Exhibit R

Cal/OSHA Report

State of California
DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

* |x| Fatality

* W.C. Carrier SCIF

NARRATIVE SUMMARY

Establishment Name	CA Department of Water Resources	Inspection Number	310544614
Management Contacted	Bill Collins	Title	Safety Specialist

Information on Injured — Covered by Workers' Compensation Yes_x_ No___

Name, Address and Phone Number	Occupation
EE#1 - Tim Crawford 1856 Harding St. Seaside, CA 93955 (831) 394-3738	Utility Craftsman
EE#2 - Martin Alvarado 590 Mustang Way Coalinga, CA 93210 (559) 935-8855	

Use additional forms(s) as needed.

Witness Name(s) and Title — *Check box preceding name if confidentiality is given.

*	Names and Title(s)	Address	Phone No.	Signed Statement?			
	Mark Mederios	738 Madison Los Banos, CA 93635	209 827-5134	Yes	Taped	No	
				Yes		No	
				Yes		No	

Summary

On 02/07/07, EE#1 and EE#2, both Utility Craftsmen and divers for the State of California Department of Water Resources performed a diving operation at the Dos Amigos Pumping Plant to inspect the trash racks of Units 1, 2 & 3 for the presence of Quagga/Zebra muscles. The dive was of short duration (30 minutes) and considered routine. A dive tender was stationed on the deck to monitor the divers while in the water. The dive tender was not a diver, had not received training, and had not performed tender duties prior to 02/07/07. Communication gear to allow contact between the divers and dive tender was available but not used. An undetermined event occurred during the dive that resulted in the deaths of both employees. The divers were swept to Pump #5 which was operating at full capacity (2600 cfs). The operating pump was shut off, and a third diver with the Department of Water Resources attempted rescue. EE#1 and EE#2 were recovered in front of pumping Unit #5 and taken by ambulance to Memorial Hospital Los Banos California where they were pronounced deceased.

Use additional sheet(s) as needed.

		Signature	Date
Prepared by:	CSE, IH		8/5/07
Reviewed by:	DM/SR. IH		8/5/07
	Regional Manager		
	Deputy Chief		

State of California
DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF OCCUPATIONAL SAFETY & HEALTH

*[X] Fatality

*W.C. Carrier

SCIF

NARRATIVE SUMMARY

Establishment Name	Inspection Number
California Department of Water Resources	310544614
Management contacted	Title(s)
Bill Collins	Safety Specialist/Hazmat Coord.

Information on Injured

Covered by Workers' Compensation (Yes) No

Name, Address and Phone Number	Occupation
EE#1	
Tim Crawford	Utility Craftsworker
1856 Harding Street Seaside, CA 93955	
831-394-3738	
EE#2	
Martin Alvarado	Utility Craftsworker
590 Mustang Way Coalinga, CA 93210	
559-935-8855	

Witness Name(s) and Title

*Check box preceding name if confidentiality is given.

*	Name and Title(s)	Address	Phone No.	Signed Statement
EE #3	Mark Mederios Utility Craftsworker	738 Madison Los Banos, CA 93635	209- 827-5134	Recorded

Preliminary Accident Information

The Department of Water Resources (DWR) was formed in 1956 with the purpose to build and operate the California State Water Project, including the California Aqueduct. The California Aqueduct is a 444 mile long aqueduct that carries water from Northern California to Southern California. A typical section has a concrete-lined channel 40 feet wide at the base and an average water depth of approximately 30 feet.

The Dos Amigos Pumping Plant is located at 25001 Pole Line Road approximately 9 miles south of Los Banos California, and has the largest pumping plant capacity along the California Aqueduct. The Dos Amigos Pumping Plant was designed and constructed by the U.S. Bureau of Reclamation with construction completed in 1968. The Dos Amigos Pumping Plant is operated and maintained by DWR with the Bureau of Reclamation paying approximately 45% of the cost of operation and maintenance.

