



P.O. Box 1257 San Ramon, CA 94583

Phone: (925) 275-3801 Fax: (925) 275-3815

January 6, 2009

Re: Formal Well Abandonment Report

Former Atlantic Richfield Company Station #5387

20200 Hesperian Boulevard

Hayward, California

ACWD Case No. RO0000174

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

2:24 pm, Jan 08, 2009

Alameda County Environmental Health

Submitted by:

Paul Supple

Environmental Business Manager



January 6, 2009 Project No. 06-02-628

Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502 (Mailed a copy and submitted via ACEH ftp site)

Attn.: Mr. Paresh Khatri

Re: Formal Well Abandonment Report, Former Atlantic Richfield Company (a BP affiliated company)

Station #5387, 20200 Hesperian Boulevard, Hayward, California. ACEH Case No. RO0000174.

Dear Mr. Khatri:

Broadbent & Associates, Inc., on behalf of Atlantic Richfield Company (Atlantic Richfield), is pleased to submit this *Formal Well Abandonment Report* for former Atlantic Richfield Company Station #5387 (herein referred to as Station #5387) located at 20200 Hesperian Boulevard, Hayward, California. The Alameda County Environmental Health (ACEH) August 22, 2008 Monitoring Well Destruction for Case Closure Letter concurred that no further action related to the case be required at this time. The letter further stated that a remedial action completion certificate would be issued once documentation has been provided that monitor wells installed at the site have been properly abandoned.

Stratus Environmental, Inc. (Stratus) completed well abandonment activities during the time period November 17 through November 18, 2008 for wells associated with ACEH Case No. RO0000174. The attached Drawing 1 depicts the site and location of wells that were abandoned. The Stratus *Groundwater Well Destruction Data Package*, documenting formal well abandonment of 22 wells (A-4, A-5, A-6, A-7, A-8, A-9, A-10, AR-1, AR-2, AS-1, AS-2, AS-3, AS-4, AS-6, AS-7, AS-9, AV-1, AV-2, AV-4, MW-1, MW-2 and MW-3), is provided in Attachment A. Waste disposal certificates for well abandonment work activities are provided in Attachment B.

Atlantic Richfield eagerly awaits receipt of a remedial action completion certificate for Station #5387. Should you have questions or need additional assistance to help expedite certificate completion, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Matthew G. Herrick, P.G., C.HG.

Senior Hydrogeologist

Robert H. Miller, P.G., C.HG.

Principal Hydrogeologist

NEVADA

ARIZONA

CALIFORNIA

TEXAS

ROBERT H

MILLER

No. 561

### **Enclosures**

Drawing 1: Site Map with Abandoned Well Locations

Attachment A: Stratus Environmental, Inc. Groundwater Well Destruction Data Package (Includes

Field Data Sheets, Well Destruction Permits, Encroachment Permit, DWR Well Destruction Reports, Well Details Table, Site Map, and Certified Analytical Report

and Chain-of-Custody Documentation)

Attachment B: Waste Disposal Certificates

cc: Mr. Paul Supple, Atlantic Richfield Company, P.O. Box 1257, San Ramon, CA

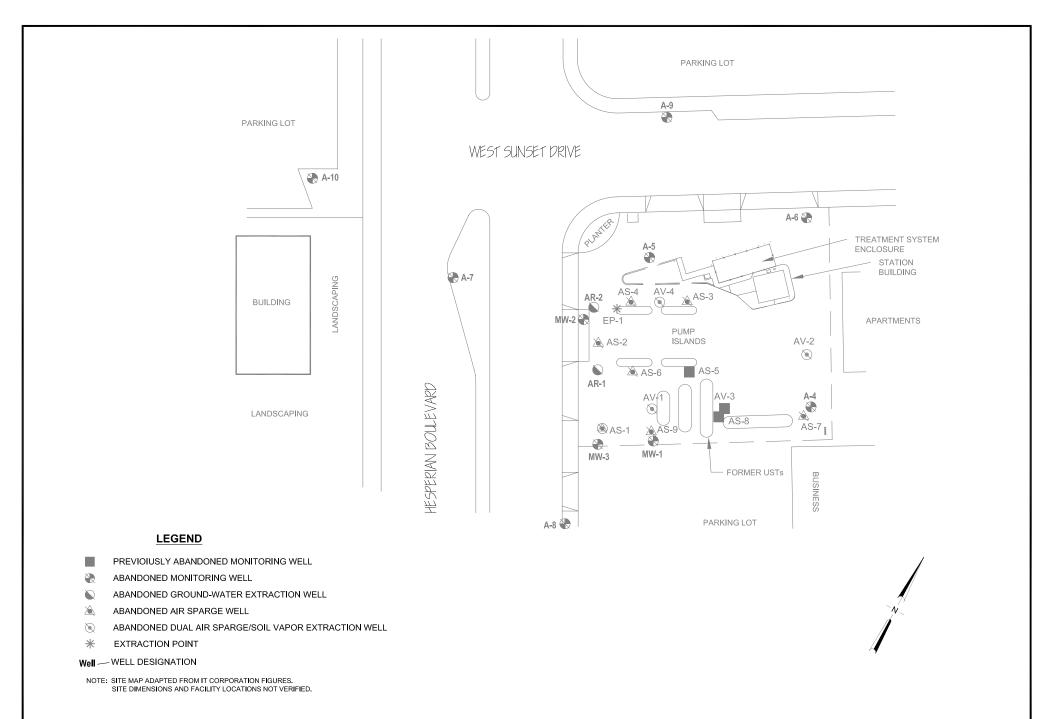
94583 (Submitted via ENFOS)

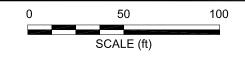
Mr. Chris Panaitescu, Thrifty Oil Co., 13116 Imperial Hwy, Sante Fe Springs, CA

90760

Mr. Jack Oman, Atlantic Richfield Company (Submitted via ENFOS)

GeoTracker





BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

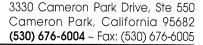
ENGINEERING, WATER RESOURCES & ENVIRONMENTA 1324 Mangrove Ave. Suite 212, Chico, California, 95926 Project No.: 06-02-628 Date: 1/5/09 Former Station #5387 20200 Hesperian Boulevard Hayward, California

Site Map with Abandoned Well Locations

Drawing

### ATTACHMENT A

STRATUS ENVIRONEMNTAL INC. GROUNDWATER WELL DESTRUCTION DATA PACKAGE (INCLUDES FIELD DATA SHEETS, WELL DESTRUCTION PERMITS, ENCROACHMENT PERMIT, DWR WELL DESTRUCTION REPORTS, WELL DETAILS TABLE, SITE MAP, AND CERTIFIED ANALYTICAL REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION)





December 17, 2008 Project No. E5387-01

Mr. Rob Miller Broadbent & Associates, Inc. 2000 Kirman Avenue Reno, NV 89502

Re:

Groundwater Well Destruction Data Package, Former BP Service Station No. 5387, located at 20200 Hesperian Boulevard, Hayward, California (Field activities performed between September 3, 2008 and November 18, 2008)

### **General Information**

Data Submittal Prepared / Reviewed by: Collin Fischer / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representative: Scott Bittinger

Date: September 3, 2008

Arrival: 07:00 Departure: 08:05

Weather Conditions: Sunny Unusual Field Conditions: None

Scope of Work Performed: Completed reconnaissance of project work areas, including activities needed to obtain offsite encroachment and drilling permits. Marked work areas for Underground Service Alert (USA) clearance.

