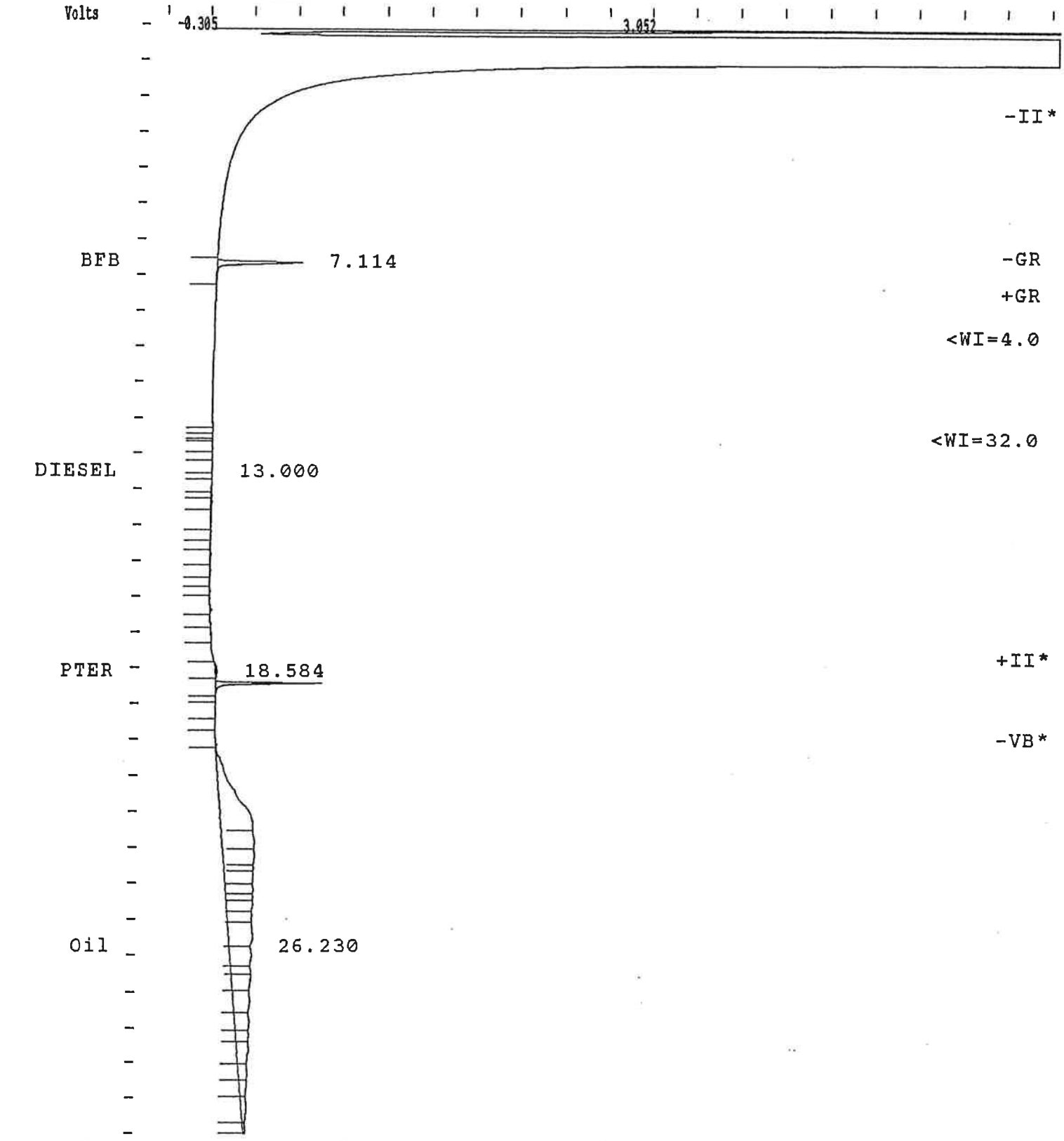
ction Date: 28-APR-99 4:45 PM Calculation Date: 28-APR-99 5:17 PM

ator : MD
station: MS-DOS_6
ument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

****** Star Chromatography Software ********** Version 4.0 **********

Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 1982 ceti

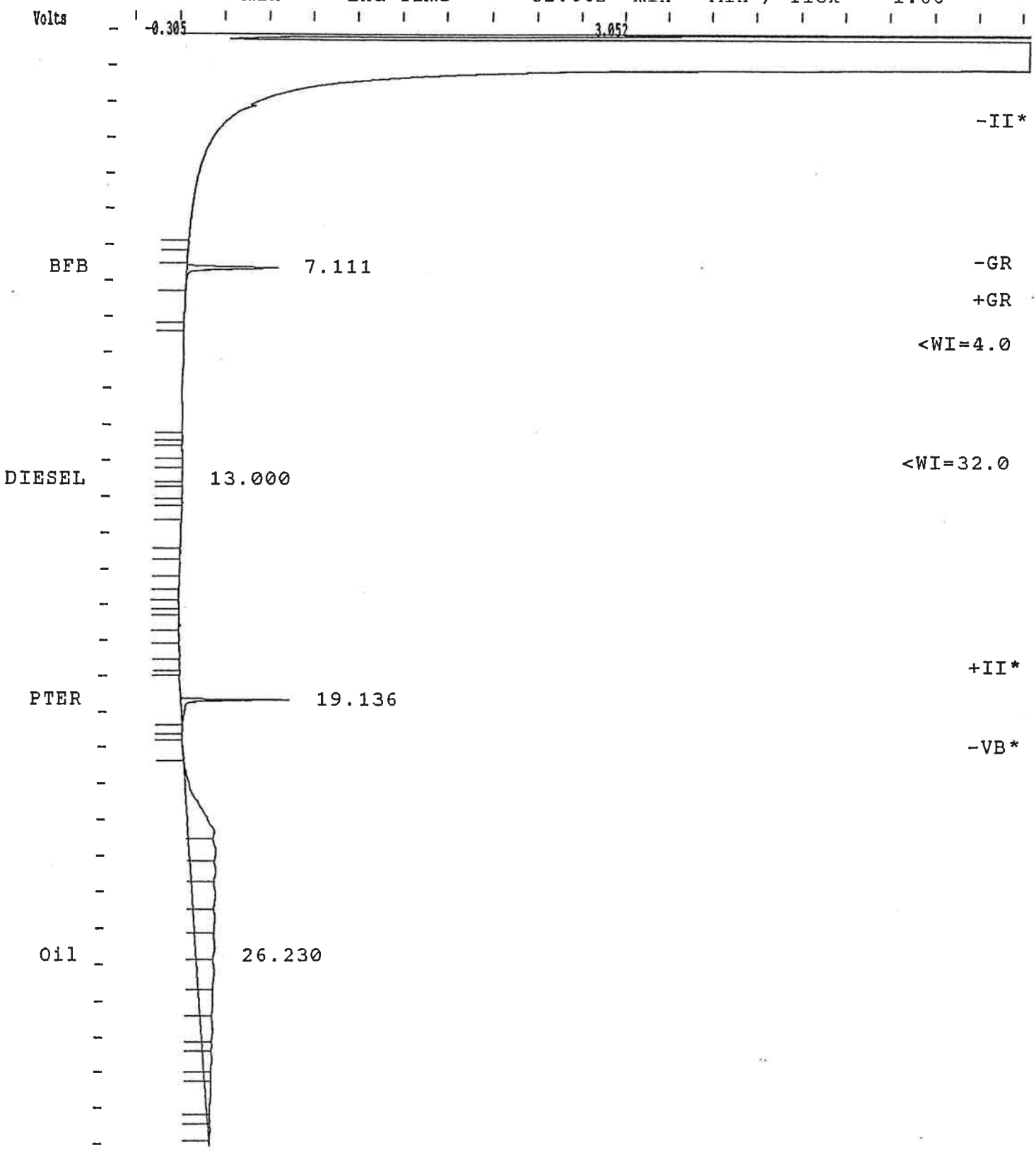
jection Date: 28-APR-99 5:24 PM Calculation Date: 28-APR-99 5:57 PM

rator : MD
:kstation: MS-DOS_6
strument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******** Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
irt Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 1983 ceti

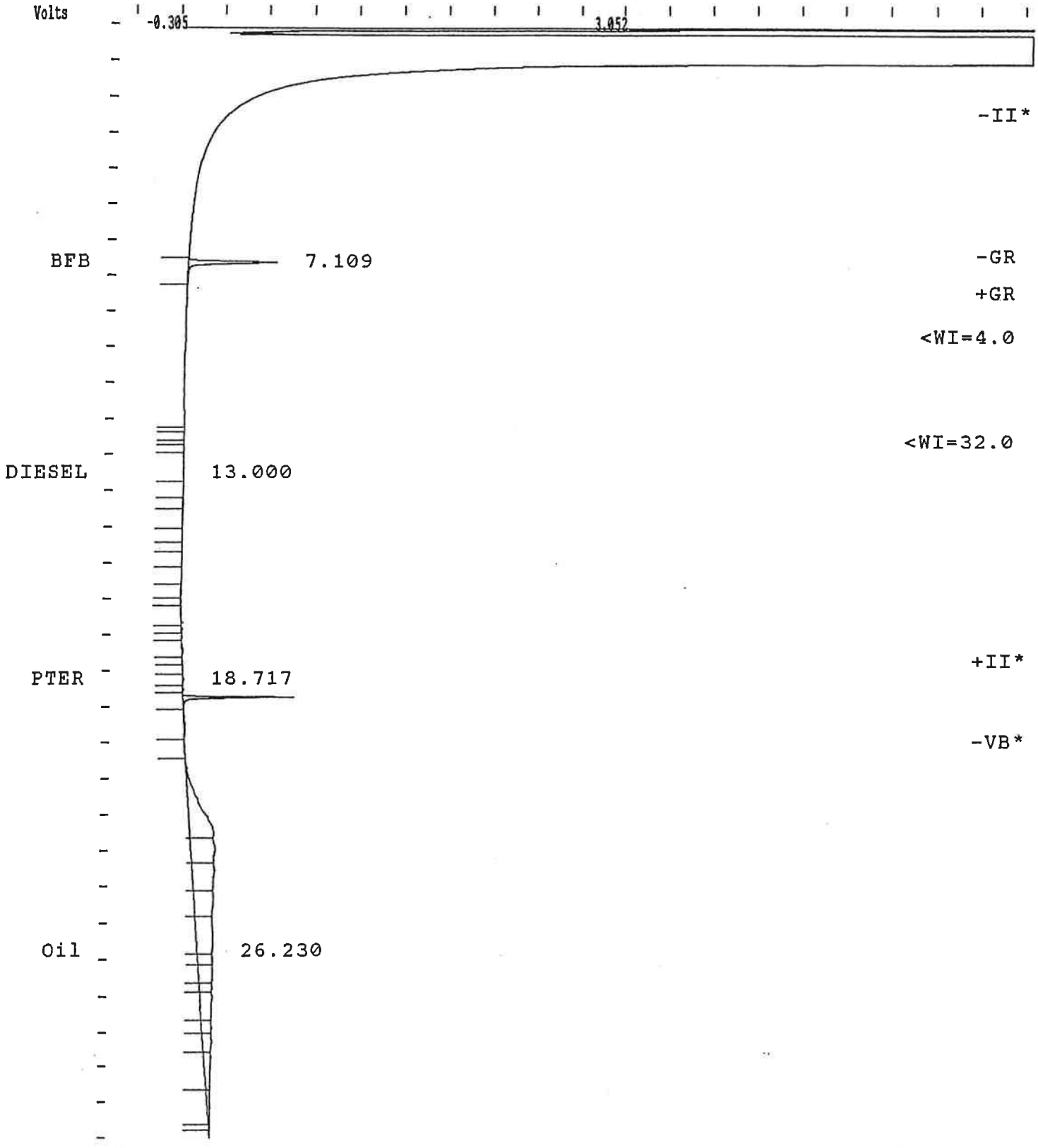
ction Date: 28-APR-99 6:04 PM Calculation Date: 28-APR-99 6:36 PM

ator : MD
station: MS-DOS_6
ument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

****** Star Chromatography Software ********** Version 4.0 **********

Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



:hod File : C:\STAR\WD4.MTH
ıple ID : mblk soil 4-29-99

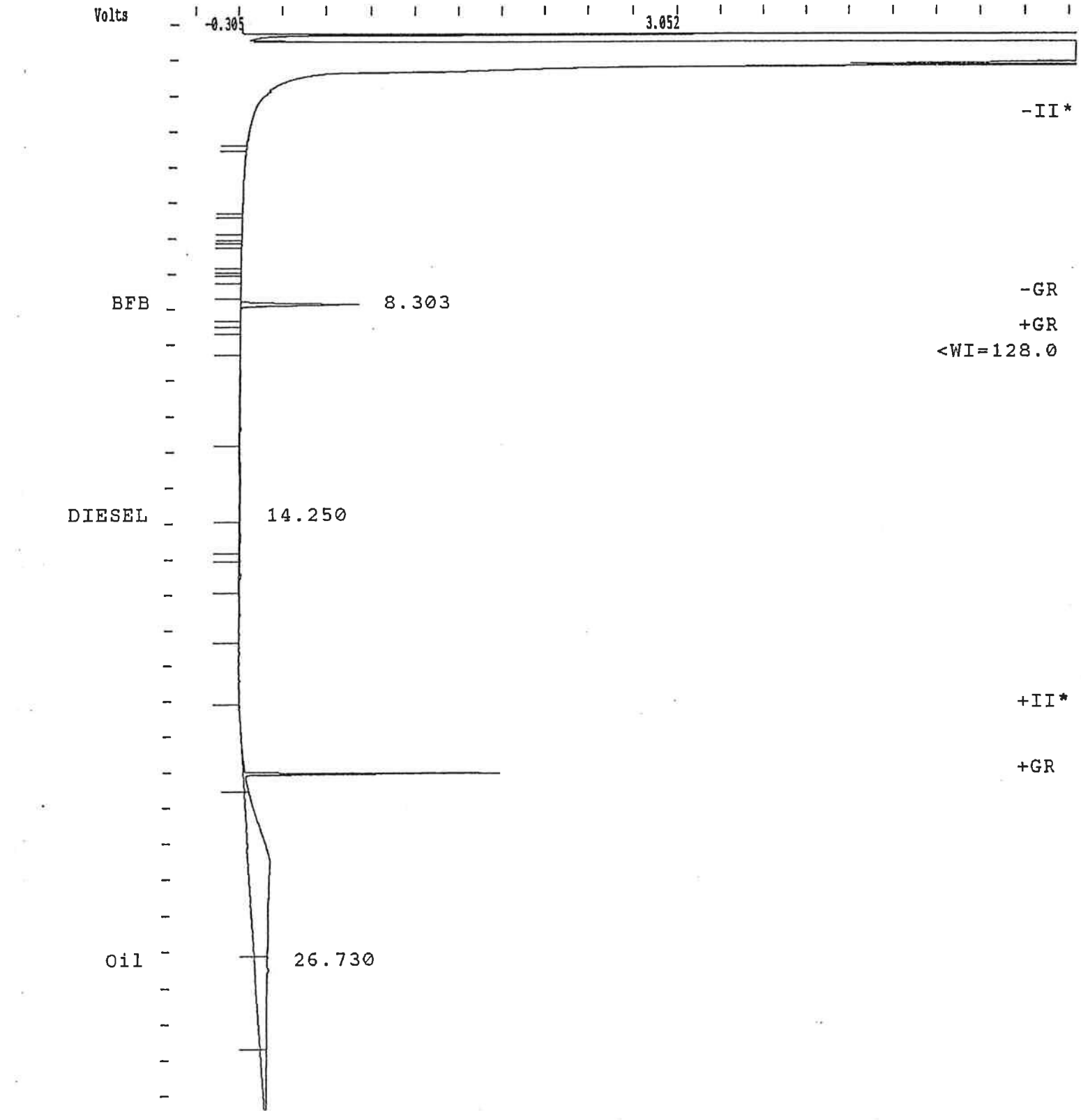
'ection Date: 29-APR-99 3:22 PM Calculation Date: 29-APR-99 3:54 PM