The Dos Amigos Pumping Plant has 6 pump units. The pumping plant lifts water coming from the north to flow by gravity to the next pumping station located 164 miles to the south. Each pump intake is served by three trash rack bays. Each trash rack bay is approximately 10 feet wide by 40 feet high. The trash racks extend from the forebay floor to just below the transformer deck.

EE#1, EE#2 and EE#3 were employed by DWR as Utility Craftsworkers with the responsibility of repair, operation, modification, inspection, replacement and maintenance of major civil structures and related utility equipment associated with the State Water Project.

Summary (continued)

EE#1 and EE#2 were also members of DWR's 13-member dive team. Divers routinely inspect facilities along the State Water Project. EE#1 had been a member of the dive team for more than 18 years and was a Diving Supervisor. EE#2 joined the dive team in 2006. Both had recently been through diver certification/re-certification in September 2006.

EE#1 generated a "Notice of Dive" on 02/01/07 at approximately 08:24 AM. The dive, scheduled for 02/07/07, was intended to be an inspection of trash racks 1, 2 & 3 for Quagga/Zebra Mussels. Three participants were listed on the "Notice of Dive", EE#1, EE#2 and Bill Collins. Bill Collins is the DWR Health and Safety Officer and Hazmat Coordinator. Bill Collins is a certified diver with DWR for approximately 12 years and is a Dive Supervisor for DWR.

A Work Clearance Application (#2002865) was generated on 02/01/07 at approximately 09:14 AM by Michael Cardoza. On 02/07/07 at approximately 09:33 AM Timothy Salcido issued a Work Clearance Document (#3003348). There was not a separate clearance for the dive as the divers were working under the clearance obtained for the transformers that were taken out of service at pump units 1, 2 & 3.

On 02/07/07, employees reported at the DWR Engineering Branch of the San Luis Field Division 31770 Gonzaga Road Gustine, CA 95322. EE#1 spoke with Bill Collins regarding the dive and learned that Mr. Collins would be attending meetings that morning and would not participate in the dive. At approximately 07:10 AM EE#1 asked EE#3 if he could be the tender at the dive that day, to which EE#3 agreed. EE#3 had been present at other dives, bringing materials to the site and observing but never participating as a dive tender. EE#3 was trained in CPR/First Aid but not certified as a DWR diver or trained as a DWR dive tender.

EE#1, EE#2 and EE#3 arrived at the Dos Amigos Pumping Plant at approximately 09:00 AM and began to prepare for the dive. The three employees entered the Area Control Center (ACC) at approximately 09:15 AM. A dive briefing was conducted with Tim Salcido, HEP Operator. Tim Salcido informed EE#1 that pump unit #5 would be operating at 100% (approximately 2600 cfs) during the dive. EE#1 understood and agreed, informing Tim Salcido to notify the dive tender (EE#3) if there were any changes.

At approximately 09:33 AM, EE#1 and EE#2 were ready to begin the dive and notified the Area Control Center. Permission to dive was granted, and at approximately 09:44 AM, the clearance was entered into the computer and a printed document was issued.

At approximately 09:50 AM, EE#1 and EE#2 suited up for the dive. EE#1 gave limited instructions to EE#3, but did communicate the following:
1. EE#1 and EE#2 would be underwater for approximately 30 minutes and;
2. If there is a need for us to surface, use this metal rake and strike the metal trash racks.

Wired communication gear where a diver could communicate with the dive tender was available in the dive van. EE#3 asked EE#1 about the use of communication gear. EE#1 stated that that they would not use it since this was going to be an easy dive with short duration.

Summary (continued)

EE#1 and EE#2 entered the water at approximately 10:10 AM. Both descended into the canal using a rope tied to a guardrail on the left side of the liner.

EE#1 and EE#2 were tethered together by a 3-foot rope. The tether was attached to a D-Ring on the buoyancy compensator of EE#1. The other end of the tether was wrapped around the wrist of EE#2.

