

GETTLER-RYAN INC.

TRANSMITTAL

April 23, 2001 G-R #: 386750

TO:

Mr. Matt Miller

Delta Environmental Consultants, Inc. 1200-112th Avenue N. E., Suite C-146, Bellevue, Washington 98004-3769



FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

RE: **Chevron Service Station**

#20-9335

1225 North 45th Street Seattle, Washington

WE HAVE ENCLOSED THE FOLLOWING:

| COPIES | DATED | DESCRIPTION |
|--------|----------------|---|
| 1 | April 18, 2001 | Groundwater Monitoring and Sampling Report Event of March 26, 2001 |

COMMENTS:

This report is being sent for your review. Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to May 4, 2001, at which time the final report will be distributed to the following:

Mr. Brett Hunter, Chevron Products Company, P.O. Box 6004, San Ramon, CA 94583 Mr. John Wietfeld, WDOE Northwest Region, 3190 160th Avenue S.E., Bellevue, WA 98008 Mr. Larry Hard, Seattle Housing Authority, 120 Sixth Avenue North, Seattle, WA 98109-5003

Current Site Check List included.

RECEIVED

MAY 1 0 2001

Enclosure

DEPT OF ECOLOGY



April 18, 2001 Job #386750

Mr. Brett Hunter Chevron Products Company P.O. Box 6004 San Ramon, CA 94583

Re

Event of March 26, 2001

Groundwater Monitoring & Sampling Report Former Chevron Service Station #20-9335

1225 North 45th Street Seattle, Washington

Dear Mr. Hunter:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any of the wells. Static water level data and groundwater elevations are presented in Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). Purge water was treated by filtration through granular activated carbon and was subsequently discharged. The field data sheets for this event are attached. The samples were analyzed by North Creek Analytical, Inc. Analytical results are presented in Table 1 and a Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are attached.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

Deanna L. Harding Project Coordinator

10000 NO V)

Hagop Kevork Professional Engineer

Figure 1:

Potentiometric Map

Figure 2: Table 1: Concentration Map

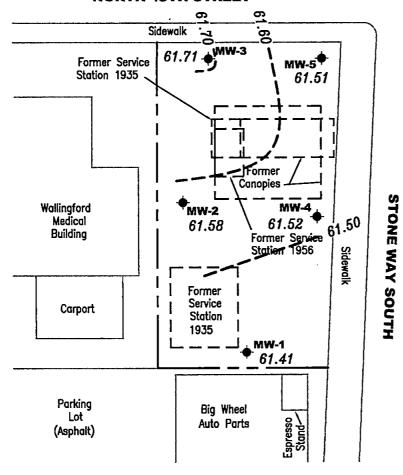
Table 1: Attachments:

Groundwater Monitoring Data and Analytical Results Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

NORTH 45TH STREET



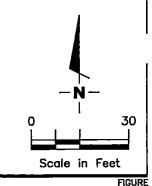
EXPLANATION

Groundwater monitoring well .

99.99 Groundwater elevation in feet referenced to an arbitary datum

Groundwater elevation contour, dashed where inferred.

> Approximate groundwater flow direction at a gradient of 0.003 to 0.004 Ft./Ft.



Source: Figure modified from drawing provided by Delta Environmental Consultants, Inc.



(925) 551-7555

POTENTIOMETRIC MAP Former Chevron Service Station #20-9335 1225 North 45th Street Seattle, Washington

DATE

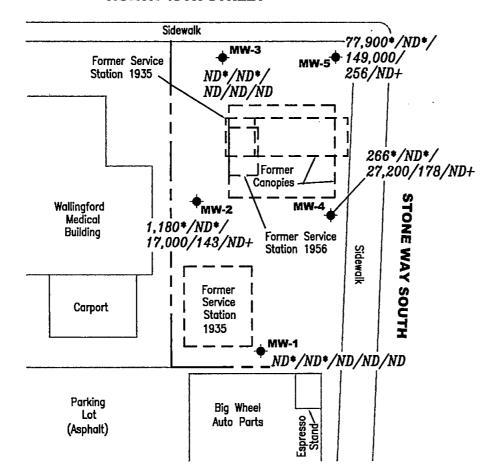
REVISED DATE

PROJECT NUMBER 386750

REVIEWED BY

March 26, 2001

NORTH 45TH STREET



EXPLANATION

Groundwater monitoring well

A/B/C/Total Petroleum Hydrocarbons (TPH) as Diesel/TPH as Oil/ D/ETPH as Gasoline/Benzene/ MTBE concentrations in ppb

Not Detected ND

- w/silica gel cleanup
- MTBE by EPA Method 8260

30

Source: Figure modified from drawing provided by Delta Environmental Consultants, Inc.



CONCENTRATION MAP

Former Chevron Service Station #20-9335 1225 North 45th Street Seattle, Washington

PROJECT NUMBER 386750

REVIEWED BY

DATE March 26, 2001

REVISED DATE

FILE NAME: P:\Enviro\Chevron\20-9335\Q01-20-9335.DWG | Layout Tab: Con1

Scale in Feet

FIGURE

Table 1 Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station # 20-9335 1225 North 45th Street Seattle, Washington

| WELL ID/ | DATE | DTW | GWE | TPH-D | ТРН-О | TPH-G | В | Т | E | X | MTBE | D. Lead • |
|-----------|-----------------------|-------|-------|-----------------------|-----------------|---------|--------|--------|-------|--------|---------------------------------|-------------|
| TOC*(ft.) | | (ft.) | (ft.) | (ppb) | (ppb) | (ppb) | (ppb) | (ppb) | (ppb) | (ppb) | (ppb) | (ppm) |
| MW-1 | | | | | | | | | | | | |
| 97.95 | 10/11/001 | 34.50 | 63.45 | | | | | | | | | |
| | 12/16/00 | 35.91 | 62.04 | $ND^{2.3}$ | $ND^{2,3}$ | 74.4 | ND | ND | ND | ND | ND | ND^4 |
| | 03/26/01 | 36.54 | 61.41 | ND^3 | ND ³ | ND | ND | ND | ND | ND | ND | |
| MW-2 | | | | | | | | | | | | |
| 98.70 | 10/11/001 | 34.50 | 64.20 | | | | | | | | | |
| | 12/16/00 | 36.46 | 62.24 | $1,000^3$ | ND^3 | 28,100 | 283 | 2,560 | 693 | 4,020 | ND^2 | 0.00194^4 |
| | 03/26/01 | 37.12 | 61.58 | 1,1803,5 | ND^3 | 17,000 | 143 | 1,450 | 378 | 2,180 | ² ND/ND ⁶ | |
| | | | | | | | | | | | | |
| MW-3 | | | | | | | | | | | | |
| 98.76 | 10/11/001 | 34.00 | 64.76 | - | | | | | | | | |
| | 12/16/00 | 36.39 | 62.37 | ND^3 | ND^3 | ND | ND | 0.612 | ND | 1.95 | ND | ND^4 |
| | 03/26/01 | 37.05 | 61.71 | ND^3 | ND ³ | ND | ND | ND | ND | ND | ND | |
| MW-4 | | | | | | | | | | | | |
| 98.52 | 10/11/00 ¹ | 35.00 | 63.52 | | | | | | | | | |
| 70.52 | 12/16/00 | 36.35 | 62.17 | $ND^{2,3}$ | $ND^{2,3}$ | 58,200 | 326 | 5,520 | 1,430 | 8,520 | ND^2 | 0.0123^4 |
| | 03/26/01 | 37.00 | 61.52 | 2663,5 | ND^3 | 27,200 | 178 | 2,160 | 785 | 4,160 | ² ND/ND ⁶ | |
| | | | | | | | | | | | | |
| MW-5 | | | | | | | | | | | | |
| 99.42 | 10/11/001 | 34.50 | 64.92 | | | | | | | | | |
| | 12/16/00 | 37.18 | 62.24 | $5,080^3$ | ND^3 | 146,000 | ND^2 | 15,100 | 4,160 | 24,100 | ND^2 | 0.0200^4 |
| | 03/26/01 | 37.91 | 61.51 | 77,900 ^{3,5} | ND ³ | 149,000 | 256 | 10,600 | 4,000 | 24,200 | ² ND/ND ⁶ | |