ɐrator : MD
ckstation: MS-DOS_6
trument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

'******** Star Chromatography Software ********** Version 4.0 ***************

ɹrt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
ɹrt Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



un File : C:\STAR\MODULE22\wtphd027.RUN
ethod File : C:\STAR\WD4.MTH
ample ID : 2015 cet1

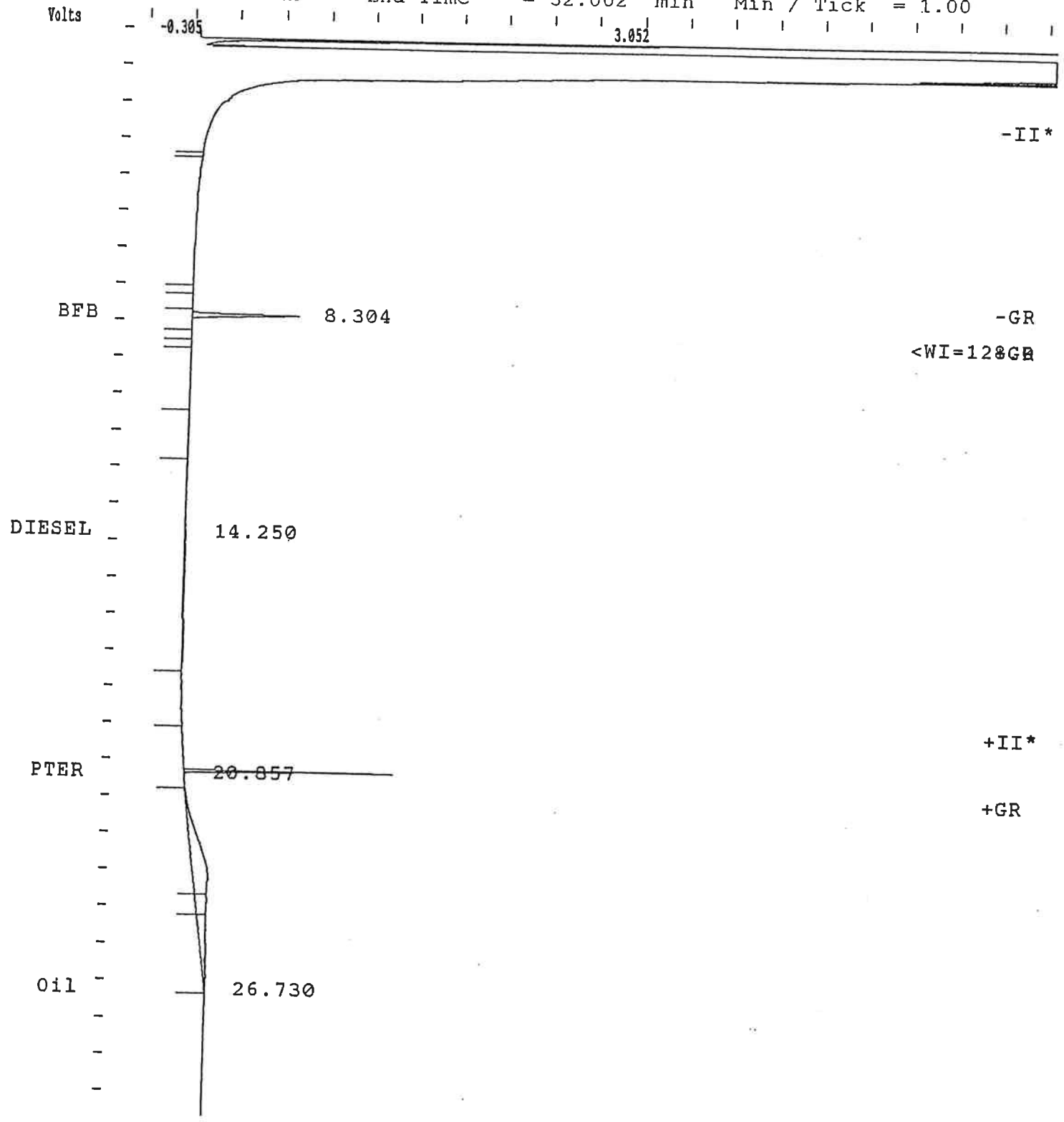
njection Date: 29-APR-99 4:01 PM Calculation Date: 29-APR-99 4:33 PM

perator : MD
orkstation: MS-DOS_6
nstrument : Varian Star #2
hannel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********** Star Chromatography Software ********** Version 4.0 **********

art Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 2016ceti

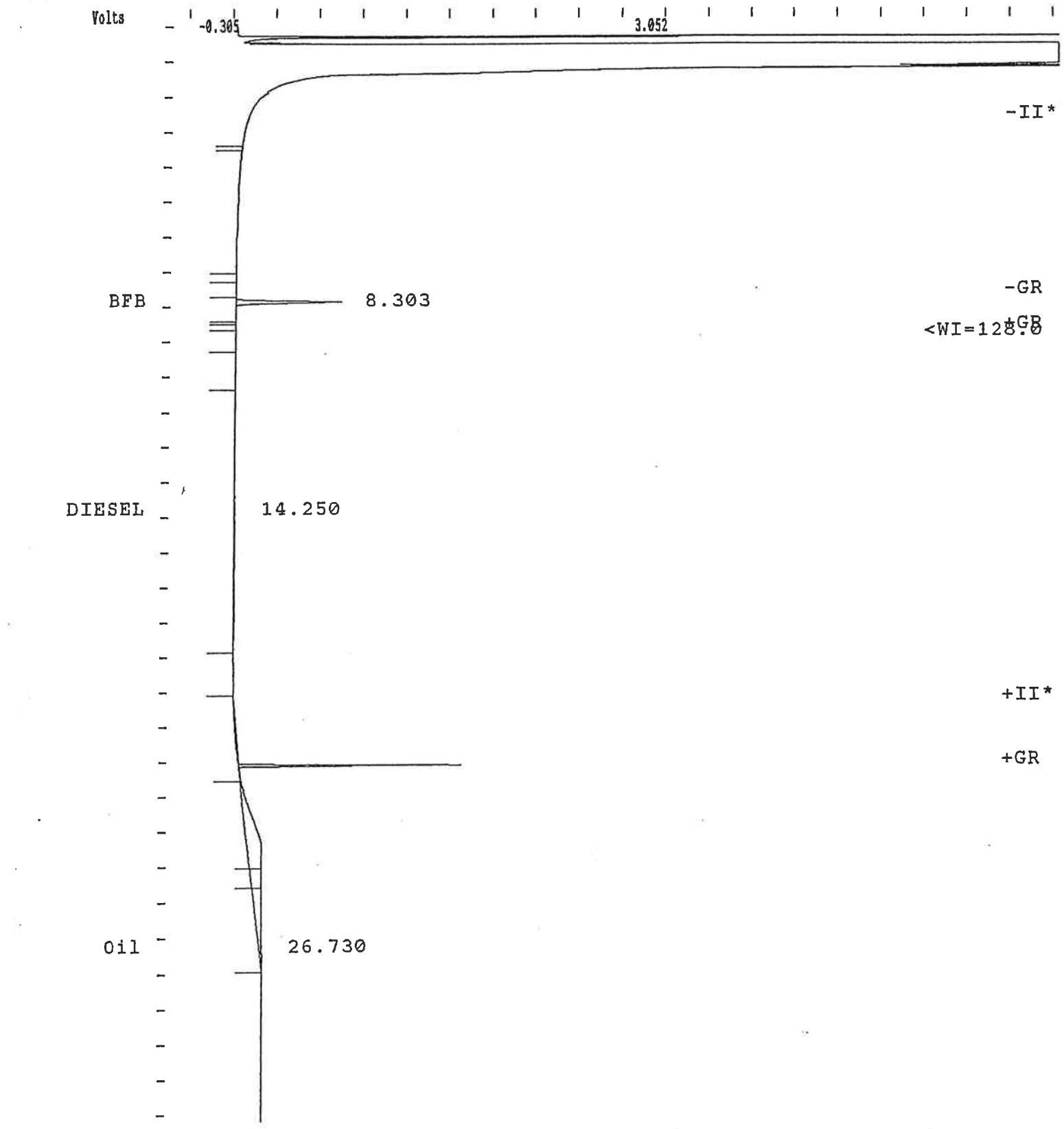
jection Date: 29-APR-99 4:41 PM Calculation Date: 29-APR-99 5:13 PM

rator : MD
kstation: MS-DOS_6
strument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2017 ceti

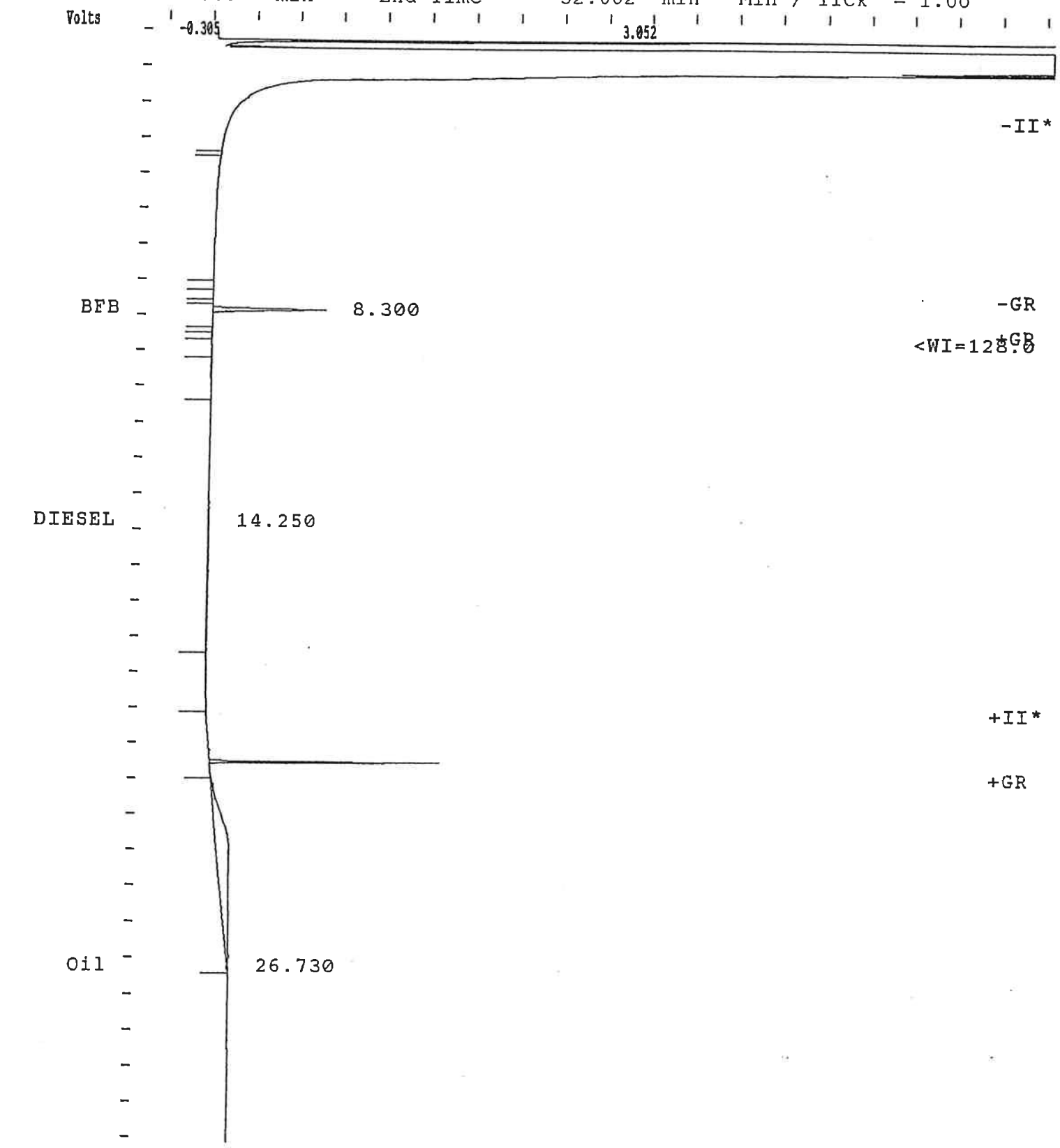
ction Date: 29-APR-99 5:20 PM Calculation Date: 29-APR-99 5:52 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

****** Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ıple ID : 2018 ceti

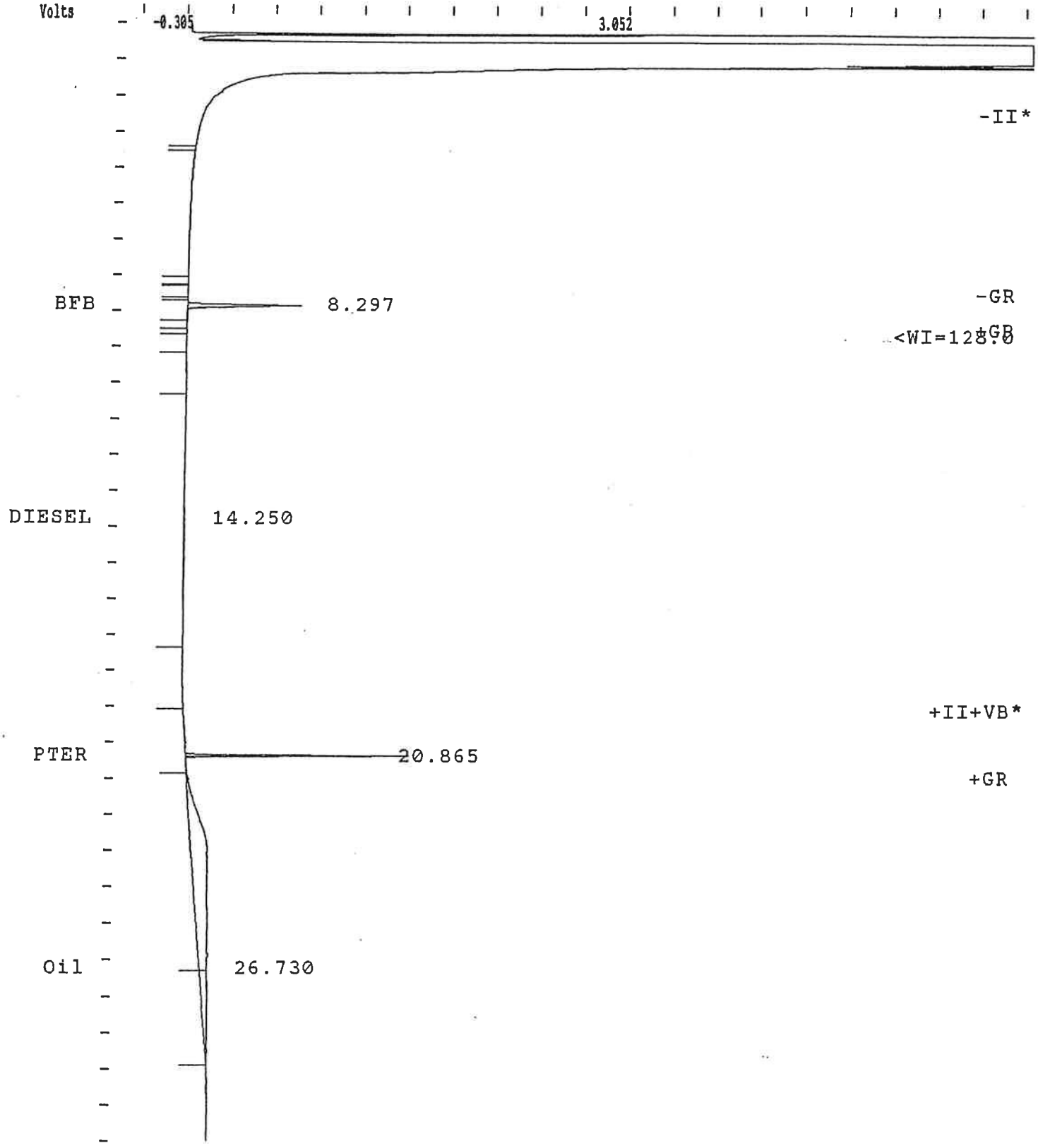
jection Date: 29-APR-99 6:00 PM Calculation Date: 29-APR-99 6:32 PM

ɜrator : MD
rkstation: MS-DOS_6
ɜtrument : Varian Star #2
.nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 ***************

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2019 ceti

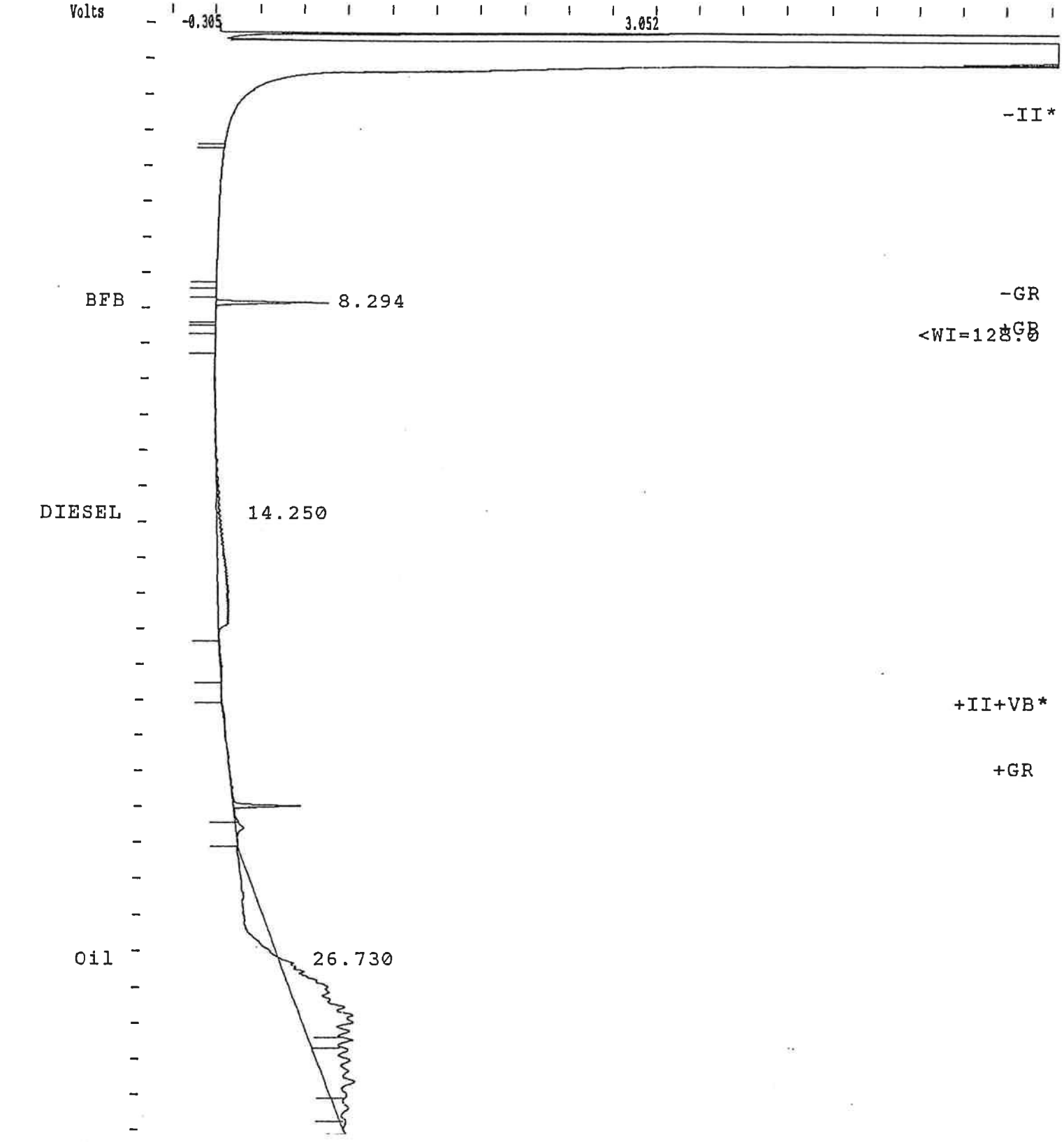
ction Date: 30-APR-99 1:09 AM Calculation Date: 30-APR-99 1:42 AM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

t Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
t Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 2020 ceti

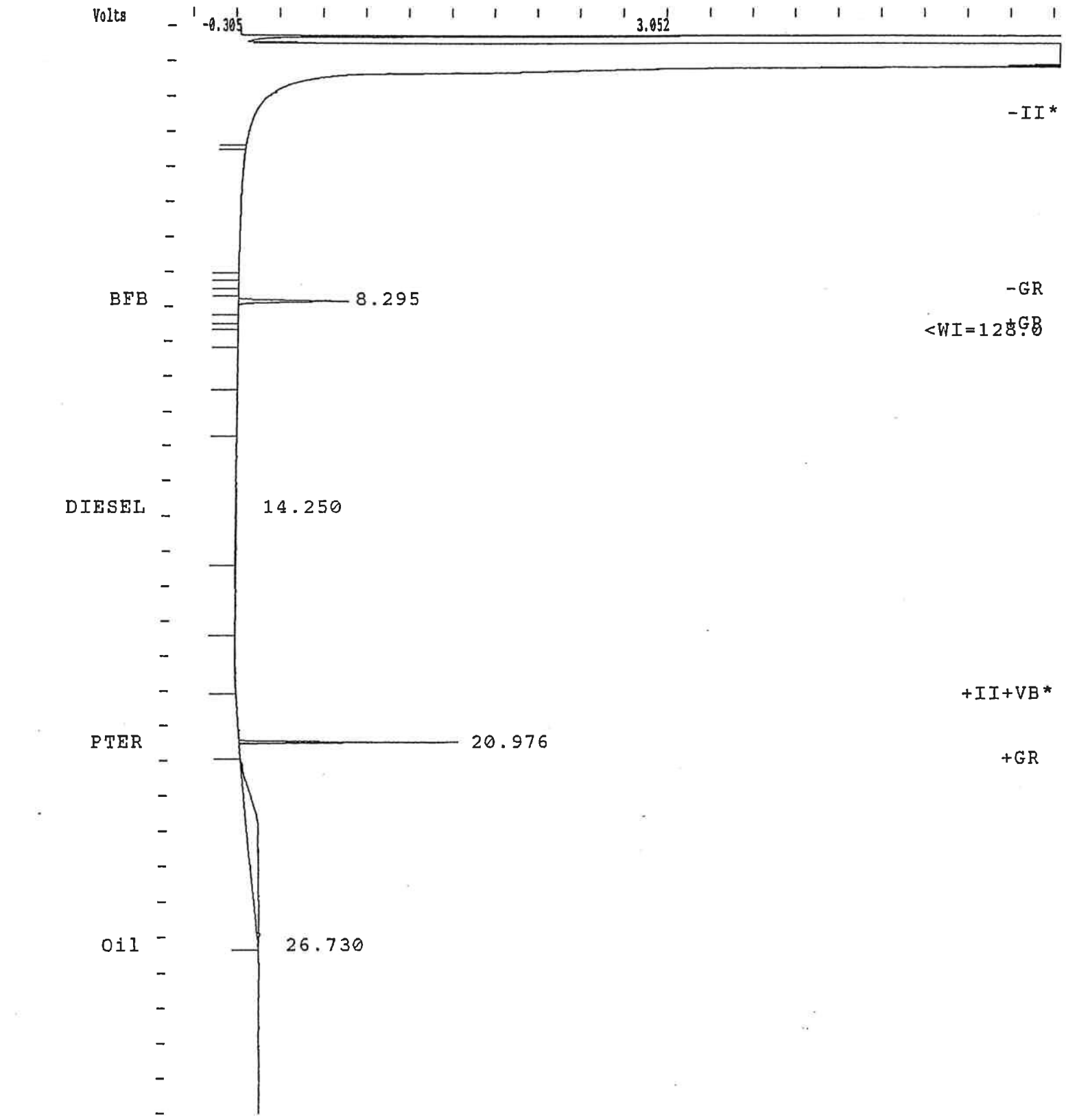
jection Date: 29-APR-99 6:39 PM Calculation Date: 29-APR-99 7:11 PM

rator : MD
kstation: MS-DOS_6
trument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



od File : C:\STAR\WD4.MTH
le ID : 2021 ceti

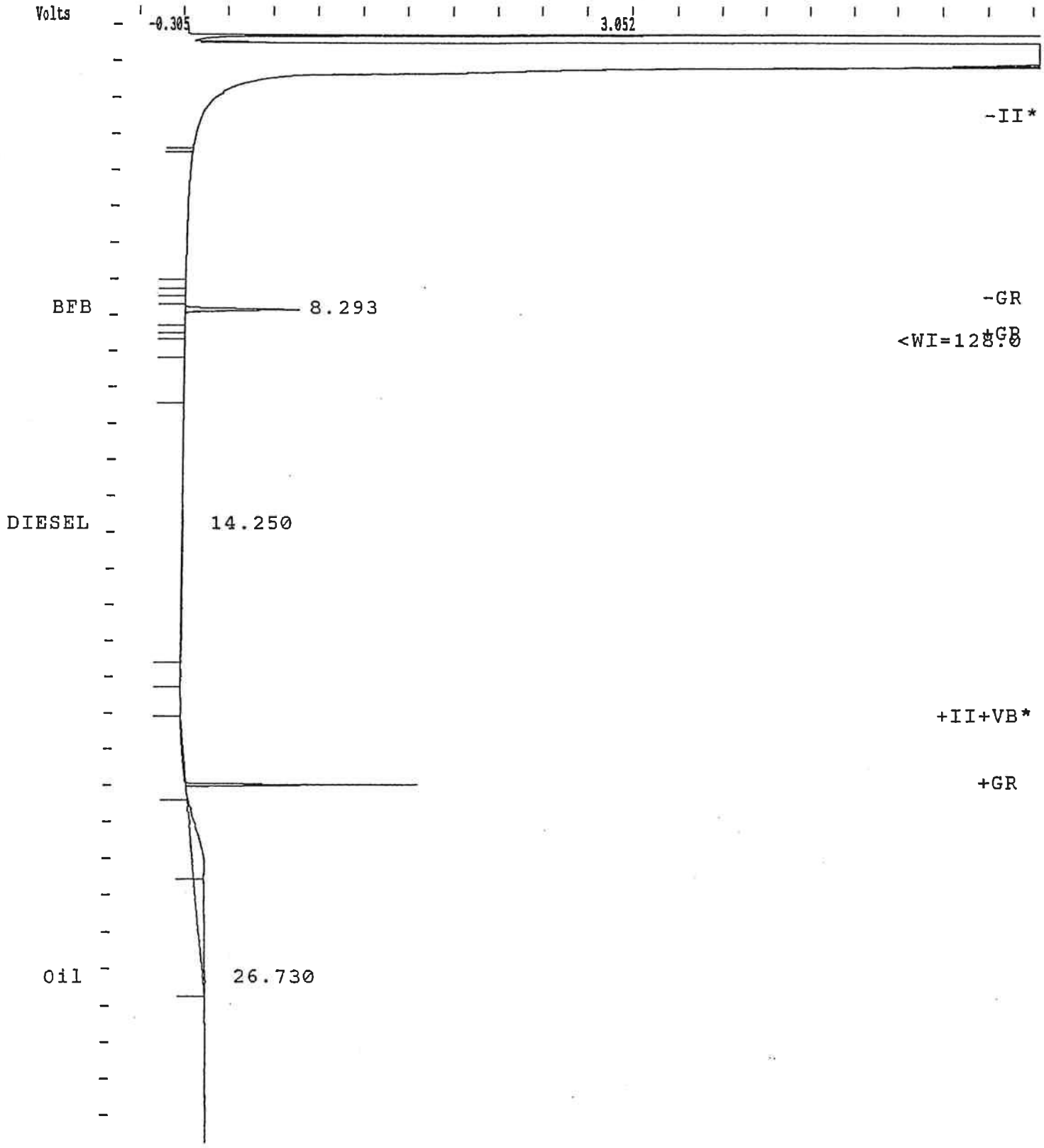
ction Date: 29-APR-99 7:18 PM Calculation Date: 29-APR-99 7:50 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ıple ID : 2022 ceti

