RO - 434

Delta
Environmental
Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

3164 Gold Camp Drive • Suite 200
Rancho Cordova, California 95670 USA

916.638.2085 800.477.7411
Fax 916.638.8385

July 2, 2004

Mr. Bob Schultz
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Subject: Quarterly Groundwater Monitoring Report – First Quarter 2004
Tesoro No. 67076 (Former Beacon Station No. 3604)
1619 First Street, Livermore, California
Delta Project No. D004-076

Dear Mr. Schultz:

Delta Environmental Consultants, Inc. (Delta) has been authorized by Tesoro Environmental Resources Company (Tesoro) to perform quarterly groundwater monitoring at the site (Former Beacon Station No. 3604) located at 1619 First Street, Livermore, California (Figure 1).

Quarterly Groundwater Monitoring

Delta retained Doulos Environmental, Inc., (Doulos) to measure depth to groundwater and collect groundwater samples on March 23, 2004. Doulos field data forms are presented in Enclosure A.

Doulos measured the depth to the groundwater table in monitoring wells MW-1 through MW-10. Depth measurements were obtained using an electronic water-level indicator and recorded to the nearest 0.01-foot. The water-level indicator was cleaned with a solution of non-phosphate detergent and deionized water, and rinsed before each use. Groundwater elevation data are presented in Table 1 and inferred groundwater elevation contours are presented on Figure 2. Depth to groundwater ranged from 26.41 to 30.01 feet below the top of well casing. Based on ground water elevation data computed from depth to water measurements in wells, the groundwater flow direction across the site was inferred to be west-northwest with an approximate gradient of 0.019, and west-southwest with a gradient of 0.0235.

Groundwater monitoring wells MW-2 and MW-5 through MW-10 were sampled on March 23, 2004. Wells MW-1, MW-3 and MW-4 were not sampled because they are on a semi-annual sampling schedule. Samples from these wells were analyzed for total petroleum hydrocarbons (TPH) in the gasoline range , benzene, toluene, ethylbenzene, xylenes (BTEX), and oxygenates

including methyl tertiary butyl ether (MTBE) and tertiary butyl alcohol (TBA), using EPA Test Method 8260B. Kiff Analytical Labs, Inc. (Kiff Analytical) of Davis, California, a California state-certified laboratory, performed the chemical analyses. The Kiff Analytical laboratory report, including chain-of-custody documentation, is included as Enclosure B. Laboratory analyses results for the first quarter 2004 sampling event are presented in Table 1, and TPH in the gasoline range, benzene, MTBE, and TBA concentrations are shown on Figure 3.

Discussion of Results

The following trends were observed between the fourth quarter 2003 and the first quarter 2004 groundwater monitoring events:

- Concentrations of TPH in the gasoline range, benzene, toluene, ethyl-benzene and total xylenes increased (45,000, 5,200, 1,500, 1,800, and 5,000 µg/L, respectively), in monitoring well MW-2. Well MW-2 is located at the down-gradient edge of the site property.

- Concentrations of TPH in the gasoline range, toluene, ethyl-benzene, total xylenes and MTBE increased (24,000, 71, 1,500, 2,000, and 7,500 µg/L, respectively), in monitoring well MW-6. Well MW-6 is located across the intersection of South P Street and First Street from the site.

- The groundwater flow direction has remained stable, trending north-northwest across the site.

Schedule

- The second quarter groundwater monitoring event was conducted in May 2004. Results are pending and will be submitted before July 15, 2004.

- Corrective actions are being evaluated for the hydrocarbon plume emanating from the site.

Mr. Bob Schultz
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
July 2, 2004

Please contact Jim Brownell at (916) 638-2765 if you have any questions.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