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station # 20-9335 1225 North 45th Street Seattle, Washington

| WELL ID/ TOC*(ft.) | DATE | DTW (ft.) | GWE (ft.) | TPH-D (ppb) | TPH-O (ppb) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) | D. Lead' (ppm) |
|-----------------------|------------|---------------|--------------|----------------|----------------|--------------------------|------------|------------|------------|------------|---------------|-------------------|
| Trip Blank | | | | | | | | | | | | |
| TB-LB | 12/16/00 | | | | | ND | ND | ND | ND | ND | ND | |
| | 03/26/01 | | | | | ND | ND | ND | ND | ND | ND | |
| | | | | ТРН-D | ТРН-О | ТРН-G | В | Т) | E | l x | МТВЕ | D. Lead |
| <u> </u> | Current La | boratory Repo | rting Limits | | 750 | 50.0 | 0.500 | 0.500 | 0.500 | 1.00 | 1.00 | 0.00100 |
| | | Method A Cle | | | 1,000 | 1,000 | 5.0 | 40 | 30 | 20 | | |
| | | Cur | rent Method: | WTPH-D | + Extended | ded NWTPH-G and EPA 8021 | | | | | EPA 6020 | |

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station # 20-9335 1225 North 45th Street Seattle, Washington

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to December 16, 2000, were compiled from reports prepared by Delta Environmental Consultants Inc.

TOC = Top of CasingB = Benzene(ppb) = Parts per billion(ft.) = FeetT = Toluene(ppm) = Parts per million

DTW = Depth to Water E = Ethylbenzene ND = Not Detected

 $GWE = Groundwater \ Elevation \\ X = Xylenes \\ -- = Not \ Measured/Not \ Analyzed$

TPH-D = Total Petroleum Hydrocarbons as Diesel MTBE = Methyl tertiary butyl ether MTCA = Model Toxics Control Act Cleanup Regulations

TPH-O = Total Petroleum Hydrocarbons as Oil

D. Lead = Dissolved Lead

[WAC 173-340-720(2)(a)(I), as amended 12/93].

TPH-G = Total Petroleum Hydrocarbons as Gasoline

- * TOC elevations have been provided by Delta Environmental Consultants, Inc. referenced to an assumed datum in feet.
- Data provided by Delta Environmental Consultants, Inc.
- Detection limit raised. Refer to analytical reports.
- 3 TPH-D and TPH-O with silica-gel cleanup.
- ⁴ Filtered at the laboratory.
- Laboratory report indicates results in the diesel organics range are primarily due to overlap from a gasoline range product.
- 6 MTBE by EPA Method 8260.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize. Purge water is treated by filtering the water through granular activated carbon and is subsequently discharged to the ground surface at the site.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used for all samples. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

WELL MONITORING/SAMPLING FIELD DATA SHEET

| | Ynor Chouses | | Job#: _ | 38675 | 0 | · |
|-----------------------------|--|------------------------------|--|--|----------------|------------------|
| Address: 12 | 25 North 4 | 5h St | Date: | 3/26 | (0) | |
| City: <u>See</u> | Hle, WA | · | Sampler: ₋ | HA16- | Ki_ | |
| Well ID | MW-1 | Well Condition | n: <u>G</u> | 90D_ | | |
| Well Diameter | in. | Hydrocarbon Thickness: _ | Ø liet | Amount Ba | (/ | (Gallons) |
| Total Depth Depth to Water | 42 July 1 34 Jul | Volume Factor (VF) | 2" = 0.17 6" | 3" = 0.38 = 1.50 | 12" = 5.80 | "= 0.66 |
| | • | vf 0.17=0.8 | X 3 (case volume | e) = Estimated Pur | ge Volume: _ | 2.4 (08) |
| Purge Equipment: | Disposable Bailer Bailer Stack Suction Grundfos Other: | 1 – | ampling quipment: | Disposable Bai Baller Pressure Bailer Grab Sample Other: | | |
| | · 11130 | Water C | Conditions: olor: CLE nt Description: Time: | SILT | C1.0U Odor: | |
| Time | Volume pH (gal.) 1 | Conductivity | Temperature 13. | 0 (mg/L) | ORP (mV) | Alkalinity (ppm) |
| | | | | | | ••• |
| SAMPLE ID | (#) - CONTAINER | LABORATORY REFRIG. PRESER | INFORMATION | N ABORATORY | ·ANAL | YSES - |
| MW- | 3 VOA'S | Y 14 | 0 | N CA | CIBIE TPH- | NATBE DIEXT |
| | | | | | | |
| COMMENTS: | | | | | | |
| | | • | | | | |