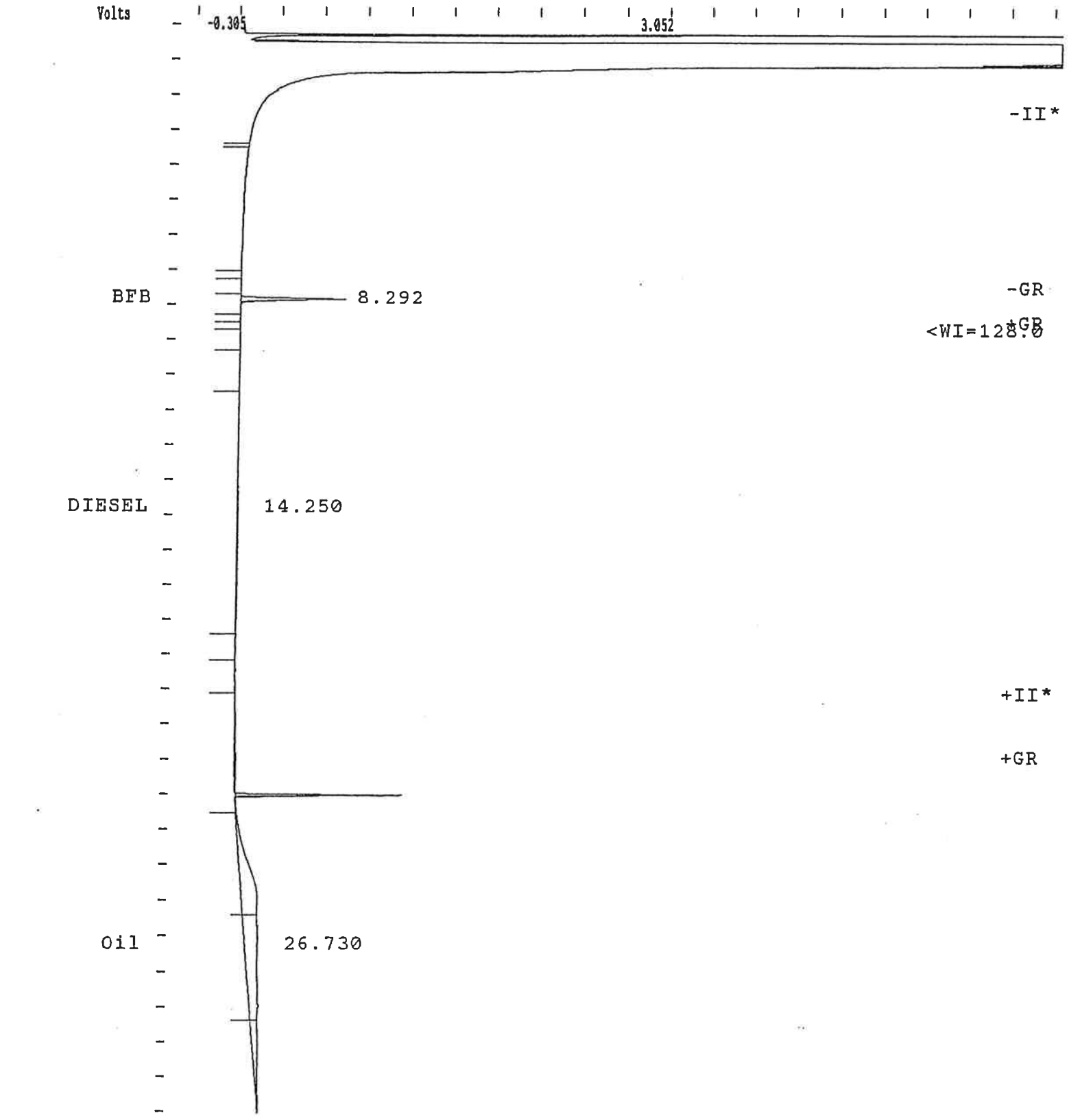
jection Date: 29-APR-99 7:57 PM Calculation Date: 29-APR-99 8:29 PM

ɜrator : MD
ɾkstation: MS-DOS_6
ʂtrument : Varian Star #2
ɹnnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2023 ceti

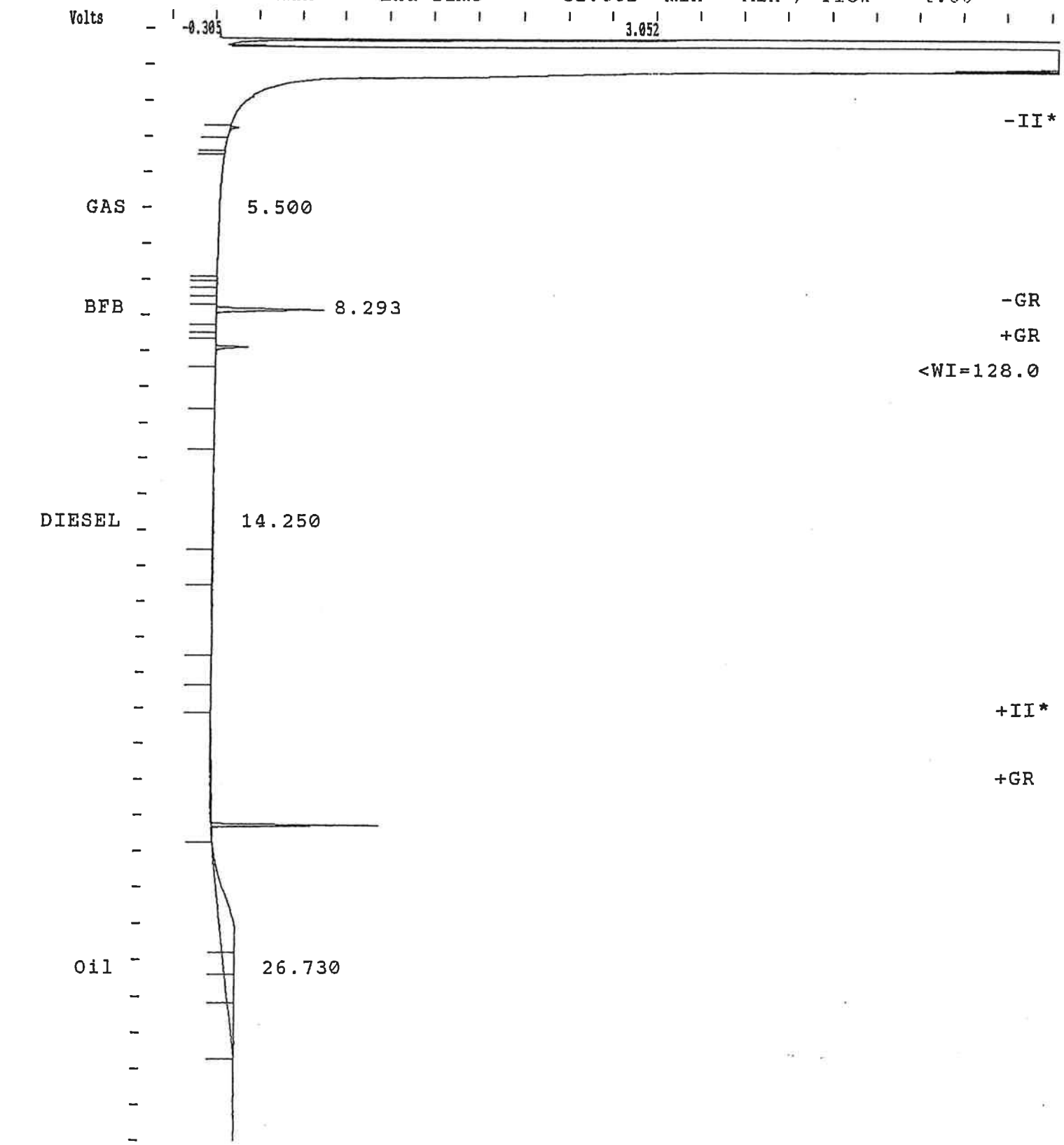
ction Date: 29-APR-99 8:36 PM Calculation Date: 29-APR-99 9:08 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 ***************

t Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
t Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ıple ID : 2024 ceti

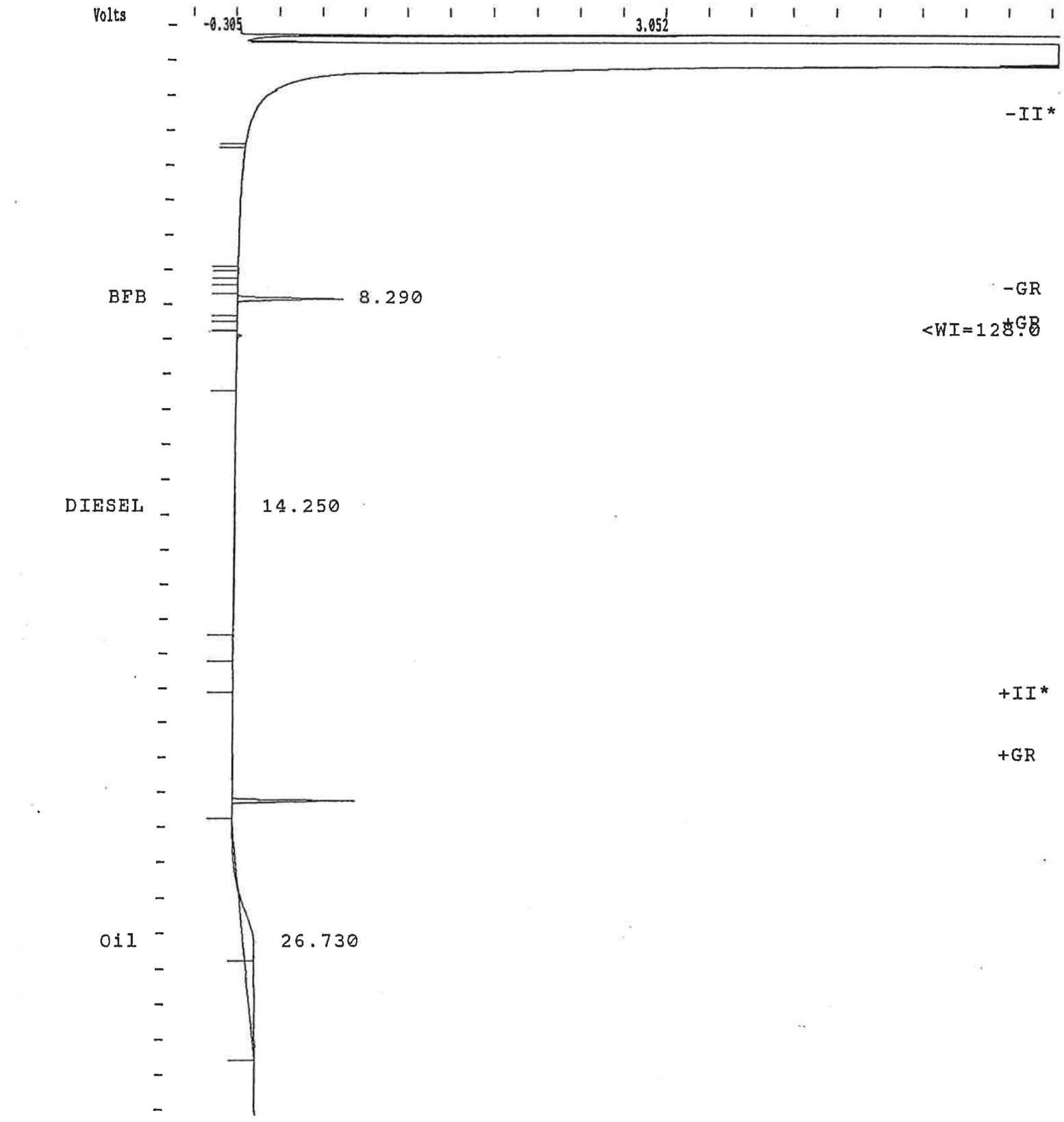
jection Date: 29-APR-99 9:15 PM Calculation Date: 29-APR-99 9:48 PM

·rator : MD
ıkstation: MS-DOS_6
strument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
ırt Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2025 ceti

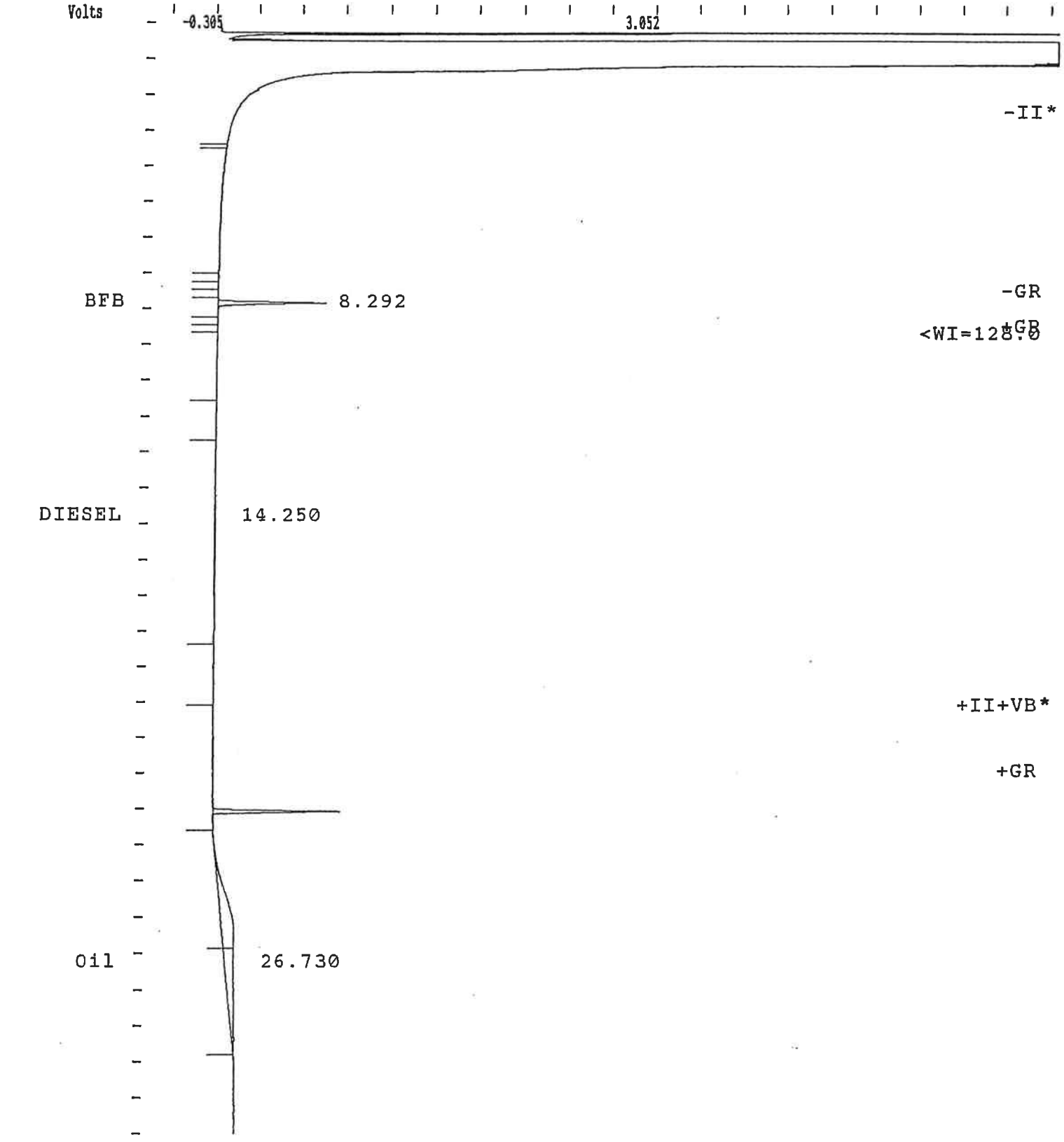
ction Date: 29-APR-99 9:54 PM Calculation Date: 29-APR-99 10:27 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 2026 ceti