EE#2 made some final adjustments to his mask and head gear prior to beginning the dive.

EE#3 watched along the railing of the deck, keeping track of the time and the divers separate air bubbles. The pattern of bubbles started at trash rack #1, gradually working west to trash rack #2 and #3.

At approximately 10:35 AM, EE#3 observed the divers air bubbles drift to the center of trash rack #4, then disappear. EE#3 took the metal rake and struck the trash rack to signal to the divers to resurface. EE#3 continued to walk along the deck looking for signs of air bubbles and striking the metal trash rack with the rake.

At approximately 10:45 AM, EE#3 placed a telephone call to Bill Collins but was unable to reach. EE#3 then contacted the Area Control Center, speaking with Kenneth Allen. EE#3 reported that he had lost sight of the divers air bubbles.
Kenneth Allen attempted to call Bill Collins but was unable to reach.
Kenneth Allen attempted to call the cell phone of Bill Collins but reached his voice mail. A message was left to telephone the Area Control Center immediately.
Kenneth Allen communicated to Tim Salcido to assist EE#3 searching for the divers on the deck.

Mandeep Bling, an engineering supervisor at the Dos Amigos Pumping Plant was on the deck on unrelated business. EE#3 approached Mandeep Bling and asked how much air time was typically in the divers tanks. Mandeep Bling estimated about 30 minutes. EE#3 stated that the divers had been in the water for over an hour. Mandeep Bling telephoned Bill Collins but did not get an answer. Mandeep Bling telephoned Jim Thomas Chief of the San Luis Field Division and explained the emergency.

At approximately 11:00 AM, Jim Thomas got Bill Collins out of the meeting and informed him of the situation. Bill Collins immediately left for the Dos Amigos Pumping Plant, approximately a 30 to 40 minute drive.

At approximately 11:35 AM, Pump #5 was veined down to 50% of capacity (approximately 1300 cfs).

At approximately 11:40 AM, Bill Collins arrived at the Dos Amigos Pumping Plant and began to suit up. Appropriate equipment was not available. Bill Collins made a telephone call to get the equipment delivered to the pumping plant. This would take an additional 20 minutes approximate.

At approximately 11:50 AM, Pump #5 was shut down.
At approximately 11:52 AM, 911 was called.

Bill Collins entered the water near Unit #4 after 12:00 PM. With the use of communication gear and line tended from the surface, EE#3 supplied verbal directions.

Summary (continued)

At 12:34 PM, Merced County Sheriffs Office requested the California Highway Patrol to respond to the incident for assistance.

EE#2 was found at approximately 12:40 PM, 30 to 40 feet in front of Unit #5. Bill Collins communicated to EE#3 to pull him back. EE#2 was brought to the surface. Bill Collins continued to search for EE#1.

California Highway Patrol arrived on scene at approximately 12:44 PM.

At approximately 12:50 PM, Bill Collins found EE#1 approximately 4 to 5 feet in front of Unit #5. EE#1 was brought to the surface. An excavator was brought on the deck, and the scoop lowered into the water to bring both employees to the deck.

Both EE#1 and EE#2 were non-responsive and paramedics worked on trying to revive them. Both divers were transported via ground ambulance to Memorial Hospital Los Banos.
EE#1 was pronounced deceased at 01:29 PM.
EE#2 was pronounced deceased at 01:46 PM.

The California Highway Patrol secured all gear worn by both divers at the Los Banos office. Photographic evidence taken by the California Highway Patrol demonstrated the diving gear to be relatively new and in good condition without indication of physical damage.

Remaining air estimated in tanks:
EE#1 - 250 psi
EE#2 - 0 psi

On 02/08/07, the autopsy of EE#1 and EE#2 was conducted at the Merced County Coroners Office. The autopsy was attended by investigators of Cal/OSHA and the California Highway Patrol. Coroners reports have not been issued as of the date of this document.