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WELL MONITORING/SAMPLING FIELD DATA SHEET

| Client/ Facility#+Co | mar Charles | #209335 | Job#: _ | 38675 | 0 | |
|--|--------------------------|---------------------------|--|-------------------------------------|--------------------------------|------------------|
| | 25 North 45 | | Date: _ | 3/26 | 101 | |
| | Hle, WH | <u> </u> | Sampler: _ | HAIG | 12. | |
| Well ID | MW-2 | Well Condition | : <u>Go</u> | 0D | | 1 |
| Well Diameter | in. | Hydrocarbon Thickness: | (fee | Amount Ba | | (Gallons) |
| Total Depth | 424101 | Volume | 2" = 0.17 | 3" = 0.38 = 1.50 | | = 0.66 |
| Depth to Water | 371121 | Factor (VF) | | <u> </u> | | |
| | 4.88 x vFC | 2.17=0.8; | K 3 (case volume) |) ≐ Estimated Pui | ge Volume: _ <u>~</u> | (Leal) |
| Purge Equipment: | Disposable Bailer Bailer | _ | mpling uipment: | Disposable Ba | iler | |
| Edoibilietti | Stack | , • | | Baller Pressure Baile | | |
| | Suction Grundfos | | | Grab Sample | | • |
| | Other: | , | | Other: | | |
| Starting Time: Sampling Time: Purging Flow R | | Water Co | Conditions: plor: <u>Succ</u> t Description: | PARTL | Y CLO Odor: | my_ |
| Did well de-war | | | Time: | | ne: | (oal.) |
| Time | Volume pH (gal.) | Conductivity µmhos/cm | Temperature | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
| 11143 | 7,49 | 346 | 14.0 | <u> </u> | | · |
| मिष्व | 2.5 7.42 | 385 | 140 | 3 | | |
| | | | | | | tes*. |
| | | LABORATORY II | NFORMATION | l . <u>.</u> . | | |
| SAMPLE ID | | FRIG. PRESERV | /. TYPE | ABORATORY | ANALY | SES TO THE SES |
| MW-2 | 344A15 | Y | | NCA | T114 | 1) BXD |
| | 1 4 MREG | 7-1 | `U | | //\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | V - / - 1 |
| | | | | | | |
| COMMENTS: | | • | | | | . — |
| COMMENT 10. | | | | | | |
| | | | | | | D/03 (0.14 c. 1 |

WELL MONITORING/SAMPLING FIELD DATA SHEET

| Client/ Facility## | | #209335 | Job#: | _38 | 675 | <u>6</u> | |
|-----------------------|--------------------------|-----------------------------|--|-------------------|---------------------------|-------------------|-------------------------|
| Address: 12 | 25 North 45 | nst | Date: | 3, | 126, | 101 | |
| City: Soc | He, WH | <u>·</u> | Sample | r: <u>HA</u> | 16- | <u> </u> | |
| Well ID | MW-3 | Well Condition | n: <u></u> | 100D | | | |
| Well Diameter | in. | Hydrocarbon Thickness: | 9 | | nount Bail aduct/water | | (Gallons) |
| Total Depth | 45,00 to | Volume | 2" = 0.17 | 6° = 1.50 | 3" = 0.38 | 4° 12" = 5.80 | = 0.66 |
| Depth to Water | 37,05 m | Factor (VF) | | | | | |
| | 7.95 x VF | 0.17-1.3 | X 3 (case vo | ilume) = Esti | imated Purg | , ge Volume: _ | 3.9 (00) |
| Purge Equipment: | Disposable Bailer Bailer | 1 | mpling Juipment: | Dispos | sable Bail | er | |
| rdahment. | Stack | • | , . | Baller | ure Bailer | • | |
| | Suction | | | | Sample | | • |
| | Grundfos Other: | _ | | | : | | |
| • • | | o. Sedimer | olor: 51 It Description Time: Temper 15 14 | ion: <u>51</u> | LT | Odor: | (gal.) Alkalinity (ppm) |
| | AM CONTAINED D | LABORATORY EFRIG. PRESER | INFORMAT | TION LABORA | TORY | ·ANAL | YSES - |
| SAMPLE ID | (#) - CONTAINER R | Y H_C | -1. | N/C/ | 7 | SIBTE | X/MTBE |
| 1MW-3 | IAMBER | 4 1 | 0 | 1/ | | TPH | D EXT |
| | | | | · ···· | | | |
| COMMENTS: | | | | | | | |
| | | | | | | | |
| | | | | | | | 9/97-fieldat.frm |

WELL MONITORING/SAMPLING FIELD DATA SHEET

| Client/ Facility#\(\frac{1}{2}\) | Ymar Chowson | #209335 | Job#: | 38675 | <u> </u> | |
|--|---------------------|---------------------------------------|--|------------------------------|---------------------------|------------------|
| Address: 12 | 25 North 49 | in St | Date: 3 | 1261 | 0 | |
| City: Soa | He WA | | Sampler: | 1A-16- | <u>(</u> L , _ | |
| Well ID | MW-4 | Well Condition | | D | | |
| Well Diameter | in. | Hydrocarbon Thickness: | | Amount Baile (product/water) | | (Gallons) |
| Total Depth | 4200 n. | Volume Factor (VF) | 2" = 0.17 6" = 1. | 3" = 0.38 | | = 0.66 |
| Depth to Water | - | <u> </u> | | | | <u> </u> |
| | 5,00 × v | 10.17 = 0.85 | X 3 (case volume) = | Estimated Purg | e Volume:e | (Llan) |
| Purge | Disposable Bailer | | mpling uipment: Dis | sposable Baile | er | - |
| Equipment: | Bailer Stack | , , , , , , , , , , , , , , , , , , , | } B a | iler essure Bailer | | |
| | Suction Grundfos | | | ab Sample | | • |
| | Other: | | Ot | her: | | |
| Starting Time: Sampling Time Purging Flow I Did well de-wa | : <u>12150</u> | Water C | Conditions: £ plor: CLFA t Description: _ Time: | R | Odor: | |
| Timė | Volume pH (gal.) | Conductivity µmhos/cm | Temperature | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
| 12126 | 726 | 420 | 15.2 | <u></u> | | · |
| 12132 | 2,5 7,2 | 3 448 | 14.5 | | | |
| | | | | | | |
| | | LABORATORY | INFORMATION | | | |
| SAMPLE ID | (#) - CONTAINER | REFRIG. PRESER | V. TYPE LAB | ORATORY | ANALY | |
| MW-4 | 3 VOA'S | ` | | 11 | T-011- | A SKI |
| ļ | 11AMBEH | 4 / ~ | <u> </u> | | | 7 |
| <u> </u> | - | | | | | |
| <u> </u> | | | | | | |
| COMMENTS: | | f . | | | | |
| | | | | | | |

