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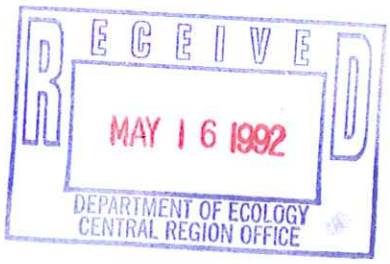
24 April 1992

Chevron U.S.A., Inc.
P.O. Box 220
Seattle, WA 98111

S-1038

Attention: Mr. David W. Bush



Subject: Fuel Oil UST, Used Oil USTand Dry Well Removal
and Excavation of Soil
Chevron Service Station No. 9-3883
1602 Terrace Heights Road
Yakima, Washington

Mr. Bush:

RZA AGRA, Inc. is pleased to present this letter report of our observations of the removal of the fuel oil UST, used oil UST and dry well and the results of soil sampling services performed at the above referenced site. Authorization for our participation in this project was provided by Mr. Phil Briggs in his letter dated 28 February 1992 and subsequent release number 7081650. This report has been prepared for the exclusive use of Chevron U.S.A., Inc. and their agents, for specific application to the referenced scope of services in accordance with generally accepted environmental monitoring practices.

PROJECT DESCRIPTION

The project site is located at 1602 Terrace Heights Road in Yakima, Washington. The purpose of our work was to: observe and document the removal of the fuel oil tank, used oil tank and dry well; collect soil samples within the excavated areas to document post-removal soil conditions; submit soil samples to an analytical laboratory for analysis of petroleum hydrocarbons and purgeable organics; and to install a monitoring well in the fuel oil tank excavation. One excavation was accomplished for the removal of the used oil tank and fuel oil tank and another for the removal of the dry well and associated hydrocarbon stained soils. Location of the units to be removed is presented in Figure 1, Site and Exploration Plan. Figure 2 depicts the approximate limits of the excavations and location of the stockpiled soils accumulated during this project.

DRY WELL, FUEL OIL TANK AND USED OIL TANK REMOVAL OPERATIONS

At the request of Chevron U.S.A., Inc., RZA AGRA arrived at the subject site on 5 March 1992 to observe and document the removal of the fuel oil tank, used oil tank and dry well and perform soil sampling within the excavations. Removal of the concrete, excavation of soils and removal of the tanks was performed by SME of Seattle, Washington. Excavation and tank removal procedures were accomplished with a 490 D John Deere track mounted excavator. Also used to break the concrete pad was a 100 pound jackhammer. The fuel oil tank and dry well were removed on 5 March 1992. The used oil tank was removed on 16 March 1992.

Dry Well Excavation

The initial dry well excavation was approximately 32 feet wide by 23 feet long and approximately 10 feet in depth except directly beneath the dry well which was excavated to a depth of 15 feet. Soils located directly below the dry well were later excavated to a depth of 15 feet. Upon visual observation during the excavation process, a heavily stained area located along the seal of the top and second stand pipe was noted. Another hydrocarbon stained area, generated from a different source located under the building, was also visible beneath the foundation of the building. These two potential source areas resulted in the area of stained soil depicted in Figure 3. No other areas of stained soil were observed in the excavation.

The soils exposed in the excavation consisted of a one foot thick (dense), damp, brown, gravelly SAND with some silt overlain by a thin asphalt layer. At one foot in depth a 0.5 foot thick (dense), damp, black, gravelly silty SAND with cobbles was observed, underlain by a one foot thick (very dense), damp, brown, cobbly SAND which was present above the 2.5 foot thick black hydrocarbon stained cobbly silty SAND which exhibited a hydrocarbon-like odor. Vapors from these soils registered 10 to 40 parts per million (ppm) in the ambient air when measured with a field OVM during excavation. This stained horizon was present from approximately 2 1/2 feet to 5 feet in depth. The hydrocarbon stained zone was located directly above a 1 to 2 foot thick fill layer that consisted of burnt wood, organics, and other debris. Beneath this organic layer, from a depth of 6 to 7 feet, occurred a (dense), brown/black, sandy coarse GRAVEL with hydrocarbon staining in places in the immediate vicinity of the dry well. A (medium dense to dense), brown, gravelly SAND was encountered below this to the full depths explored (15 feet below the ground surface directly below the dry well). Groundwater was encountered at a depth of approximately 14 feet below the existing ground surface. All soils encountered in the excavation were classified as fill material due to the presence of burnt logs, lumber and other scattered debris such as bottles.

Fuel Oil/Used Oil Excavation

The fuel oil tank was removed on 5 March 1992. Upon the request of Chevron U.S.A., Inc., a representative of RZA AGRA returned to the site on 16 March 1992 to observe the removal of the used oil tank. The tank pit excavation was approximately 17 feet by 17 feet and was excavated to a depth of approximately 11 feet from the ground surface (directly below the used oil tank location) and 15 feet in depth (directly below the fuel oil tank location). A schematic of the excavation and cross sections is presented in Figure 4.

Upon visual observation of the fuel oil tank, two holes approximately 0.1 to 0.2 inches in diameter were present at the tank corner. The holes were located approximately half way down the tank on the northwest corner, the end that faced towards the building. This would place the holes at approximately 5 feet in depth beneath the ground surface. Visual observation of the used oil tank showed no apparent holes other than the designed fill and vent ports. Both UST's removed from the excavation exhibited surface rust and scaling. The used oil tank was removed because of the condition observed of the fuel oil tank and that the used oil tank was approximately the same age of the removed fuel oil tank containing the small holes.

The soils exposed in the excavations consisted of a one foot thick pea gravel layer beneath a 6-inch thick concrete platform. A (dense), light to dark brown, damp, fine sandy coarse GRAVEL with cobbles is present beneath the pea gravel layer at a depth of 1.5 to 5 feet beneath the ground surface. From a depth of 5 to 5.8 feet below the ground surface, an old fill layer consisting of mostly burnt wood, wood and debris in a fine sand matrix was observed. Below this fill layer, a (medium dense), brown, silty sand with some gravel existed to a depth of approximately 15 1/2 feet. A (medium stiff) saturated blue silty CLAY and SILT is located below the silty SAND. Groundwater was encountered at a depth of approximately 14 1/2 feet below the existing site grade. Soils directly above the water interface exhibit a strong petroleum hydrocarbon-like odor. Slight odors could also be detected in the soils below the fuel oil tank. It should be noted that reference to odor should be considered subjective data since the ability to detect odors can vary with observer fatigue and climatic factors such as temperature, moisture and wind direction.

SOIL SAMPLING PROCEDURES

Discrete soil samples were collected from selected areas of the excavations completed at the subject site. At each sample location, a representative portion of soil from a freshly exposed "native" soil surface was placed directly into a laboratory prepared glass container. Field headspace measurements were immediately

obtained in the field on each sample by placing a foil cover over the sample jars, securing the teflon lid, and shaking the sample vigorously for a minimum of 15 seconds. The probe of the OVM was then immediately plunged through the foil cover and the highest digital value recorded for each sample. Sample location descriptions and OVM field measurements are presented in Table 1. Location of samples collected are depicted on Figure 3 and Figure 4. After field headspace measurements were obtained, the containers were then sealed with Teflon-lined threaded caps and stored in a chilled ice chest. Samples were shipped to Analytical Technologies, Inc. of Renton, Washington under chain of custody procedures. All samples obtained for this study were analyzed for total petroleum hydrocarbons (TPH) by EPA Method 418.1 and Washington HCID Method. In addition to the TPH analyses, the following testing program was utilized on samples obtained:

Soil Sample Location	Analytical Procedure
Beneath Fuel Oil Tank	BTEX by EPA Method 8020
Beneath Used Oil Tank	Metals by TCLP Method
Beneath Dry Well	Halogenated Volatiles by EPA 8010
	PCB's by EPA Method 8080
	Metals by TCLP Method

Lab certificates for analytical test results are presented in Appendix A and a summary of results is presented in Table 2.

Tank and Dry Well Excavations

Following the removal of the fuel oil tank, used oil tank, and dry well, the excavations were cleared of soils which showed obvious visual signs of staining. Discrete soil samples were then acquired from the limits of the excavations and a field head space measurement conducted on the sample collected. This test allowed a rough estimate of the presence of volatile aromatic hydrocarbons in the sample collected. If high values were displayed by the field organic vapor meter, the excavation was continued. The final excavation for the dry well removal measured approximately 32 feet by 23 feet by 10 feet deep in the general excavation. Soils located directly below the dry were excavated to a depth of about 15 feet below site grade. The final tank pit excavation measured 17 feet by 17 feet and excavated to a depth of approximately 11 feet deep directly beneath the used oil tank and 15 feet beneath the fuel oil tank.

Six soil samples were collected from the dry well excavation. Four samples from the excavation walls and one from three feet beneath the bottom of the dry well (11 feet beneath the ground surface), and one at the depth of the groundwater interface beneath the dry well at approximately 14 1/2 feet. Six samples were collected from the initial fuel oil tank excavation. Four samples were collected from the excavation sidewalls and one two feet beneath the fuel oil tank (approximately 9 feet below the ground surface) and one from 6 feet beneath the tank near the groundwater interface (approximately 14 feet below the ground surface). When the excavation was extended to remove the used oil tank, one sample was collected on the west sidewall and one was collected 2 feet beneath the tank (approximately 9 feet below ground surface). All influent pipes to the used oil tank and dry well were plugged with concrete after completion of the excavation. The garage floor sump within the building used to recover used oil, was also closed and concreted in during this project.

RESULTS OF ANALYTICAL TESTING

Dry Well Excavation

Six soil samples were collected from the dry well excavation. Four samples were collected from the sidewalls of the excavation and two collected from selected depths beneath the bottom of dry well. Samples collected from the east, south and west sidewalls exhibited nondetectable concentrations of TPH by EPA Method 418.1. The sample (DWS-3) collected from the north sidewall, from the stained horizon described above beneath the building at a depth of about 3 feet, exhibited a TPH concentration of 12,000 ppm (by EPA 418.1). Samples collected beneath the dry well to a depth of 14 1/2 feet beneath the site grade exhibited detectable concentrations of TPH by EPA Method 418.1 (DWS-1 = 260 ppm and DWS-2 = 29 ppm). Sample DWS-1 was collected 3 feet below the dry well and sample DWS-2 was collected near the groundwater interface approximately 6 feet below the bottom of the dry well. The TPH concentration exhibited by the sample collected at 14 1/2 feet was below the Model Toxics Control Act (MTCA) Method A compliance cleanup levels (CCL) of 200 ppm. Four of the five samples collected from the limits of the excavation exhibited TPH concentrations below MTCA CCL. These samples were DWS-2 (14 1/2 feet at bottom of excavation), DWS-4 (from west wall), DWS-5 (from south wall), DWS-6 (from east wall). Further excavation of soil containing TPH concentrations on the north wall could not be completed do to potential undercutting of the structure. Based on this criteria, the excavation was then backfilled with new fill material. EPA Method 418.1 results are presented on Figure 3.

TPH concentrations above MTCA CCL, as determined by Washington HCID method, were detected only in sample DWS-3, located beneath the service station building. Soil sample DWS-3 also exhibited concentrations of 1,000 ppm by TPH-G and 410 ppm by TPH-D. Samples DWS-1 and DWS-2, collected from beneath the dry well, and samples DWS-4, DWS-5 and DWS-6 collected from the limits of the excavation, exhibited TPH concentrations below method detection by HCID methods.

Soil sample DWS-1 and DWS-2, collected from below the dry well, were also analyzed for PCB, volatile organics and TCLP metals. Both samples exhibited non-detectable concentrations of PCB. Sample DWS-1 exhibited non-detectable concentrations of volatile organics while sample DWS-2 exhibited a detectable concentration of 0.035 ppm dichlorobenzene. Both samples exhibited non-detectable concentrations of TCLP metals except for barium (Ba). Sample DWS-1 exhibited a leachable barium concentration of 0.13 ppm. The above listed detections are below the criteria for dangerous waste as presented in WAC 173-303-090.

Fuel Oil and Used Oil Excavation

Eight soil samples were collected from the fuel oil and used oil tank excavation and sent to ATI laboratories for analytical testing. All samples were analyzed for heavy oils by EPA Method 418.1. Soil samples (FOS-1 through FOS-4) collected from the four original sidewalls of the initial fuel oil tank excavation exhibited nondetectable concentrations of TPH. Samples collected beneath the fuel oil tank (FOS-5 and FOS-6) at depths of 9 and 14 feet below ground surface exhibited TPH concentrations of 520 ppm and 3,500 ppm, respectively. The TPH test results and sample locations are depicted on Figure 4.

The excavation was later enlarged to the west to remove the used oil tank. One sample (W.O.-1) was collected from the newly exposed west excavation wall near monitoring well MW-3. Soil collected at this location exhibited a TPH concentration of 25 ppm. One sample (W.O.-2) was also obtained approximately 2 feet below the used oil tank (9 feet below the ground surface). This sample exhibited a heavy oil concentration of 1,300 ppm. Soils were excavated to a depth of 11 feet below the ground surface, 2 feet below sample W.O.-2. The four wall samples obtained from the limits of the excavation exhibited TPH concentrations below MTCA CCL. These samples were W.O.-1 (from west excavation wall), FOS-1 (from north excavation wall), FOS-2 (from east excavation wall), and FOS-3 (from south excavation wall). Soils beneath the fuel oil tank were excavated to the groundwater interface at a depth of about 15 feet below existing site grade. Based on this criteria the excavation was then backfilled with clean fill material.