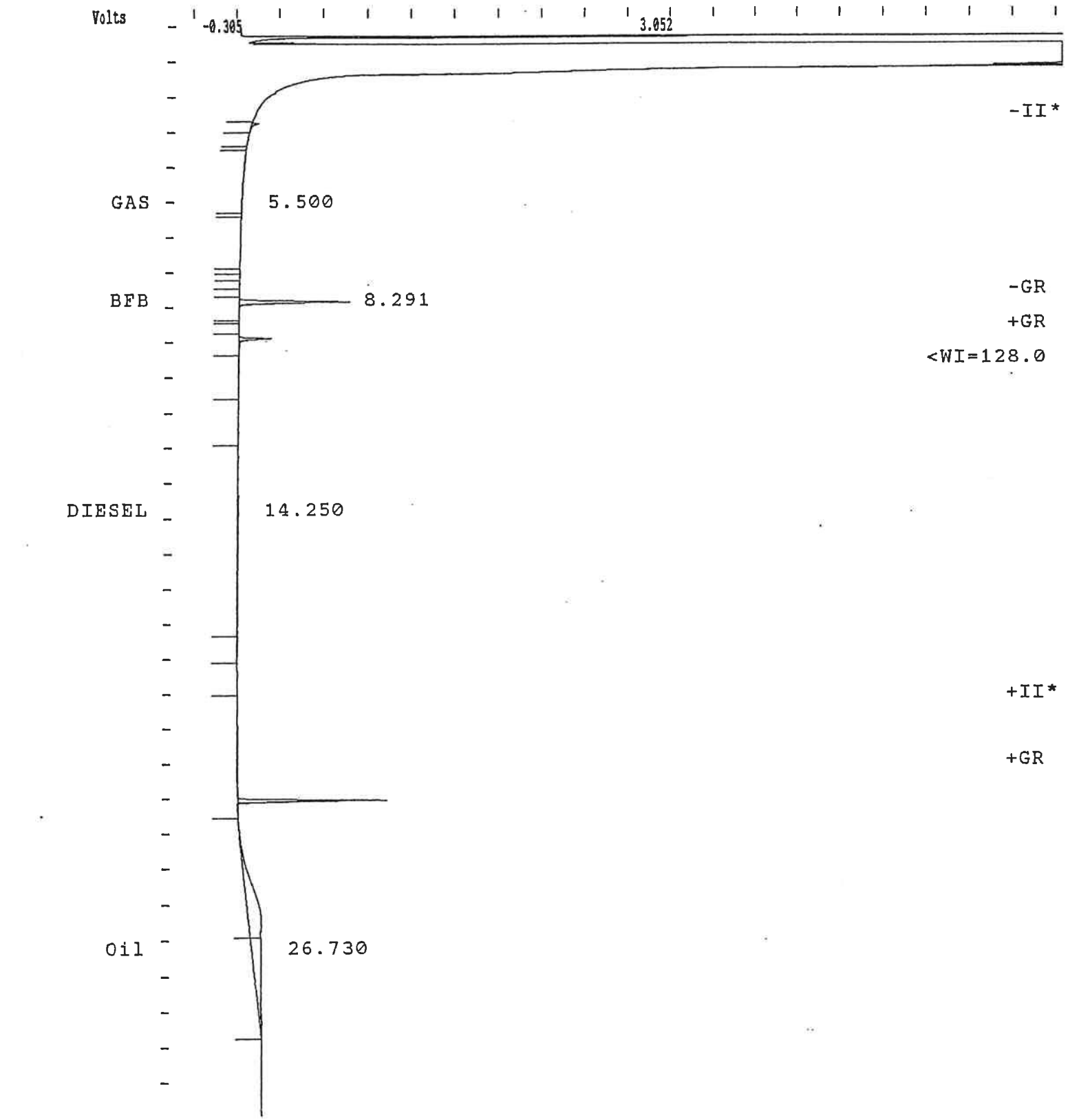
jection Date: 29-APR-99 10:34 PM Calculation Date: 29-APR-99 11:06 PM

rator : MD
:kstation: MS-DOS_6
strument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2027 ceti

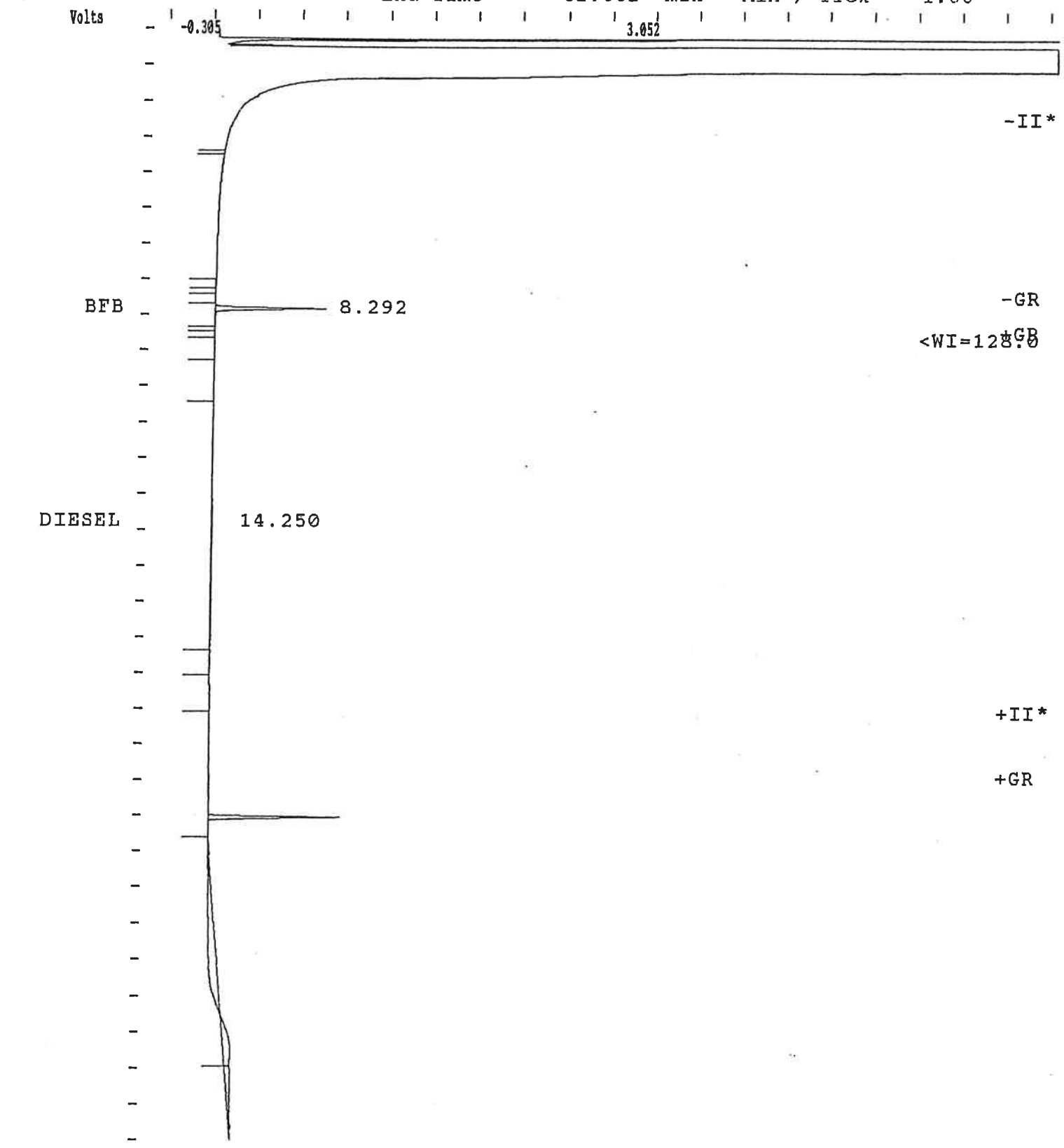
ction Date: 29-APR-99 11:13 PM Calculation Date: 29-APR-99 11:45 PM

ator : MD
station: MS-DOS_6
rument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 2028 ceti

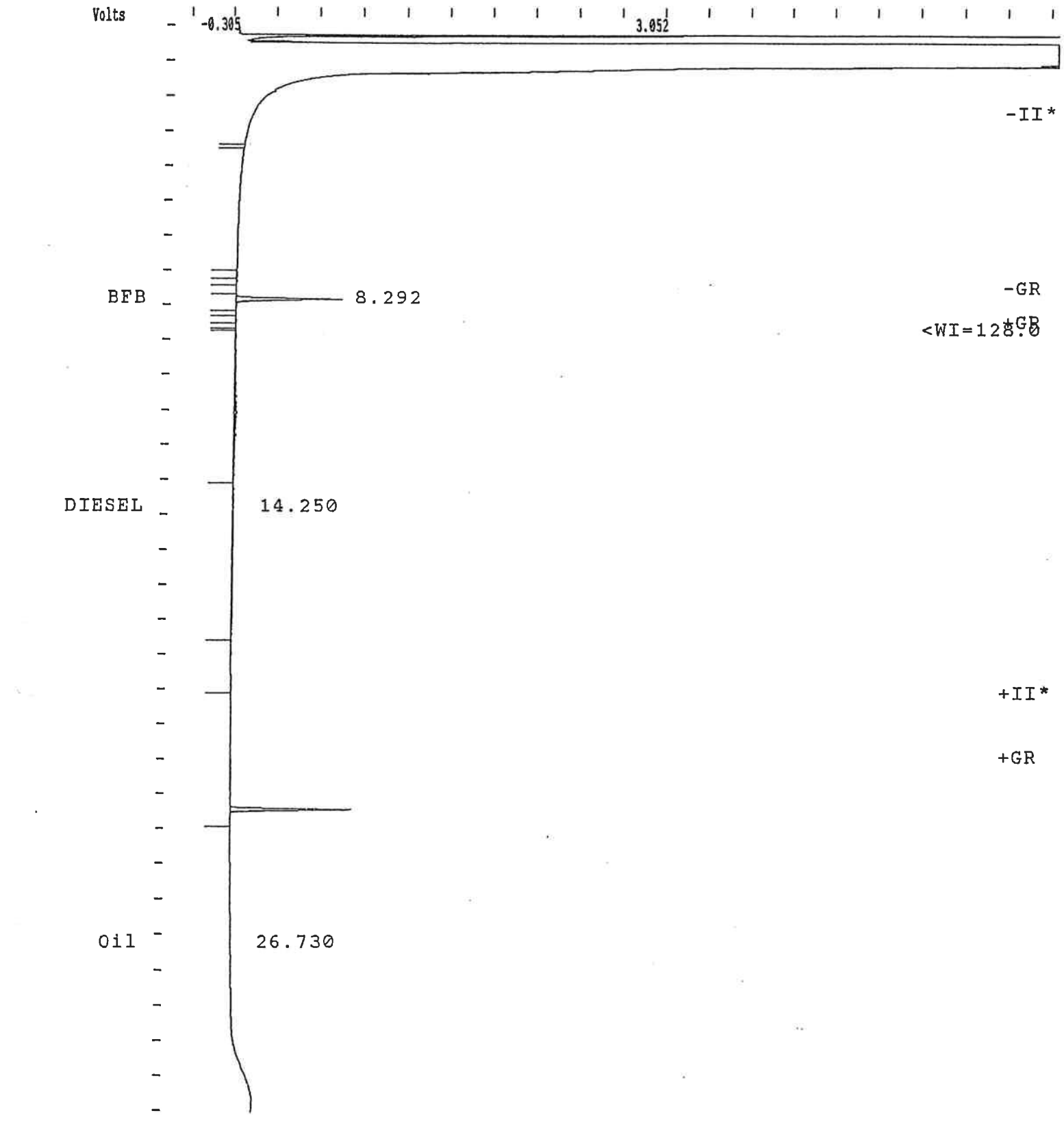
jection Date: 29-APR-99 11:52 PM Calculation Date: 30-APR-99 0:24 AM

rator : MD
kstation: MS-DOS_6
strument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
irt Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2029 ceti