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WELL MONITORING/SAMPLING FIELD DATA SHEET

| Client/ Facility# | mar Cherres | n#20 | 9335 Job#: | 3867 | 50 | · |
|---|---------------------------------------|----------|--|------------------------|-----------------|----------------------|
| Address: 122 | 5 North 4 | 5th S | <u>★</u> Date: | 3/26 | (0) | |
| | Hle, WX | | Sampl | er: <u>HALC</u> | K, | |
| Well ID | MW-5 | Well | Condition: | 300D_ | | |
| Well Diameter | in. | • | ocarbon | Amount E | (/ · · · | (Gallons) |
| Total Depth | 4200 n. | Volu | ame 2° = 0.1 | | | " = 0.66 |
| Depth to Water | 34 4 m | | or (VF) | | | |
| | | VF 0.17 | = 0.6 X 3 (case v | volume) = Estimated F | ourge Volume: _ | (gal.) |
| Purge Equipment: | Disposable Bailer Bailer |) | Equipment: | Disposable E Bailer | Bailer | |
| | Stack Suction | | | Pressure Bai | ler | |
| | Grundfos | | | Grab Sample Other: | | • |
| | Other: | | | | | |
| Starting Time: Sampling Time: Purging Flow Re Did well de-wat | ate: | <u> </u> | Weather Conditio Water Color: Sediment Descrip If yes; Time: | 11TY ption: 51LT | Odor: | |
| Time | Volume pH (gal.) | | luctivity Temper | ergiure D.O. (mg/L) | ORP (mV) | ·Alkalinity (ppm) |
| 13:12 | 3/4 H.D. | 6 | 39 10 | かう | <u> </u> | · |
| 13:18 | 2 7.10 | | 16 | + بع | | |
| | | | | · | | 41.014 |
| | | LABOR | ATORY INFORMA | TION | 44141 | YSES - |
| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | RATES | //MTRF |
| MW-5 | 3 V U/4'S | Υ | 110 | NCA | T01+~ | DEXT |
| | ITANDER | | | | | |
| | | | | | | |
| 0014145150 | | | | | | |
| COMMENTS: | | | | | | |
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| | | Chevron | Facility Number | #20-9 | 3335 3 45 | тн ѕ | т | EATT | I.EV | IA. | | | | | | . 4/7- | -042- | ()0 | 1.3 | | | |
| tevron Products | co. | | Facility Address int Project Numb | 386 | 3 750 | <u> </u> | | | | | | ւ | aborale | ory Name | Nor | th C | reek | Anal | ytica | 1T | | |
| O. BOX 6004 | | | Cat | +1ar- | Rvan | Inc. | | | | | | | .oborate | ory Service | se Order | · | | | | | | |
| n Ramon, CA 945 | i83 | Consulta | ess 6747 Si | orra | Court | Su | ilte. | G. Di | <u>ıhli</u> n | , CA | 945 | 68L L | .aboral | ry Servic | ce Code | | 170 | 10 | KE | VAF | R. | |
| X (925)842-83 | 70 | Addi | | · Da | | T 3 | inrdi | nø | | | | — I : | Sample | Colocy | d by | - Hamol | R/7. | | 11/2 | <u>.v </u> | | |
| | | Proj | ect Contact (Non | ne) <u>172</u> | 5-551 | -75 | 5 <u>(</u> Fax | Number | <u> 925-</u> | <u>551-</u> | 789 <u>9</u> | <u> </u> | Signalv | • 4 | KKI (| | -//XA | V (1 | | | | Remorks |
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| \ <u>\</u> | A Air | 8 | | BIEX/ATBE+TPH GAS (8020 + 8015) | " l | l | į | Purgeable Halocarbons (8010) | Purgeable Organics (8260) | Extractable Organics (8270) | _ | ایا | | BTEX/MBE/Naph. (8020) | 1 | 맞색 | 2 | Ĺ | | ļ | | |
| Containers | 11 | Preservation | ł | 표임 | ହୁଡ଼ି | 1 | 1 | <u>8</u> | ğ | န် | 6656 | 정본 | 1 | N N | 용 | -D Extended | 6 | Ŋ. | | | } | - * |
| \$ 5 | 1 70 | Ě | g } | # T | 医 | - T | g = | 움이 | ă | | 70 70 | 24 | 6 | | # T | 2,75 | \$ | 77. | · | | į | NLSO |
| ž š | 38 | -8. | Date/Time | 충 | BIEX + TPH CAS (8020 + 8015) | TPH Diesel (5015) | Oxygenates (8250) | E8 | (B26 (B26 | \$2 <u>8</u> | 01 and Grease (5520) | Hetals (ICAP CACT.Pb.Zn.Ni | E | A SE | тРн – нсіо | 直 | ~£ | ₩ | | | | Leb Sample No. |
| Sample Number | E Soil | Sample | · 💈 | ES | E 5 | F~ | 8 | Κ- | <u>د</u> | W | | <u> </u> | ļ | | · | | | - | | | 01 | Pen Mba |
| | 1 | ! | 2/9//01 | | | | | | | | | | <u> </u> | <u> </u> | | | | <u> </u> - | | | | |
| B-LB 1 | <u>w</u> | 11+50 | 3/26/01 | \leftarrow | | | | | | | | | | | . ' | \times | | |] | \ | | by 8260 |
| 1W-1 4 | W | 3000 | 11:30 3/26 | \geq | | | | | | - | | ┼── | 1- | 1- | 1 | X | × |] | l | <u> </u> | 20 | on Au |
| 1W-24 | W | $T\Gamma$ | 12:10 3/26 | \boxtimes | | | | | | | | ┪ | ╂── | | | | | | | | 104 | ortar 8020 |
| nw-3 4 | -1 | | 0:45 3/26 | \bowtie | | | | <u> </u> | | | | -} | -} | | ╂ | \Longrightarrow | | | 1 | | 05 | |
| | + | -1- 1 | 12:50 3/20 | X | | • | ١. | ! | | <u> </u> | | | - - | | | \longleftrightarrow | $\langle \cdot \rangle$ | - | - | 1 | 06 | |
| \ <u> </u> | | - - - | 13:35 3/20 | | | | | | | | | 1 | | | | | | | | | 100 | |
| 1W-5 4 | <u> </u> | <u>1</u> | 12:22 120 | | | | | | 1 | | | | 1 |] | <u> </u> | | ļ | | <u> </u> | | | |
| | _ | <u> </u> | | | | | ├ | | ┼ | - | | | _ | | | | <u> </u> | <u> </u> | <u> </u> | _ | <u> </u> | <u> </u> |
| | \ _ | | <u> </u> | ļ | <u> </u> | | | | ╂ | | | + | - | _ | | | | \ _ | J | | <u> </u> | |
| | | 1 | | <u> </u> | | | - | | | - | - | | ╁╾ | _ | 1 | | | | 7 | 1 | \ | |
| | - - | | | 1 | | | | ļ | | - | | | | | | ╁── | | 1 | | | Ţ- | • |
| | | | - | | | [| 1 | | l | <u> </u> | | | | | - | -├ | | ┨ | ┪ | | 1 | |
| | | | | | | | 1 | | | 1 | 1_ | | | | | | . | | -} | | -} | |
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| | | _ , | | <u> </u> | | ╁ | | ╂ | ┼─ | | | _ | - | | | | | ł | | | | · |
| . 0-1 | ٨ | ML | A | , | <u> </u> | <u></u> | ــــــــــــــــــــــــــــــــــــــ | <u></u> _ | ٠. | | ٦, | <u> </u> | | L Date/Tim | l 18 | lced ' | Y/N | 1 | Turn | Around | Time (C | Circle Choice) |
| Relinevished By (\$1) | Hothia) | TIIW | Organization | Date/1 | ľm• | R | scelved | By (Sig | nature) | | | NeA | | carry min | | 1 | - | | | | 24 Hre. | |
| CHILL | NH | MA | 15th Inc. | · | | | | | | | — — | | | Dala In- | | lced ' | Y/N | \dashv | | | 48 Hrs. | |
| Relinquished By (Sig | natura) | VV / | Organization | Date/ | llm• | R | eceived | By (Sig | nature) | | 0 | rgonizali | ION | Dala/Ilm | 10 | 10.00 | ., | 1 | 1 6 | | 5 Days | |
| • | | | | <u> </u> | | | | | | | | | | | | 100 | | /, ├- | 4-0 | · | 10 Days | 一 |
| Relinquished By (Sig | nalure) | | Organization | Dale/ | ĭim∙ | R | ecleved | For Lot | oralory | By (Sig | nolure | }- | ŀ | Dole/Tim | 10 [R30 | ' [cod) | Y/N | 19 | 0 | As | Contrac | ted . |
| | | | } . | | | | & u | my | | only | 8 | | | 3/26/ | 0/ | } | | Ι, | V | + | | |