TPH concentrations, as determined by Washington HCID method (WTPH-G and WTPH-D), were detected in samples FOS-5 (190 ppm diesel, 48 ppm gasoline) and FOS-6 (4,800 ppm diesel, 340 ppm gasoline). The TPH concentrations exhibited by sample FOS-6 are above the MTCA Method A CCL's for TPH in soils of 200 ppm diesel and 100 ppm gasoline. Sample FOS-5 exhibited BTEX concentrations below method detection limits and sample FOS-6 exhibited BTEX concentrations as follows: (benzene = ND, toluene = 0.031 ppm, ethylbenzene = 0.068 ppm, xylene = 0.26 ppm). The exhibited BTEX concentrations are below MTCA CCL's for these compounds

Soil sample WO-2, collected from beneath the used oil tank, was also analyzed for TPH by HCID and TPH-G/TPH-D, BTEX and TCLP metals. Sample WO-2 exhibited detectable concentrations of TPH-D (1,200 ppm), TPH-G (73 ppm), TCLP barium (0.26 ppm) and TCLP lead (0.12 ppm). The TPH-D detection is above the MTCA Method A CCL of 200 ppm while the leachable metal concentration are below the Dangerous Waste criteria presented in WAC 173-303-090.

Excavation and Stockpiled Soils

Based on the results of soil sampling analyses, and the visual observation of the amount and extent of the stained zone, further excavation was limited by possible damage to the existing building in the dry well excavation and groundwater encountered at depth in both excavations. Soils which were excavated were stockpiled in the southeast corner of the property and separated into overburden soils, fuel oil excavation soils, used oil excavation soils, and dry well excavation soils. Approximately 325 yards of soil were removed for the excavations. Four samples (SP-1 through SP-4) were obtained from the stockpiled soils for purpose of disposal characterization. Results from analytical testing are presented on Table 2. Arrangements are currently being made for disposal of the excavated soils.

Groundwater Sampling

One groundwater sample was obtained from monitoring well MW-3 located between the fuel oil/used oil excavation and dry well excavation. The sample obtained was analyzed for the volatile aromatics benzene, toluene, ethylbenzene and xylene (BTEX), TPH by EPA Methods 418.1 and 8015 Modified, halogenated volatiles by EPA Method 8010, and dissolved lead by EPA Method 7421.

BTEX concentrations in the sample obtained were below method detection. Groundwater collected exhibited TPH concentrations of 5.0 ppm (by EPA Method 418.1), 8 ppm gasoline and 100 ppm diesel (by EPA Method 8015 Modified). Dissolved lead, as determined by EPA Method 7421, was determined to be 0.0037 ppm. The lead concentration exhibited is below the MTCA CCL of 0.005 ppm for lead in groundwater while the TPH concentrations are above MTCA CCL of 1.0 ppm in groundwater.

Additional Well Installation

One additional monitoring well was installed within the existing fuel oil tank excavation to enable monitoring of the groundwater beneath the removed tanks. An as-built diagram of the well constructed is attached as Figure 5 to this letter. The well was installed within five feet of pea gravel at the bottom of the excavation. The remainder of the excavation was then filled with 'pit run' fill, while a bentonite plug was constructed around the well. No groundwater sample was collected from the new monitoring well.

CONCLUSIONS

The fuel oil tank, used oil tank and dry well were successfully removed from the site during recent remedial activities. Observations made at the time of removal indicate the structural integrity of the fuel oil tank was comprised by two small holes located on the north end of the tank.

Sampling and analysis of soils remaining in the excavation sidewalls indicate petroleum hydrocarbon concentrations below the MTCA Method A CCL's, except along the north wall of the dry well excavation where further soil removal would undermine the building. Sampling and analysis of soils remaining in the bottoms of the excavations indicate petroleum hydrocarbon concentrations below MTCA CCL's in the dry well excavation and TPH concentration above MTCA CCL's in the fuel oil/used oil tank excavation, which was completed to the groundwater interface at a depth of approximately 14 feet below existing site grade.

A water sample collected from monitoring well MW-3, located between the dry well and fuel oil used oil tank excavations, exhibited upon analysis TPH concentrations above the MTCA CCL for TPH in groundwater.

Approximately 325 yards of soil was removed from the two excavations, separated and stockpiled on-site at the southeast corner of the property and are currently awaiting disposal.

We appreciate the opportunity to be of continued service to Chevron U.S.A., Inc. Should you have any questions regarding this report, please call us at your earliest convience.

Respectfully submitted,
RZA AGRA, Inc.

Eugene N.J. St.Godard
Senior Geologist

Jon N. Sondergaard, P.G.
Associate

Enclosures:
Table 1: Summary of Sample Location & Field OVM Reading
Table 2: Summary of Analytical Test Results
Figure 1: Site and Exploration Plan
Figure 2: Excavated Areas
Figure 3: Dry Well Excavation & Sample Location
Figure 4: Used Oil/Fuel Tank Excavation
Figure 5: Monitoring Well Log
Appendix A: Laboratory Certificates

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Yakima Chevron
Chevron Station No. 3883
Yakima, Washington
Table 1: Summary of Sample Location & Field OVM Reading

Sample No.	Location	Depth from Surface (feet)	OVM Reading (ppm)
FOS-1	NORTH WALL FUEL OIL TANK EXCAVATION	5	0.0
FOS-2	EAST WALL FUEL OIL TANK EXCAVATION	5	0.0
FOS-3	SOUTH WALL FUEL OIL TANK EXCAVATION	5	0.0
FOS-4	WEST WALL FUEL OIL TANK EXCAVATION	5	0.0
FOS-5	2 FT. BELOW FUEL OIL TANK	9	40.6
FOS-6	6 FT. BELOW FUEL OIL TANK	14	58.8
WO-1	WEST WALL USED OIL TANK EXCAVATION	4	0.0
WO-2	2 FT. BELOW USED OIL TANK	9	28.6
DWS-1	3 FT. BELOW BOTTOM OF DRY WELL	11	10.8
DWS-2	6 FT. BELOW BOTTOM OF DRY WELL	14	48.1
DWS-3	NORTH WALL DRY WELL EXCAVATION	3	154.0
DWS-4	WEST WALL DRY WELL EXCAVATION	4	0.0
DWS-5	SOUTH WALL DRY WELL EXCAVATION	4	0.0
DWS-6	EAST WALL DRY WELL EXCAVATION	4	0.0
W-1	GROUNDWATER FROM MONITORING WELL MW-3	--	--
SPS-1	TANK PIT OVERBURDEN SOILS (UPPER 3 FT)	0 - 3'	1.0
SPS-2	EXCAVATED SOILS FROM FUEL OIL TANK EXCAVATION	3 - 14'	103.0
SPS-3	EXCAVATED SOILS FROM DRY WELL EXCAVATION	0 - 14'	35.5
SPS-4	EXCAVATED SOILS FROM DRY WELL EXCAVATION	0 - 8'	14.1

ppm = parts per million

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Table 2. Summary of Analytical Test Results (1)

Sample No.	Depth (ft)	Certificate	HCID (6)	TPH 418.1	WTPH-D/ WTPH-G	BTEX (7)	TCLP Metals	Dissolved Lead	PCB	Volatile Organics (8)
FOS-1	5	A-34, 63, 74	ND	ND						
FOS-2	5	A-35, 63, 74	ND	ND						
FOS-3	5	A-36, 63, 74	ND	ND						
FOS-4	5	A-37, 63, 74	ND	ND						
FOS-5	10	A-25, 38, 54, 63, 74	G/D	520	190(D)/48(G)	ND				
FOS-6	14	A-26, 39, 55, 63, 74	G/D	3500	4800(D)/340(G)	Yes(4)				
DWS-1	11	A-10, 15, 40, 63, 68, 74	ND	260			0.016 Ba		ND	ND
DWS-2	14	A-11, 16, 41, 63, 68, 74	ND	29			0.13 Ba		ND	0.035 DCB
DWS-3	3	A-42, 50, 56, 63, 74	G/D/H	12000	1,000(G)/410(D)					
DWS-4	4	A-43, 63, 74	ND	ND						
DWS-5	4	A-44, 48, 63, 74	ND	ND						
DWS-6	4	A-45, 49, 63, 74	ND	ND						
WO-1	4	A-82, 93, 101	H	25						
WO-2	9	A-83, 86, 90, 93, 98, 101	H	1300	1,200(D)/73(G)		0.26 Ba/0.12 Pb			
SPS-1		A-107, 113, 119, 125, 140, 151, 153, 154	D		620(D)	ND	0.44 Ba,0.23 Pb		ND	ND
SPS-2		A-108, 114, 120, 126, 132, 141, 146, 151, 153, 154	G/D/H	2400	670(G)/650(D)	Yes(5)	Yes(3)		ND	Yes(2)
SPS-3		A-109, 115, 121, 127, 133, 142, 146, 151, 153, 154	G/D	970	950(D)/73(G)	X=0.087	0.33 Ba,0.054 Pb		ND	ND
SPS-4		A-128, 134, 143, 146	G/D/H	650	38(G)/190(D)					
W-1		A-5, 21, 30, 71		5.0	8(G)/100(D)	ND		0.0037		ND

Note: 1) All results in mg/kg or mg/l unless noted

2) Chlorobenzene=0.32 mg/kg; 1,2-dichlorobenzene=4.3 mg/kg; 1,3-dichlorobenzene=0.16mg/kg; 1,4-dichlorobenzene=0.96 mg/kg; 1,2-dichloroethane=0.027 mg/kg.

3) Arsenic=0.094 mg/l; Barium=0.46 mg/l; Cadmium=0.0027 mg/l; lead=0.60 mg/l; Mercury = 0.00037.

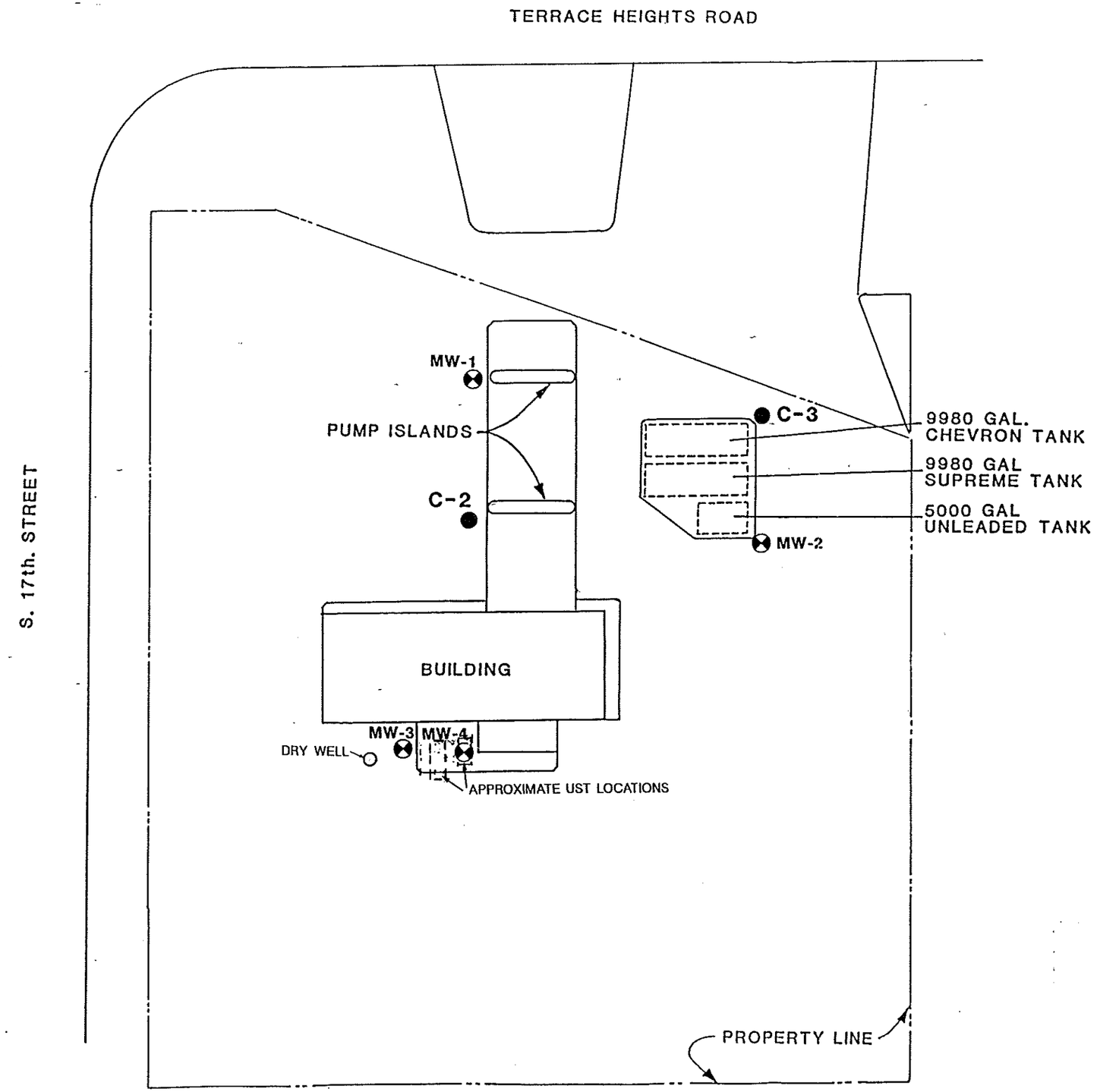
4) Benzene=ND; Toluene=0.031 mg/kg; Ehtyl benzene=0.068 mg/kg; Xylenes=0.26 mg/kg.

5) Benzene=ND; Toluene=0.067 mg/kg; Ethyl benzene=0.075 mg/kg; Xylenes=0.53 mg/kg.