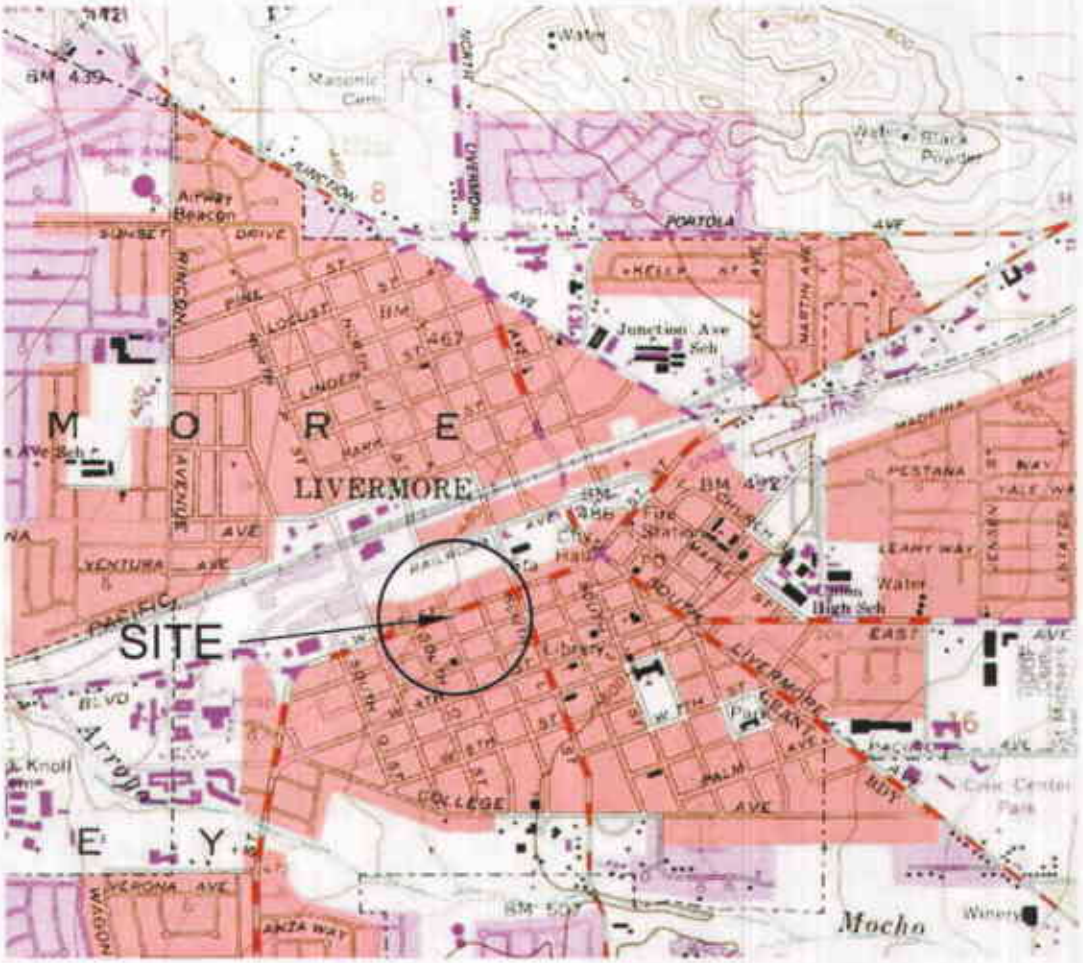
Jason Mata

Jason M. Mata
Staff Technician

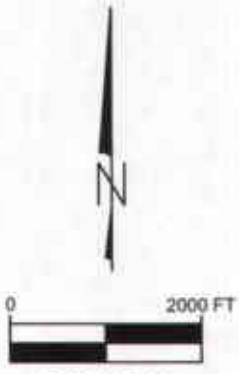
James R Brownell

James R. Brownell, R.G.
California Registered Geologist No. 5078

JMM
Enclosures
cc: Mr. Jeff Baker, Tesoro Petroleum Company
Mr. Chuck Miller, Green Valley Gasoline, LLC
Mr. Brian Kelleher, Kelleher and Associates
Ms. Bettie Graham, Regional Water Quality Control Board, San Francisco Bay Region



GENERAL NOTES:
BASE MAP FROM U.S.G.S.
LIVERMORE
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1980



SCALE 1:24,000

FIGURE 1

SITE LOCATION MAP

TESORO SITE NO. 67076
FORMER BEACON STATION NO. 604
1619 WEST FIRST STREET
LIVERMORE, CA.

PROJECT NO. D004-076	DRAWN BY REG 6/18/04
FILE NO. TS-67076-FIG1	PREPARED BY BAB
REVISION NO. -	REVIEWED BY JRB 7/2/04

Delta Environmental Consultants, Inc.

LEGEND

PROPERTY LINE

GROUNDWATER MONITORING WELL

VAPOR EXTRACTION WELL

(452.71) GROUNDWATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL

452.0 INFERRED WATER TABLE CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL

* MW-10 HAS NOT BEEN SURVEYED RELATIVE TO MEAN SEA LEVEL

SOURCE: Doulos Environmental, Inc. site plan. Wells resurveyed by Advanced Geomatic Engineering on 1/22/02. MW-8, MW-9, MW-10 installed on September 2, 2003.