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Gettler-Ryan Inc. - Dublin 6747 Sierra Court Suite G **Dublin CA, 94568**

Project: Chevron #20-9335

Project Number: 386750

Project Manager: Deanna Harding

Reported: 04/09/01 08:34

ANALYTICAL REPORT FOR SAMPLES

| A | ANALYTICAL REPORT FOR SA | WII LIEG | OPERACTORS | |
|-----------|--------------------------|----------|----------------|----------------|
| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
| TB-LB | B1C0625-01 | Water | 03/26/01 12:00 | 03/26/01 18:30 |
| MW-1 | B1C0625-02 | Water | 03/26/01 11:30 | 03/26/01 18:30 |
| MW-2 | B1C0625-03 | Water | 03/26/01 12:10 | 03/26/01 18:30 |
| MW-3 | B1C0625-04 | Water | 03/26/01 10:45 | 03/26/01 18:30 |
| MW-4 | B1C0625-05 | Water | 03/26/01 12:50 | 03/26/01 18:30 |
| MW-5 | B1C0625-06 | Water | 03/26/01 13:35 | 03/26/01 18:30 |

North Creek Analytical - Bothell

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eer, Project Manager

North Creek Analytical, Inc. Environmental Laboratory Network

Page 1 of 10



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Gettler-Ryan Inc. - Dublin

Project: Chevron #20-9335

6747 Sierra Court Suite G Dublin CA, 94568

Project Number: 386750 Project Manager: Deanna Harding

Reported: 04/09/01 08:34

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B North Creek Analytical - Bothell

| | | eporting | I Imies | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|-----------|----------------------|----------|------------|----------|-----------|--------------|--------|
| Analyte | Result | Limit | Units | | | | Allalyzeu | | 110103 |
| TB-LB (B1C0625-01) Water | Sampled: 03/26/01 12:00 | Receive | ed: 03/26/0 | 1 18:30 | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | ug/l | 1 | 1C30012 | 03/30/01 | 03/30/01 | WTPH-G/8021B | |
| Benzene | ND | 0.500 | ** | n | H | Ħ | n | n | |
| Toluene | ND | 0.500 | n | 11 | n | n | tı | 11 | |
| Ethylbenzene | ND | 0.500 | *1 | II | n | n | 11 | II | |
| Xylenes (total) | ND | 1.00 | n | Ħ | 11 | 11 | n | | |
| Methyl tert-butyl ether | ND | 1.00 | n | ti | 17 | И | n | | |
| Surrogate: 4-BFB (FID) | 97.5 % 5 | 0-150 | | | <i>"</i> , | " | " | " | |
| Surrogate: 4-BFB (PID) | 90.4 % 5 | 0-150 | | | " | " | " | " | |
| MW-1 (B1C0625-02) Water | Sampled: 03/26/01 11:30 | Receive | ed: 03/2 <u>6/</u> 0 | 1 18:30 | | | | | |
| Gasoline Range Hydrocarbons | ND ND | 50.0 | ug/l | 1 | 1C30012 | 03/30/01 | 03/30/01 | WTPH-G/8021B | |
| Benzene | ND | 0.500 | IT | 11 | Ħ | 11 | H | 11 | |
| Toluene | ND | 0.500 | n | n | * | 11 | 11 | u | |
| Ethylbenzene | ND | 0.500 | п | ii | U | n | 11 | U | |
| Xylenes (total) | ND | 1.00 | n | 11 | 11 | Ħ | u | 11 | |
| Methyl tert-butyl ether | ND | 1.00 | 11 | 17 | P | н | " | 11 | |
| Surrogate: 4-BFB (FID) | 99.0 % 5 | 0-150 | | | " | " | " | ** | |
| Surrogate: 4-BFB (PID) | 92.9 % | 0-150 | | | " | " | " | " | |
| MW-2 (B1C0625-03) Water | Sampled: 03/26/01 12:10 |) Receive | ed: 03/26/0 | 1 18:30 | | | | <u>.</u> | |
| Gasoline Range Hydrocarbon | ns 17000 | 2500 | ug/l | 50 | 1C30012 | 03/30/01 | 03/31/01 | WTPH-G/8021B | |
| Benzene | 143 | 25.0 | Ħ | н | " | II . | Ħ | H | |
| Toluene | 1450 | 25.0 | n | Ħ | *1 | ** | n | " | |
| Ethylbenzene | 378 | 25.0 | n | Ħ | 17 | 17 | n | ** | |
| Xylenes (total) | 2180 | 50.0 | 11 | ti | tr | N . | ** | н | |
| Methyl tert-butyl ether | ND | 50.0 | U | n | | | ir | н | |
| Surrogate: 4-BFB (FID) | 96.7 % | 50-150 | | | " | " | " | n · | |
| Surrogate: 4-BFB (PID) | 95.6 % | 50-150 | | | n | " | " | " | |