Variations from Work Scope: None noted

On-Site Supplier Representative: Collin Fischer

Date: October 13, 2008

Arrival: 07:30 Departure: 09:30

Weather Conditions: Partly Cloudy

Unusual Field Conditions: None

Scope of Work Performed: Safety meeting, checked location of underground utilities near 3 well locations (A-7, A-8 and A-9) scheduled for over drilling with utility locating subcontractor.

Variations from Work Scope: None noted

December 17, 2008 Project No. E5387-01

Mr. Rob Miller, Broadbent & Associates, Inc. Groundwater Well Destruction Data Package Former ARCO 5387 Hayward, California Page 2

On-Site Supplier Representative: Kiran Nagaraju

Date: October 28, 2008

Arrival: Not Noted Departure: Not Noted

Weather Conditions: Not Noted

Unusual Field Conditions: Stratus received a complaint that several oversize vault lids covering wells at the site had been removed, resulting in vehicle and pedestrian hazard. The property tenant had apparently reported the situation to the police, and were informed that the lids were likely intentionally removed for sale as scrap metal.

Scope of Work Performed: The air space between the vault lid and the ground surface was filled with sand and temporarily patched to allow for safe vehicle and pedestrian access to the well areas.

Variations from Work Scope: None noted

On-Site Supplier Representative: Collin Fischer

Date: November 17, 2008

Arrival: 07:45 Departure: 17:00

Weather Conditions: Clear Unusual Field Conditions: None

Scope of Work Performed: Safety meeting, cleared 2 wells to 5' bgs. with air knife (A-7 and A-8), drill out and grout 1 well (A-7), Tremmie grout 2 wells (A-9 and A-10).

Variations from Work Scope: Well A-9 was not air knifed past 6" due to the close proximity of the well to a fiber optic line. Alameda County Public Works Agency approved tremmie grouting of the well, instead of the previously requested over drilling.

On-Site Supplier Representative: Collin Fischer

Date: November 18, 2008

Arrival: 06:30 Departure: 18:00

Weather Conditions: Clear Unusual Field Conditions: None

Scope of Work Performed: Safety meeting, Drill out and grout 1 well (A-8), tremmie grout 18 wells (MW-1, MW-2, MW-3, A-4, A-5, A-6, AR-1, AR-2, AS-1, AS-2, AS-3, AS-4, AS-6, AS-7, AS-9, AV-1, AV-2, AV-4).

Variations from Work Scope: Well EP-1 was not destroyed as originally planned because it could not be located.

Mr. Rob Miller, Broadbent & Associates, Inc. Groundwater Well Destruction Data Package Former ARCO 5387 Hayward, California Page 3

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include field data sheets, well destruction permits, an encroachment permit, DWR well destruction reports, well details table (Table 1), site map, and certified analytical results. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Scott G. Bittinger, P.G. Project Manager

**Attachments:** 

- Field Data Sheets
- Well Destruction Permits
- Encroachment Permit
- DWR Well Destruction Reports
- Well Details Table (Table 1).
- Site Map
- Certified Analytical Results

CC: Mr. Paul Supple, BP/ARCO

	Onsite 7:00 to complete site reconaissance & made boings on
	USA Clearance. Almost entire property is surrounded by a chain-
	link Cence. Approximately 70-100 appliances (refrigedors, washers, etc.)
	are spredim on the property, which is adjacent to the girport
	Appliance store, Mark USA look around entire property
	off site well. Well A-10 has a damaged well vault, but the
	Well carried apapear intate well A-10 is in a Homen how
	Man a Carrows restaurant, but the well is on a property occupied
	by Tayet (verified with owner manager of carrows). Talled to manager
	of Airport Appliances, the appliances situated outside of the 5 fore will
	Al clinored on September 10, 2008, So there wond be a conflict
	W/ the work, Mough they will lose parting spaces at this time,
	Well A-8 is located in the sidewalk, about 18" from the Wib
	line of 18" From the tree down for a guy-wire for an electrical line
	pole. Since well is under power lines, an L.A.R. will be needed for
	over drilling.
	Many of wells are wroned I fover sized vaults that can't be
	accented > either covered by appliances or welded closed.
	Will reld to Subjectively explained at time of destruction for
	diameter & depth, Janger: 1966/ Hesperian, Carrows, 20413
	Hesperian
	M/sik8:05,
The state of the s	
A. Carrier	Suthlally
É	<del>-</del>

PHANTY Clour

ARCO 5387-Colla Frence

0730-5 ONSUTE, SAFETS MEETING.

0800-8 Clean 3 Borns locations

MALE FOR USA

TALE WI STATION OWN MZ

0900-> PULL SELVEN CAPS TO INVESTIGATE

0930 -> OFFSITE

MM T

STRATOS EN- (NC.

## Field Data Sheet

Site:	ARCO	5387		رد   Date:	(7/08	
Parec	onnel on site:	. Collu	Fiscary.			
1 0130	onner on site	•				
Weat	her Conditio	ns: Clinc	Samo			-
Notes			r.1			
0740	5 5 OHE	SITE MAG	FIC CONTROL FOR	shire Julconn	roia, Shiffy Mebyling,	
0830	- B STEUE	L BERINS	SENTING WE TR	HEEL CONTRO	1 FOR LOCKTION (A.	-71
0900	-, wa o	SHE SHE	ETY MEETING 1 DO	A SITE WAIK.	L TOL LICETION (A.	<del>-</del> / *
0920	-> MOSE	AU KNIER	TO(A-1) 3 SE	u.V.		
ba40	-> B&302	SACETIAM	on (m-1).			
1130 -	STAVOT COM	WE ENI	EL ON (A-t). =	SITE WALK MYC	over sufficient team they fort	TRUCK
	ALL ENL	FE DONE	, orus to CA-	3)-	over suffices from support	
1145-	-5 DIRILI COLE	w MUBE TO	(A-7) For Decilor	it OF (4-71, SE	ET WE & CLUSTON ZONE.	
1220 -	-5 STANT	Drilling 3"	(4-7) W (811 A	users & STIN	SER BUT SCOTT GUAR	
	THE G	jo Afrend, un	com lunca		11 (14 5)	
1240	-> UHC CLE	W STHIT	FED KAIFE ON (F	f-9) STANT D	ruling (a) (A-+).	1.17g-
1650 -	5 0 36 B	to the	well, can office	may a fiber of	Milling @ (A-7). PTIC (NE CHE MARKED PED) TTUS H-DWALLINGS.	( 9
	Jru-	tunnua ou	T BOX ONLY.			
1390	> A-7	GROUTED	TO Suppace, D	econ Augues, C	Charle Area, FINKA MEDIA	)
1205	SWILL	Paris Scan	MAN EXCUISION SON	Ex Mai	Discuss of Score	
1503	TYLE (	CLOSE VICU	1173, 7-2.51 OF	FISHEDAIL TO (A	DISCUSS OF SCOTT	
	Clea	u w Av	2 ENUTE to 8	31 & Courtinu	LE WITH SCOPE TO OUT	
1310-9	AR ENLA	e case of	finishing ut so (4	9), Clemus o	etronos to move to 14-18)	) <u> </u>
1330-	5 phil 8	ra Don's a	3 (A-2), MOVE Ma	3 they lunch	A SET UP TRUFFIL  A SOUT WOLK.  O 2'-8' BOS  About Worked OF Pressure	
. 100	Courter	FUL (A-1	S). Go THUE TO HP	Plinice Store	resour work.	
1400	De Cherry	tumling ONS	TE, SHESMOS FUE	MAS TRENMIE	GOORT NOTEND OF PRESON	2 pear
1415	3 Ser ul	1 Fed-Classian	zone & BAN AIR	ENCEWA. OR-	<b>A</b> .	
1430	-> STAIT	Charting of	ecus & BAN ALE (+-10), SET UN BYCH	us (on Zone, UNB	was well text.	
12 17-	-> ( d ora = (	-Auer Muras	+D IA-O & CAME	C SOSMAND DY	ATON Proceed.	_
120	S SWIT	in to H	20 EMIEE OF	B). WHIS OFF &	XN TO COHOUR POLE HEACHE	2
10 20	W WA	5 of well, T	ORINENT KINGERS FRO	m carening on t	Duray Dell org. 1 pren	
	HEUL !	BISCHESINA W	beiler Avenor Will	THAT BE IN CUM	5, SO WONT BE OFF.	
					HER PHOND.  AD TELEPHONE POLE HUCHUT DUNCY DELLOWD BELLOWD DELLOWD DEL	syring.
<b>167</b> 0	Hole (4	B) Crareo.	TO 6' 1959 CLIAN	ng 2 Secret	Alfer	
1700	OCTSUR	. , , , , , , , , , , , , , , , , , , ,	THE RESERVE OF THE PARTY OF THE			
111	AL	~				