6) G=Gasoline; D=Diesel; H= Heavier than diesel

7) X=xylenes

8) DCB=Dichlorobenzene



EXPLANATION

MW-3 INDICATES APPROXIMATE LOCATION OF MONITORING WELL

C-2 INDICATES APPROXIMATE LOCATION OF BORING

0 30 60

SCALE IN FEET

N

FIGURE 1

SITE AND EXPLORATION PLAN

Chevron Service Station No. 3883

Yakima, Washington

W.O. S-1038
BY ENJS
DATE MARCH 1992
SCALE NOTED

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Earth & Environmental Consultants
539 W. Sharp, Suite D
Spokane, WA 99201

RZA

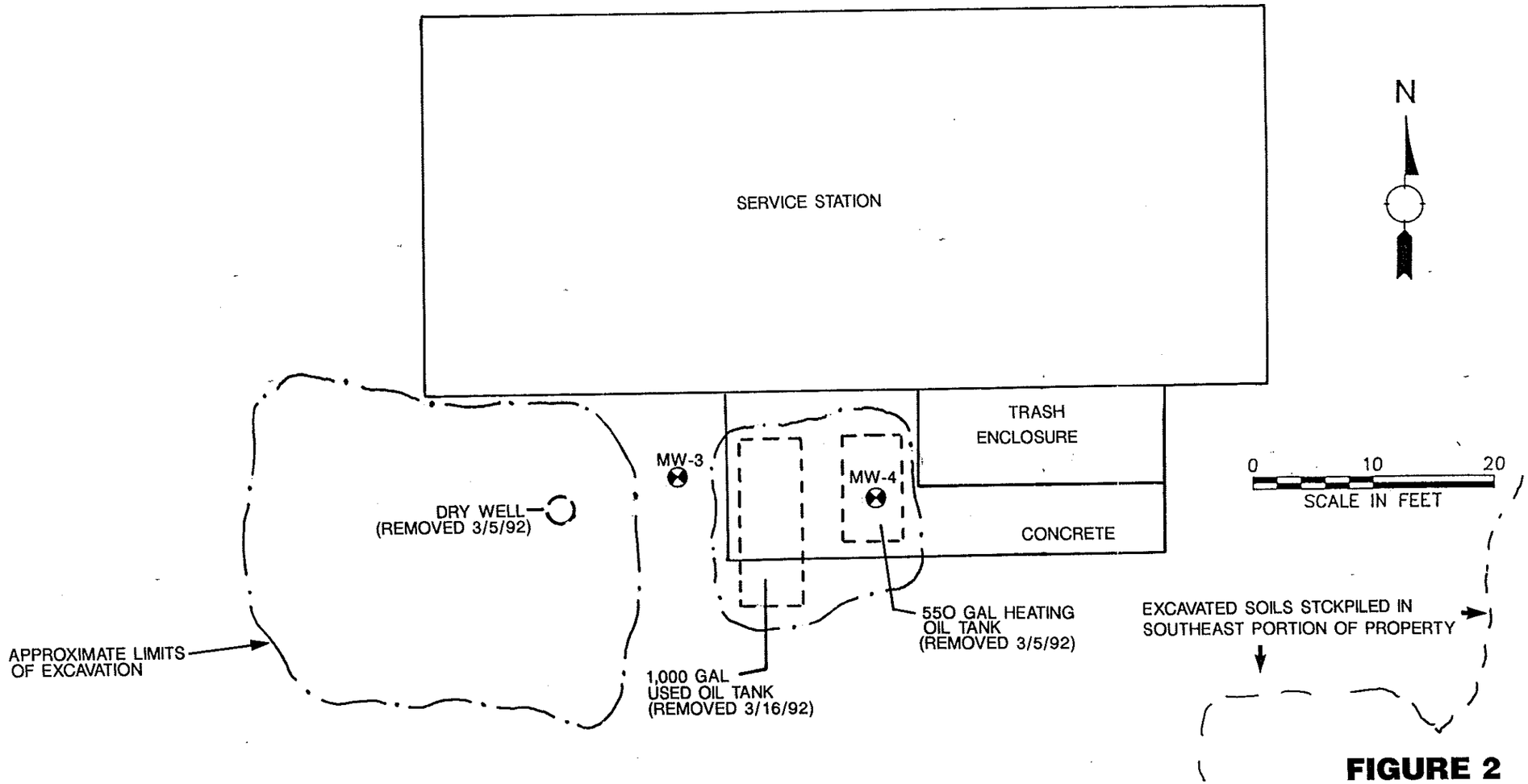

FIGURE 2

EXCAVATED AREAS

Chevron Service Station No. 3883

Yakima, Washington

W.O.	S-1038
BY	ENJS
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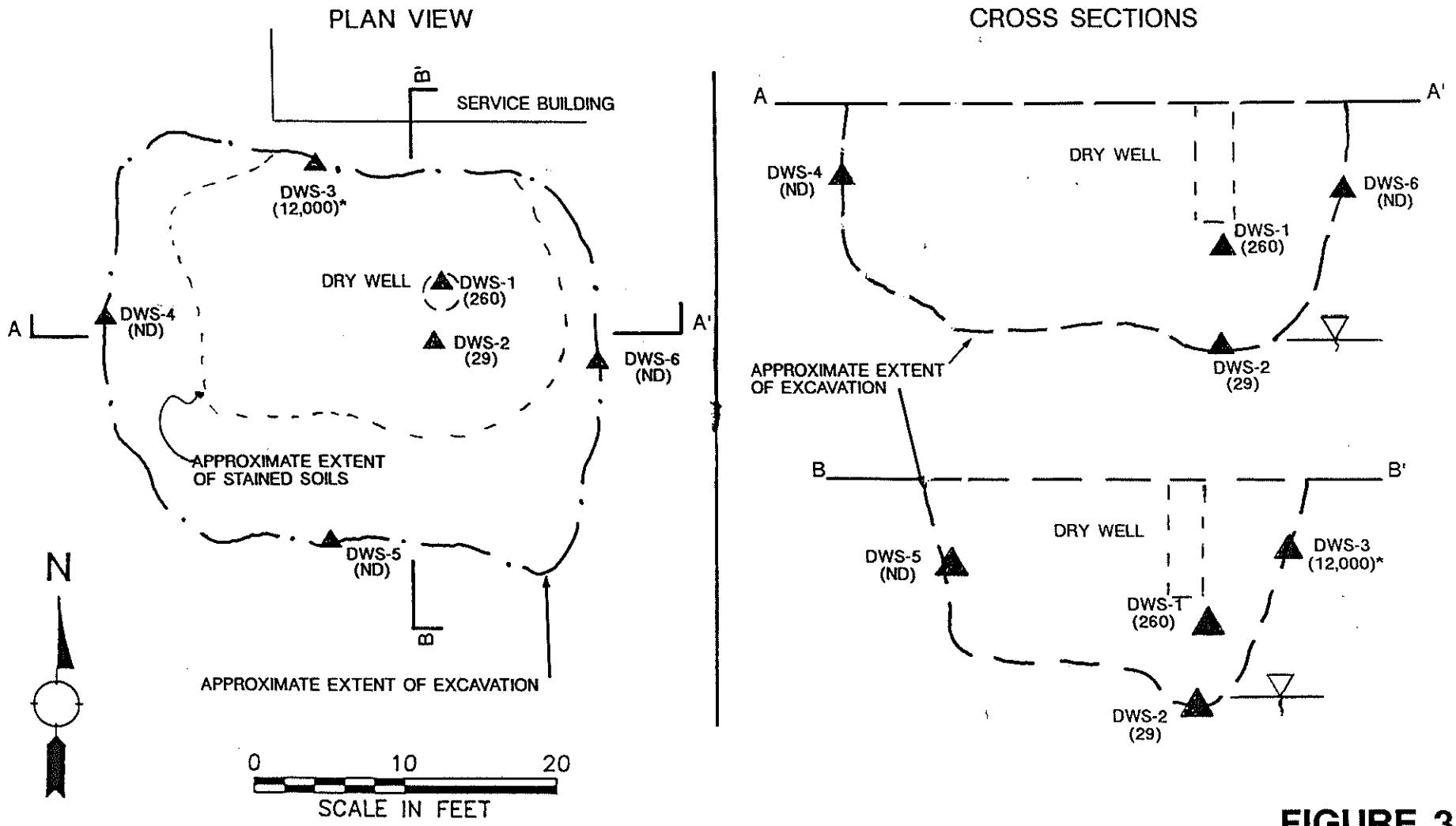

FIGURE 3

DRY WELL EXCAVATION AND SAMPLE LOCATION

STATIC WATER LEVEL

DWS-2 (29) APPROXIMATE SAMPLE LOCATION AND NUMBER
TPH (BY EPA 418.1) IN PPM

*TPH-G OR TPH-D ALSO DETECTED IN THIS SAMPLE

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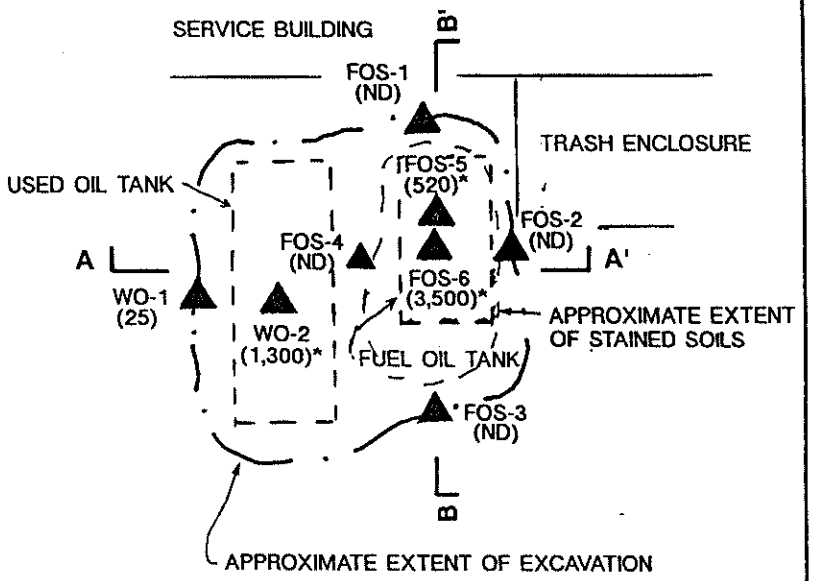
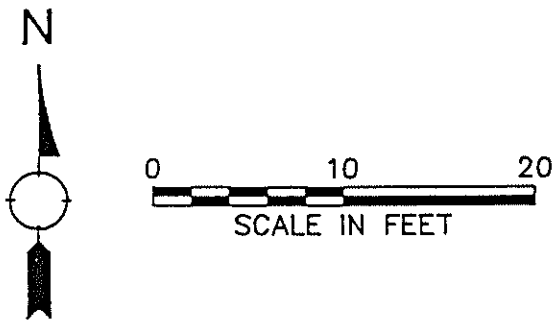
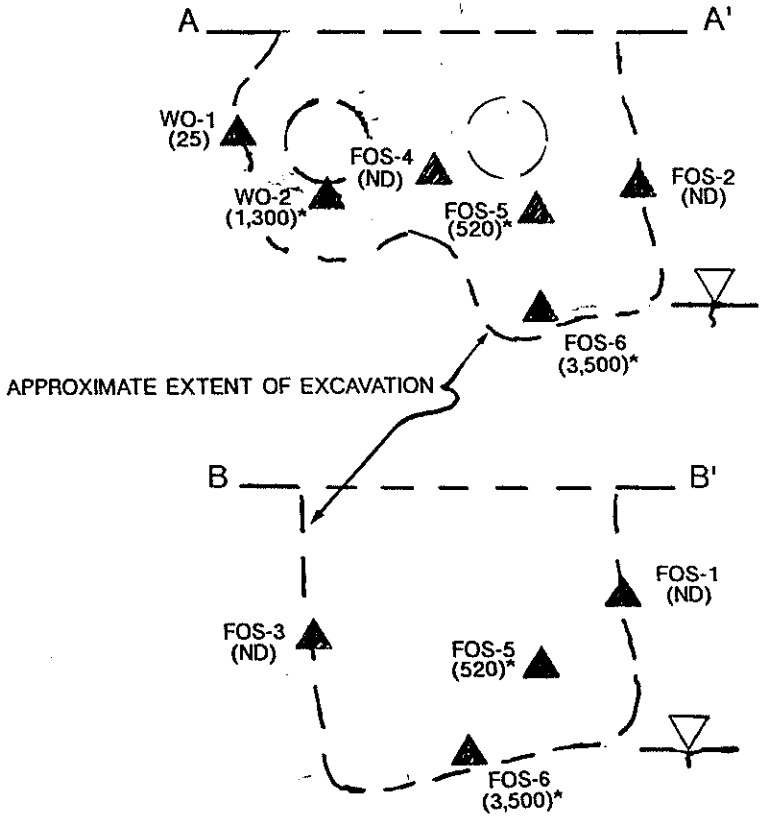
PLAN VIEW





CROSS SECTIONS



STATIC WAER LEVEL

FOS-5 (520)* APPROXIMATE SAMPLE LOCATION AND NUMBER TPH (BY EPA 418.1) IN PPM

*TPH-G OR TPH-D ALSO DETECTED IN SAMPLE

FIGURE 4

USED OIL/FUEL TANK EXCAVATION

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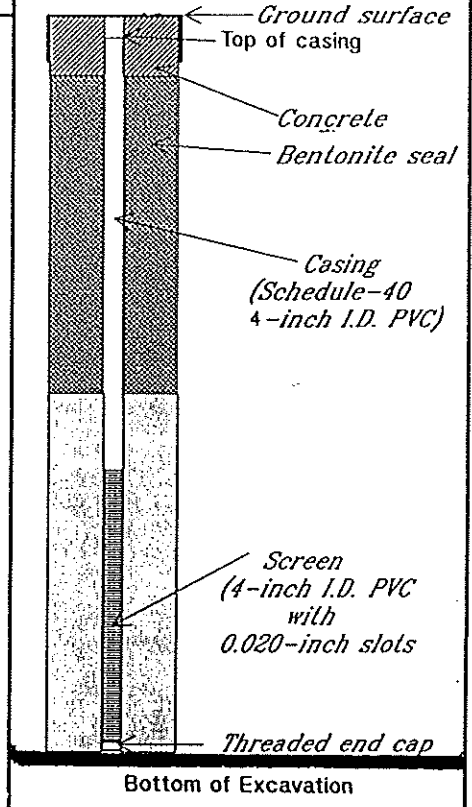
PROJECT *Yakima Chevron Station* W.O. *S-1038* WELL NO. *MW-4*

Elevation reference:
Ground surface elevation: Casing elevation:

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	GROUND WATER
0	0-6" CONCRETE PEA GRAVEL FILL				
	(dense) damp, light to dark brown, fine, sandy, coarse GRAVEL an COBBLES with some fine gravel. Matrix supported in places.				
5	damp, brown SAND with burnt wood and debris (FILL).				
	(medium demse), damp, brown SAND with some gravels.				
10					
	- hydrocarbon (fuel oil) odorodor 12 - 15 feet.				ATD
15	(medium stiff), blue SILT/CLAY. (unknown thickness)				
20					
25					
30					

AS-BUILT DESIGN



TESTING

LEGEND

I 2-inch O.D. split-spoon sample

ATD Observed groundwater level (ATD = at time of drilling)

RZA *RITTENHOUSE-ZEMAN & ASSOCIATES, INC. Geotechnical & Environmental Consultants*

WELL INSTALLED: 3/17/92

FIGURE 5

Logged by: ENJS

APPENDIX A

Analytical Technologies, Inc. 560 Naches Avenue, S.W., Suite 101, Renton, WA 98055, (206) 228-8335

ATI I.D. # 9203-054

April 2, 1992

RZA-AGRA
539 W. Sharp
Suite D
Spokane, WA 99201

Attention : Gene St.Godard

Project Number : S-1038

Project Name : Chevron Station 3883

On March 7, 1992, Analytical Technologies, Inc., received one water and 12 soil samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and quality control data are enclosed.