North Creek Analytical - Bothell

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Greer Project Manager



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Gettler-Ryan Inc. - Dublin

Project: Chevron #20-9335

6747 Sierra Court Suite G **Dublin CA**, 94568

Project Number: 386750 Project Manager: Deanna Harding

Reported: 04/09/01 08:34

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B North Creek Analytical - Bothell

| | | eporting | | | | | | | |
|-----------------------------|-------------------------|-----------|-------------|----------|---------|-----------|----------|--------------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared, | Analyzed | Method | Notes |
| MW-3 (B1C0625-04) Water | Sampled: 03/26/01 10:45 | Receive | d: 03/26/01 | 18:30 | | | | | · . |
| Gasoline Range Hydrocarbons | ND | 50.0 | ug/l | 1 | 1C30012 | 03/30/01 | 03/30/01 | WTPH-G/8021B | |
| Benzene | ND | 0.500 | Ħ | n | n | n | u | li . | |
| Toluene | ND | 0.500 | n | 11 | n | Ħ | 11 | " | |
| Ethylbenzene | ND | 0.500 | Ħ | n | M . | It | 11 | Ħ | |
| Xylenes (total) | ' ND | 1.00 | 11 | Ħ | ti | ** | n | Ħ | |
| Methyl tert-butyl ether | ND | 1.00 | u | n | *1 | ** | H | " | |
| Surrogate: 4-BFB (FID) | 99.6% 5 | 0-150 | | | 11 | " | " | " | - |
| Surrogate: 4-BFB (PID) | 93.3 % 5 | 0-150 | | | " | " | " | " | |
| MW-4 (B1C0625-05) Water | Sampled: 03/26/01 12:50 | Receive | d: 03/26/0 | 1 18:30 | | | | | |
| Gasoline Range Hydrocarbon | ıs 27200 | 2500 | ug/l | 50 | 1C30012 | 03/30/01 | 03/30/01 | WTPH-G/8021B | |
| Benzene | 178 | 25.0 | ŧı | U | Ħ | Ħ | n | U | |
| Toluene | 2160 | 25.0 | H | H | n | n' | | n | |
| Ethylbenzene | 785 | 25.0 | н | 11 | Ħ | U | n | TI TI | |
| Xylenes (total) | 4160 | 50.0 | Ħ | U | n | ** | n | И | |
| Methyl tert-butyl ether | ND | 50.0 | 0 | ** | 11 | | n | n | |
| Surrogate: 4-BFB (FID) | 98.3 % | 0-150 | | - | " | " | " | ,, | |
| Surrogate: 4-BFB (PID) | 98.1 % | i0-150 | | | " | " | " | " | |
| MW-5 (B1C0625-06) Water | Sampled: 03/26/01 13:3 | 5 Receive | ed: 03/26/0 | 1 18:30 | | | | | |
| Gasoline Range Hydrocarbor | ns 149000 | 25000 | ug/l | 500 | 1C30012 | 03/30/01 | 03/30/01 | WTPH-G/8021B | |
| Benzene | 256 | 250 | v | 11 | 17 | u | 11 | ti | |
| Toluene | 10600 | 250 | n | . 11 | n | " | 11 | " | |
| Ethylbenzene | 4000 | 250 | 11 | п | n | n | II | n | |
| Xylenes (total) | 24200 | 500 | n | " | ır | Ħ | N | н | |
| Methyl tert-butyl ether | ND | 500 | | 17 | U | ** | *1 | м | |
| Surrogate: 4-BFB (FID) | 96.9 % | 50-150 | | | " | n | " | " | |
| Surrogate: 4-BFB (PID) | 96.0% | 50-150 | | | " | " | " | n | |

North Creek Analytical - Bothell

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Greer, Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network**



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Gettler-Ryan Inc. - Dublin

Project: Chevron #20-9335

6747 Sierra Court Suite G

Dublin CA, 94568

Project Number: 386750

Reported: 04/09/01 08:34 Project Manager: Deanna Harding

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C36 by WTPH-D (extended) with Silica Gel Clean-up

North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prenared | Analyzed | Method | Notes |
|------------------------------|------------------------|--------------------|--------------|----------|---------|----------|--------------|--------|-------|
| | | | | | | | | | |
| MW-1 (B1C0625-02) Water | Sampled: 03/26/01 11:3 | 0 Receive | d: 03/26/01 | 18:30 | | | | | |
| Diesel Range Hydrocarbons | ND | 0.250 | mg/l | 1 | 1C30008 | 03/30/01 | 04/02/01 | WTPH-D | |
| Heavy Oil Range Hydrocarbons | : ND | 0.750 | l7 | ** | | 19 | n | * | |
| Surrogate: 2-FBP | 60.4 % | 50-150 | | | " | ** | " | " | |
| Surrogate: Octacosane | 64.4 % | 50-150 | | | " | . " | " | " | |
| MW-2 (B1C0625-03) Water | Sampled: 03/26/01 12:1 | 0 Receive | ed: 03/26/01 | 18:30 | | | | | |
| Diesel Range Hydrocarbons | 1.18 | 0.250 | mg/l | 1 | 1C30008 | 03/30/01 | 04/02/01 | WTPH-D | D-08 |
| Heavy Oil Range Hydrocarbons | s ND | 0.750 | n | H | Ħ | H | | n | |
| Surrogate: 2-FBP | 70.9 % | 50-150 | | | " | " | " | " | |
| Surrogate: Octacosane | 67.5 % | 50-150 | | | 11 | " | " | " | |
| MW-3 (B1C0625-04) Water | Sampled: 03/26/01 10:4 | 5 Receive | ed: 03/26/0 | 1 18:30 | | | | | |
| Diesel Range Hydrocarbons | ND | 0.250 | mg/l | 1 | 1C30008 | 03/30/01 | 04/02/01 | WTPH-D | |
| Heavy Oil Range Hydrocarbons | s ND | 0.750 | " | 11 | 11 | 17 | ** | | |
| Surrogate: 2-FBP | 61.6 % | 50-150 | - | | " | " | " | " | |
| Surrogate: Octacosane | 64.7 % | 50-150 | | | n | " | " | " | |
| MW-4 (B1C0625-05) Water | Sampled: 03/26/01 12:5 | 0 Receive | ed: 03/26/0 | 1 18:30 | | | | | |
| Diesel Range Hydrocarbons | 0.266 | 0.250 | mg/l | 1 | 1C30008 | 03/30/01 | 04/02/01 | WTPH-D | D-08 |
| Heavy Oil Range Hydrocarbons | s ND | 0.750 | II. | ** | н | " | II | | |
| Surrogate: 2-FBP | 70.4 % | 50-150 | | | " | " | " | " | |
| Surrogate: Octacosane | 70.4 % | 50-150 | | | " | " | " | " | |
| MW-5 (B1C0625-06) Water | Sampled: 03/26/01 13:3 | 35 Receiv | ed: 03/26/0 | 1 18:30 | | | | | |
| Diesel Range Hydrocarbons | 77.9 | 10.2 | mg/l | 41 | 1C30008 | 03/30/01 | 04/03/01 | WTPH-D | D-08 |
| Heavy Oil Range Hydrocarbon | s ND | 30.8 | n | ** | н | 11 | N | n | |
| Surrogate: 2-FBP | % | 50-150 | | | " | " | " | " | S-01 |
| Surrogate: Octacosane | 66.5 % | 50-150 | | | " | " | " | " | |

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Gettler-Ryan Inc. - Dublin 6747 Sierra Court Suite G Dublin CA, 94568