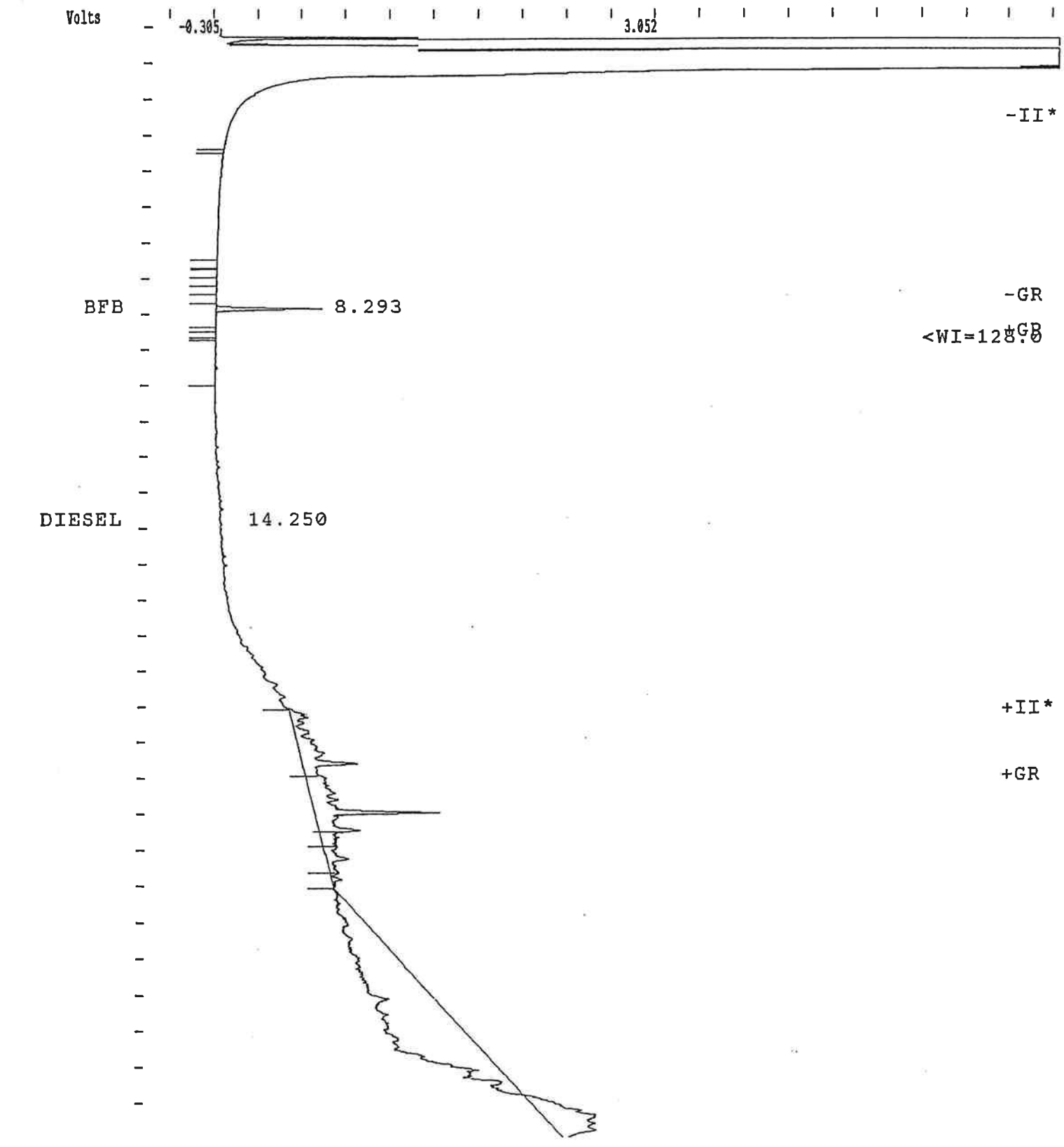
tion Date: 30-APR-99 0:31 AM Calculation Date: 30-APR-99 1:03 AM

ator : MD
station: MS-DOS_6
ument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

****** Star Chromatography Software ********** Version 4.0 **********

: Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
: Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 2104 ceti

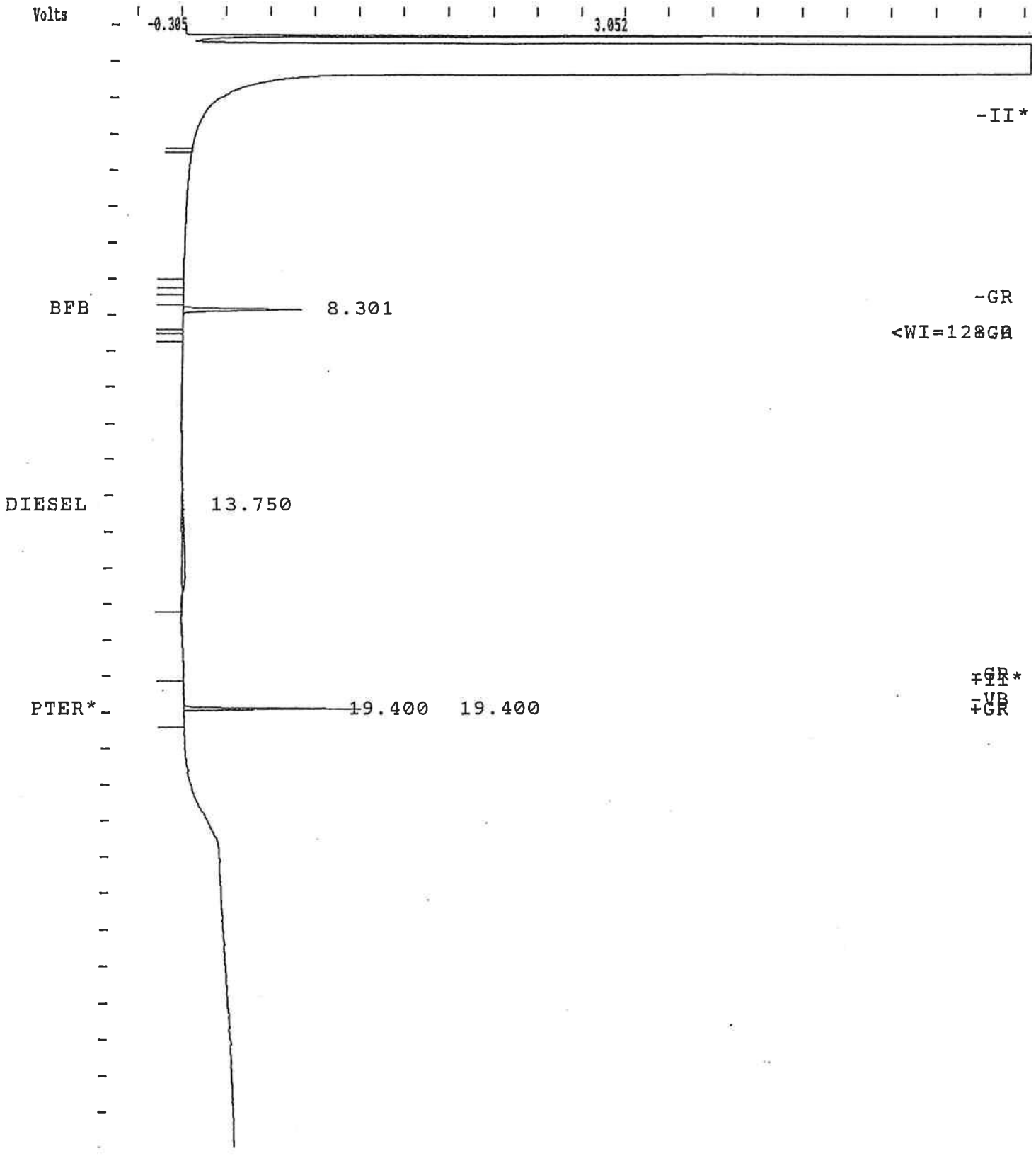
jection Date: 30-APR-99 6:11 PM Calculation Date: 30-APR-99 6:43 PM

rator : MD
:kstation: MS-DOS_6
:trument : Varian Star #2
nnel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******** Star Chromatography Software ********** Version 4.0 ***************

ct Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



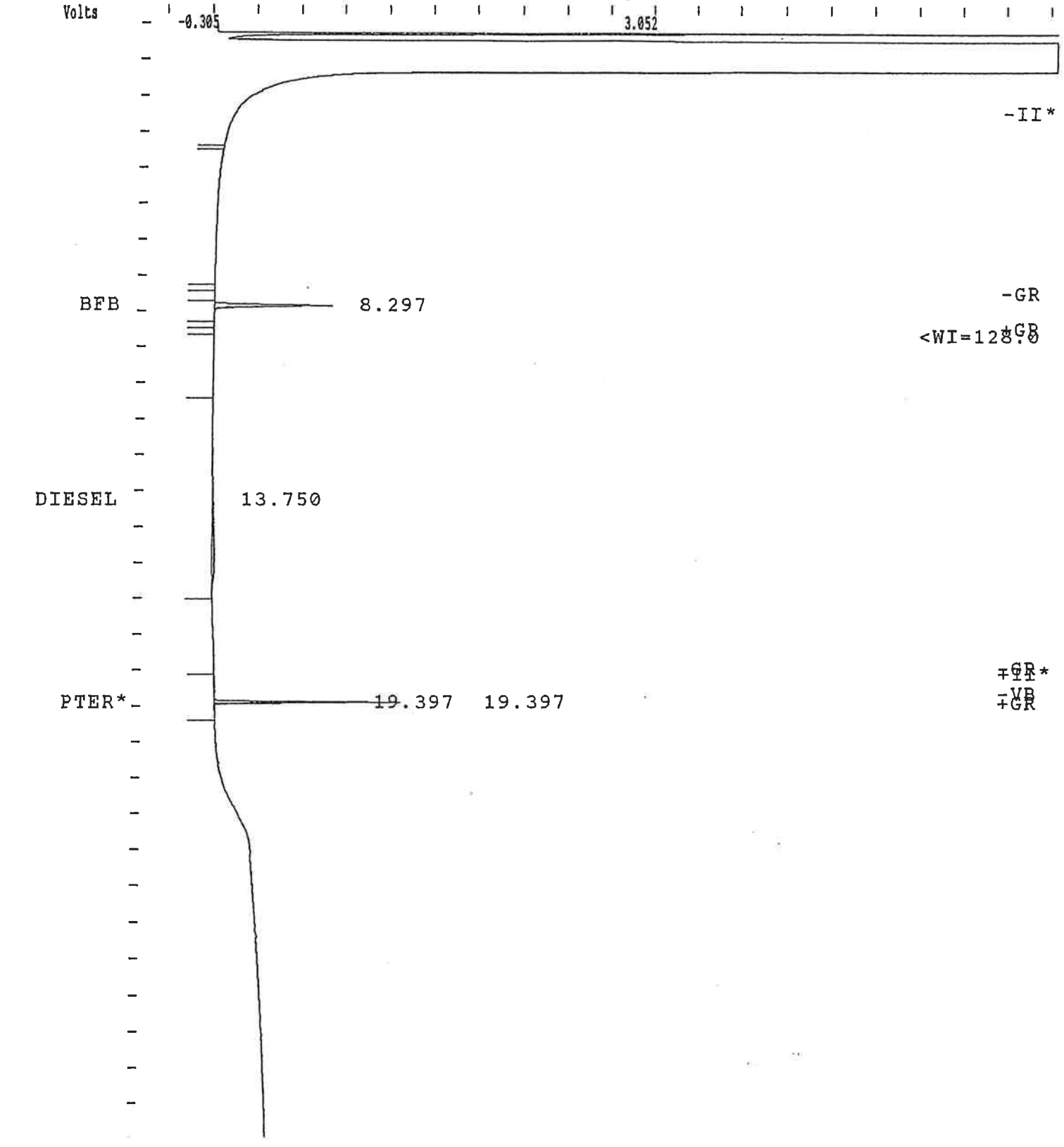
Data File : C:\STAR\WD4.RAW
Sample ID : 2105 ceti

Acquisition Date: 30-APR-99 6:51 PM Calculation Date: 30-APR-99 7:23 PM

Operator : MD Detector Type: ADCB (10 Volts)
Workstation: MS-DOS_6 Bus Address : 22
Instrument : Varian Star #2 Sample Rate : 10.00 Hz
Channel : B = FID-B Run Time : 32.002 min

******* Star Chromatography Software ********** Version 4.0 **********

Plot Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Start Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



Method File : C:\STAR\WD4.MTH
Sample ID : 2100 ceti
2106

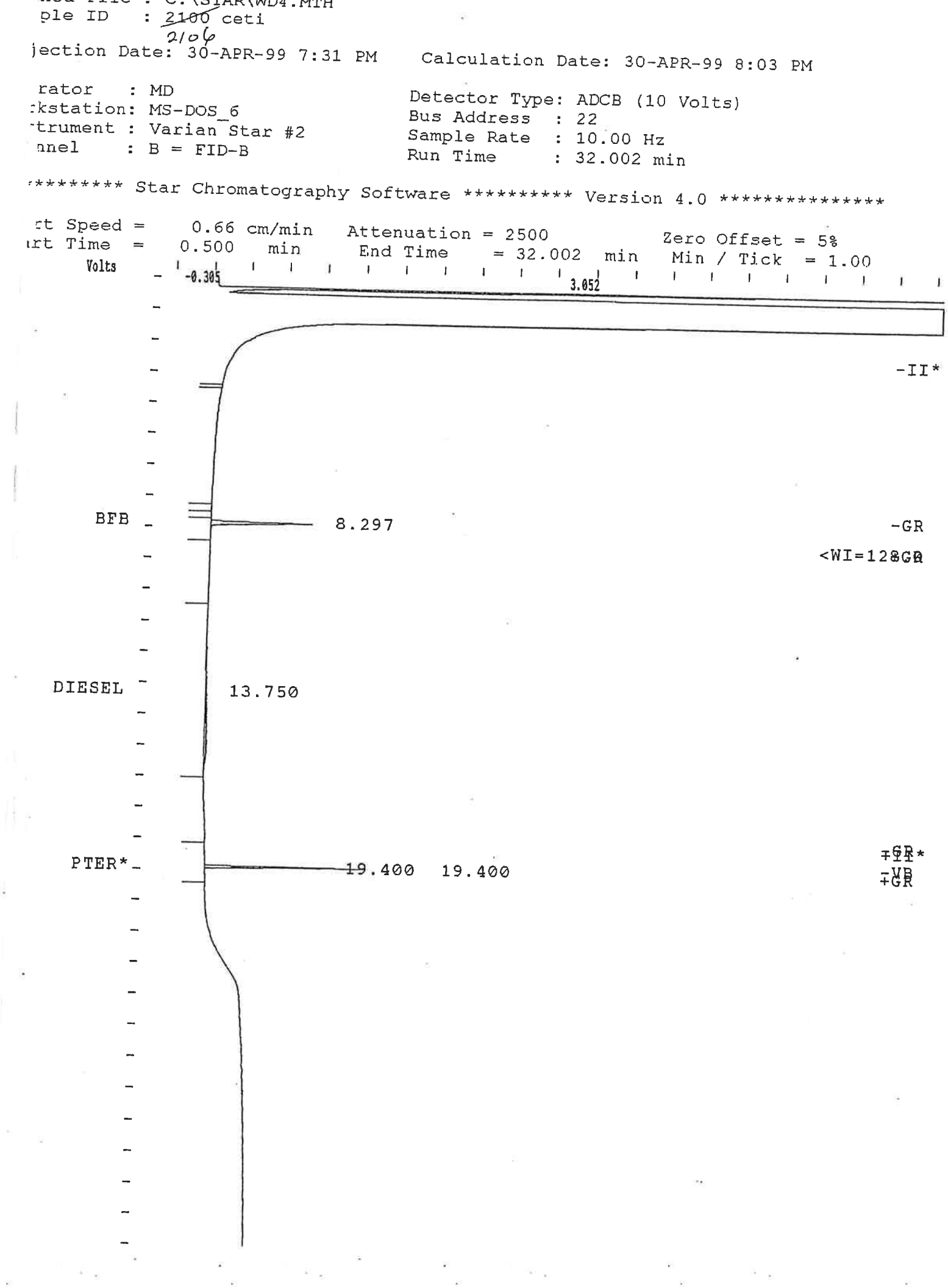
Injection Date: 30-APR-99 7:31 PM Calculation Date: 30-APR-99 8:03 PM