This report is a reissue. All data have been corrected for revised moisture data.

Karen L. Mixon
Senior Project Manager

Frederick W. Grothkopp
Laboratory Manager

FWG/hal/hbb/elf/ff

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054

SAMPLE CROSS REFERENCE SHEET

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9203-054-1	FO S-1	03/05/92	SOIL
9203-054-2	FO S-2	03/05/92	SOIL
9203-054-3	FO S-3	03/05/92	SOIL
9203-054-4	FO S-4	03/05/92	SOIL
9203-054-5	FO S-5	03/05/92	SOIL
9203-054-6	FO S-6	03/05/92	SOIL
9203-054-7	DW S-1	03/05/92	SOIL
9203-054-8	DW S-2	03/05/92	SOIL
9203-054-9	DW S-3	03/05/92	SOIL
9203-054-10	DW S-4	03/05/92	SOIL
9203-054-11	W-1	03/05/92	WATER
9203-054-12	DW S-5	03/06/92	SOIL
9203-054-13	DW S-6	03/06/92	SOIL

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	12
WATER	1

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of the report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

ANALYTICAL SCHEDULE

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ANALYSIS	TECHNIQUE	REFERENCE	LAB
PURGEABLE HALOCARBONS	GC/ELCD	EPA 8010	R
POLYCHLORINATED BIPHENYLS (PCBs)	GC/ECD	EPA 8080	R
BETX	GC/PID	EPA 8020	R
FUEL HYDROCARBONS	GC/FID	EPA 8015 MODIFIED	R
HYDROCARBON IDENTIFICATION	GC/FID	WA DOE WTPH-HCID	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-G	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-D	R
PETROLEUM HYDROCARBONS	IR	EPA 418.1	R
ETROLEUM HYDROCARBONS	IR	WA DOE WTPH-418.1 MODIFIED	R
TCLP PREPARATION	-	EPA 1311	R
ARSENIC	ICAP	EPA 6010	R
BARIUM	ICAP	EPA 6010	R
CADMIUM	ICAP	EPA 6010	R
CHROMIUM	ICAP	EPA 6010	R
LEAD	ICAP	EPA 6010	R
LEAD	AA/GF	EPA 7421	R
MERCURY	AA/COLD VAPOR	EPA 7470	R
SELENIUM	ICAP	EPA 6010	R
SILVER	ICAP	EPA 6010	R
MOISTURE	GRAVIMETRIC	CLP SOW ILMO1.0	R

R = ATI - Renton
D = ATI - San Diego
PHX = ATI - Phoenix
PNR = ATI - Pensacola
FC = ATI - Fort Collins
SUB = Subcontract

AnalyticalTechnologies,Inc

ATI I.D. # 9203-054

VOLATILE ORGANICS ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: N/A
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: WATER	UNITS	: mg/L
EPA METHOD	: 8010	DILUTION FACTOR	: 1

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.0002	ND
BROMOFORM	0.0002	ND
BROMOMETHANE	0.001	ND
CARBON TETRACHLORIDE	0.0002	ND
CHLOROBENZENE	0.0005	ND
CHLOROETHANE	0.001	ND
CHLOROFORM	0.0002	ND
CHLOROMETHANE	0.002	ND
1,2-DIBROMOETHANE (EDB)	0.0005	ND
1,2-DICHLOROBENZENE	0.0005	ND
1,3-DICHLOROBENZENE	0.0005	ND
,4-DICHLOROBENZENE	0.0005	ND
DIBROMOCHLOROMETHANE	0.0002	ND
1,1-DICHLOROETHANE	0.0002	ND
1,2-DICHLOROETHANE (EDC)	0.0002	ND
1,1-DICHLOROETHENE	0.0002	ND
CIS-1,2-DICHLOROETHENE	0.0002	ND
TRANS-1,2-DICHLOROETHENE	0.0002	ND
1,2-DICHLOROPROPANE	0.0002	ND
CIS-1,3-DICHLOROPROPENE	0.0002	ND
TRANS-1,3-DICHLOROPROPENE	0.0002	ND
METHYLENE CHLORIDE	0.002	ND
1,1,2,2-TETRACHLOROETHANE	0.0002	ND
TETRACHLOROETHENE	0.0002	ND
1,1,1-TRICHLOROETHANE	0.0002	ND
1,1,2-TRICHLOROETHANE	0.0002	ND
TRICHLOROETHENE	0.0002	ND
TRICHLOROFLUOROMETHANE	0.0005	ND
VINYL CHLORIDE	0.001	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	92

Analytical Technologies, Inc.

ATI I.D. # 9203-054-11

VOLATILE ORGANICS ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-1	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: WATER	UNITS	: mg/L
EPA METHOD	: 8010	DILUTION FACTOR	: 1

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.0002	ND
BROMOFORM	0.0002	ND
BROMOMETHANE	0.001	ND
CARBON TETRACHLORIDE	0.0002	ND
CHLOROBENZENE	0.0005	ND
CHLOROETHANE	0.001	ND
CHLOROFORM	0.0002	ND
CHLOROMETHANE	0.002	ND
1,2-DIBROMOETHANE (EDB)	0.0005	ND
1,2-DICHLOROBENZENE	0.0005	ND
1,3-DICHLOROBENZENE	0.0005	ND
1,4-DICHLOROBENZENE	0.0005	ND
DIBROMOCHLOROMETHANE	0.0002	ND
1,1-DICHLOROETHANE	0.0002	ND
1,2-DICHLOROETHANE (EDC)	0.0002	ND
1,1-DICHLOROETHENE	0.0002	ND
CIS-1,2-DICHLOROETHENE	0.0002	ND
TRANS-1,2-DICHLOROETHENE	0.0002	ND
1,2-DICHLOROPROPANE	0.0002	ND
CIS-1,3-DICHLOROPROPENE	0.0002	ND
TRANS-1,3-DICHLOROPROPENE	0.0002	ND
METHYLENE CHLORIDE	0.002	ND
1,1,2,2-TETRACHLOROETHANE	0.0002	ND
TETRACHLOROETHENE	0.0002	ND
1,1,1-TRICHLOROETHANE	0.0002	ND
1,1,2-TRICHLOROETHANE	0.0002	ND
TRICHLOROETHENE	0.0002	ND
TRICHLOROFLUOROMETHANE	0.0005	ND
VINYL CHLORIDE	0.001	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	97

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANICS ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
EPA METHOD : 8010
SAMPLE MATRIX : WATER

SAMPLE I.D. # : BLANK SPIKE
DATE EXTRACTED : N/A
DATE ANALYZED : 03/11/92
UNITS : mg/L

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
CHLOROBENZENE	ND	0.0080	0.00958	120	N/A	N/A	N/A
1,1-DICHLOROETHENE	ND	0.0080	0.00650	81	N/A	N/A	N/A
TRICHLOROETHENE	ND	0.0080	0.00904	113	N/A	N/A	N/A

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANICS ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-019-6
PROJECT #	: S-1038	DATE EXTRACTED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/11/92
EPA METHOD	: 8010	UNITS	: mg/L
SAMPLE MATRIX	: WATER		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
CHLOROBENZENE	ND	0.0080	0.00993	124	0.0103	129	4
1,1-DICHLOROETHENE	ND	0.0080	0.0104	130	0.0109	136	5
TRICHLOROETHENE	ND	0.0080	0.0102	127	0.0104	130	2

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

CASE NARRATIVE

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

CASE NARRATIVE: VOLATILE ORGANIC ANALYSIS

The methylene chloride value for the soil blank was given a "J" flag to indicate an estimated value below normal reporting limits. The methylene chloride value for 9203-054-8 (DW S-2) was given a "B" flag to indicate that the target was found in the associated blank.

There were no other problems associated with this sample set.

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054

VOLATILE ORGANICS ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/09/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.010	ND
BROMOFORM	0.010	ND
BROMOMETHANE	0.050	ND
CARBON TETRACHLORIDE	0.010	ND
CHLOROBENZENE	0.025	ND
CHLOROETHANE	0.050	ND
CHLOROFORM	0.010	ND
CHLOROMETHANE	0.10	ND
1,2-DIBROMOETHANE (EDB)	0.025	ND
1,2-DICHLOROBENZENE	0.025	ND
1,3-DICHLOROBENZENE	0.025	ND
,4-DICHLOROBENZENE	0.025	ND
DIBROMOCHLOROMETHANE	0.010	ND
1,1-DICHLOROETHANE	0.010	ND
1,2-DICHLOROETHANE (EDC)	0.010	ND
1,1-DICHLOROETHENE	0.010	ND
CIS-1,2-DICHLOROETHENE	0.010	ND
TRANS-1,2-DICHLOROETHENE	0.010	ND
1,2-DICHLOROPROPANE	0.010	ND
CIS-1,3-DICHLOROPROPENE	0.010	ND
TRANS-1,3-DICHLOROPROPENE	0.010	ND
METHYLENE CHLORIDE	0.10	0.061 J
1,1,2,2-TETRACHLOROETHANE	0.010	ND
TETRACHLOROETHENE	0.010	ND
1,1,1-TRICHLOROETHANE	0.010	ND
1,1,2-TRICHLOROETHANE	0.010	ND
TRICHLOROETHENE	0.010	ND
TRICHLOROFLUOROMETHANE	0.025	ND
VINYL CHLORIDE	0.050	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	82

J = Estimated value.

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-7

VOLATILE ORGANICS ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/09/92
CLIENT I.D.	: DW S-1	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.011	ND
BROMOFORM	0.011	ND
BROMOMETHANE	0.057	ND
CARBON TETRACHLORIDE	0.011	ND
CHLOROBENZENE	0.028	ND
CHLOROETHANE	0.057	ND
CHLOROFORM	0.011	ND
CHLOROMETHANE	0.11	ND
1,2-DIBROMOETHANE (EDB)	0.028	ND
1,2-DICHLOROBENZENE	0.028	ND
1,3-DICHLOROBENZENE	0.028	ND
,4-DICHLOROBENZENE	0.028	ND
DIBROMOCHLOROMETHANE	0.011	ND
1,1-DICHLOROETHANE	0.011	ND
1,2-DICHLOROETHANE (EDC)	0.011	ND
1,1-DICHLOROETHENE	0.011	ND
CIS-1,2-DICHLOROETHENE	0.011	ND
TRANS-1,2-DICHLOROETHENE	0.011	ND
1,2-DICHLOROPROPANE	0.011	ND
CIS-1,3-DICHLOROPROPENE	0.011	ND
TRANS-1,3-DICHLOROPROPENE	0.011	ND
METHYLENE CHLORIDE	0.11	ND
1,1,2,2-TETRACHLOROETHANE	0.011	ND
TETRACHLOROETHENE	0.011	ND
1,1,1-TRICHLOROETHANE	0.011	ND
1,1,2-TRICHLOROETHANE	0.011	ND
TRICHLOROETHENE	0.011	ND
TRICHLOROFLUOROMETHANE	0.028	ND
VINYL CHLORIDE	0.057	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	78

Analytical Technologies, Inc.