Project: Chevron #20-9335

Project Number: 386750 Project Manager: Deanna Harding

Reported: 04/09/01 08:34

Volatile Organic Compounds by EPA Method 8260B North Creek Analytical - Bothell

| | | Reporting | - | | | | | | |
|-------------------------|----------------------|-------------|-------------|----------|---------|----------|----------|--|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| MW-2 (B1C0625-03) Water | Sampled: 03/26/01 12 | :10 Receive | d: 03/26/0 | 1 18:30 | | | | | |
| Methyl tert-butyl ether | ND | 5.00 | ug/l | 1 | 1C29024 | 03/29/01 | 03/29/01 | EPA 8260B | |
| Surrogate: 1,2-DCA-d4 | 136 % | 73-137 | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 179 % | 75-124 | | | H | n | " | n ' | S-04 |
| Surrogate: 4-BFB | 85.6 % | 77-120 | | | # | " | " | " | |
| MW-4 (B1C0625-05) Water | Sampled: 03/26/01 12 | :50 Receive | ed: 03/26/0 | 1 18:30 | | | | <u>. </u> | |
| Methyl tert-butyl ether | ND | 5.00 | ug/l | 1 | 1C29024 | 03/29/01 | 03/29/01 | EPA 8260B | |
| Surrogate: 1,2-DCA-d4 | 135 % | 73-137 | | | ., | " | " | " | |
| Surrogate: Toluene-d8 | 114% | 75-124 | | | " | n | " | " | |
| Surrogate: 4-BFB | 107 % | 77-120 | | | " | " | " | " | |
| MW-5 (B1C0625-06) Water | Sampled: 03/26/01 13 | :35 Receive | ed: 03/26/0 | 1 18:30 | | | | | |
| Methyl tert-butyl ether | ND | 5.00 | ug/l | 1 | 1C31005 | 03/30/01 | 03/30/01 | EPA 8260B | |
| Surrogate: 1,2-DCA-d4 | 191 % | 73-137 | | | " | " | " | " | S-04 |
| Surrogate: Toluene-d8 | 282 % | 75-124 | | | " | " | " | " | S-04 |
| Surrogate: 4-BFB | 121 % | 77-120 | | | " | " | u | n | S-04 |

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Gettler-Ryan Inc. - Dublin

Project: Chevron #20-9335

6747 Sierra Court Suite G **Dublin CA**, 94568

Project Number: 386750 Project Manager: Deanna Harding

Reported: 04/09/01 08:34

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality **Control**

North Creek Analytical - Bothell

| | | F | Reporting | | Spike | Source | | %REC | | RPD | |
|-------------------------|-------------------|-----------------------|-----------|--|-------|-------------|----------|--------|-------|-------|-------|
| Analyte | | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch 1C30012: | Prepared 03/30/01 | Using EPA 5030B (P/T) | | | | | | | | _ | |
| Blank (1C30012-B) | LK1) | <u> </u> | | | | | | | | | |
| Gasoline Range Hydro | carbons | ND | 50.0 | ug/l | | | | | | | |
| Benzene | | ND | 0.500 | H | | | | • | | | |
| Toluene | | ND | 0.500 | Ħ | | | | | | | |
| Ethylbenzene | | ND | 0.500 | II . | | | | | | | |
| Xylenes (total) | | ND | 1.00 | ** | | | | | | | |
| Methyl tert-butyl ether | • | ND | 1.00 | IT | | | | | | | |
| Surrogate: 4-BFB (FII | Ď) | 44.9 | | ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, | 48.0 | | 93.5 | 50-150 | | | |
| Surrogate: 4-BFB (PII | - | 44.3 | | " | 48.0 | | 92.3 | 50-150 | | | |
| LCS (1C30012-BS) | 1) | | | | | | | | | | |
| Gasoline Range Hydro | ocarbons | 471 | 50.0 | ug/l | 500 | - | 94.2 | 70-130 | | • | _ |
| Surrogate: 4-BFB (FI | D) | 50.9 | | " | 48.0 | | 106 | 50-150 | | - | |
| Duplicate (1C3001) | 2-DUP1) | | | | | Source: | B1C0625- | 03 | | | |
| Gasoline Range Hydro | ocarbons | 14800 | 10000 | ug/l | | 17000 | | | 13.8 | 25 | _ |
| Surrogate: 4-BFB (FI | D) | 45.7 | | " | 48.0 | | 95.2 | 50-150 | | | |
| Duplicate (1C3001 | 2-DUP2) | | | | | | | | | | |
| Gasoline Range Hydro | | 32400 | 2500 | ug/l | | 32500 | | | 0.308 | 25 | |
| Surrogate: 4-BFB (FI | D) | 46.7 | | " | 48.0 | | 97.3 | 50-150 | | _ | |
| Matrix Spike (1C3 | 0012-MS1) | | | | | Source: | B1C0625- | -02 | | | |
| Benzene | | 8.64 | 0.500 | ug/l | 10.0 | ND | 85.3 | 70-130 | | | |
| Toluene | | 8.51 | 0.500 | Ħ | 10.0 | ND | 84.1 | 70-130 | | | |
| Ethylbenzene | | 8.48 | 0.500 | U | 10.0 | ND | 84.8 | 70-130 | | | |
| Xylenes (total) | | 24.0 | 1.00 | Ħ | 30.0 | ND | 80.0 | 70-130 | | | |
| Methyl tert-butyl ethe | г | 9.65 | 1.00 | Ħ | 10.0 | ND | 96.5 | 70-130 | | | |
| Surrogate: 4-BFB (PI | D) | 44.6 | | " | 48.0 | | 92.9 | 50-150 | | | |
| | | | | | | | | | | | |

North Creek Analytical - Bothell

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t Greer Project Manager

North Creek Analytical, Inc. **Environmental Laboratory Network**



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| 1720 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182

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Gettler-Ryan Inc. - Dublin

Project: Chevron #20-9335

Bend

6747 Sierra Court Suite G

Project Number: 386750

Reported: 04/09/01 08:34

Dublin CA, 94568

Project Manager: Deanna Harding

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality **Control**

North Creek Analytical - Bothell

| Analyte | | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------|-------------------|----------|--------------------|-------|----------------|------------------|------|----------------|------|--------------|-------|
| Batch 1C30012: | Prepared 03/30/01 | Using EF | A 5030B | (P/T) | | | | | | | |
| Matrix Spike Dup | | | | | Source: I | 31C0625- | 02 | | | | |
| Benzene | <u> </u> | 9.20 | 0.500 | ug/l | 10.0 | ND | 90.9 | 70-130 | 6.28 | 15 | |
| Toluene | | 9.08 | 0.500 | ** | 10.0 | ND | 89.8 | 70-130 | 6.48 | 15 | |
| Ethylbenzene | | 9.05 | 0.500 | ır | 10.0 | ND | 90.5 | 70-130 | 6.50 | 15 | |
| Xylenes (total) | • | 25.6 | 1.00 | u | 30.0 | ND | 85.3 | 70-130 | 6.45 | 15 | |
| Methyl tert-butyl ether | | 10.3 | 1.00 | ** | 10.0 | ND | 103 | 70-130 | 6.52 | 15 | |
| Surrogate: 4-BFB (PII | D) | 44.6 | | " | 48.0 | | 92.9 | 50-150 | | | |