DEM COUNT => 10 Solio

### Field Data Sheet

Site: 5	387	Date: "   18   08
	elonsite: Collin Fischer	
Weather	Conditions: CLEAR, Swing	
Notes:	S ONE OTE, SECURE SITE, B	lock all Develops From teapper
MIO -	5 Dellines on She, Sheer, more t	MA, SUTE WALE, DISCUSS ECOPE OF WOLK,
0739 -5 -5	ARUNT CAEW ON AS-C KE CAEW ON AUM, AS-U, EP-1	SAFETY WELLOS FORFORE THERE ONS CITE.  SAFETY WELLUYS, WEST FOR TORRECT  ES 3 SUR PICCESS (SOF, MANNAGERS, WILL FILL
0800 <u>-</u> ५ व्य	MYOSCOTT ABOUT CATERAL PIA (OPERATE CATEREL OUSCIE) SET W	to trong the flather.
0830 -5	Fill allow from the	Some 105 will wise to BE ENGLISH OFF,
0845 ->	THERE ( CONTROL IS SHOT	UP, MOUR LIMOTED ACCESS FIG TO (A-8). BEGIN Dulling 20 9000
9900 <u>- 5</u>	CONTINUE WHILIPMS BOX	es, Clausing Great out of Boxes
025 -5	AMADOR OPPSOTE TO GET	MURE WHOMS TOS.
040 ->	Geary UVIC TOME Whatom	more whom 5 TIDS.  Leg a Depth full proges START buting  Soil to the waste, I ABEL Deams.  Toom STU Mammy, Howard Burrow &
	TARCE MOCH -	
1230-3	PESSING COME, UN CHEW SING DIGHT CAREN CHEW & CONCE	the Character and come growing growing
		to two Lup times offsite 2 1330.
330 -> 420 ->	GERTI CREW DONE SECTIONS	CE UP ANOTHER PAULET OF CEMENTS
530 -5 C	record ery between will Dankly La Moure to Fright 3 Wells	to acoust.
45-5 A	MOUR TO FINAL 3 WELS	ON REMAINING WELLS
732-51	THE WI APPLIANCE STOPE ABEL DRIVE & SECRE SIX	A BOUT WET CONCRETE.
	OFFICE	
,	1	
	Allin In	
	Merit	

STRATES ENV., INC.



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 10/16/2008 By jamesy

Permit Numbers: W2008-0794 Permits Valid from 11/17/2008 to 11/20/2008

Application Id:

1224088980519

City of Project Site: Hayward

Site Location:

19661 Hesperian Blvd, Hayward, CA 94545

Completion Date: 11/20/2008

**Project Start Date:** 

11/17/2008

Requested Inspection: 11/17/2008

Scheduled Inspection: 11/17/2008 at 11:30 AM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)

Applicant:

STRATUS ENVR. - Scott Bittinger

Phone: 530-676-2062

**Property Owner:** 

3330 Cameron Park Dr #550, Cameron Park, CA 95682

**TARGET Corporation** 

Phone: --

Client:

PO Box 94567-2185, Minneapolis, MN 55440 \*\* same as Property Owner '

Total Due:

\$345.00

Receipt Number: WR2008-0372

**Total Amount Paid:** 

\$345.00

Payer Name: STRATUS ENVR. Paid By: CHECK

PAID IN FULL

### Works Requesting Permits:

Well Destruction-Monitoring - 1 Wells

Driller: Woodward Drilling - Lic #: 710079 - Method: auger

Work Total: \$345.00

#### **Specifications**

Permit #	Issued Date	Expire Date		Hole Diam.	~	Seal Depth	Max. Depth	State Well #	•	DWR#
W2008-	10/16/2008	02/15/2009	<b>Id</b> A-10	8.00 in.	Diam. 2.00 in.	0.00 ft	35.00 ft		Permit #	
0794										

#### **Specific Work Permit Conditions**

- 1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
- 2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.
- 4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to,

property damage, personal injury and wrongful death.

- 5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 6. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 7. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 10/16/2008 By jamesy

Permit Numbers: W2008-0791 to W2008-0793

Permits Valid from 11/17/2008 to 11/20/2008

1224088531822 City of Project Site: Hayward

Site Location: intersection of Hesperian Blvd and W Sunset Drive, Hayward

**Project Start Date:** 11/17/2008 Completion Date: 11/20/2008

Requested Inspection: 11/17/2008

Scheduled Inspection: 11/17/2008 at 2:00 PM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)

Applicant:

STRATUS ENVR. - Scott Bittinger

Phone: 530-676-2062

3330 Cameron Park Dr #550, Cameron Park, CA 95682

**Property Owner:** 

Alameda County

Phone: 510-670-5480

Application Id:

399 Elmhurst St., Hayward, CA 94544

Client:

\*\* same as Property Owner \*\*

Total Due: \$1035.00 \$1035.00

Receipt Number: WR2008-0371 Payer Name: STRATUS ENVR. Paid By: CHECK

**Total Amount Paid:** 

PAID IN FULL

**Works Requesting Permits:** 

Well Destruction-Monitoring - 3 Wells

Driller: Woodward Drilling - Lic #: 710079 - Method: auger

Work Total: \$1035.00

#### **Specifications**

Permit #	Issued Date	<b>Expire Date</b>	Owner Well	Hole Diam.	Casing	Seal Depth	Max. Depth	State Well #	Orig.	DWR#
			ld		Diam.				Permit #	
W2008-	10/16/2008	02/15/2009	A-7	8.00 in.	3.00 in.	0.00 ft	35.00 ft			
0791										
W2008-	10/16/2008	02/15/2009	A-8	8.00 in.	3.00 in.	0.00 ft	35.00 ft			
0792										
W2008-	10/16/2008	02/15/2009	A-9	8.00 in.	3.00 in.	0.00 ft	35.00 ft			
0793										

### **Specific Work Permit Conditions**

- 1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
- 2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

- 4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
- 5. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.
- 6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 7. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 8. Remove the Christy box or similar structure. Destroy well by overdrilling & Tremie Grouting with Cement. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
- 9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 10/16/2008 By jamesy

Permit Numbers: W2008-0772 to W2008-0790 Permits Valid from 11/17/2008 to 11/20/2008

Application Id:

1224087582797

City of Project Site: Hayward

Site Location:

20200 Hesperian Blvd, Hayward, CA 94545

**Project Start Date:** 

11/17/2008

Requested Inspection: 11/17/2008

Completion Date: 11/20/2008

Scheduled Inspection: 11/17/2008 at 3:00 PM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)

Applicant:

Client:

STRATUS ENVR. - Scott Bittinger

Phone: 530-676-2062

**Property Owner:** 

3330 Cameron Park Dr #550, Čameron Park, CA 95682

Phone: --

Orkin Inc. c/o Thrifty Oil Company
13116 Imperial Hwy, Santa Fe Springs, CA 90670
\*\* same as Property Owner \*\*

Total Due:

\$6555.00

Receipt Number: WR2008-0370 Total Amount Paid:

\$6555.00

Payer Name: stratus Envr. Paid By: CHECK

PAID IN FULL

### **Works Requesting Permits:**

Well Destruction-Monitoring - 19 Wells

Driller: Woodward Drilling - Lic #: 710079 - Method: other

Work Total: \$6555.00

### **Specifications**

Specification		5 .	O	Hala Diag-	Caalaa	Cool Donth	May Donth	State Well #	Oria	DWR#
Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seai Depth	wax. Depth	State Well #	Permit #	DWILT
W2008-	10/16/2008	02/15/2009	A-4	3.00 in.	0.00 in.	0.00 ft	35.00 ft			
0772										
W2008-	10/16/2008	02/15/2009	A-5	3.00 in.	0.00 in.	0.00 ft	35.00 ft			
0773				0.00 !	0.00:-	0.00#	35.00 ft			
W2008-	10/16/2008	02/15/2009	A-6	3.00 in.	0.00 in.	0.00 ft	35.00 10			
0774	10/16/2009	02/15/2009	AR-1	6.00 in.	0.00 in.	0.00 ft	35.00 ft			
W2008- 0775	10/16/2008	02/15/2009	AIX-1	0.00 111.	0.00 111.	0.00 11	00.00 K			
W2008-	10/16/2008	02/15/2009	AR-2	6.00 in.	0.00 in.	0.00 ft	35.00 ft			
0776	10/10/2000	0_, 101_11								
W2008-	10/16/2008	02/15/2009	AS-1	1.00 in.	0.00 in.	0.00 ft	35.00 ft			
0777										
W2008-	10/16/2008	02/15/2009	AS-2	1.00 in.	0.00 in.	0.00 ft	35.00 ft			
0778										
W2008-	10/16/2008	02/15/2009	AS-3	0.00 in.	0.00 in.	0.00 ft	35.00 ft			
0779		0011510000	10.4	0.00 !	0.00 in.	0.00 ft	35.00 ft			
W2008-	10/16/2008	02/15/2009	AS-4	0.00 in.	0.00 III.	0.00 11	33.00 II			
0780 W2008-	10/16/2008	02/15/2009	AS-6	0,00 in.	0.00 in.	0.00 ft	35.00 ft			
0781	10/10/2000	02/10/2000	, 1.0 0	0,00						
W2008-	10/16/2008	02/15/2009	AS-7	0.00 in.	0.00 in.	0.00 ft	35.00 ft			
0782										
W2008-	10/16/2008	02/15/2009	AS-9	0.00 in.	0.00 in.	0.00 ft	35.00 ft			
0783										
W2008-	10/16/2008	02/15/2009	AV-1	4.00 in.	0.00 in.	0.00 ft	35.00 ft			
0784				4.001	0.001	0.00 #	25.00 #			
W2008-	10/16/2008	02/15/2009	AV-2	4.00 in.	0.00 in.	0.00 ft	35.00 ft			
0785	40/40/0000	00/45/2000	A\/	0.00 in.	0.00 in.	0.00 ft	35.00 ft			
W2008-	10/16/2008	02/15/2009	AV-4	0.00 III.	0,00 III.	0.00 11	55.00 It			

0786							
W2008- 0787	10/16/2008	02/15/2009	EP-1	0.00 in.	0.00 in.	0.00 ft	35.00 ft
W2008- 0788	10/16/2008	02/15/2009	MW1	2.00 in.	0.00 in.	0.00 ft	35.00 ft
W2008- 0789	10/16/2008	02/15/2009	MW2	2.00 in.	0.00 in.	0.00 ft	35.00 ft
W2008- 0790	10/16/2008	02/15/2009	MW3	2.00 in.	0.00 in.	0.00 ft	35.00 ft

### **Specific Work Permit Conditions**

- 1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
- 2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.
- 4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.
- 5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 6. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 7. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit
application on site shall result in a fine of \$500.00.

·	
Work Order Number:*	Permit Number: ROS LD 9557
*This WO is / is not open for charges.	Permit Issuance Date: 10 3 108
Title WO IS / IS HOT COURT TO: TIME get	Permit Expiration Date:   0   2   09
COUNTY OF ALAMEDA	PUBLIC WORKS AGENCY
	ACHMENT PERMIT
This Beautical instead in considerate with Chapter 1	2.08 of the Alameda County General Ordinance Code
	Total Situs Addingson
Name & Address of Property Owner: Well Owner: BP/ARIO, 6 Center point	20000 Block of Herris Manblud, of Went
Dive, La Palma, CA 90623	Sunset Divid
District Control	
Phone Number: 925~ 275-3301	(This statement to be completed by the Agency)
Name & Address of Contractor:	This permit is issued to the owner _/ contractor _;
Woodward Drilling to , 550 River Road	if "owner" is checked, he/she is/ is notexempt
Rio Vista, CA 94571	from the requirement that work in the readway be
162 F.2 FI) - 102 F. 2 FI	performed by a licensed contractor.
Phone Number: 707-374-4305	
The Applicant intends to perform the following work is	scobe:
Destroy by overdrilling 3 ground water monibin	well streeted in the public right of - wan
Description of the second of t	g), Patch (repair ground surface, as appropriate,
	3), Tasevis repair gloves our real var appropriate
after removing travit box covering wells.	
Licensed Conwactor Declaration:	Worker's Compensation Insurance Declaration:
I hereby affirm, under penalty of perjusy, that I hold the	I hereby affice, under penalty of perjury, that I will, during
following contractor's license, which is in fall force and	the performance of any and all work authorized by this
effect, under the applicable provisions of the State	permit, satisfy the requirements of the State Labor Code with regard to Worker's Compensation Insurance, as
Business and Professions Code.	dedared below:
License Class and No. C-57,710079	I will maintain a comments of consent to self-insure.
Convactor's Signature:	I will maintain the following insertice policy:
Consing E Woodunund	Carrier's Name and Policy No.: State Fund #0020238
	I will not employ any person in any manner so as to become
	i will not employ any person in any manner so at to become subject to the worker's compensation laws of the State.
	Owner's/Contractor's Signature:
	Geneing E Wordward
,	ede-co with the requirements of Chapter 12.08 and
All work and/or access shall be performed in accountless otherwise specified below, shall be fully con	moliant with each of the terms and conditions of the
attached General Provisions:	, ),
	James Joo
	A SECTION AND A SECTION ASSESSMENT ASSESSMEN
CALL THIS NUMBER FOR IT	USPECTIONS: 670 6633
17 C	Insp. Feeor Deposit; \$ 99
Bond Information:	
	\$ 225
	Work Completed (Date):
BY: \$ 14 \\ Mai , Alameda County	•
	Inspector:
I certify that the information that I have entered into this per	nit application is correct, and I agree to comply with all of the
terms and conditions and other requirements of the issued he	gnit a man a
DINO DITTONO STUDONOMONOMO	W