ATI I.D. # 9203-054-8

VOLATILE ORGANICS ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/09/92
CLIENT I.D.	: DW S-2	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT	
BROMODICHLOROMETHANE	0.011	ND	
BROMOFORM	0.011	ND	
BROMOMETHANE	0.054	ND	
CARBON TETRACHLORIDE	0.011	ND	
CHLOROBENZENE	0.027	ND	
CHLOROETHANE	0.054	ND	
CHLOROFORM	0.011	ND	
CHLOROMETHANE	0.11	ND	
1,2-DIBROMOETHANE (EDB)	0.027	ND	
1,2-DICHLOROBENZENE	0.027	0.033	
1,3-DICHLOROBENZENE	0.027	ND	
,4-DICHLOROBENZENE	0.027	ND	
DIBROMOCHLOROMETHANE	0.011	ND	
1,1-DICHLOROETHANE	0.011	ND	
1,2-DICHLOROETHANE (EDC)	0.011	ND	
1,1-DICHLOROETHENE	0.011	ND	
CIS-1,2-DICHLOROETHENE	0.011	ND	
TRANS-1,2-DICHLOROETHENE	0.011	ND	
1,2-DICHLOROPROPANE	0.011	ND	
CIS-1,3-DICHLOROPROPENE	0.011	ND	
TRANS-1,3-DICHLOROPROPENE	0.011	ND	
METHYLENE CHLORIDE	0.11	0.14	B
1,1,2,2-TETRACHLOROETHANE	0.011	ND	
TETRACHLOROETHENE	0.011	ND	
1,1,1-TRICHLOROETHANE	0.011	ND	
1,1,2-TRICHLOROETHANE	0.011	ND	
TRICHLOROETHENE	0.011	ND	
TRICHLOROFLUOROMETHANE	0.027	ND	
VINYL CHLORIDE	0.054	ND	

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	93

B = Analyte is found in the associated blank as well as the sample.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANICS ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/09/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
EPA METHOD	: 8010	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
CHLOROBENZENE	ND	0.400	0.492	123	N/A	N/A	N/A
1,1-DICHLOROETHENE	ND	0.400	0.367	92	N/A	N/A	N/A
TRICHLOROETHENE	ND	0.400	0.428	107	N/A	N/A	N/A

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANICS ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-054-7
PROJECT #	: S-1038	DATE EXTRACTED	: 03/09/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
EPA METHOD	: 8010	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
CHLOROBENZENE	ND	0.400	0.513	128	0.507	127	1
1,1-DICHLOROETHENE	ND	0.400	0.364	91	0.406	101	11
TRICHLOROETHENE	ND	0.400	0.449	112	0.443	111	1

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

PCB ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/13/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8080	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
PCB 1016	0.033	ND
PCB 1221	0.033	ND
PCB 1232	0.033	ND
PCB 1242	0.033	ND
PCB 1248	0.033	ND
PCB 1254	0.033	ND
PCB 1260	0.033	ND

SURROGATE PERCENT RECOVERIES

ECACHLOROBIPHENYL	93
DIBUTYLCHLORENDATE	71

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-7

PCB ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-1	DATE ANALYZED	: 03/13/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8080	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
PCB 1016	0.038	ND
PCB 1221	0.038	ND
PCB 1232	0.038	ND
PCB 1242	0.038	ND
PCB 1248	0.038	ND
PCB 1254	0.038	ND
PCB 1260	0.038	ND

SURROGATE PERCENT RECOVERIES

DECACHLOROBIPHENYL	87
DIBUTYLCHLORENDATE	74

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-8

PCB ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
ROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
LIENT I.D.	: DW S-2	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
PA METHOD	: 8080	DILUTION FACTOR	: 1

ESULTS ARE CORRECTED FOR MOISTURE CONTENT

OMPOUND	MDL	RESULT
PCB 1016	0.036	ND
CB 1221	0.036	ND
CB 1232	0.036	ND
PCB 1242	0.036	ND
CB 1248	0.036	ND
CB 1254	0.036	ND
PCB 1260	0.036	ND

SURROGATE PERCENT RECOVERIES

CACHLOROBIPHENYL	77
IBUTYLCHLORENDATE	63

Analytical Technologies, Inc.

ATI I.D. # 9203-054

PCB ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/13/92
EPA METHOD	: 8080	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
PCB 1260	ND	0.333	0.316	95	N/A	N/A	N/A

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

PCB ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-052-3
PROJECT #	: S-1038	DATE EXTRACTED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/11/92
EPA METHOD	: 8080	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
PCB 1260	ND	0.333	0.290	87	0.299	90	3

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

QUALITY CONTROL INFORMATION

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

BETX

DETECTION LIMITS

Water	
Benzene	0.0005 mg/L
Toluene	0.0005 mg/L
Ethyl Benzene	0.0005 mg/L
Xylenes	0.0005 mg/L
Soil	
Benzene	0.025 mg/Kg
Toluene	0.025 mg/Kg
Ethyl Benzene	0.025 mg/Kg
Xylenes	0.025 mg/Kg

Soil samples are extracted with methanol. An aliquot of the methanol extract is purged for analysis.

CONTROL LIMITS

SPIKE COMPOUNDS	WATER	RPD	SOIL	RPD
Benzene	70-121	20	59-120	20
Toluene	56-135	20	61-120	20
Xylenes	62-128	20	34-144	20

8015

DETECTION LIMITS

Soils	5 mg/Kg
Waters	1 mg/L

CONTROL LIMITS

SPIKE COMPOUND	WATER	RPD	SOIL	RPD
Fuel Hydrocarbons	41-176	32	50-166	20

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: N/A
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: WATER	UNITS	: mg/L
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

COMPOUND	MDL	RESULT
BENZENE	0.0005	ND
ETHYLBENZENE	0.0005	ND
TOLUENE	0.0005	ND
TOTAL XYLENES	0.0005	ND

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE	92

Analytical Technologies, Inc.

ATI I.D. # 9203-054-11

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: N/A
CLIENT I.D.	: W-1	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: WATER	UNITS	: mg/L
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

COMPOUND	MDL	RESULT
BENZENE	0.0005	ND
ETHYLBENZENE	0.0005	ND
TOLUENE	0.0005	ND
TOTAL XYLENES	0.0005	ND

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE	106

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANIC COMPOUNDS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
EPA METHOD : 8020 (BETX)
SAMPLE MATRIX : WATER

SAMPLE I.D. # : BLANK SPIKE
DATE EXTRACTED : N/A
DATE ANALYZED : 03/10/92
UNITS : mg/L

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	ND	0.0200	0.0196	98	0.0201	101	3
TOLUENE	ND	0.0200	0.0201	101	0.0205	103	2
TOTAL XYLENES	ND	0.0400	0.0415	103	0.0419	105	2

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANIC COMPOUNDS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
EPA METHOD : 8020 (BETX)
SAMPLE MATRIX : WATER

SAMPLE I.D. # : 9203-067-1
DATE EXTRACTED : N/A
DATE ANALYZED : 03/10/92
UNITS : mg/L

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	0.00147	0.0200	0.0205	95	0.0197	91	4
TOLUENE	0.00135	0.0200	0.0205	96	0.0196	91	4
TOTAL XYLENES	0.00062	0.0400	0.0411	101	0.0387	95	6

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.025	ND
ETHYLBENZENE	0.025	ND
TOLUENE	0.025	ND
TOTAL XYLENES	0.025	ND

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE	99

Analytical Technologies, Inc.

ATI I.D. # 9203-054-5

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: FO S-5	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.027	ND
ETHYLBENZENE	0.027	ND
TOLUENE	0.027	ND
TOTAL XYLENES	0.027	ND

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE	84

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-6

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: FO S-6	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.027	ND
ETHYLBENZENE	0.027	0.068
TOLUENE	0.027	0.031
TOTAL XYLENES	0.027	0.26

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE	102

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANIC COMPOUNDS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
EPA METHOD : 8020 (BETX)
SAMPLE MATRIX : SOIL

SAMPLE I.D. # : BLANK SPIKE
DATE EXTRACTED : 03/08/92
DATE ANALYZED : 03/09/92
UNITS : mg/Kg

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	ND	1.00	0.842	84	0.894	89	6
TOLUENE	ND	1.00	0.960	96	0.955	96	1
TOTAL XYLENES	ND	2.00	1.96	98	1.95	98	1

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

VOLATILE ORGANIC COMPOUNDS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-054-5
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
EPA METHOD	: 8020 (BETX)	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	ND	1.00	0.624	62	0.598	60	4
TOLUENE	ND	1.00	0.762	76	0.712	71	7
TOTAL XYLENES	ND	2.00	1.73	87	1.69	85	2

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

FUEL HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: 8015 (MODIFIED)	DILUTION FACTOR	: 1

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	1	ND
HYDROCARBON RANGE		C7 - C12
HYDROCARBON QUANTITATION USING		GASOLINE
FUEL HYDROCARBONS	1	ND
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERIES

TERPHENYL	127

Analytical Technologies, Inc.

ATI I.D. # 9203-054-11

FUEL HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: W-1	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: 8015 (MODIFIED)	DILUTION FACTOR	: 1

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	1	8 *
HYDROCARBON RANGE		C7 - C12
HYDROCARBON QUANTITATION USING		GASOLINE
FUEL HYDROCARBONS	1	100
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERIES

P-TERPHENYL	107

* Sample chromatogram indicates hydrocarbons characteristic of diesel.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

FUEL HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
METHOD	: 8015 (MODIFIED)	UNITS	: mg/L
SAMPLE MATRIX	: WATER		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	50.0	46.6	93	45.4	91	3

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054

FUEL HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-050-10
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
METHOD	: 8015 (MODIFIED)	UNITS	: mg/L
SAMPLE MATRIX	: WATER		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	50.0	47.4	95	49.0	98	3

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	106

Analytical Technologies, Inc.

ATI I.D. # 9203-054-1

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: FO S-1	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT
GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.
DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.
HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	115

Analytical Technologies, Inc.

ATI I.D. # 9203-054-2

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: FO S-2	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT
GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.
DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.
HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	104

Analytical Technologies, Inc.

ATI I.D. # 9203-054-3

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: FO S-3	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	109

Analytical Technologies, Inc.

ATI I.D. # 9203-054-4

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: FO S-4	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	112

Analytical Technologies, Inc.

ATI I.D. # 9203-054-5

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: FO S-5	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

DIESEL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	127

Analytical Technologies, Inc.

ATI I.D. # 9203-054-6

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: F0 S-6	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

DIESEL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	F

F = Out of limits due to matrix interference.

Analytical Technologies, Inc.

ATI I.D. # 9203-054-7

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-1	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	121

Analytical Technologies, Inc.

ATI I.D. # 9203-054-8

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-2	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

	RESULT
GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.	
DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.	
HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.	
SURROGATE PERCENT RECOVERY	
O-TERPHENYL	118

Analytical Technologies, Inc.

ATI I.D. # 9203-054-9

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-3	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

DIESEL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

HEAVY OIL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	F

F = Out of limits due to matrix interference.

Analytical Technologies, Inc.

ATI I.D. # 9203-054-10

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-4	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT
GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.
DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.
HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	109

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-12

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-5	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT
GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.
DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.
HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	111

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-13

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: DW S-6	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	111

Analytical Technologies, Inc.

ATI I.D. # 9203-054

HYDROCARBON IDENTIFICATION
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
METHOD	: WA DOE WTPH-HCID	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
DIESEL	ND	500	440	88	513	103	15

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	ND
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE

SURROGATE PERCENT RECOVERY

TRIFLUOROTOLUENE	93

Analytical Technologies, Inc.

ATI I.D. # 9203-054-5

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: FO S-5	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	48
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE

SURROGATE PERCENT RECOVERY

TRIFLUOROTOLUENE	87

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054-6

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: FO S-6	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 5

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	340
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE

SURROGATE PERCENT RECOVERY

TRIFLUOROTOLUENE	95

Analytical Technologies, Inc.

ATI I.D. # 9203-054-9

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: DW S-3	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 10

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	50	1,000
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE

SURROGATE PERCENT RECOVERY

TRIFLUOROTOLUENE	85

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/10/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	100	103	103	101	101	2

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-054-5
PROJECT #	: S-1038	DATE EXTRACTED	: 03/10/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	44.7	100	122	77	135	90	10

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	10	ND
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERY

O-TERPHENYL	76

Analytical Technologies, Inc.

ATI I.D. # 9203-054-5

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: FO S-5	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	10	190
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERY

O-TERPHENYL	97

Analytical Technologies, Inc.

ATI I.D. # 9203-054-6

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: FO S-6	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	10	4,800
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERY

O-TERPHENYL	F

F = Out of limits due to matrix interference.

Analytical Technologies, Inc.

ATI I.D. # 9203-054-9

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/05/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/10/92
CLIENT I.D.	: DW S-3	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	10	410
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERY

O-TERPHENYL	F

F = Out of limits due to matrix interference.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/10/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
METHOD	: WA DOE WTPH-D	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (DIESEL)	NC	200	196	98	200	0	2

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-054-5
PROJECT #	: S-1038	DATE EXTRACTED	: 03/10/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
METHOD	: WA DOE WTPH-D	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (DIESEL)	173	200	344	86	367	97	6

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

QUALITY CONTROL
INFORMATION

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

418.1 & 413.2

DETECTION LIMITS

Water	0.5 mg/L
Soil	5 mg/Kg

SPIKE CONTROL LIMITS		DUPLICATE CONTROL LIMITS	
Water	41 - 115%	Water	>2.5 - 20% RPD <2.5 ± 0.5 mg/L
Soil	82 - 130%	Soil	>25 - 59% RPD <25 ± 5 mg/Kg

EPA QC CHECK SAMPLES

Lot:	EPA WP 487
Date Analyzed:	02/13/91
Result:	18.7 mg/L
True Value:	20.0 mg/L
Limits:	12 - 24 mg/L

LABORATORY CONTROL SAMPLE

Control limits: 41 - 120%
Source: Benzene Aldrich Chemical Co., lot #2620ML
Hexadecane Aldrich Chemical Co., lot #10015KW
Isooctane Baker, lot #A45143

INITIAL CALIBRATION VERIFICATION STANDARD

Control limits: 90 - 110%
Source: Benzene Aldrich Chemical Co., lot #2620ML
Hexadecane Aldrich Chemical Co., lot #10015KW
Isooctane Baker, lot #A45143

STANDARDS AND CONTINUING CALIBRATION VERIFICATION

Standard
Control limits: 90 - 110%
Source: ATI San Diego, lot #04/12/88

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE EXTRACTED	: 03/08/92
PROJECT #	: S-1038	DATE ANALYZED	: 03/09/92
PROJECT NAME	: CHEVRON STATION 3883	UNITS	: mg/L
EPA METHOD	: 418.1	SAMPLE MATRIX	: WATER

ATI I.D.#	CLIENT I.D.	MDL	TOTAL PETROLEUM HYDROCARBONS	TOTAL PETROLEUM HYDROCARBONS *
9203-054-11	W-1	1.0	5.0	5.0
REAGENT BLANK	-	1.0	ND	N/A

* Reanalyzed after second aliquot of silica gel added.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
EPA METHOD	: 418.1	UNITS	: mg/L
SAMPLE MATRIX	: WATER		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS	ND	N/A	N/A	10	7.5	75	7.2	72	4

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: ICV
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
EPA METHOD	: 418.1	UNITS	: mg/L
SAMPLE MATRIX	: WATER		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS	N/A	N/A	N/A	500	512	102	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE EXTRACTED	: 03/08/92
PROJECT #	: S-1038	DATE ANALYZED	: 03/09/92
PROJECT NAME	: CHEVRON STATION 3883	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-418.1 MODIFIED	SAMPLE MATRIX	: SOIL