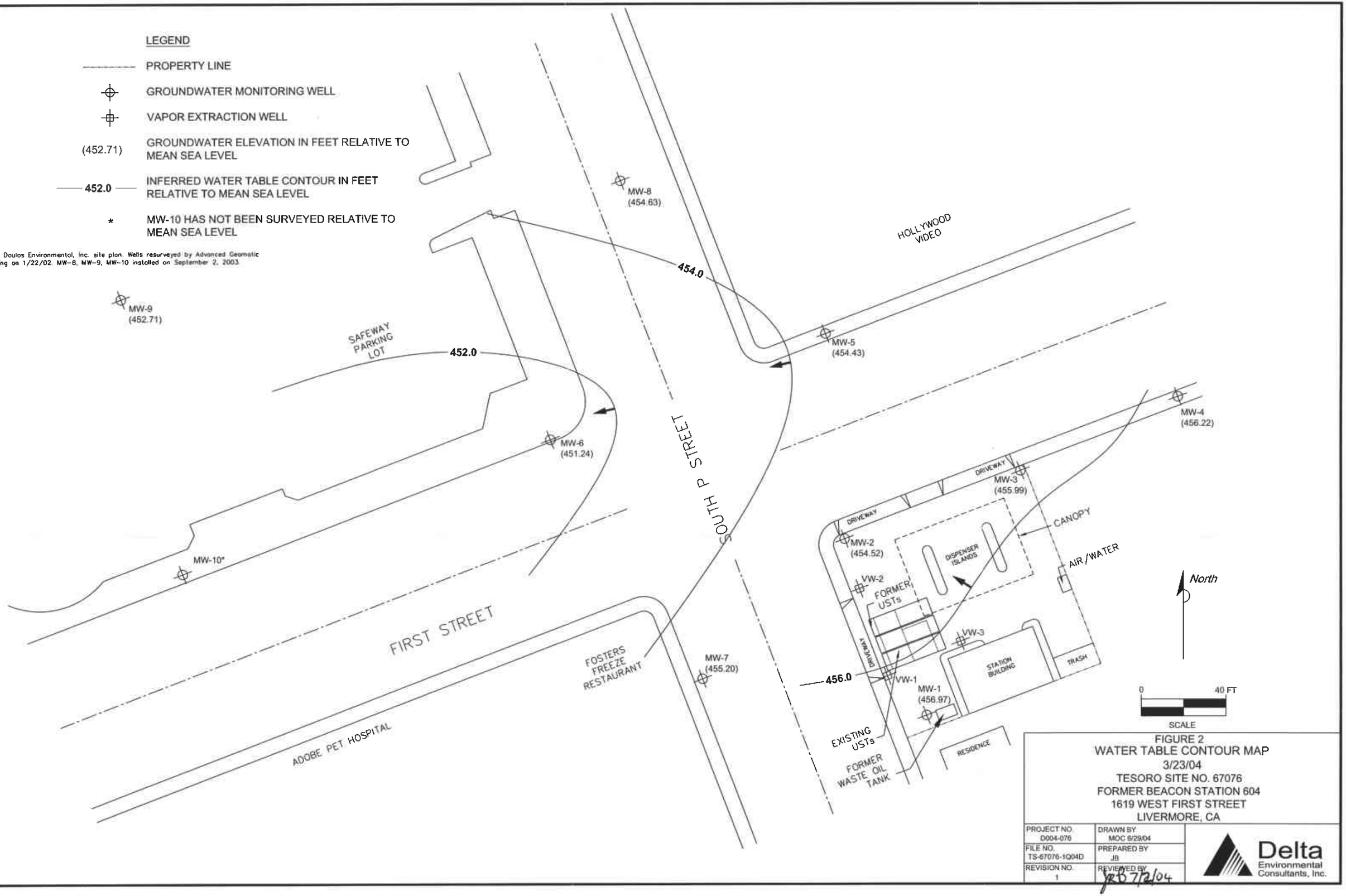


FIGURE 2
WATER TABLE CONTOUR MAP
3/23/04
TESORO SITE NO. 67076
FORMER BEACON STATION 604
1619 WEST FIRST STREET
LIVERMORE, CA

PROJECT NO. D004-076	DRAWN BY MOC 6/29/04
FILE NO. TS-67076-1Q04D	PREPARED BY JB
REVISION NO. 1	REVIEWED BY JB 7/2/04

Delta Environmental Consultants, Inc.

LEGEND

PROPERTY LINE

GROUNDWATER MONITORING WELL

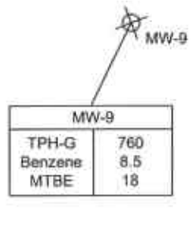
VAPOR EXTRACTION WELL

MW- 2	
TPH-G	45,000
Benzene	5,200
MTBE	750

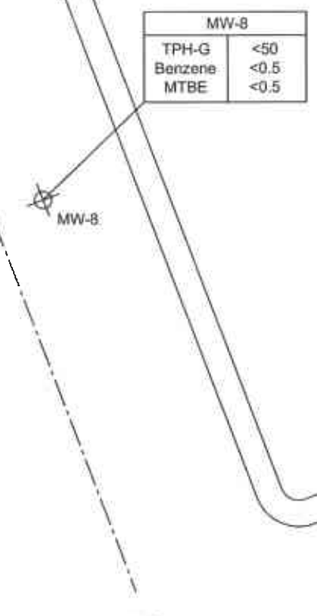
DISSOLVED PHASE HYDROCARBON CONCENTRATIONS (μg/L)

* MW-10 HAS NOT BEEN SURVEYED RELATIVE TO MEAN SEA LEVEL

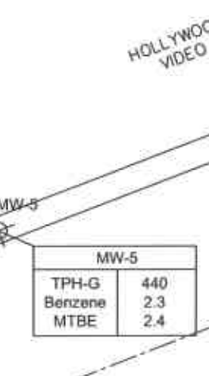
SOURCE: Doulos Environmental, Inc. site plan. Wells resurveyed by Advanced Geomatic Engineering on 1/22/02. MW-8, MW-9, MW-10 installed on September 2, 2003.