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

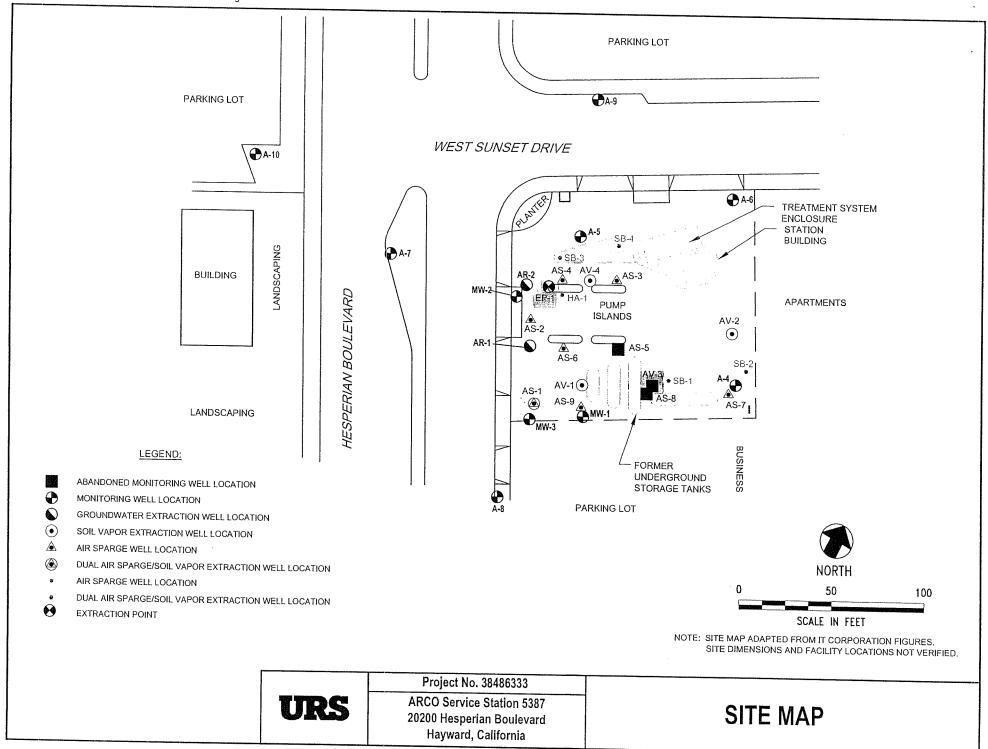
STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

Table 1
Well Details
Former ARCO Station 5387
20200 Hesperian Boulevard
Hayward, California

	Diameter	Well Depth		Diameter of	2nd Well Casing
Well ID	(Inches)	(Feet bgs)	<b>Dual Completion</b>	2nd Well Casing	Depth (Feet bgs)
MW-1	2	30	NO	N/A	N/A
MW-2	2	30	NO	N/A	N/A
MW-3	2	30	NO	N/A	N/A
A-4	3	35	NO	N/A	N/A
A-5	3	30	NO	N/A	N/A
A-6	3	30	NO	N/A	N/A
A-7	3	35	NO	N/A	N/A
A-8	2	35	NO	N/A	N/A
A-9	2	35	NO	N/A	N/A
A-10	2	35	NO	N/A	N/A
AR-1	6	35	NO	N/A	N/A
AR-2	6	35	NO	N/A	N/A
AS-1	1	35	YES	2	15.5
AS-2	1	30	NO	N/A	N/A
AS-3	2	35	NO	N/A	N/A
AS-4	2	35	NO	N/A	N/A
AS-6	2	35	NO	N/A	N/A
AS-7	2	35	NO	N/A	N/A
AS-9	2	35	NO	N/A	N/A
AV-1	4	15	NO	N/A	N/A
AV-2	4	15	NO	N/A	N/A
AV-4	4	15	NO	N/A	N/A
EP-1			UNABLE TO LO	CATE	





December 05, 2008

Jay Johnson Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Subject: Calscience Work Order No.: 08-11-2093

Client Reference:

**ARCO 5387** 

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/22/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental

Laboratories, Inc.

Richard Villafania

**Project Manager** 

Richard Vella



## **Analytical Report**



Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received: Work Order No: Preparation: Method:

08-11-2093 EPA 3050B

11/22/08

**EPA 6010B** 

Project: ARCO 5387

Page 1 of 1

1 10,000. 711100 0007							, .	90 1 01 1
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
swc		08-11-2093-1-A	11/18/08 17:00	Solid	ICP 5300	12/02/08	12/03/08 10:37	081202L04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Lead	6.16	0.500	1		mg/kg			
Method Blank		097-01-002-11,774	N/A	Solid	ICP 5300	12/02/08	12/03/08 10:17	081202L04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Lead	ND	0.500	1		mg/kg			



### **Analytical Report**

Stratus Environmental, inc.

3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:

Work Order No:

Preparation:

Method:

11/22/08

08-11-2093

EPA 5030B

EPA 8015B (M)

Project: ARCO 5387

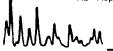
Page 1 of 1

Project: ARCO 5387							Pa	age 1 of 1
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
swc		08-11-2093-1-A	11/18/08 17:00	Solid	GC 1	11/22/08	11/26/08 20:47	081126B01
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	83	42-126						
Method Blank		099-12-697-52	N/A	Solid	GC 1	11/21/08	11/26/08 13:53	081126B01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	0.50	1		mg/kg			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	84	42-126						

RL - Reporting Limit

DF - Dilution Factor ,

Qual - Qualifiers





## **Analytical Report**



Stratus Environmental, inc.

Project: ARCO 5387

3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received:

Work Order No: Preparation:

Method: Units: 11/22/08 08-11-2093

EPA 5030B

EPA 8260B mg/kg

Page 1 of 1

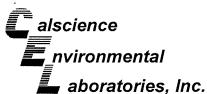
Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrumen	Date t Prepared	Date/Ti i Analyz		QC Batch ID
swc			08-11-	2093-1-A	11/18/08 17:00	Solid	GC/MS Z	12/02/08	12/02/ 22:50		081202L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
Ethylbenzene	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTB	Ξ)	ND	0.0010	1	
Toluene	ND	0.0010	1								
Surrogates:	<u>REC (%)</u>	<u>Control</u>		Qual	Surrogates:			REC (%)	Control		<u>Qual</u>
		<u>Limits</u>							<u>Limits</u>		
Dibromofluoromethane	107	75-141			1,2-Dichloroeth			105	73-151		
Toluene-d8	102	87-111			1,4-Bromofluor	obenzene		101	71-113		
Method Blank		·	099-12	:-709-70	N/A	Solid	GC/MS Z	12/02/08	12/02/ 22:19		081202L01
Parameter	Result	<u>RL</u>	DF	Qua!	<u>Parameter</u>			Result	<u>RL</u>	DF	Qual
Benzene	ND	0.0010	1		Xylenes (total)			ND	0.0010	1	
Ethylbenzene	ND	0.0010	1		Methyl-t-Butyl E	Ether (MTBE	Ξ)	ND	0.0010	1	
Toluene	ND	0.0010	1								
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits		Qual
Dibromofluoromethane	111	75-141			1,2-Dichloroeth	ane-d4		102	73-151		
Toluene-d8	102	87-111			1,4-Bromofluor	obenzene		100	71-113		