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

ATI I.D. #	CLIENT I.D.	MDL	TOTAL PETROLEUM HYDROCARBONS	TOTAL PETROLEUM HYDROCARBONS *
9203-054-1	FO S-1	20	ND	N/A
9203-054-2	FO S-2	20	ND	N/A
9203-054-3	FO S-3	20	ND	N/A
9203-054-4	FO S-4	20	ND	N/A
9203-054-5	FO S-5	20	520	520
9203-054-6	FO S-6	20	3,500	3,500
9203-054-7	DW S-1	20	260	260
9203-054-8	DW S-2	20	29	N/A
9203-054-9	DW S-3	20	12,000	12,000
9203-054-10	DW S-4	20	ND	N/A
9203-054-12	DW S-5	20	ND	N/A
9203-054-13	DW S-6	20	ND	N/A
REAGENT BLANK	-	20	ND	N/A

* Reanalyzed after second aliquot of silica gel added.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	ND	N/A	N/A	400	521	130	563	141	8

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-054-1
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	ND	ND	NC	400	523	131	532	133	2

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: ICV
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/L
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	N/A	N/A	N/A	500	489	98	N/A	N/A	N/A

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TCLP METALS ANALYSIS

CLIENT : RZA-AGRA MATRIX : LEACHATE
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ELEMENT	DATE LEACHED	DATE DIGESTED	DATE ANALYZED
ARSENIC	03/09/92	03/10/92	03/11/92
BARIUM	03/09/92	03/10/92	03/11/92
CADMIUM	03/09/92	03/10/92	03/11/92
CHROMIUM	03/09/92	03/10/92	03/11/92
LEAD	03/09/92	03/10/92	03/11/92
MERCURY	03/09/92	03/11/92	03/12/92
SELENIUM	03/09/92	03/10/92	03/11/92
SILVER	03/09/92	03/10/92	03/11/92

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TCLP METALS ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA MATRIX : LEACHATE
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883 UNITS : mg/L

ELEMENT	MDL	REAGENT BLANK	DW S-1 -7	DW S-2 -8
ARSENIC	0.050	ND	ND	ND
BARIUM	0.010	ND	0.016	0.13
CADMIUM	0.0020	ND	ND	ND
CHROMIUM	0.010	ND	ND	ND
LEAD	0.030	ND	ND	ND
MERCURY	0.00020	ND	ND	ND
SELENIUM	0.050	ND	ND	ND
SILVER	0.0050	ND	ND	ND

Analytical Technologies, Inc.

ATI I.D. # 9203-054

TCLP METALS ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : LEACHATE
UNITS : mg/L

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
ARSENIC	9203-001-10	ND	ND	NC	0.964	1.00	96
ARSENIC	BLANK SPIKE	ND	N/A	N/A	0.952	1.00	95
BARIUM	9203-001-10	0.20	0.21	5	1.10	1.00	90
BARIUM	BLANK SPIKE	ND	N/A	N/A	0.973	1.00	97
CADMIUM	9203-001-10	ND	ND	NC	0.804	1.00	80
CADMIUM	BLANK SPIKE	ND	N/A	N/A	0.847	1.00	85
CHROMIUM	9203-001-10	ND	ND	NC	0.946	1.00	95
CHROMIUM	BLANK SPIKE	ND	N/A	N/A	0.996	1.00	100
LEAD	9203-001-10	ND	ND	NC	0.911	1.00	91
EAD	BLANK SPIKE	ND	N/A	N/A	0.958	1.00	96
MERCURY	9203-054-8	ND	ND	NC	0.00110	0.00100	110
MERCURY	BLANK SPIKE	ND	N/A	N/A	0.00110	0.00100	110
SELENIUM	9203-001-10	ND	ND	NC	0.950	1.00	95
SELENIUM	BLANK SPIKE	ND	N/A	N/A	0.950	1.00	95
SILVER	9203-001-10	ND	ND	NC	0.802	1.00	80
SILVER	BLANK SPIKE	ND	N/A	N/A	0.979	1.00	98

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

METALS ANALYSIS

CLIENT : RZA-AGRA MATRIX : WATER
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ELEMENT	DATE PREPARED	DATE ANALYZED
LEAD	03/12/92	03/13/92

Analytical Technologies, Inc.

ATI I.D. # 9203-054

METALS ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : WATER
UNITS : mg/L

ELEMENT	MDL	REAGENT BLANK	W-1 (TOTAL) -11	W-1 (DISSOLVED) -11
LEAD	0.0030	ND	0.046	0.0037

Analytical Technologies, Inc.

ATI I.D. # 9203-054

METALS ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : WATER
UNITS : mg/L

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
LEAD	9203-054-11	0.046	0.048	4	0.0625	0.0250	66
LEAD	BLANK SPIKE	ND	N/A	N/A	0.0280	0.0250	112

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-054

GENERAL CHEMISTRY ANALYSIS

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : SOIL

PARAMETER	DATE ANALYZED
MOISTURE *	03/07/92
MOISTURE	03/11/92

* Percent moisture results associated with Total Petroleum Hydrocarbon analyses.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

GENERAL CHEMISTRY ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : SOIL
UNITS : %

ATI I.D. #	CLIENT I.D.	MDL	MOISTURE *	MOISTURE
9203-054-1	FO S-1	0.5	13	N/A
9203-054-2	FO S-2	0.5	12	N/A
9203-054-3	FO S-3	0.5	15	N/A
9203-054-4	FO S-4	0.5	6.6	N/A
9203-054-5	FO S-5	0.5	7.0	6.0
9203-054-6	FO S-6	0.5	7.0	10
9203-054-7	DW S-1	0.5	8.6	12
9203-054-8	DW S-2	0.5	9.9	7.6
9203-054-9	DW S-3	0.5	19	N/A
9203-054-10	DW S-4	0.5	14	N/A
9203-054-12	DW S-5	0.5	21	N/A
9203-054-13	DW S-6	0.5	14	N/A

* Percent moisture results associated with Total Petroleum Hydrocarbon analyses.

Analytical Technologies, Inc.

ATI I.D. # 9203-054

GENERAL CHEMISTRY ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : SOIL
UNITS : %

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
MOISTURE *	9203-054-2	12	13	8	N/A	N/A	N/A
MOISTURE *	9203-054-12	21	20	5	N/A	N/A	N/A
MOISTURE	9203-052-1	7.6	7.9	4	N/A	N/A	N/A

* Percent moisture results associated with Total Petroleum Hydrocarbon analyses.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc. 560 Naches Avenue, S.W., Suite 101, Renton, WA 98055, (206) 228-8335

ATI I.D. # 9203-145

April 8, 1992

RZA-AGRA
539 W. Sharp
Suite D
Spokane, WA 99201

Attention : Gene St.Godard

Project Number : S-1038

Project Name : Yakima Chevron

On March 18, 1992, Analytical Technologies, Inc., received two soil samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and quality control data are enclosed.

Karen L. Mixon
Senior Project Manager

Frederick W. Grothkopp
Laboratory Manager

FWG/hal/elf

Analytical Technologies, Inc.

ATI I.D. # 9203-145

SAMPLE CROSS REFERENCE SHEET

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9203-145-1	W.O. - 1	03/16/92	SOIL
9203-145-2	W.O. - 2	03/16/92	SOIL

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of the report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ATI I.D. # 9203-145

ANALYTICAL SCHEDULE

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

ANALYSIS	TECHNIQUE	REFERENCE	LAB
HYDROCARBON IDENTIFICATION	GC/FID	WA DOE WTPH-HCID	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-G	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-D	R
PETROLEUM HYDROCARBONS	IR	WA DOE WTPH-418.1 MODIFIED	R
TCLP PREPARATION	-	EPA 1311	R
ARSENIC	ICAP	EPA 6010	R
BARIUM	ICAP	EPA 6010	R
CADMIUM	ICAP	EPA 6010	R
CHROMIUM	ICAP	EPA 6010	R
LEAD	ICAP	EPA 6010	R
MERCURY	AA/COLD VAPOR	EPA 7470	R
SELENIUM	ICAP	EPA 6010	R
SILVER	ICAP	EPA 6010	R
MOISTURE	GRAVIMETRIC	CLP SOW ILM01.0	R

R = ATI - Renton
SD = ATI - San Diego
PHX = ATI - Phoenix
PNR = ATI - Pensacola
FC = ATI - Fort Collins
UB = Subcontract

Analytical Technologies, Inc.

ATI I.D. # 9203-145

QUALITY CONTROL
INFORMATION

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

WA DOE WTPH-G

DETECTION LIMITS

	SOIL
Gasoline	5 mg/Kg

CONTROL LIMITS

	SOIL	RPD
BLANK SPIKE		
Gasoline	86-114	20
MATRIX SPIKE		
Gasoline	59-107	20

WA DOE WTPH-D

DETECTION LIMITS

	SOIL
Diesel	25 mg/Kg

CONTROL LIMITS

	SOIL	RPD
BLANK SPIKE		
Diesel	76-132	20
MATRIX SPIKE		
Diesel	58-141	20

CONTINUED ON NEXT PAGE

Analytical Technologies, Inc.

ATI I.D. # 9203-145

QUALITY CONTROL
INFORMATION
CONTINUED

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

EPA 418.1 and WTPH 418.1 Modified

DETECTION LIMITS

COMPOUND	WATER	SOIL
Petroleum Hydrocarbon	1 mg/L	5 mg/Kg

CONTROL LIMITS

	WATER	RPD	SOIL	RPD
BLANK SPIKE				
Petroleum Hydrocarbons	64-97	20	122-156	20
MATRIX DUPLICATE				
Petroleum Hydrocarbons	-	32	-	20
MATRIX SPIKE	WATER	RPD	SOIL	RPD
Fuel Hydrocarbons	-	-	92 -180	20

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-145

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/18/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/18/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	91

Analytical Technologies, Inc.

ATI I.D. # 9203-145-1

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/16/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/18/92
CLIENT I.D.	: W.O. - 1	DATE ANALYZED	: 03/19/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	105

Analytical Technologies, Inc.

ATI I.D. # 9203-145-2

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/16/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/18/92
CLIENT I.D.	: W.O. - 2	DATE ANALYZED	: 03/19/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

HEAVY OIL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	104

Analytical**Technologies,**Inc.

ATI I.D. # 9203-145

HYDROCARBON IDENTIFICATION
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/18/92
METHOD	: WA DOE WTPH-HCID	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
DIESEL	ND	500	486	97	504	101	4

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/23/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/23/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	ND
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE

SURROGATE PERCENT RECOVERY

TRIFLUOROTOLUENE	97

Analytical Technologies, Inc.

ATI I.D. # 9203-145-2

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/16/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/23/92
CLIENT I.D.	: W.O. - 2	DATE ANALYZED	: 03/24/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	73
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE

SURROGATE PERCENT RECOVERY

TRIFLUOROTOLUENE	96

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-199-2
PROJECT #	: S-1038	DATE EXTRACTED	: 03/23/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/23/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	181	100	220	39F	234	53F	6

F = Out of limits due to matrix interference.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/23/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/23/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	100	83.9	84H	98.4	98	16

H = Out of limits.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/24/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/24/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	ND
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERY

O-TERPHENYL	85

Analytical Technologies, Inc.

ATI I.D. # 9203-145-2

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/16/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE EXTRACTED	: 03/24/92
CLIENT I.D.	: W.O. - 2	DATE ANALYZED	: 03/25/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	1,200
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL

SURROGATE PERCENT RECOVERY

O-TERPHENYL	139

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-147-1
PROJECT #	: S-1038	DATE EXTRACTED	: 03/24/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/24/92
METHOD	: WA DOE WTPH-D	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (DIESEL)	31	200	183	76	206	88	12

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/24/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/24/92
METHOD	: WA DOE WTPH-D	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (DIESEL)	ND	200	184	92	177	88	4

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON
METHOD : WA DOE WTPH-418.1 MODIFIED
RESULTS ARE CORRECTED FOR MOISTURE CONTENT

DATE EXTRACTED : 03/18/92
DATE ANALYZED : 03/19/92
UNITS : mg/Kg
SAMPLE MATRIX : SOIL

ATI I.D. #	CLIENT I.D.	MDL	TOTAL PETROLEUM HYDROCARBONS	TOTAL PETROLEUM HYDROCARBONS *
9203-145-1	W.O. - 1	20	25	-
9203-145-2	W.O. - 2	20	1,300	1,300
REAGENT BLANK	-	20	ND	-

* Reanalyzed after second aliquot of silica gel added.

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-145-1
PROJECT #	: S-1038	DATE EXTRACTED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/19/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	22	20	10	400	480	115	504	121	5

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/19/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	ND	N/A	N/A	400	438	110H	456	114H	4

H = Out of limits.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: ICV
PROJECT #	: S-1038	DATE EXTRACTED	: 03/18/92
PROJECT NAME	: YAKIMA CHEVRON	DATE ANALYZED	: 03/19/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/L
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	N/A	N/A	N/A	100	99	99	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TCLP METALS ANALYSIS

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

MATRIX : LEACHATE

ELEMENT	DATE LEACHED	DATE DIGESTED	DATE ANALYZED
ARSENIC	03/19/92	03/24/92	03/25/92
BARIUM	03/19/92	03/24/92	03/25/92
CADMIUM	03/19/92	03/24/92	03/25/92
CHROMIUM	03/19/92	03/24/92	03/25/92
LEAD	03/19/92	03/24/92	03/25/92
MERCURY	03/19/92	03/23/92	03/23/92
SELENIUM	03/19/92	03/24/92	03/25/92
ILVER	03/19/92	03/24/92	03/25/92

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TCLP METALS ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

MATRIX : LEACHATE
UNITS : mg/L

ELEMENT	MDL	REAGENT BLANK	W.O. - 2 -2
ARSENIC	0.050	ND	ND
BARIUM	0.010	ND	0.26
CADMIUM	0.0050	ND	ND
CHROMIUM	0.010	ND	ND
LEAD	0.030	ND	0.12
MERCURY	0.00020	ND	ND
SELENIUM	0.050	ND	ND
SILVER	0.0050	ND	ND

Analytical Technologies, Inc.