MW-9	
TPH-G	760
Benzene	8.5
MTBE	18



MW-8	
TPH-G	<50
Benzene	<0.5
MTBE	<0.5



MW-5	
TPH-G	440
Benzene	2.3
MTBE	2.4

MW-6	
TPH-G	24,000
Benzene	1,400
MTBE	7,500

MW-10	
TPH-G	<50
Benzene	<0.5
MTBE	<0.5

MW-7	
TPH-G	<50
Benzene	<0.5
MTBE	<0.5

MW-2	
TPH-G	45,000
Benzene	5,200
MTBE	750

SOUTH P STREET

FIRST STREET

HOLLYWOOD VIDEO

SAFEWAY PARKING LOT

FOSTERS FREEZE RESTAURANT

ADOBE PET HOSPITAL

DRIVEWAY

DRIVEWAY

DRIVEWAY

MW-3

CANOPY

MW-2

DISPENSER ISLANDS

AIR / WATER

VW-2

FORMER USTs

VW-3

VW-1

MW-1

STATION BUILDING

TRASH

EXISTING USTs

FORMER WASTE OIL TANK

RESIDENCE

North

0 40 FT

SCALE

FIGURE 3
DISTRIBUTION OF TPH-G, BENZENE AND MTBE IN GROUNDWATER-3/23/04
TESORO SITE NO. 67076
FORMER BEACON STATION 604
1619 WEST FIRST STREET
LIVERMORE, CA

PROJECT NO. D004-076	DRAWN BY MOC 6/28/04
FILE NO. TS-67076-1Q04D	PREPARED BY JB
REVISION NO. 1	REVIEWED BY JB 7/2/04

Delta Environmental Consultants, Inc.

ENCLOSURE A

Field Methods and Procedures

FIELD METHODS AND PROCEDURES

The following section describes field procedures that are to be used by Delta personnel in the performance of the tasks involved with this project.

1.0 HEALTH AND SAFETY PLAN

Fieldwork performed by Delta and Delta's subcontractors at the site is conducted according to guidelines established in a Site Health and Safety Plan (SHSP). The SHSP is a document that describes the hazards that may be encountered in the field and specifies protective equipment, work procedures and emergency information. A copy of the SHSP will be at the site and available for reference by appropriate parties during work at the site.

2.0 GROUNDWATER DEPTH ASSESSMENT

A water/product interface probe is used to assess the liquid-phase hydrocarbons (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for LPH sheen.

3.0 SUBJECTIVE ANALYSIS OF GROUNDWATER

A water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

4.0 MONITORING WELL SAMPLING

No purge groundwater sampling is conducted at this site. After measurement of depth to water, a groundwater sample is removed from each of the wells using a pump or disposable bailer. The water sample is collected, labeled and handled according to the Quality Assurance Plan. Decontamination water generated during the monitoring event is disposed of according to the accepted regulatory method pertaining to the site.

5.0 QUALITY ASSURANCE PLAN

This section describes the field and analytical procedures to be followed by Delta throughout the investigation.

5.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample will be collected in the appropriate container, preserved correctly for the intended analysis and stored, prior to analysis, for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of soil samples from this project can be found in previous sections.

5.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis will have a label affixed to identify the job number, sampler, date and time of sample collection and a sample number unique to that sample. During soil sampling, this information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel and any other pertinent field observations will be recorded on the borehole log or in the field records.

ENCLOSURE B

Groundwater Sampling Information Sheets

DOULOS ENVIRONMENTAL, INC.
GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet)

Project Address: 1619 First St. Livermore

Date: 3-23-04

Project No.: 67076

Recorded by:

Well No.	Time	Well Elev. TOC	Depth to Groundwater	Measured Total Depth	Groundwater Elevation	Depth to Product	Product Thickness	Comments
mw-1	2:29		26.61	69.56				
mw-2	2:20	-	28.25	67.89				
mw-3	2:17		26.67	67.15				
mw-4	2:33		26.71	69.39				
mw-5	1:40	-	27.51	67.80				
mw-6	1:46	-	29.96	64.90				
mw-7	2:13	-	26.41	67.05				
mw-8	2:10	-	28.50	44.30				
mw-9	1:51	-	30.01	44.35				
mw-10	1:59	-	28.68	44.90				

Notes:

DOULOS ENVIRONMENTAL, INC. **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 Sampling Date: 3-23-04

Site: 1619 First St. Project No.:

Livermore, Ca. Well Designation: MW-2

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in the well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 4
Well cover type: 8" or 12" UV_____ 12" EMCO_____ 8" or 12" BK_____ 8" Christy_____
12" Christy_____ 8" M&D_____ 12" M&D_____ 12" DWP _____
12" CNI _____ 36" CNI _____ 12" Pomeco X Other: _____
General condition of wellhead assembly: Excellent _____ Good X Fair_____ Poor_____

Purging Equipment: _____2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer _____Centrifugal pump
Sampled with: Disposable bailer _____ Teflon bailer _____ Disposable Tubing_____

Well Diameter: 2" _____ 4" X 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 2:20
Depth of well: 67.89
Depth to water: 28.25

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: _____
Actual purge: NA

Start purge: NA Sampling time: 3:25

Time	Temperature	E.C.	pH	Turbidity	Volume
		NA	NA		

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (check all that apply) Note condition of replaced item(s)
2" Locking Cap: _____ Lock: _____ 7/32 Allenhead: _____
4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL, INC. **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 Sampling Date: 3-23-04

Site: 1619 First St. Project No.:

Livermore, Ca. Well Designation: MW-5

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in the well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 3
Well cover type: 8" or 12" UV _____ 12" EMCO _____ 8" or 12" BK X 8" Christy _____
12" Christy _____ 8" M&D _____ 12" M&D _____ 12" DWP _____
12" CNI _____ 36" CNI _____ 12" Pomeco _____ Other: _____
General condition of wellhead assembly: Excellent _____ Good X Fair _____ Poor _____

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 2" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer _____ Centrifugal pump
Sampled with: Disposable bailer X Teflon bailer _____ Disposable Tubing _____

Well Diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 1:40
Depth of well: 67.80
Depth to water: 27.51

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: _____
Actual purge: NA

Start purge: NA Sampling time: 2:49

Time	Temperature	E.C.	pH	Turbidity	Volume
		NA			

Sample appearance: clear Lock: Dolphin

Equipment replaced: (check all that apply) Note condition of replaced item(s)
2" Locking Cap: _____ Lock: _____ 7/32 Allenhead: _____
4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL, INC. **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 Sampling Date: 3-23-04

Site: 1619 First St. Project No.: _____

Livermore, Ca. Well Designation: MW-6

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in the well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 5
Well cover type: 8" or 12" UV____ 12" EMCO____ 8" or 12" BK____ 8" Christy____
12" Christy____ 8" M&D X 12" M&D____ 12" DWP ____
12" CNI____ 36" CNI____ 12" Pomeco____ Other: ____
General condition of wellhead assembly: Excellent____ Good X Fair____ Poor____

Purging Equipment: ____2" disposable bailer ____Submersible pump
____2" PVC bailer ____Dedicated bailer
____4" PVC bailer ____Centrifugal pump
Sampled with: Disposable bailer X Teflon bailer ____ Disposable Tubing____

Well Diameter: 2" X 4" ____ 6" ____ 8" ____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 1:46
Depth of well: 64.90
Depth to water: 29.96

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: ____
Actual purge: NA

Start purge: NA Sampling time: 2:40

Time	Temperature	E.C.	pH	Turbidity	Volume
		NA	NA		

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (check all that apply)
2" Locking Cap: ____ Lock: ____
4" Locking Cap: ____ Lock-Dolphin: ____
6" Locking Cap: ____

Note condition of replaced item(s)
7/32 Allenhead: ____
9/16 Bolt: ____
Pinned Allenhead (DWP): ____

Remarks: ____

Signature: ____

DOULOS ENVIRONMENTAL, INC. — **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 — Sampling Date: 3-23-04

Site: 1619 First St. — Project No.:

Livermore, Ca. — Well Designation: MW-7

Is setup of traffic control devices required? (NO) YES — time: _____ hours
Is there standing water in the well box? (NO) YES — Above TOC Below TOC
Is top of casing cut level? NO (YES) — If no, see remarks
Is well cap sealed and locked? NO (YES) — If no, see remarks
Height of well casing riser (in inches): 4
Well cover type: 8" or 12" UV X — 12" EMCO ____ — 8" or 12" BK ____ — 8" Christy ____
12" Christy ____ — 8" M&D ____ — 12" M&D ____ — 12" DWP ____
12" CNI ____ — 36" CNI ____ — 12" Pomeco ____ — Other: ____
General condition of wellhead assembly: Excellent ____ — Good X — Fair ____ — Poor ____

Purging Equipment: ____ 2" disposable bailer — ____ Submersible pump
____ 2" PVC bailer — ____ Dedicated bailer
____ 4" PVC bailer — ____ Centrifugal pump
Sampled with: Disposable bailer X — Teflon bailer ____ — Disposable Tubing ____