Operator : MD
Workstation: MS-DOS_6
Instrument : Varian Star #2
Channel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********** Star Chromatography Software ********** Version 4.0 **********

Chart Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Start Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



od File : C:\STAR\WD4.MTH
.e ID : 2107 ceti

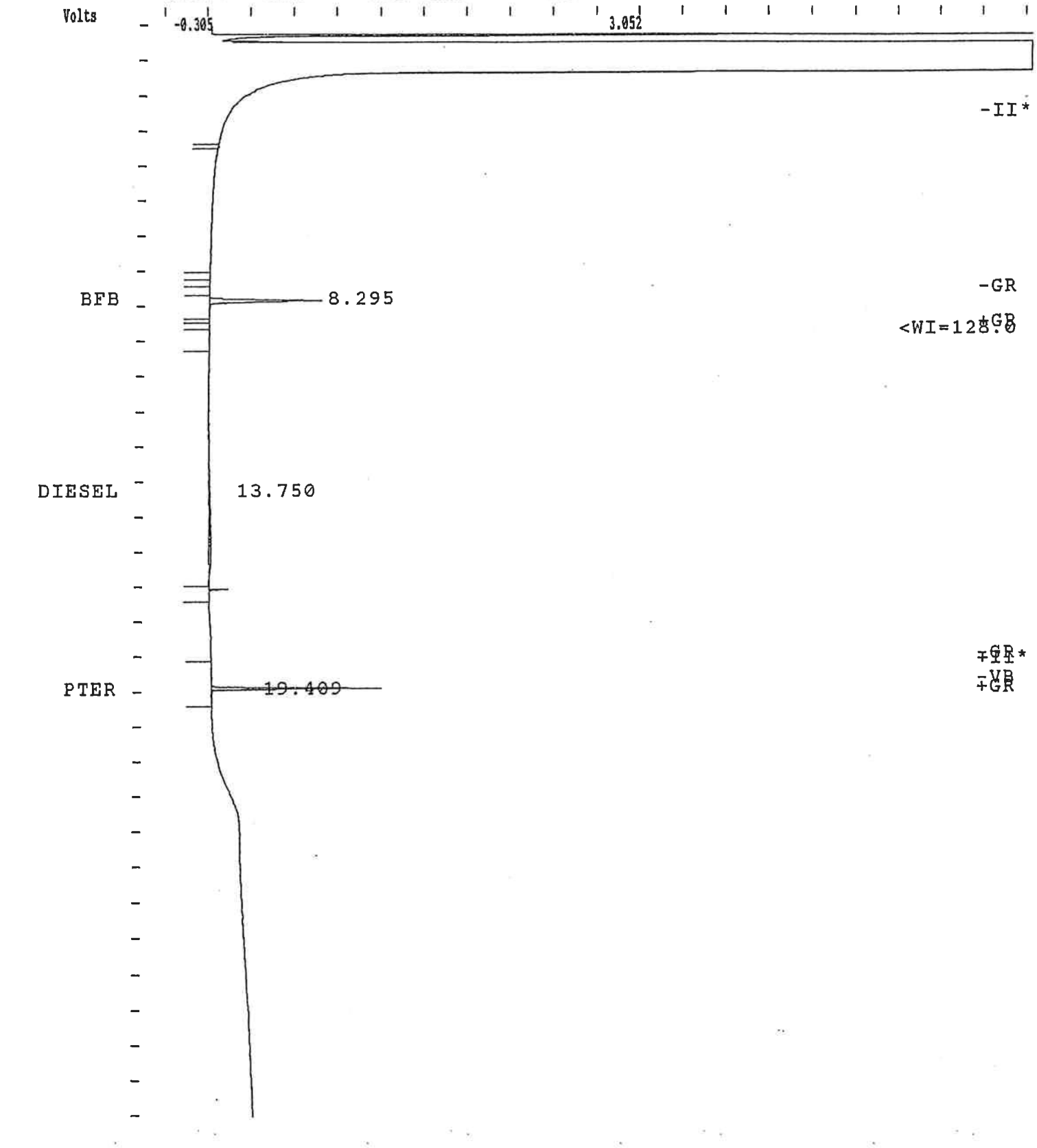
:tion Date: 30-APR-99 8:10 PM Calculation Date: 30-APR-99 8:43 PM

ıtor : MD
:tation: MS-DOS_6
:ument : Varian Star #2
ıel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

'****** Star Chromatography Software ********** Version 4.0 **********

. Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
. Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



Method File : C:\STAR\MD4.MTH
Sample ID : 2108 ceti

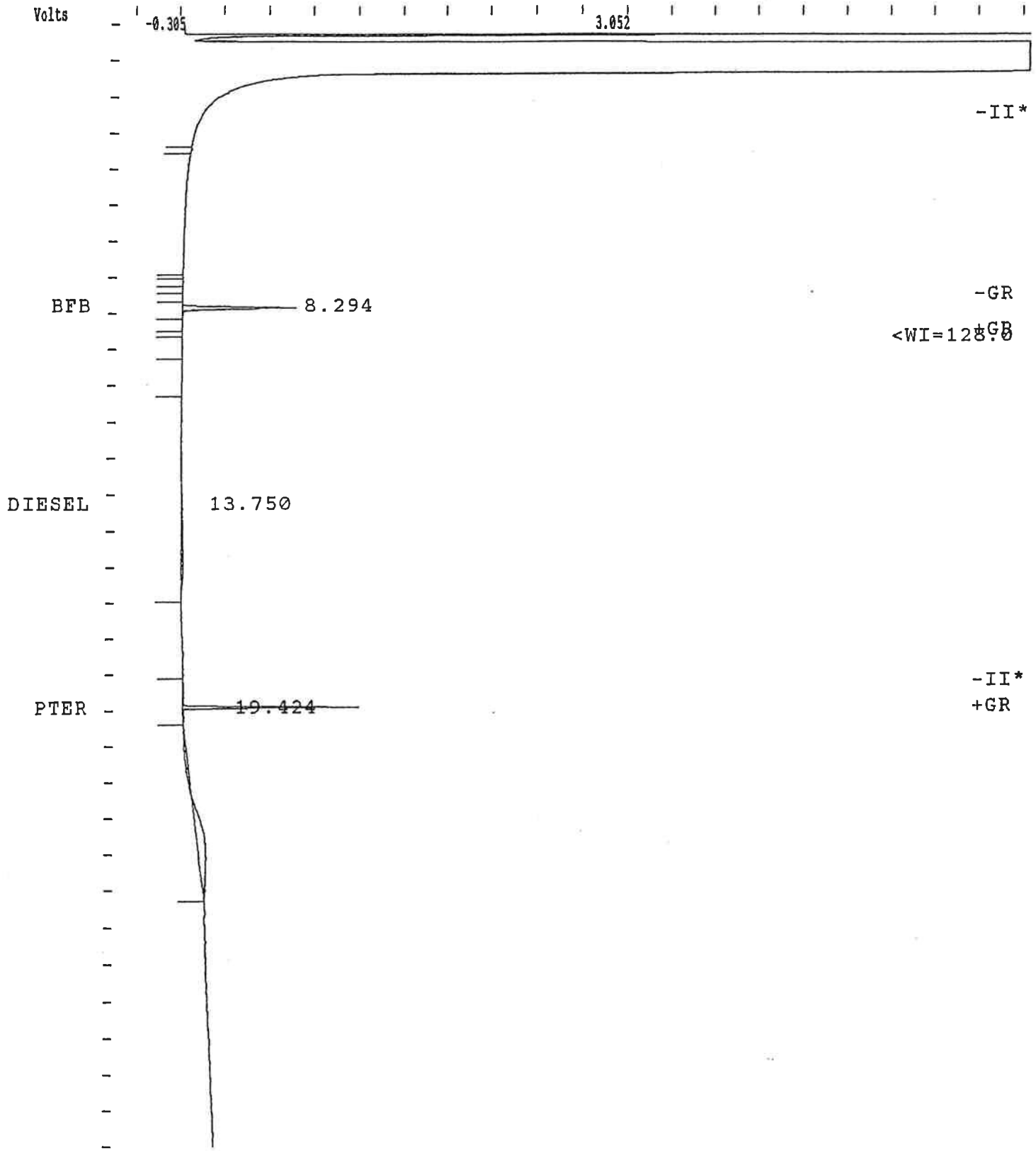
Injection Date: 30-APR-99 8:50 PM Calculation Date: 30-APR-99 9:22 PM

Operator : MD
Workstation: MS-DOS_6
Instrument : Varian Star #2
Channel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

********* Star Chromatography Software ********** Version 4.0 **********

Chart Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Start Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



:e ID : 2109 ceti

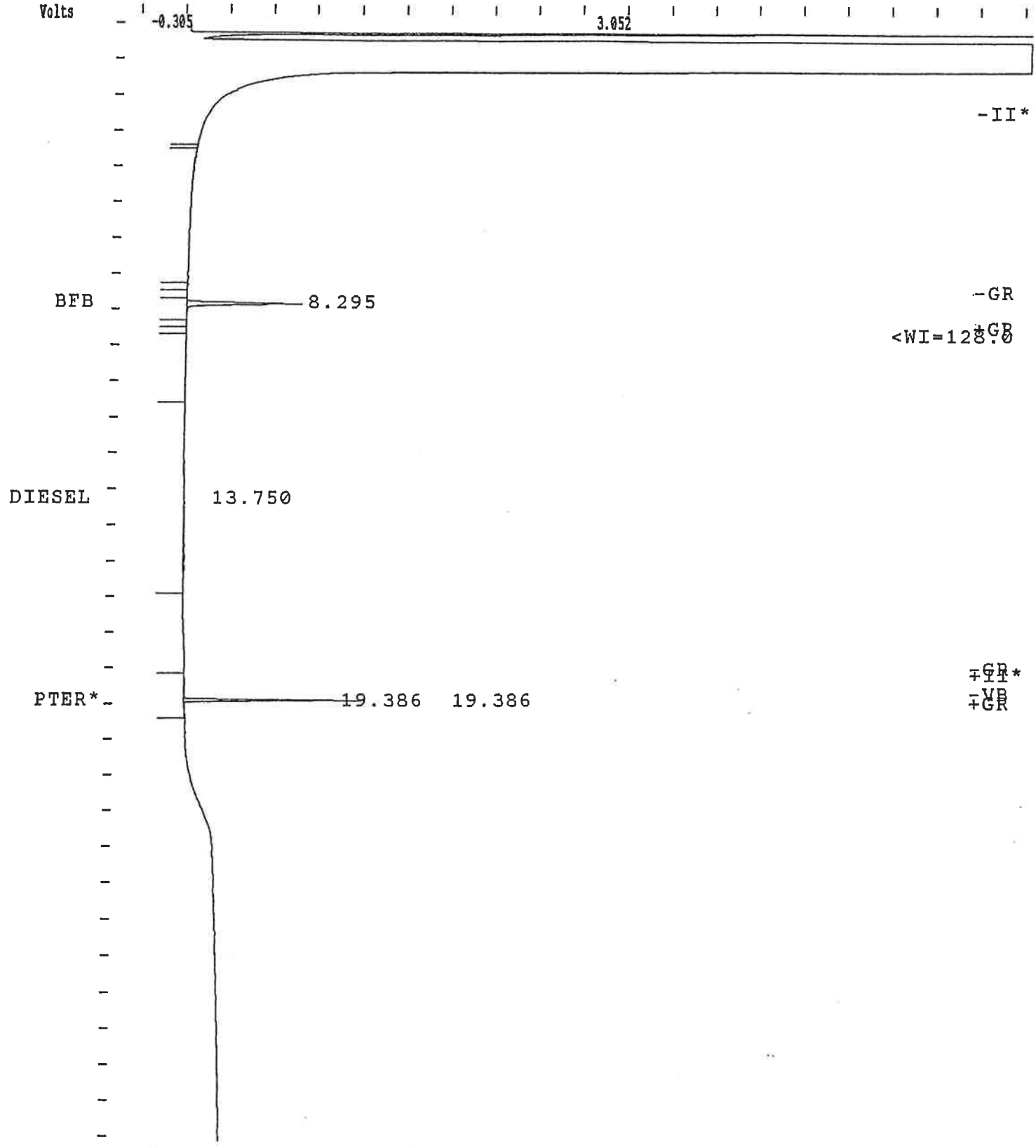
:tion Date: 30-APR-99 9:30 PM Calculation Date: 30-APR-99 10:02 PM

ıtor : MD
ıtation: MS-DOS_6
:ument : Varian Star #2
ıel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

'****** Star Chromatography Software ********** Version 4.0 **********

Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



ple ID : 2110 ceti

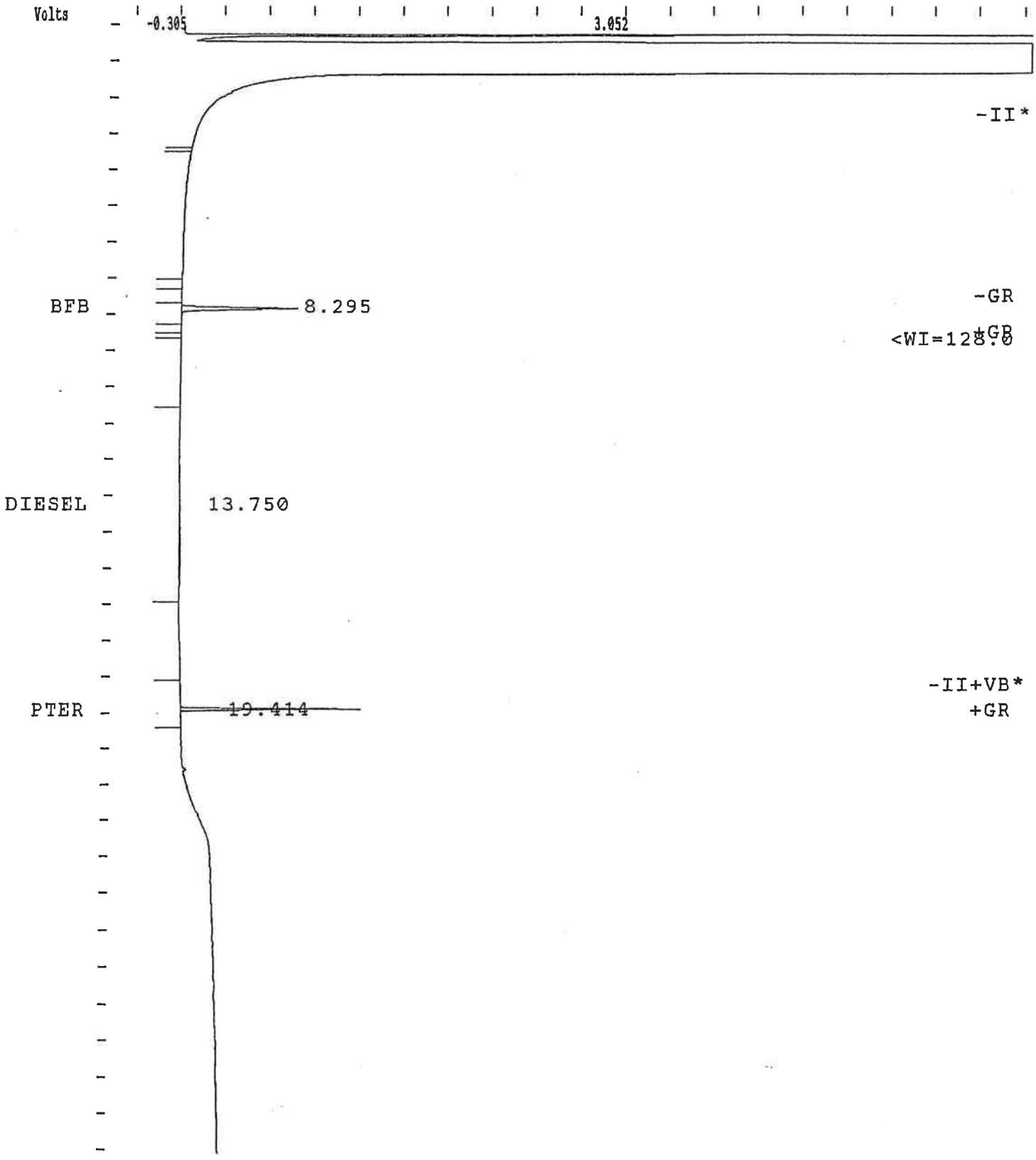
jection Date: 30-APR-99 10:09 PM Calculation Date: 30-APR-99 10:42 PM