ATI I.D. # 9203-145

TCLP METALS ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

MATRIX : LEACHATE
UNITS : mg/L

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
ARSENIC	9203-146-1	ND	ND	NC	1.04	1.00	104
ARSENIC	BLANK SPIKE	ND	N/A	N/A	0.958	1.00	96
BARIUM	9203-146-1	0.32	0.37	14	1.31	1.00	99
BARIUM	BLANK SPIKE	ND	N/A	N/A	0.919	1.00	92
CADMIUM	9203-146-1	ND	ND	NC	0.878	1.00	88
CADMIUM	BLANK SPIKE	ND	N/A	N/A	0.869	1.00	87
CHROMIUM	9203-146-1	ND	ND	NC	0.960	1.00	96
CHROMIUM	BLANK SPIKE	ND	N/A	N/A	0.955	1.00	96
LEAD	9203-146-1	ND	ND	NC	0.992	1.00	99
LEAD	BLANK SPIKE	ND	N/A	N/A	0.982	1.00	98
MERCURY	9203-145-2	ND	ND	NC	0.00087	0.00100	87
MERCURY	BLANK SPIKE	ND	N/A	N/A	0.00101	0.00100	101
SELENIUM	9203-146-1	ND	ND	NC	1.01	1.00	101
SELENIUM	BLANK SPIKE	ND	N/A	N/A	0.888	1.00	89
SILVER	9203-146-1	ND	ND	NC	0.974	1.00	97
SILVER	BLANK SPIKE	ND	N/A	N/A	0.964	1.00	96

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-145

GENERAL CHEMISTRY ANALYSIS

CLIENT : RZA-AGRA MATRIX : SOIL
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

PARAMETER	DATE ANALYZED
MOISTURE	03/19/92

Analytical**Technologies,** Inc.

ATI I.D. # 9203-145

GENERAL CHEMISTRY ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

MATRIX : SOIL
UNITS : %

ATI I.D. #	CLIENT I.D.	MOISTURE MDL	RESULT
9203-145-1	W.O. - 1	0.5	13
9203-145-2	W.O. - 2	0.5	7.5

Analytical Technologies, Inc.

ATI I.D. # 9203-145

GENERAL CHEMISTRY ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : YAKIMA CHEVRON

MATRIX : SOIL
UNITS : %

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
MOISTURE	9203-132-3	17	18	6	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical**Technologies,**Inc. 560 Naches Avenue, S.W., Suite 101, Renton, WA 98055, (206) 228-8335

ATI I.D. # 9203-052

April 2, 1992

RZA-AGRA
539 W. Sharp, Suite D
Spokane, WA 99201

Attention : Gene St.Godard

Project Number : S-1038

Project Name : Chevron Station 3883

On March 7, 1992, Analytical Technologies, Inc. received four soil samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and the quality control data are enclosed.

Karen L. Mixon
Senior Project Manager

Frederick W. Grothkopp
Laboratory Manager

FWG/ff

Analytical Technologies, Inc.

ATI I.D. # 9203-052

SAMPLE CROSS REFERENCE SHEET

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9203-052-1	SPS-1	03/06/92	SOIL
9203-052-2	SPS-2	03/06/92	SOIL
9203-052-3	SPS-3	03/06/92	SOIL
9203-052-4	SPS-4	03/06/92	SOIL

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	4

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ATI I.D. # 9203-052-1

VOLATILE ORGANIC ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: SPS-1	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.011	ND
BROMOFORM	0.011	ND
BROMOMETHANE	0.054	ND
CARBON TETRACHLORIDE	0.011	ND
CHLOROBENZENE	0.027	ND
CHLOROETHANE	0.054	ND
CHLOROFORM	0.011	ND
CHLOROMETHANE	0.11	ND
1,2-DIBROMOETHANE (EDB)	0.027	ND
1,2-DICHLOROBENZENE	0.027	ND
1,3-DICHLOROBENZENE	0.027	ND
',4-DICHLOROBENZENE	0.027	ND
IBROMOCHLOROMETHANE	0.011	ND
1,1-DICHLOROETHANE	0.011	ND
1,2-DICHLOROETHANE (EDC)	0.011	ND
1,1-DICHLOROETHENE	0.011	ND
CIS-1,2-DICHLOROETHENE	0.011	ND
TRANS-1,2-DICHLOROETHENE	0.011	ND
1,2-DICHLOROPROPANE	0.011	ND
CIS-1,3-DICHLOROPROPENE	0.011	ND
TRANS-1,3-DICHLOROPROPENE	0.011	ND
METHYLENE CHLORIDE	0.11	ND
1,1,2,2-TETRACHLOROETHANE	0.011	ND
TETRACHLOROETHENE	0.011	ND
1,1,1-TRICHLOROETHANE	0.011	ND
1,1,2-TRICHLOROETHANE	0.011	ND
TRICHLOROETHENE	0.011	ND
TRICHLOROFLUOROMETHANE	0.027	ND
VINYL CHLORIDE	0.054	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	100

Analytical Technologies, Inc.

ATI I.D. # 9203-052-2

VOLATILE ORGANIC ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: SPS-2	DATE ANALYZED	: 03/10/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.011	ND
BROMOFORM	0.011	ND
BROMOMETHANE	0.057	ND
CARBON TETRACHLORIDE	0.011	ND
CHLOROBENZENE	0.029	0.032
CHLOROETHANE	0.057	ND
CHLOROFORM	0.011	ND
CHLOROMETHANE	0.11	ND
1,2-DIBROMOETHANE (EDB)	0.029	ND
1,2-DICHLOROBENZENE	0.029	4.3 D
1,3-DICHLOROBENZENE	0.029	0.16
1,4-DICHLOROBENZENE	0.029	0.96
DIBROMOCHLOROMETHANE	0.011	ND
1,1-DICHLOROETHANE	0.011	ND
1,2-DICHLOROETHANE (EDC)	0.011	0.027
1,1-DICHLOROETHENE	0.011	ND
CIS-1,2-DICHLOROETHENE	0.011	ND
TRANS-1,2-DICHLOROETHENE	0.011	ND
1,2-DICHLOROPROPANE	0.011	ND
CIS-1,3-DICHLOROPROPENE	0.011	ND
TRANS-1,3-DICHLOROPROPENE	0.011	ND
METHYLENE CHLORIDE	0.11	ND
1,1,2,2-TETRACHLOROETHANE	0.011	ND
TETRACHLOROETHENE	0.011	ND
1,1,1-TRICHLOROETHANE	0.011	ND
1,1,2-TRICHLOROETHANE	0.011	ND
TRICHLOROETHENE	0.011	ND
TRICHLOROFLUOROMETHANE	0.029	ND
VINYL CHLORIDE	0.057	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	95

D = Value from a ten fold diluted analysis.

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-052-3

VOLATILE ORGANIC ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/08/92
CLIENT I.D.	: SPS-3	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8010	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BROMODICHLOROMETHANE	0.010	ND
BROMOFORM	0.010	ND
BROMOMETHANE	0.052	ND
CARBON TETRACHLORIDE	0.010	ND
CHLOROBENZENE	0.026	ND
CHLOROETHANE	0.052	ND
CHLOROFORM	0.010	ND
CHLOROMETHANE	0.10	ND
1,2-DIBROMOETHANE (EDB)	0.026	ND
1,2-DICHLOROBENZENE	0.026	ND
1,3-DICHLOROBENZENE	0.026	ND
,4-DICHLOROBENZENE	0.026	ND
IBROMOCHLOROMETHANE	0.010	ND
1,1-DICHLOROETHANE	0.010	ND
1,2-DICHLOROETHANE (EDC)	0.010	ND
1,1-DICHLOROETHENE	0.010	ND
CIS-1,2-DICHLOROETHENE	0.010	ND
TRANS-1,2-DICHLOROETHENE	0.010	ND
1,2-DICHLOROPROPANE	0.010	ND
CIS-1,3-DICHLOROPROPENE	0.010	ND
TRANS-1,3-DICHLOROPROPENE	0.010	ND
METHYLENE CHLORIDE	0.10	ND
1,1,2,2-TETRACHLOROETHANE	0.010	ND
TETRACHLOROETHENE	0.010	ND
1,1,1-TRICHLOROETHANE	0.010	ND
1,1,2-TRICHLOROETHANE	0.010	ND
TRICHLOROETHENE	0.010	ND
TRICHLOROFLUOROMETHANE	0.026	ND
VINYL CHLORIDE	0.052	ND

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	98

Analytical**Technologies,**Inc.

ATI I.D. # 9203-052

VOLATILE ORGANIC ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9202-114-9
PROJECT #	: S-1038	DATE EXTRACTED	: 02/27/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 02/27/92
EPA METHOD	: 8010	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
CHLOROBENZENE	ND	0.400	0.433	108	0.446	112	3
1,1-DICHLOROETHENE	ND	0.400	0.307	77	0.316	79	3
TRICHLOROETHENE	ND	0.400	0.401	100	0.420	105	5

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

VOLATILE ORGANIC ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/08/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/10/92
EPA METHOD	: 8010	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
CHLOROBENZENE	ND	0.400	0.473	118	N/A	N/A	N/A
1,1-DICHLOROETHENE	ND	0.400	0.391	98	N/A	N/A	N/A
TRICHLOROETHENE	ND	0.400	0.421	105	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

PCB ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/13/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8080	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
PCB 1016	0.033	ND
PCB 1221	0.033	ND
PCB 1232	0.033	ND
PCB 1242	0.033	ND
PCB 1248	0.033	ND
PCB 1254	0.033	ND
PCB 1260	0.033	ND

SURROGATE PERCENT RECOVERIES

DECACHLOROBIPHENYL	93
DIBUTYLCHLORENDATE	71

Analytical Technologies, Inc.

ATI I.D. # 9203-052-1

PCB ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
CLIENT I.D. : SPS-1
SAMPLE MATRIX : SOIL
EPA METHOD : 8080

DATE SAMPLED : 03/06/92
DATE RECEIVED : 03/07/92
DATE EXTRACTED : 03/07/92
DATE ANALYZED : 03/11/92
UNITS : mg/Kg
DILUTION FACTOR : 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
PCB 1016	0.036	ND
PCB 1221	0.036	ND
PCB 1232	0.036	ND
PCB 1242	0.036	ND
PCB 1248	0.036	ND
PCB 1254	0.036	ND
PCB 1260	0.036	ND

SURROGATE PERCENT RECOVERIES

DECACHLOROBIPHENYL	90
DIBUTYLCHLORENDATE	65

Analytical Technologies, Inc.

ATI I.D. # 9203-052-2

PCB ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-2	DATE ANALYZED	: 03/13/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8080	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
PCB 1016	0.038	ND
PCB 1221	0.038	ND
PCB 1232	0.038	ND
PCB 1242	0.038	ND
PCB 1248	0.038	ND
PCB 1254	0.038	ND
PCB 1260	0.038	ND

SURROGATE PERCENT RECOVERIES

DECACHLOROBIPHENYL	82
DIBUTYLCHLORENDATE	59

Analytical Technologies, Inc.

ATI I.D. # 9203-052-3

PCB ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-3	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8080	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
PCB 1016	0.035	ND
PCB 1221	0.035	ND
PCB 1232	0.035	ND
PCB 1242	0.035	ND
PCB 1248	0.035	ND
PCB 1254	0.035	ND
PCB 1260	0.035	ND

SURROGATE PERCENT RECOVERIES

DECACHLOROBIPHENYL	82
DIBUTYLCHLORENDATE	60

AnalyticalTechnologies,Inc.

ATI I.D. # 9203-052

PCB ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-052-3
PROJECT #	: S-1038	DATE EXTRACTED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/11/92
EPA METHOD	: 8080	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PCB 1260	ND	0.333	0.290	87	0.299	90	3

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

PCB ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/13/92
EPA METHOD	: 8080	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PCB 1260	ND	0.333	0.316	95	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.025	ND
ETHYLBENZENE	0.025	ND
TOLUENE	0.025	ND
TOTAL XYLENES	0.025	ND

SURROGATE PERCENT RECOVERY

BROMOFLUOROBENZENE	96

Analytical Technologies, Inc.

ATI I.D. # 9203-052-1

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-1	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.027	ND
ETHYLBENZENE	0.027	ND
TOLUENE	0.027	ND
TOTAL XYLENES	0.027	ND

SURROGATE PERCENT RECOVERY

BROMOFLUOROBENZENE	90

Analytical Technologies, Inc.

ATI I.D. # 9203-052-2

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-2	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.028	ND
ETHYLBENZENE	0.028	0.075
TOLUENE	0.028	0.067
TOTAL XYLENES	0.028	0.53

SURROGATE PERCENT RECOVERY

BROMOFLUOROBENZENE	101

Analytical Technologies, Inc.

ATI I.D. # 9203-052-3

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-3	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
EPA METHOD	: 8020 (BETX)	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
BENZENE	0.026	ND
ETHYLBENZENE	0.026	ND
TOLUENE	0.026	ND
TOTAL XYLENES	0.026	0.087

SURROGATE PERCENT RECOVERY

BROMOFLUOROBENZENE	95

Analytical Technologies, Inc.

ATI I.D. # 9203-052

VOLATILE ORGANIC COMPOUNDS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
EPA METHOD : 8020 (BETX)

SAMPLE I.D. : 9203-052-1
DATE EXTRACTED : 03/07/92
DATE ANALYZED : 03/09/92
MATRIX : SOIL
UNITS : mg/Kg

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED SAMPLE	% REC	DUP SPIKED SAMPLE	DUP % REC	RPD
BENZENE	ND	1.00	0.582	58	0.549	55	6
TOLUENE	ND	1.00	0.741	74	0.709	71	4
TOTAL XYLENES	ND	2.00	1.72	86	1.67	84	3

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

VOLATILE ORGANIC COMPOUNDS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
EPA METHOD : 8020 (BETX)

SAMPLE I.D. : BLANK SPIKE
DATE EXTRACTED : 03/07/92
DATE ANALYZED : 03/09/92
MATRIX : SOIL
UNITS : mg/Kg

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED SAMPLE	% REC	DUP SPIKED SAMPLE	DUP % REC	RPD
BENZENE	ND	1.00	0.805	81	0.807	81	0
TOLUENE	ND	1.00	0.935	94	0.952	95	2
TOTAL XYLENES	ND	2.00	1.95	98	2.01	101	3

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL CONCENTRATION LESS THAN 50 mg/Kg BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	106

Analytical Technologies, Inc.