Well Diameter: 2" X (0.16) — 4" ____ (0.65) — 6" ____ (1.47) — 8" ____ (2.61) gal/ft.
Purge Vol. Multiplier:

Initial Measurement
Time: 2:13
Depth of well: 67.05
Depth to water: 26.41

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: ____
Actual purge: NA

Start purge: NA — Sampling time: 3:20

Time	Temperature	E.C.	pH	Turbidity	Volume
		NA	NA		

Sample appearance: clear — Lock: Dolphin

Equipment replaced: (check all that apply)
2" Locking Cap: ____
4" Locking Cap: ____
6" Locking Cap: ____
Lock: ____
Lock-Dolphin: ____
Note condition of replaced item(s)
7/32 Allenhead: ____
9/16 Bolt: ____
Pinned Allenhead (DWP): ____

Remarks: ____

Signature: ____

DOULOS ENVIRONMENTAL, INC. **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 Sampling Date: 3-23-04

Site: 1619 First St. Project No.: _____

Livermore, Ca. Well Designation: MW-8

_____

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in the well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 5
Well cover type: 8" or 12" UV_____ 12" EMCO_____ 8" or 12" BK_____ 8" Christy_____
12" Christy_____ 8" M&D_____ 12" M&D_____ 12" DWP_____
12" CNI_____ 36" CNI_____ 12" Pomeco_____ Other: 12
General condition of wellhead assembly: Excellent_____ Good X Fair_____ Poor_____

Purging Equipment: _____2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer _____Centrifugal pump
Sampled with: Disposable bailer X Teflon bailer _____ Disposable Tubing_____

Well Diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 2:10
Depth of well: 44.30
Depth to water: 28.50

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: _____
Actual purge: NA

Start purge: NA Sampling time: 2:55

Time	Temperature	E.C.	pH	Turbidity		Volume
		NA	NA			

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (check all that apply) Note condition of replaced item(s)
2" Locking Cap: _____ Lock: _____ 7/32 Allenhead: _____
4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

_____

Signature: _____

DOULOS ENVIRONMENTAL, INC. — **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 — Sampling Date: 3-23-04

Site: 1619 First St. — Project No.: _____

Livermore, Ca. — Well Designation: MW-9

Is setup of traffic control devices required? ~~NO~~ YES — time: _____ hours

Is there standing water in the well box? ~~NO~~ YES — Above TOC Below TOC

Is top of casing cut level? NO ~~YES~~ — If no, see remarks

Is well cap sealed and locked? NO ~~YES~~ — If no, see remarks

Height of well casing riser (in inches): 4

Well cover type: 8" or 12" UV_____ 12" EMCO_____ 8" or 12" BK_____ 8" Christy_____

12" Christy_____ 8" M&D_____ 12" M&D_____ 12" DWP _____

12" CNI_____ 36" CNI _____ 12" Pomeco_____ Other: T2

General condition of wellhead assembly: Excellent _____ Good X Fair_____ Poor_____

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump

_____ 2" PVC bailer _____ Dedicated bailer

_____ 4" PVC bailer _____ Centrifugal pump

Sampled with: Disposable bailer X Teflon bailer _____ Disposable Tubing_____

Well Diameter: 2" X 4" _____ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Time: 1:51

Depth of well: 44.35

Depth to water: 30.01

Recharge Measurement

Time: NA

Depth to water: NA

Calculated purge: _____

Actual purge: NA

Start purge: NA — Sampling time: 3:02

Time	Temperature	E.C.	pH	Turbidity	Volume
		N/A	A		

Sample appearance: clear — Lock: Dolphin

Equipment replaced: (check all that apply)

2" Locking Cap: _____

4" Locking Cap: _____

6" Locking Cap: _____

Lock: _____

Lock-Dolphin: _____

Note condition of replaced item(s)

7/32 Allenhead: _____

9/16 Bolt: _____

Pinned Allenhead (DWP): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL, INC. **SAMPLING INFORMATION SHEET**

Client: Tesoro 67076 Sampling Date: 3-23-04

Site: 1619 First St. Project No.: _____

Livermore, Ca. Well Designation: MW-10

_____

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in the well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 5
Well cover type: 8" or 12" UV_____ 12" EMCO_____ 8" or 12" BK_____ 8" Christy_____
12" Christy_____ 8" M&D_____ 12" M&D_____ 12" DWP _____
12" CNI _____ 36" CNI _____ 12" Pomeco_____ Other: TV
General condition of wellhead assembly: Excellent _____ Good X Fair_____ Poor_____

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 2" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer _____ Centrifugal pump
Sampled with: Disposable bailer X Teflon bailer _____ Disposable Tubing_____

Well Diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 1:59
Depth of well: 44.90
Depth to water: 28.68