L - Reporting Limit , D

DF - Dilution Factor ,

Qual - Qualifiers



## **Quality Control - Spike/Spike Duplicate**



atus Environmental inc

Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: Preparation: Method: 11/22/08 08-11-2093 EPA 3050B EPA 6010B

#### Project ARCO 5387

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
08-12-0101-1	Solid	ICP 5300	12/02/08		12/03/08	081202S04
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Lead	135	131	75-125	1	0-20	LM

RPD - Rela



### **Quality Control - PDS / PDSD**



Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received Work Order No: Preparation:

Method:

11/22/08 08-11-2093 EPA 3050B EPA 6010B

Project: ARCO 5387

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date	Analyzed	PDS/PDSD Batch Number
08-12-0101-1	Solid	ICP 5300	12/02/08	12	2/03/08	081202S04
<u>Parameter</u>	PDS %REC	PDSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Lead	98	94	75-125	1	0-20	





### **Quality Control - Spike/Spike Duplicate**



Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: Preparation: Method: 11/22/08 08-11-2093 EPA 5030B EPA 8015B (M)

#### Project ARCO 5387

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Analyzed	MS/MSD Batch Number
08-11-1842-14	Solid	GC 1	11/21/08		11/26/08	081126S01
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	82	80	42-126	2	0-25	

RPD - Relative Percent Difference ,

7440 Lincolr

CL - Control Limit



## **Quality Control - Spike/Spike Duplicate**



Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550

Cameron Park, CA 95682-8861

Date Received: Work Order No: Preparation:

11/22/08 08-11-2093 **EPA 5030B** 

Method:

**EPA 8260B** 

LN

LN

ВА

#### Project ARCO 5387

Tetrachloroethene

Trichloroethene

Methyl-t-Butyl Ether (MTBE)

Toluene

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
08-12-0101-2	Solid	GC/MS Z	12/02/08		12/02/08	081202S01
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	81	80	78-114	1	0-14	
Chloroform	97	63	80-120	43	0-20	LN,BA
1,1-Dichloroethane	66	96	80-120	38	0-20	LN,BA
1,2-Dichloroethane	91	91	80-120	0	0-20	
1,1-Dichloroethene	85	88	73-127	4	0-21	
Ethanol	99	103	45-135	4	0-29	

57

76

73

110

80-120

74-116

74-122

69-123

5

1

3

27

0-20

0-16

0-17

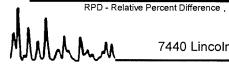
0-18

60

77

75

84







Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861

Date Received: Work Order No: Preparation:

08-11-2093 EPA 3050B

N/A

Method:

EPA 6010B

Project: ARCO 5387

Quality Control Sample ID	Matrix	Matrix Instrume		ate ared	Date d Analyzed		LCS/LCSD Bato Number	h
097-01-002-11,774	Solid	ICP 530	00 12/0	2/08	12/03/08		081202L04	
<u>Parameter</u>	LCS S	<u>6REC</u>	_CSD %REC	<u>%RI</u>	EC CL	<u>RPD</u>	RPD CL	Qualifiers
Lead	107	•	106	80	-120	1	0-20	



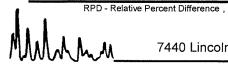




Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: Preparation: Method: N/A 08-11-2093 EPA 5030B EPA 8015B (M)

Project: ARCO 5387

Quality Control Sample ID	Matrix	Instru	ıment	Date Prepared		Date Analyzed		LCS/LCSD Bate Number	h
099-12-697-52	Solid	GC	1	11/21	/08	11/26	5/08	081126B01	
<u>Parameter</u>	LCS %	<u> %REC</u>	LCSD 9	<u>%REC</u>	%RE	C CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	102	!	101		70	-118	1	0-20	







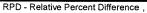
Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: Preparation:

Method:

N/A 08-11-2093 EPA 5030B EPA 8260B

Project: ARCO 5387

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Analy		LCS/LCSD I Numbe	
099-12-709-70	Solid	GC/MS Z	12/02/08	12/02/08		081202L01	
<u>Parameter</u>	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifier
Benzene	92	100	84-114	79-119	7	0-7	
Bromobenzene	97	100	80-120	73-127	3	0-20	
Bromochloromethane	76	79	80-120	73-127	3	0-20	LR
Bromodichloromethane	97	100	80-120	73-127	3	0-20	
Bromoform	96	97	80-120	73-127	1	0-20	
Bromomethane	87	98	80-120	73-127	12	0-20	
n-Butylbenzene	93	103	77-123	69-131	10	0-25	
sec-Butylbenzene	96	104	80-120	73-127	7	0-20	
tert-Butylbenzene	97	104	80-120	73-127	7	0-20	
Carbon Disulfide	92	102	80-120	73-127	10	0-20	
Carbon Tetrachloride	94	103	69-135	58-146	10	0-13	
Chlorobenzene	95	99	85-109	81-113	4	0-8	
Chloroethane	100	112	80-120	73-127	11	0-20	
Chloroform	90	68	80-120	73-127	27	0-20	LR,BA
Chloromethane	86	95	80-120	73-127	10	0-20	
2-Chlorotoluene	96	100	80-120	73-127	4	0-20	
4-Chlorotoluene	93	101	80-120	73-127	8	0-20	
Dibromochloromethane	100	101	80-120	73-127	1	0-20	
1,2-Dibromo-3-Chloropropane	94	99	80-120	73-127	5	0-20	
1,2-Dibromoethane	100	101	80-120	73-127	2	0-20	
Dibromomethane	95	98	80-120	73-127	4	0-20	
1,2-Dichlorobenzene	95	101	80-110	75-115	6	0-10	
1,3-Dichlorobenzene	94	101	80-120	73-127	7	0-20	
1,4-Dichlorobenzene	92	99	80-120	73-127	7	0-20	
Dichlorodifluoromethane	98	105	80-120	73-127	7	0-20	
1,1-Dichloroethane	98	104	80-120	73-127	6	0-20	
1,2-Dichloroethane	98	100	80-120	73-127	2	0-20	
1,1-Dichloroethene	95	104	83-125	76-132	9	0-10	
c-1,2-Dichloroethene	89	98	80-120	<b>7</b> 3-127	9	0-20	
t-1,2-Dichloroethene	91	102	80-120	73-127	11	0-20	
1,2-Dichloropropane	95	101	79-115	73-121	6	0-25	
1,3-Dichloropropane	98	100	80-120	73-127	2	0-20	
2,2-Dichloropropane	90	94	80-120	73-127	4	0-20	
1,1-Dichloropropene	94	103	80-120	73-127	9	0-20	
c-1,3-Dichloropropene	100	103	80-120	73-127	3	0-20	
t-1,3-Dichloropropene	100	100	80-120	73-127	1	0-20	
Ethylbenzene	95	101	80-120	73-127	6	0-20	
Isopropylbenzene	98	102	80-120	73-127	5	0-20	



CL - Control Limit





Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861 Date Received: Work Order No: Preparation:

Method:

N/A 08-11-2093 EPA 5030B EPA 8260B

Project: ARCO 5387

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed 12/02/08		LCS/LCSD I Number	
099-12-709-70	Solid	GC/MS Z	12/02/08			081202L0	)1
<u>Parameter</u>	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
p-Isopropyltoluene	96	104	80-120	73-127	8	0-20	
Methylene Chloride	96	99	80-120	73-127	3	0-20	
Naphthalene	96	98	80-120	73-127	3	0-20	
n-Propylbenzene	96	101	80-120	73-127	5	0-20	
Styrene	97	101	80-120	73-127	4	0-20	
Ethanol	101	109	50-134	36-148	7	0-23	
1,1,1,2-Tetrachloroethane	97	102	80-120	73-127	5	0-20	
1,1,2,2-Tetrachloroethane	100	99	80-120	73-127	1	0-20	
Tetrachloroethene	91	101	80-120	73-127	10	0-20	
Toluene	95	102	79-115	73-121	7	0-8	
1,2,3-Trichlorobenzene	94	99	80-120	73-127	5	0-20	
1,2,4-Trichlorobenzene	95	99	80-120	73-127	4	0-20	
1,1,1-Trichloroethane	96	105	80-120	73-127	8	0-20	
1,1,2-Trichloroethane	97	101	80-120	73-127	4	0-20	
Trichloroethene	93	100	87-111	83-115	7	0-7	
Trichlorofluoromethane	98	108	80-120	73-127	9	0-20	
1,2,3-Trichloropropane	99	95	80-120	73-127	4	0-20	
1,2,4-Trimethylbenzene	96	104	80-120	73-127	8	0-20	
1,3,5-Trimethylbenzene	96	101	80-120	73-127	5	0-20	
Vinyl Acetate	97	95	80-120	73-127	1	0-20	
Vinyl Chloride	93	104	72-126	63-135	11	0-10	BA
p/m-Xylene	92	98	80-120	73-127	6	0-20	
o-Xylene	96	101	80-120	73-127	5	0-20	
Methyl-t-Butyl Ether (MTBE)	100	103	75-129	66-138	3	0-13	
Tert-Butyl Alcohol (TBA)	97	103	66-126	56-136	6	0-24	
Diisopropyl Ether (DIPE)	100	103	77-125	69-133	3	0-13	
Ethyl-t-Butyl Ether (ETBE)	103	105	72-132	62-142	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	101	77-125	69-133	1	0-10	

Total number of LCS compounds: 66

Total number of ME compounds: 1

Total number of ME compounds allowed:

LCS ME CL validation result: Pass

RPD - Relative Percent Difference ,



# **Glossary of Terms and Qualifiers**

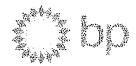


Work Order Number: 08-11-2093

Qualifier	<u>Definition</u>
AX	Sample too dilute to quantify surrogate.
ВА	There was no MS/MSD analyzed with this batch due to insufficient sample volume (NR = not reported). See Blank Spike/Blank Spike Duplicate.
BA,AY	Relative percent difference out of control, matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
вн	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GS	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG	Surrogate recovery below the acceptance limit.
LH	Surrogate recovery above the acceptance limit.
LM,AY	MS and/or MSD above acceptance limits. See Blank Spike (LCS). Matrix interfence suspected.
LN,AY	MS and/or MSD below acceptance limits. See Blank Spike (LCS). Matrix interfence suspected.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.

Work Order Number: 08-11-2093

<u>Qualifier</u>	<u>Definition</u>
MB	Analyte present in the method blank.
MG	Analyte is a suspected lab contaminate.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.



Custody Seals In Place Yes

Chain of Custody Record Project Name: BP BU/AR Region/Enfos Segment: State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy):

UNSITE TIME Offshe Time Princeron

	ame: CHSCLENCE ENC		Born	YORU	<b>E</b> 3	BP/AR Facility No.									*****		(	-0~	Sub	مبدوا	7/6	بهجوط	wee.	. 57	truct	13 E	NU., i	NC.	
Addre	ss: 7440 Unceln w					BP/AR Facility Add	iress	20	200	24	وع	PEL	M.	<u>v</u> §	ou	euxe	2 Y	1000	A CO	. 3	330	COY	ucce	w Pa	Het-	Qr.	# SSC	)	
<b> </b>	CHARDON GAROUR, C			1		Site Lat Long:	~	47	5	A	<b>夕</b>	V	A-				F			C	sur	Car	fure	- C	A.	956	82		\
_ab Pl	M: Lungra Schwiff	NEER	2			California Global II	) No	I	O(c	<u>_</u>	0	3	8	d many 1 - 1 - 1 - 1	an a			لبيع	انسكا	-	1con	جر ق	PEDSE	不快了	55	5367	_		
	ex:(714) 895 - 54		<u> </u>			Enfos Project No.:	કા	ير	52	_e	<u>0</u> 2_	<u>م</u> ا			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Consultant amendment PM: They JOHNSON											
	PM Contact: Pull Sur	The			_	Provision or RCOP										,		الا	19	11	(	530)	.7€¢c	co .	(391	) <del>3</del> 46	6005	•	
Addre	ss:					Phase/WBS: Su	E	Clo	Be	uz	<u></u>				d. m			-	ra:	13.1	L. (	عد	level	-= 4	wel	1	w/ E	DE .	
ļ						Sub Phase/Task:	m	الم	Tre	4	G			********			]	<b>Zora</b>	النام	Z)	70		stlans:	<b>€</b> 870 :	Sim	ATUS	WC.N	ET	
	ex: 925 275 380					Cost Element: C	0	W					_	T=13: 0=1	ZUT.		!	عربد	سيع	10	Cu	8.	sh B	PORL		My	ne Pea	cerelo (	
Lab E	ottle Order No:			Ma	trix				<u> </u>	resen	rrati	(- ) 				1	op :	SI	AM	Alba	Ses	. ~							
Item No.	Sample Description	Time	Date	Soil/Solid	water) Jquid Air	Laboratory No.	No. of Containers	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO	101	Methanol					(4	The second secon	eko G	変な	MYBE	TOTAL TOTAL	S	male	₹oµ₹	Lim	(Lams)	<b>R</b> Co:/mu	EN
	SWC	11/18/08	1700	K	7		1	X					===	-1-	1	-	]=	: ====	K	1	*	K		DR	e .	Com	POSITE	· D	1
7			<u> </u>		_			¥											."-		•			7.5	<b>-</b> . (	ببب	, , , , ,		
			<b></b> -	-	-													-							٠			•	• • •
3					_			L			ļ				<u>-</u>							ļ <b>.</b>	<b>.</b> .						
4																													
5																													
6					7							-														**	• •• *	•	
7				╟╌┼╴	1			-							~~~ <u>*</u>										•	****		•	
				$\vdash$	-				*******																	••			.,
8				╟┷	-					-																			!
9					_												_												
10																													:
Sampl	er's Name:	Colla.	Escala	سيد		Reling	ulshe	d By	ΑN	iliatio	11	/e. <u>savin</u> a		)u	tı:	Tic	e		:::::::::::::::::::::::::::::::::::::::		1.	2 1.	1:	11-1		1831	1119		
	er's Company: STAA	TUS				Mi	F	حت						11/21	08	090	י כי	7	7	Ĺ	_	: 		C'	FC		1-21-02	040	Ď
	ent Date:					Lis				70	C	30		1-21	-03	7	3						$\mathcal{C}_{\mathcal{C}}$						
	ent Method:									************				L				,					1.1	/.		*****			(
		19162	<u>'8</u>				====		-			: <b>=</b> =	<u></u> _	<u>L</u> =	:===		<u> </u>	1 1 2 2 2	: : <b>:::</b> ::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::	. : /	W	1/4	UT	<del>-</del>	::::	11/22/	8093	0
Special	Instructions:													-													' !		(

ody Seals In Place Yes No Temp Blank Yes No Cooler Temperature in Receipt OF Instribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Fink Copy - Consultant/Contractor