ATI I.D. # 9203-052-1

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-1	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE CONCENTRATION LESS THAN 20 mg/Kg BY WA DOE WTPH-HCID.

DIESEL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	121

Analytical Technologies, Inc.

ATI I.D. # 9203-052-2

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-2	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

DIESEL QUALITATIVELY IDENTIFIED BYY WA DOE WTPH-HCID.

HEAVY OIL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	125

Analytical Technologies, Inc.

ATI I.D. # 9203-052-3

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-3	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT

GASOLINE QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

DIESEL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

HEAVY OIL CONCENTRATION LESS THAN 100 mg/Kg BY WA DOE WTPH-HCID.

SURROGATE PERCENT RECOVERY

O-TERPHENYL	147

Analytical Technologies, Inc.

ATI I.D. # 9203-052-4

HYDROCARBON IDENTIFICATION
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/07/92
CLIENT I.D.	: SPS-4	DATE ANALYZED	: 03/09/92
SAMPLE MATRIX	: SOIL	DILUTION FACTOR	: 1
METHOD	: WA DOE WTPH-HCID		

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

RESULT
GASOLINE QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.
DIESEL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.
HEAVY OIL QUALITATIVELY IDENTIFIED BY WA DOE WTPH-HCID.

SURROGATE	PERCENT RECOVERY
O-TERPHENYL	117

Analytical Technologies, Inc.

ATI I.D. # 9203-052

HYDROCARBON IDENTIFICATION
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/09/92
METHOD	: WA DOE WTPH-HCID	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
DIESEL	N/A	500	440	88	513	103	15

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/11/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/11/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	ND
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE
SURROGATE PERCENT RECOVERY		
TRIFLUOROTOLUENE	101	

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/18/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/18/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	ND
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE
SURROGATE PERCENT RECOVERY		
TRIFLUOROTOLUENE	96	

Analytical Technologies, Inc.

ATI I.D. # 9203-052-2

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/11/92
CLIENT I.D.	: SPS-2	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 5

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	670
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE
SURROGATE PERCENT RECOVERY		
TRIFLUOROTOLUENE	94	

Analytical Technologies, Inc.

ATI I.D. # 9203-052-3

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/18/92
CLIENT I.D.	: SPS-3	DATE ANALYZED	: 03/19/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-G	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	73
HYDROCARBON RANGE		TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING		GASOLINE
SURROGATE PERCENT RECOVERY		
TRIFLUOROTOLUENE	93	

Analytical Technologies, Inc.

ATI I.D. # 9203-052-4

TOTAL PETROLEUM HYDROCARBON ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883
CLIENT I.D. : SPS-4
SAMPLE MATRIX : SOIL
METHOD : WA DOE WTPH-G
RESULTS ARE CORRECTED FOR MOISTURE CONTENT

DATE SAMPLED : 03/06/92
DATE RECEIVED : 03/07/92
DATE EXTRACTED : 03/11/92
DATE ANALYZED : 03/12/92
UNITS : mg/Kg
DILUTION FACTOR : 1

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS HYDROCARBON RANGE HYDROCARBON QUANTITATION USING	5	38 TOLUENE TO DODECANE GASOLINE
SURROGATE PERCENT RECOVERY		
TRIFLUOROTOLUENE	84	

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ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-076-2
PROJECT #	: S-1038	DATE EXTRACTED	: 03/11/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/11/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	100	65.9	66	65.2	65	1

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-089-5
PROJECT #	: S-1038	DATE EXTRACTED	: 03/18/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/18/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	100	50.3	50H	57.3	57H	13

H = Out of limits.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/11/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/11/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	100	100	100	103	103	3

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/18/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/18/92
METHOD	: WA DOE WTPH-G	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (GASOLINE)	ND	100	101	101	103	103	2

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARABON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: N/A
PROJECT #	: S-1038	DATE RECEIVED	: N/A
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/12/92
CLIENT I.D.	: REAGENT BLANK	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	ND
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL
SURROGATE PERCENT RECOVERY		
O-TERPHENYL	88	

Analytical Technologies, Inc.

ATI I.D. # 9203-052-1

TOTAL PETROLEUM HYDROCARABON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/12/92
CLIENT I.D.	: SPS-1	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 5

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	620
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL
SURROGATE PERCENT RECOVERY		
O-TERPHENYL	124	

Analytical Technologies, Inc.

ATI I.D. # 9203-052-2

TOTAL PETROLEUM HYDROCARABON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/12/92
CLIENT I.D.	: SPS-2	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 5

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	25	650
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL
SURROGATE PERCENT RECOVERY		
O-TERPHENYL	115	

Analytical**Technologies,**Inc.

ATI I.D. # 9203-052-3

TOTAL PETROLEUM HYDROCARABON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/12/92
CLIENT I.D.	: SPS-3	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 10

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	50	950
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL
SURROGATE PERCENT RECOVERY		
O-TERPHENYL	136	

Analytical Technologies, Inc.

ATI I.D. # 9203-052-4

TOTAL PETROLEUM HYDROCARABON ANALYSIS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE SAMPLED	: 03/06/92
PROJECT #	: S-1038	DATE RECEIVED	: 03/07/92
PROJECT NAME	: CHEVRON STATION 3883	DATE EXTRACTED	: 03/12/92
CLIENT I.D.	: SPS-4	DATE ANALYZED	: 03/12/92
SAMPLE MATRIX	: SOIL	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

COMPOUND	MDL	RESULT
FUEL HYDROCARBONS	5	190
HYDROCARBON RANGE		C12 - C24
HYDROCARBON QUANTITATION USING		DIESEL
SURROGATE PERCENT RECOVERY		
O-TERPHENYL	99	

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ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-052-4
PROJECT #	: S-1038	DATE EXTRACTED	: 03/12/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/12/92
METHOD	: WA DOE WTPH-D	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (DIESEL)	169	200	353	92	377	104	7

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBON ANALYSIS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/12/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/12/92
METHOD	: WA DOE WTPH-D	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (DIESEL)	ND	200	213	107	206	103	3

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA-AGRA	DATE EXTRACTED	: 03/12/92
PROJECT #	: S-1038	DATE ANALYZED	: 03/12/92
PROJECT NAME	: CHEVRON STATION 3883	UNITS	: mg/Kg
METHOD	: WA DOE WTPH-418.1 MODIFIED	SAMPLE MATRIX	: SOIL

RESULTS ARE CORRECTED FOR MOISTURE CONTENT

ATI I.D. #	CLIENT I.D.	MDL	TOTAL PETROLEUM HYDROCARBONS	TOTAL PETROLEUM HYDROCARBONS *
9203-052-2	SPS-2	20	2,400	2,400
9203-052-3	SPS-3	20	970	890
9203-052-4	SPS-4	20	650	650
REAGENT BLANK	-	20	ND	ND

* Reanalyzed after second aliquot of silica gel added.

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ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: 9203-078-1
PROJECT #	: S-1038	DATE EXTRACTED	: 03/12/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/12/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	ND	ND	NC	400	508	127	487	122	4

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical**Technologies,**Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: BLANK SPIKE
PROJECT #	: S-1038	DATE EXTRACTED	: 03/12/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/12/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/Kg
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	ND	N/A	N/A	400	542	136	554	139	2

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{PD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA-AGRA	SAMPLE I.D. #	: ICV
PROJECT #	: S-1038	DATE EXTRACTED	: 03/12/92
PROJECT NAME	: CHEVRON STATION 3883	DATE ANALYZED	: 03/12/92
METHOD	: WA DOE WTPH-418.1 MODIFIED	UNITS	: mg/L
SAMPLE MATRIX	: SOIL		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
PETROLEUM HYDROCARBONS (MOTOR OIL)	N/A	N/A	N/A	500	496	99	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spiked Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Spike Result} - \text{Dup. Spike Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TCLP METALS ANALYSIS

CLIENT : RZA-AGRA MATRIX : LEACHATE
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ELEMENT	DATE LEACHED	DATE DIGESTED	DATE ANALYZED
ARSENIC	03/09/92	03/10/92	03/11/92
BARIUM	03/09/92	03/10/92	03/11/92
CADMIUM	03/09/92	03/10/92	03/11/92
CHROMIUM	03/09/92	03/10/92	03/11/92
LEAD	03/09/92	03/10/92	03/11/92
MERCURY	03/09/92	03/11/92	03/12/92
SELENIUM	03/09/92	03/10/92	03/11/92
ILVER	03/09/92	03/10/92	03/11/92

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TCLP METALS ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA MATRIX : LEACHATE
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883 UNITS : mg/L

ELEMENT	MDL	REAGENT BLANK	SPS-1 -1	SPS-2 -2	SPS-3 -3
ARSENIC	0.050	ND	ND	0.094	ND
BARIUM	0.010	ND	0.44	0.46	0.33
CADMIUM	0.0020	ND	ND	0.0027	ND
CHROMIUM	0.010	ND	ND	ND	ND
LEAD	0.030	ND	0.23	0.60	0.054
MERCURY	0.00020	ND	ND	0.00037	ND
SELENIUM	0.050	ND	ND	ND	ND
SILVER	0.0050	ND	ND	ND	ND

Analytical Technologies, Inc.

ATI I.D. # 9203-052

TCLP METALS ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : LEACHATE
UNITS : mg/L

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
ARSENIC	9203-001-10	ND	ND	NC	0.964	1.00	96
ARSENIC	BLANK SPIKE	ND	N/A	N/A	0.952	1.00	95
BARIUM	9203-001-10	0.20	0.21	5	1.10	1.00	90
BARIUM	BLANK SPIKE	ND	N/A	N/A	0.973	1.00	97
CADMIUM	9203-001-10	ND	ND	NC	0.804	1.00	80
CADMIUM	BLANK SPIKE	ND	N/A	N/A	0.847	1.00	85
CHROMIUM	9203-001-10	ND	ND	NC	0.946	1.00	95
CHROMIUM	BLANK SPIKE	ND	N/A	N/A	0.996	1.00	100
LEAD	9203-001-10	ND	ND	NC	0.911	1.00	91
LEAD	BLANK SPIKE	ND	N/A	N/A	0.958	1.00	96
MERCURY	9203-054-8	ND	ND	NC	0.00110	0.00100	110
MERCURY	BLANK SPIKE	ND	N/A	N/A	0.00110	0.00100	110
SELENIUM	9203-001-10	ND	ND	NC	0.950	1.00	95
SELENIUM	BLANK SPIKE	ND	N/A	N/A	0.950	1.00	95
SILVER	9203-001-10	ND	ND	NC	0.802	1.00	80
SILVER	BLANK SPIKE	ND	N/A	N/A	0.979	1.00	98

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9203-052

GENERAL CHEMISTRY ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA MATRIX : SOIL
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883 UNITS : °F

ATI I.D. #	CLIENT I.D.	FLASHPOINT
9203-052-1	SPS-1	>210
9203-052-2	SPS-2	>210
9203-052-3	SPS-3	>210

Analytical Technologies, Inc.

ATI I.D. # 9203-052

GENERAL CHEMISTRY ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA MATRIX : SOIL
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

ATI I.D. #	CLIENT I.D.	PAINT FILTER TEST
9203-052-1	SPS-1	NO FREE LIQUIDS
9203-052-2	SPS-2	NO FREE LIQUIDS
9203-052-3	SPS-3	NO FREE LIQUIDS

Analytical Technologies, Inc.

ATI I.D. # 9203-052

GENERAL CHEMISTRY ANALYSIS

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : SOIL

PARAMETER	DATE ANALYZED
MOISTURE	03/07/92*
MOISTURE	03/26/92

* Percent moisture results associated with Total Petroleum Hydrocarbon analyses.

Analytical Technologies, Inc.

ATI I.D. # 9203-052

GENERAL CHEMISTRY ANALYSIS
DATA SUMMARY

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : SOIL
UNITS : %

ATI I.D. #	CLIENT I.D.	MOISTURE MDL	MOISTURE RESULT	MOISTURE RESULT*
9203-052-1	SPS-1	0.5	7.6	8.3
9203-052-2	SPS-2	0.5	13	11
9203-052-3	SPS-3	0.5	4.5	5.4
9203-052-4	SPS-4	0.5	-	11

* Percent moisture results associated with Total Petroleum Hydrocarbon analyses.

Analytical Technologies, Inc.

ATI I.D. # 9203-052

GENERAL CHEMISTRY ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA-AGRA
PROJECT # : S-1038
PROJECT NAME : CHEVRON STATION 3883

MATRIX : SOIL
UNITS : %

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
MOISTURE*	9203-054-2	12	13	8	N/A	N/A	N/A
MOISTURE	9203-052-1	7.6	7.9	4	N/A	N/A	N/A
MOISTURE	9203-051-10	20	21	5	N/A	N/A	N/A

* Percent moisture results associated with Total Petroleum Hydrocarbon analyses.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

APPENDIX

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (206) 272-4850

March 13, 1992

Analytical Technologies, Inc.
560 Naches Avenue S.W., Suite 101
Renton, WA 98055

Attn: Karen Mixon

Desc: Soil
Project: 9203052
P.O. #21837
Date Sampled: 3-6-92
Date Received: 3-10-92

Spectra #	ID:	Paint Filter Liquids Test	Flash Point PMCC, Deg.
S203-066-1	9203-052-1	No Free Liquids	>210
S203-066-2	9203-052-2	No Free Liquids	>210
S203-066-3	9203-052-3	No Free Liquids	>210

Duplicate Flash Point (S203-066-3), P.M.C.C. Deg. F >210

Paint Filter Liquids testing performed by EPA Method 9095
Flash Point P.M.C.C. by ASTM D-93

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Chemist