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: _____
Actual purge: NA

Start purge: NA Sampling time: 3:16

Time	Temperature	E.C.	pH	Turbidity		Volume
						1
		NA	NA			

Sample appearance: clear Lock: OK

Equipment replaced: (check all that apply) Note condition of replaced item(s)
2" Locking Cap: _____ Lock: _____ 7/32 Allenhead: _____
4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

_____

Signature: _____

ENCLOSURE C

Laboratory Analytical Results With
Chain-of-Custody Documentation

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Subject : 7 Water Samples
Project Name : Tesoro
Project Number : 67076 Livermore
P.O. Number : AFE 023139615

Case Narrative

Matrix Spike/Matrix Spike Duplicate Results associated with samples MW-5, MW-7, MW-8, MW-9 and MW-10 for the analyte Methyl-t-butyl ether were affected by the analyte concentration already present in the un-spiked sample.

Approved By: Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-2** Matrix : Water Lab Number : 37613-01
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**5200**	20	ug/L	EPA 8260B	03/27/2004
Toluene	**1500**	20	ug/L	EPA 8260B	03/27/2004
Ethylbenzene	**1800**	20	ug/L	EPA 8260B	03/27/2004
Total Xylenes	**5000**	20	ug/L	EPA 8260B	03/27/2004
Methyl-t-butyl ether (MTBE)	**750**	20	ug/L	EPA 8260B	03/27/2004
Diisopropyl ether (DIPE)	**< 20**	20	ug/L	EPA 8260B	03/27/2004
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	03/27/2004
Tert-amyl methyl ether (TAME)	**34**	20	ug/L	EPA 8260B	03/27/2004
Tert-Butanol	**< 200**	200	ug/L	EPA 8260B	03/27/2004
Methanol	**< 2000**	2000	ug/L	EPA 8260B	03/27/2004
Ethanol	**< 200**	200	ug/L	EPA 8260B	03/27/2004
1,2-Dichloroethane	**< 20**	20	ug/L	EPA 8260B	03/27/2004
1,2-Dibromoethane	**< 20**	20	ug/L	EPA 8260B	03/27/2004
TPH as Gasoline	**45000**	2000	ug/L	EPA 8260B	03/27/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	03/27/2004
4-Bromofluorobenzene (Surr)	108		% Recovery	EPA 8260B	03/27/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-5** Matrix : Water Lab Number : 37613-02
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2.3**	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	**1.0**	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	**5.9**	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	**2.4**	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	**440**	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	95.4		% Recovery	EPA 8260B	03/25/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-6** Matrix : Water Lab Number : 37613-03
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1400**	20	ug/L	EPA 8260B	03/26/2004
Toluene	**71**	20	ug/L	EPA 8260B	03/26/2004
Ethylbenzene	**1500**	20	ug/L	EPA 8260B	03/26/2004
Total Xylenes	**2000**	20	ug/L	EPA 8260B	03/26/2004
Methyl-t-butyl ether (MTBE)	**7500**	20	ug/L	EPA 8260B	03/26/2004
Diisopropyl ether (DIPE)	**< 20**	20	ug/L	EPA 8260B	03/26/2004
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	03/26/2004
Tert-amyl methyl ether (TAME)	**66**	20	ug/L	EPA 8260B	03/26/2004
Tert-Butanol	**< 200**	200	ug/L	EPA 8260B	03/26/2004
Methanol	**< 2000**	2000	ug/L	EPA 8260B	03/26/2004
Ethanol	**< 200**	200	ug/L	EPA 8260B	03/26/2004
1,2-Dichloroethane	**< 20**	20	ug/L	EPA 8260B	03/26/2004
1,2-Dibromoethane	**< 20**	20	ug/L	EPA 8260B	03/26/2004
TPH as Gasoline	**24000**	2000	ug/L	EPA 8260B	03/26/2004
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	03/26/2004
4-Bromofluorobenzene (Surr)	98.7		% Recovery	EPA 8260B	03/26/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-7** Matrix : Water Lab Number : 37613-04
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	96.8		% Recovery	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	93.8		% Recovery	EPA 8260B	03/25/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-8** Matrix : Water Lab Number : 37613-05
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	98.5		% Recovery	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	93.5		% Recovery	EPA 8260B	03/25/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-9** Matrix : Water Lab Number : 37613-06
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**8.5**	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	**4.9**	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	**0.95**	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	**18**	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	**760**	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	94.2		% Recovery	EPA 8260B	03/25/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 37613
Date : 04/01/2004

Project Name : **Tesoro**
Project Number : **67076 Livermore**

Sample : **MW-10** Matrix : Water Lab Number : 37613-07
Sample Date :03/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	93.3		% Recovery	EPA 8260B	03/25/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 37613