WORK ORDER #: 08-11-2093

# -aboratories, Inc. SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Stratus		DATE: _	11/22/08
TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)  Temperature 3 • 6 °C – 0.2 °C (CF) = 3 • 6  Sample(s) outside temperature criteria (PM/APM contacted by:  Sample(s) outside temperature criteria but received on ice/chilled o	).	Blank  ay of sampling	☐ Sample
☐ Received at ambient temperature, placed on ice for transpo			9.
	□ PCBs C		Initial: <u></u>
CUSTODY SEALS INTACT:			
	Present	□ N/A	Initial:
☐ Sample ☐ ☐ No (Not Intact) ☑ Not	Present		Initial: KN
SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	_		
COC document(s) received complete	,		
Sampler's name indicated on COC	٠		
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition			
Correct containers and volume for analyses requested	. 🗹		
Analyses received within holding time			
Proper preservation noted on sample label(s)	. 🗆		₫
Volatile analysis container(s) free of headspace	. 🗆		<u> </u>
Tedlar bag(s) free of condensation			$\preceq$
CONTAINER TYPE:			
Solid: □4ozCGJ □8ozCGJ □16ozCGJ ☑Sleeve □EnCores			
Water: □VOA □VOAh □VOAna <sub>2</sub> □125AGB □125AGBh			
□1AGBs □500AGB □500AGBs □250CGB □250CGBs □	]1PB 🗆5	500PB □50	
□250PBn □125PB □125PBznna □100PBsterile □100PBn	ıa₂ □		
Air: Tedlar® Summa®   Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle  Preservative: h:HCL n:HNO3 na2:Na2S2O3 na:NaOH po4:H3PO4 s:H2SO4 zn	nna:ZnAc₂+N	Rev	abeled by: RN viewed by: WSC canned by: RN

SOP T100\_090 (11/20/08)

#### ATTACHMENT B

WASTE DISPOSAL CERTIFICATES

# NO. 675474

# NON-HAZARDOUS WASTE DATA FORM

CITY, STATE, ZIP	RGARITA, CA 92688 HAYWARD, CA 94641	PHONE NO: ( 940 )460 521
CONTAINERS: No	VOLUME 330 Gallon	NS WEIGHT
Burgard Comment of the Comment of t The Comment of the Comment of	UMP RUCK : DRUMS : CARTONS : OTHER	
WASTE DESCRIPTION COMPONENTS OF WASTE	ALL COMPONENT CONFIDENCE OF THE CONFIDENCE OF TH	WELL-PURGING / DECON WI
WATER	99-100%	
7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<b>4 1 S</b> ( )	
3	7. BESI 162	
PROPERTIES: pH 7-10  SOL	8 8 TO AN LIQUID TO SLUDGE TO SLURRY TO OTHER	
	R EMERGENCY PHONE: 800-424-9300	
THE GENERATOR CERTIFIES TH	AT.THE	
WASTE AS DESCRIBED IS NON-HAZARDOUS	Larry Moothart of BESI on behalf	of generator / / / /
BELSHIRE	Nieto & Sons	
28871 TOVIVE C		service order no.
FOOTHILL RANG	Brsa, CA 92821 CH; CA 92810 (714) 990-6855	PICKUP DATE
(919) 460-5200 PHONE NO:		
TRUCK/UNIT, J.D. NO.	TYPED OR PRINTED FULL NAME & SIGNATURE	
NAME DEMENNO KER	DOON	
ADDRESS 2000 N. ALAMED	)A ST.	DISPOSAL METHOD
CITY) STATE, ZIP COMPTON; CA	90222	Recycle
310-637-7100 PHONE NO.		
	Fernando Movave	n Dol Alexan
	TYPED OR PRINTED FULL NAME & SIGNATURE	

	Manifest		TPST So	oll Recy on-Hazard	•		A		V Mani	fest# ↓			
	Date of Shipment:	Responsible for	And the second of the second control of the	Transporte	r Truck	**	Facility #:	Giv	ven by TPST:	1210	Load #		
1000	12,29,08	022	173	(Z	A07		<i></i>	16711	U U U				
1000	Generator's Name and Billing	g Address:			tor's Phone			Generator's US EPA ID No.					
	BP WEST COAST	PRODUCTS, L	LC			-460-620 to Contact:	<u> </u>						
	P.O. BOX 80249												
	RANCHO SANTA	, A HYNOYWAW	CW 85000		FAX#:				Customer Account Number with TPST:				
	Consultant's Name and Billin	Consu	ltant's Phone	e #:	***************************************								
					Persor	to Contact:							
					FAX#:				Customer Accou	nt Number with	ı TPST:		
	Generation Site (Transport fro	om): (name & address)	in and de sent many of several transfer and desired and desired free for the second section of the		Site Pl	ione #:		<del>M Nonestan</del> teorement	BTEX Levels				
l to	05397 20200 HESPERIA	N BLVD			Person	to Contact:			TPH Levels		***************************************		
Generator and/or Consultant	HAYWARD, CA 1	<del>9</del> 4541			FAX#:				AVG. Levels				
ે	Designated Facility (Transpor	t to): (name & address)		1	y Phone #:			Facility Permit	Numbers				
Ş	TPST SOIL REC	YCLERS OF CA	LIFORNIA		_	0) 862-8 1 to Contact:							
an	12328 HIBISCUS						EFFREY				`		
rato	ADELANTO, CA	FAX#:	01 246-8	nna.									
iene	Transporter Name and Maili		orter's Pho		uncepatement	Transporter's US EPA ID No.:							
١٥	BELSHIRE		<u>9) 460-5</u>			CAR000183913							
	25971 TOWNE C	ENTRE DRIVE				to Contact: コロン・ムイン	OTHART		Transporter's I	450847			
	FOOTHILL RANC	H, CA 92610	mem tono	00	FAX#:		CHIVALI		Customer Account Number with TPST:				
			BESI: 1623	(949) 480-5210									
	Description of Soil	Moisture Content	Contaminated	by: Appro	x. Qty:	Descri	ption of Deli	very	Gross Weight	lare weight	Net Weight		
	Sand O Organic O Clay O Other O	0 - 10%	Gas Diesel Diese	7	dn	15			8960	442D	4540		
	Sand D Organic D Clay D Other D	0 - 10%	Gas 🗅 Diesel 🗅 Other 🗅								766		
	List any exception to Items listed above:  Scale Ticket#												
	Generator's and/or consul Sheet completed and certi any way.	tant's certification: fied by me/us for the	I/We certify tha Generation Sit	it the soil re e shown ab	ference ove and	d herein is I nothing h	taken entire as been add	ely from led or do	those soils desc me to such soil	ribed in the that would	Soil Data alter it in		
	Print or Type Name:	Generator 🗅	Consultant	`	mature ar	d date:		)		Month	Day Year		
H	Larry Moothert Transporter's certification	of BESI on beh. :: I/We acknowledge	e <mark>lf of genera</mark> e receint of the	tor soil describ	ed aho	e and cert	ifu that suc	h-soil is	beino delinere	→   ! <>>   d in exactly	()   U () the same		
Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being condition as when received. I/We further certify that this soil is being directly transported from the Generation without off-loading, adding to, subtracting from or in any way delaying delivery to such site.  Signature and date:											d Facility		
l is	Print or Type Name 1	Signature and date:    Month   Pay   Yeas											
F	TYMIL	- OM MINU	K							1/2 }			
B	Discrepancies:												
Facility						L							
Recycling	Recycling Facility certifies	the receipt of the soil	covered by this m		<u>.                                    </u>								
1 25	Print or Type Name:			Si	gnature a	nd date:	/ /	0/					
๕	D. JEFFR	EY/J. PROVAN	SAL			3101	29/0	8					
1					-	\							