North Creek Analytical - Bothell

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Project Manager

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Page 7 of 10



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Gettler-Ryan Inc. - Dublin

6747 Sierra Court Suite G

Project: Chevron #20-9335

Project Number: 386750

Reported:

Dublin CA, 94568

Project Manager: Deanna Harding

04/09/01 08:34

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C36 by WTPH-D (extended) with Silica Gel Clean-up -**Quality Control**

North Creek Analytical - Bothell

| | Reporting | | | Spike | Source | | %REC | _ | RPD | | |
|-----------------------|--------------------------|----------|-----------|--------------------|--------|-----------|-------------|--------|------|-------|-------|
| Analyte | | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch 1C30008: | Prepared 03/30/01 | Using El | PA 3520C/ | 600 Series | | | | | | , | |
| Blank (1C30008-B) | LK1) | | | | | | | | | | |
| Diesel Range Hydroca | rbons | ND | 0.250 | mg/l | | | _ | | | | |
| Heavy Oil Range Hyd | rocarbons | ND | 0.750 | n | | | | | | | |
| Surrogate: 2-FBP | | 0.216 | | <u>"</u> | 0.320 | | 67.5 | 50-150 | - | | • |
| Surrogate: Octacosano | ? | 0.223 | | " | 0.320 | | 69.7 | 50-150 | | | |
| LCS (1C30008-BS1 | 1) | | | | | | | | | | |
| Diesel Range Hydroca | rbons | 1.35 | 0.250 | mg/l | 2.00 | | 67.5 | 50-150 | | | |
| Surrogate: 2-FBP | | 0.208 | | " | 0.320 | | 65.0 | 50-150 | | | |
| Duplicate (1C3000 | 8-DUP1) | | | | | Source: I | B1C0624- | 03 | | | |
| Diesel Range Hydroca | rbons | ND | 0.250 | mg/l | | ND | | | | 44 | |
| Heavy Oil Range Hyd | rocarbons | ND | 0.750 | H | | ND | | | | 44 | |
| Surrogate: 2-FBP | | 0.471 | | " | 0.705 | - | 66.8 | 50-150 | | | |
| Surrogate: Octacosani | ? | 0.476 | | " | 0.705 | | 67.5 | 50-150 | | | |
| Duplicate (1C3000) | Duplicate (1C30008-DUP2) | | | Source: B1C0707-01 | | | | | | | |
| Diesel Range Hydroca | rbons | ND | 0.250 | mg/l | | ND | | | 30.2 | 44 | |
| Heavy Oil Range Hyd | rocarbons | ND | 0.750 | n | | ND | | | | 44 | |
| Surrogate: 2-FBP | | 0.398 | | " | 0.634 | - | 62.8 | 50-150 | | | _ |
| Surrogate: Octacosan | 2 | 0.417 | | n | 0.634 | | 65.8 | 50-150 | | | |

North Creek Analytical - Bothell

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Gettler-Ryan Inc. - Dublin 6747 Sierra Court Suite G

Dublin CA, 94568

Project: Chevron #20-9335

Project Number: 386750

Project Manager: Deanna Harding

Reported: 04/09/01 08:34

Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

| Analyte | | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------|-------------------|---------|--------------------|-------|----------------|------------------|------|----------------|-----|---|-------|
| Batch 1C29024: I | Prepared 03/29/01 | Using E | PA 5030B | [P/T] | | | | | | | |
| Blank (1C29024-BLK | 1) | | | | | | | | | <u></u> | |
| Methyl tert-butyl ether | | ND | 5.00 | ug/l | | | | | | | |
| Surrogate: 1,2-DCA-d4 | | 25.6 | | " | 20.1 | | 127 | 73-137 | | | |
| Surrogate: Toluene-d8 | | 21.7 | | 71 | 20.1 | | 108 | 75-124 | | | |
| Surrogate: 4-BFB | | 21.2 | | " | 20.1 | | 105 | 77-120 | | | |
| LCS (1C29024-BS1) | | | | | | | | | | , , , , , , , , , , , , , , , , , , , | |
| Methyl tert-butyl ether | | 9.39 | 5.00 | ug/l | 10.0 | | 93.9 | 70-130 | | | |
| Surrogate: 1,2-DCA-d4 | | 25.3 | | " | 20.1 | _ | 126 | 73-137 | | | |
| Surrogate: Toluene-d8 | | 22.8 | | " | 20.1 | | 113 | 75-124 | | | |
| Surrogate: 4-BFB | | 21.1 | | " | 20.1 | | 105 | 77-120 | | | |
| Batch 1C31005: | Prepared 03/30/01 | Using E | EPA 5030B | [P/T] | | | | | | _ | |
| Blank (1C31005-BLF | K1) | | | | | | | | | | |
| Methyl tert-butyl ether | | ND | 5.00 | ug/i | _ | | | | | | |
| Surrogate: 1,2-DCA-d4 | | 25.3 | | н | 20.1 | | 126 | 73-137 | | | |
| Surrogate: Toluene-d8 | | 22.9 | | " | 20.1 | | 114 | 75-124 | | | |
| Surrogate: 4-BFB | | 20.9 | | " | 20.1 | | 104 | 77-120 | | | |
| LCS (1C31005-BS1) | | | | | | | | | | | |
| Methyl tert-butyl ether | | 9.36 | 5.00 | ug/l | 10.0 | | 93.6 | 70-130 | | | |
| Surrogate: 1,2-DCA-d4 | | 26.9 | | " | 20.1 | | 134 | 73-137 | | | |
| Surrogate: Toluene-d8 | | 22.2 | | n | 20.1 | | 110 | 75-124 | | | |
| Surrogate: 4-BFB | | 21.5 | | " | 20.1 | | 107 | 77-120 | | | |

North Creek Analytical - Bothell

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Robert Green Project Manager



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Spokane

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Gettler-Ryan Inc. - Dublin

Project: Chevron #20-9335

6747 Sierra Court Suite G

Project Number: 386750

Reported:

Dublin CA, 94568

Project Manager: Deanna Harding

04/09/01 08:34

Notes and Definitions

D-08 Results in the diesel organics range are primarily due to overlap from a gasoline range product.

S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or

matrix interferences.

The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. S-04

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

North Creek Analytical - Bothell

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Greer, Project Manager

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