Date : 04/01/2004

QC Report : Method Blank Data

Project Name : **Tesoro**

Project Number : **67076 Livermore**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	< 50	50	ug/L	EPA 8260B	03/25/2004
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	98.0		%	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	03/25/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/26/2004
Methanol	< 50	50	ug/L	EPA 8260B	03/26/2004
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	03/26/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/26/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/26/2004
Toluene - d8 (Surr)	101		%	EPA 8260B	03/26/2004
4-Bromofluorobenzene (Surr)	107		%	EPA 8260B	03/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/25/2004
Methanol	< 50	50	ug/L	EPA 8260B	03/25/2004
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	03/25/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/25/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/25/2004
Toluene - d8 (Surr)	96.9		%	EPA 8260B	03/25/2004
4-Bromofluorobenzene (Surr)	96.2		%	EPA 8260B	03/25/2004

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 37613

Date : 04/01/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Tesoro**

Project Number : **67076 Livermore**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	37623-03	<0.50	39.8	40.0	39.5	39.9	ug/L	EPA 8260B	3/25/04	99.3	99.7	0.409	70-130	25
Toluene	37623-03	<0.50	39.8	40.0	40.8	40.7	ug/L	EPA 8260B	3/25/04	103	102	0.940	70-130	25
Tert-Butanol	37623-03	<5.0	199	200	206	204	ug/L	EPA 8260B	3/25/04	104	102	1.43	70-130	25
Methyl-t-Butyl Ether	37623-03	0.81	39.8	40.0	41.2	41.3	ug/L	EPA 8260B	3/25/04	102	101	0.580	70-130	25
Benzene	37658-07	79	40.0	40.0	116	112	ug/L	EPA 8260B	3/26/04	92.6	84.3	9.41	70-130	25
Toluene	37658-07	<0.50	40.0	40.0	41.0	39.9	ug/L	EPA 8260B	3/26/04	102	99.7	2.66	70-130	25
Tert-Butanol	37658-07	88	200	200	291	293	ug/L	EPA 8260B	3/26/04	101	102	0.947	70-130	25
Methyl-t-Butyl Ether	37658-07	220	40.0	40.0	258	258	ug/L	EPA 8260B	3/26/04	102	102	0.0397	70-130	25
Benzene	37586-01	<0.50	40.0	40.0	42.2	41.1	ug/L	EPA 8260B	3/25/04	106	103	2.67	70-130	25
Toluene	37586-01	<0.50	40.0	40.0	41.0	40.0	ug/L	EPA 8260B	3/25/04	102	99.9	2.52	70-130	25
Tert-Butanol	37586-01	73	200	200	292	304	ug/L	EPA 8260B	3/25/04	110	116	5.14	70-130	25
Methyl-t-Butyl Ether	37586-01	280	40.0	40.0	335	340	ug/L	EPA 8260B	3/25/04	140	153	8.30	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 37613

Date : 04/01/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **Tesoro**

Project Number : **67076 Livermore**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	3/25/04	99.4	70-130
Toluene	40.0	ug/L	EPA 8260B	3/25/04	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/25/04	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/25/04	102	70-130
Benzene	40.0	ug/L	EPA 8260B	3/26/04	102	70-130
Toluene	40.0	ug/L	EPA 8260B	3/26/04	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/26/04	98.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/26/04	99.9	70-130
Benzene	40.0	ug/L	EPA 8260B	3/25/04	103	70-130
Toluene	40.0	ug/L	EPA 8260B	3/25/04	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/25/04	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/25/04	108	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Lab No. 37613 Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Jim Brownell

EDF Report? [X] Yes [ ] No

Company/Address: Delta Env. Sac.

Recommended but not mandatory to complete this section:

Sampling Company Log Code: DEIO

Phone No.: 638-2765 FAX No.: 638-8385

Global ID: T0600101410

Project Number: 67076 Livermore P.O. No.: AFE 023139615

EDF Deliverable to (Email Address): jbrownell@deltaenv.com

Project Name: Tesoro

Project Address: Livermore

Sampler Signature (below): Edgar Palmeta

Analysis Request

Sample Designation	Sampling: Date	Sampling: Time	Container: 40 ml VOA	Container: SLEEVE	Preservative: HCl	Preservative: HNO_3	Preservative: ICE	Preservative: NONE	Matrix: WATER	Matrix: SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	TAT: 12 hr/24 hr/48 hr/72 hr/1 wk	For Lab Use Only
MW-2	3-23-04	3:25	3		X		X		X								X			X				START	01
MW-5		2:49																							02
MW-6		2:40																							03
MW-7		3:20																							04
MW-8		2:55																							05
MW-9		3:07																							06
MW-10		3:16																							07

	Date	Time		
Relinquished by:			Received by:	Remarks:
Relinquished by:			Received by:	
Relinquished by:	Date: 032404	Time: 1200	Received by Laboratory: N. SOSA / KIFF ANALYTICAL	Bill to: ROB DONOVAN

Distribution: White - Lab, Pink - Originator

Forms/coc 121001.fh9