rator : MD
.kstation: MS-DOS_6
strument : Varian Star #2
anel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******** Star Chromatography Software ********** Version 4.0 **********

ct Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
art Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



le ID : 2111 ceti

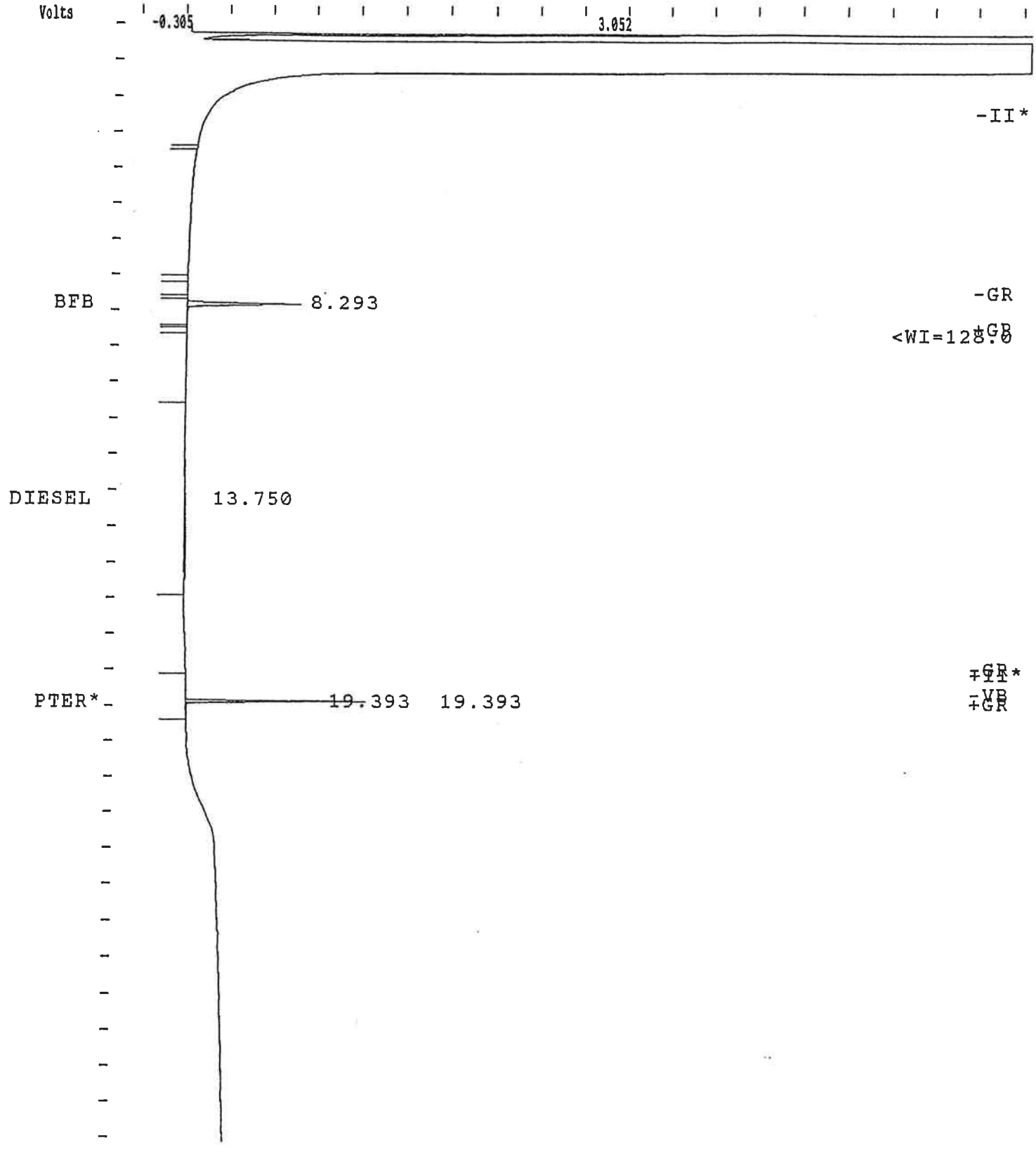
ction Date: 30-APR-99 10:49 PM Calculation Date: 30-APR-99 11:21 PM

ator : MD
station: MS-DOS_6
ument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

****** Star Chromatography Software ********** Version 4.0 **********

Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



hod File : C:\STAR\WD4.MTH
ple ID : 2112 ceti

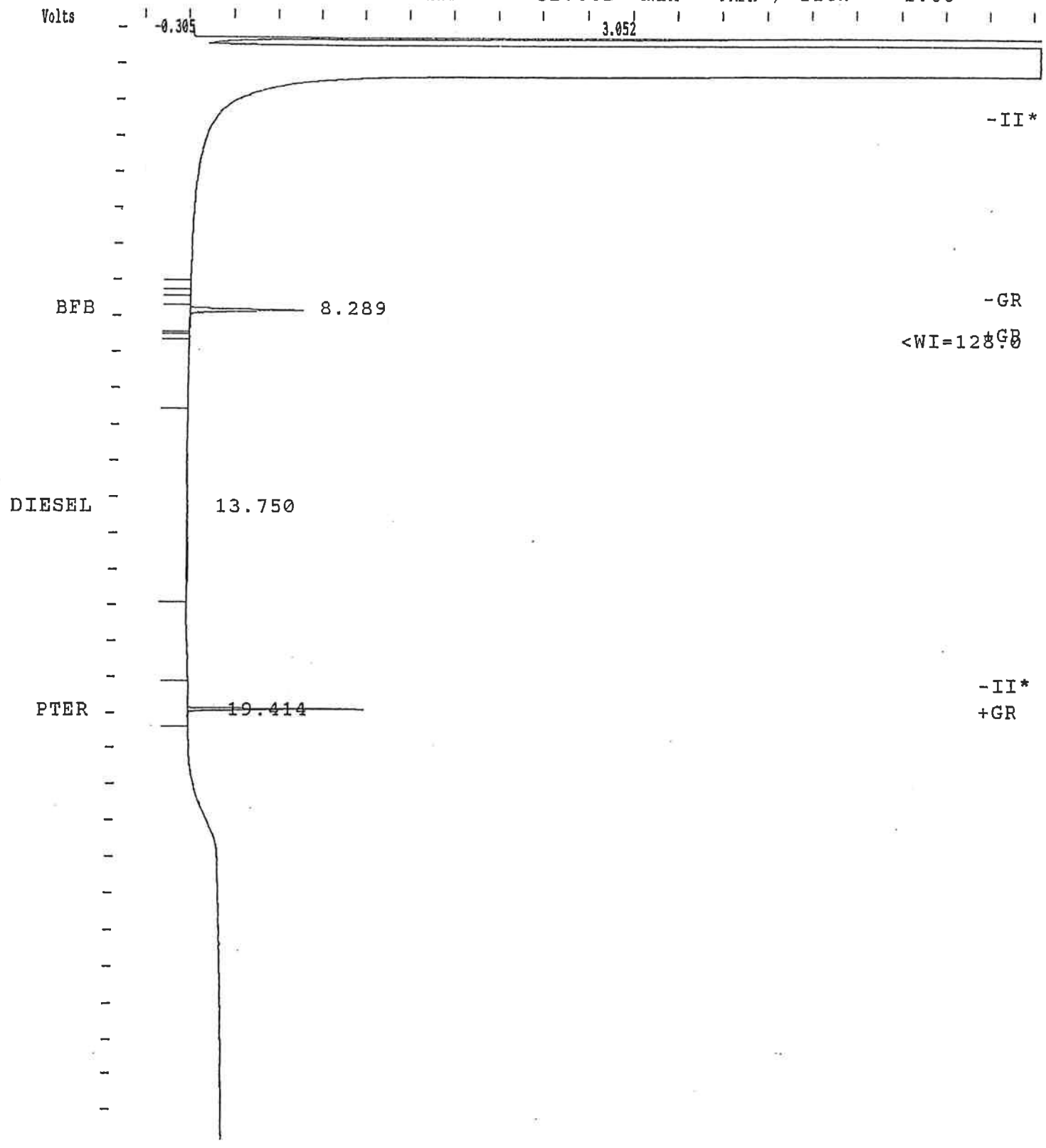
ection Date: 3-MAY-99 3:58 PM Calculation Date: 3-MAY-99 4:31 PM

rator : MD
kstation: MS-DOS_6
trument : Varian Star #2
nel : B = FID-B

Detector Type: ADCB (10 Volts)
Bus Address : 22
Sample Rate : 10.00 Hz
Run Time : 32.002 min

******** Star Chromatography Software ********** Version 4.0 ***************

rt Speed = 0.66 cm/min Attenuation = 2500 Zero Offset = 5%
rt Time = 0.500 min End Time = 32.002 min Min / Tick = 1.00



SPECTRA Laboratories, Inc.

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CHAIN OF CUSTODY

RCRA - 13

CLIENT: Metal Marine Pilot/CETI
PROJECT:
CONTACT: Janet Freeman-Daily
PHONE: (253) 564-5902
PURCHASE ORDER #:

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	HYDROCARBONS: WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D	TPH	F.O.G. 413.1/413.2	ORGANICS: 8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP D-LIST: TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	METALS: TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	OTHER: pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)					NORMAL / RUSH
S1-42699	4.26.99	3:40	Soil/H2O	1						X													X				X								

RETURN
DISPOSE
Fee applies
LAB ID

SPECIAL INSTRUCTIONS/COMMENTS:
cell # 606 2173 (Janet)
call both Janet and CETI when results com back.

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Fritz A. Carmine	CETI	4.26.99	4:46
RECEIVED BY		MARIE HALT	Spectra	4-26-99	4:46
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

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CHAIN of CUSTODY

CLIENT: CETI
PROJECT: Metal Marine 103-1
CONTACT: Stena Spencer
PHONE: 627-3347
PURCHASE ORDER #:

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D	TPH	F.O.G. 413.1/413.2	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)					NORMAL / RUSH	LAB ID
S1	4.27.99		soil	1						X																									
S2	↓		↓	↓						↓																									
S3																																			
S4																																			
S5																																			
S6																																			
S7	↓		↓	↓						↓																									

RETURN

DISPOSE

Fee applies

LAB ID

SPECIAL INSTRUCTIONS/COMMENTS:

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Fritz Carmine	CETI	4-28-99	9:08
RECEIVED BY	D. Triska	D. Triska	Spectra	4-28-99	9:08
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

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CHAIN OF CUSTODY

CLIENT: CETI
PROJECT: Marine metal
CONTACT: Steve Spencer
PHONE: 627-3317
PURCHASE ORDER #: 103-1

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	HYDROCARBONS: WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D Ext.	TPH	F.O.G. 413.1/413.2	ORGANICS: 8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP D-LIST: TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	METALS: TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	OTHER: pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)					NORMAL / RUSH
C10-42899	4/28		Soil						X																									
S11-42899	"		"						"																									
S12-42899	"		"						"																									
S13-42899	"		"						"																									
S14-42899	"		"						"																									
S15-42899	"		"						"																									
S16-42899	"		"						"																									
S17-42899	"		"						"																									
S23-42899	"		"						"																									
S24-42899	"		"						"																									

RETURN: DISPOSE / Fee applies
LAB ID

SPECIAL INSTRUCTIONS/COMMENTS:

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Fritz Carmine	CETI	4.28.99	4:56
RECEIVED BY	D. Triska	D. Triska	Spectra	4.28.99	4:50
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

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CHAIN of CUSTODY

CLIENT: CETI
PROJECT: Marine Metal 103
CONTACT: Steve Spencer
PHONE: 627 3347
PURCHASE ORDER #: 103-1

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS
S25-42899	4/28		Soil	
S26-42899	"		"	
S27-42899	"		"	
S28-42899	"		"	
S29-42899	"		"	

HYDROCARBONS							ORGANICS						TCLP D-LIST					METALS			OTHER										RETURN
WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D EXT.	TPH	F.O.G. 413.1/413.2	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)					NORMAL / RUSH	DISPOSE Fee applies
				K																											LAB ID
				↓																											

SPECIAL INSTRUCTIONS/COMMENTS:

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Fritz Carmile	CETI	4-28-99	4:50
RECEIVED BY	D. Triska	D. Triska	Spectra	4/28/99	4:50
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

CHAIN of CUSTODY

SPECTRA Laboratories, Inc.

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CLIENT: CETI
PROJECT: Metal Marine
CONTACT: Steve Spencer
PHONE: 627 - 3347
PURCHASE ORDER #:

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D (ext.)	TPH	F.O.G. 413.1/413.2	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)				NORMAL/RUSH	LAB ID
S30-43099	4.30.99	—	Soil	1					X																										
S31-43099	↓		↓	↓					↓																										
S32-43099																																			
S33-43099																																			
S34-43099																																			
S35-43099																																			
S36-43099																																			
S37-43099	↓		↓	↓					↓																										
S38-43099	↓		↓	↓					↓																										

HYDROCARBONS | ORGANICS | TCLP D-LIST | METALS | OTHER

RETURN
DISPOSE
Fee applies

SPECIAL INSTRUCTIONS/COMMENTS:

Needs Chromatograms

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY		Fritz Carmine	CETI	4.30.99	12:27
RECEIVED BY	Marie Holt	MARIE HOLT	Spectra	4-30-99	12:3[illegible]
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.