On 02/21/07 and 02/22/07, the US Bureau of Reclamation conducted an underwater inspection and velocity survey at the Dos Amigos Pumping Plant. The inspection was intended to be close to the operation schedule that was in effect at the time of the incident of 02/07/07. A Remotely Operated Vehicle (ROV) was used to inspect the trash racks in front of operating and non-operating units for evidence of water weed/debris plugging and/or damage. A flow velocity survey was performed with a point-source velocimeter and a velocity profiler. All non-operating trash racks were found to be clean and almost completely free of debris. The ROV video images of the operating Unit #5 show it plugged over much of their area by a dense mat of green water weed. Velocity measured in front of the non-operating units were less than 0.65 ft/sec. The highest velocity of 5.0 ft/sec was measured in front of the operating Unit #5.

On 03/20/07, SCUBA tanks, buoyancy compensators and regulators worn by both divers were crated and packaged for shipment to the US Navy Experimental Dive Unit in Panama City Florida for air and functionality testing. Equipment was shipped on 03/21/07 via UPS and received by the US Navy on 03/28/07.

Summary (continued)

A verbal report from the US Navy in April 2007 stated that air testing of tanks worn by the divers showed no contamination of breathing air. As of this report, no functionality testing of the divers buoyancy compensators or regulators has been completed by the US Navy.

On 04/26/07, the six remaining SCUBA tanks were inspected and air samples from the Bauer Breathing Air Compressor were obtained. Capacity of the six remaining SCUBA tanks are as follows:
Tank #1 - 1600 psi
Tank #2 - 3200 psi
Tank #3 - 3500 psi
Tank #4 - 3200 psi
Tank #5 - 3200 psi
Tank #6 - 3000 psi
Air samples from the breathing air compressor were analyzed. On 05/25/07, results showed no air contamination and the samples meeting the requirements for CGA Grade E breathing air.

Contributing factors which possibly contributed to the incident:
Untrained Dive Tender used on 02/07/07.
Dive operations conducted without the use of available communication gear.
Dive operations conducted while Unit #5 at full capacity of 2600 cfs.

List of persons participating:
EE#3 - DWR Utility Craftsman
Bill Collins - DWR Safety Specialist
Al Romero - DWR Chief, Project Safety Office
Ray Chavez - DWR HEP Engineer/Diver
Pat Whitlock - DWR Supervisor HEP Utility Engineer/Diver
Timothy Salcido - DWR HEP Operator
David Gutierrez - DWR Chief, Division of Safety of Dams
Joel Sturm - US Bureau of Reclamation
Nelson Ross - Bureau of Reclamation
Bill Bowers Jr. - California Highway Patrol
Sgt. Michael Hagerman - California Highway Patrol
Deputy Krutcher - Merced County Sheriff's Office
David Cowgill - US Navy Experimental Diving Unit
Bonnie Vance - Aquatic Dreams Scuba Center
Jim Fields - Monterey Bay Dive Center
Jared Berg - Monterey Bay Dive Center

Violation of Regulation's: 6057(d)(2/5144(i)(7)), 6057(a), 3314(c), 1910.424(b), 6054(a)(2)(D)/6055(a)(9), 3203(a)(7)(C)/3203(a)(2), Special Order

	Signature	Date
Prepared by: CSE		
Reviewed by: DM		8/7/07
Regional Manager	JC	8/9/07
Deputy Chief		

ANALYTICAL CHEMISTS, INC.

7551 Convoy Court, San Diego, CA 92111 Voice & FAX (800) 466-8898 www.AirAnalysis.com

RECEIVED
MAY 25 2007
DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH
MODESTO

Cal/OSHA
1209 Woodrow Ave, Suite C-4
Modesto, CA 95350

ATTN : Robert Pike
FAX : 209-576-6191
TEL : 209-576-6260

LABORATORY # :391-1-07
DATE REPORTED :May 18, 2007
DATE RECEIVED :May 8, 2007
DATE SAMPLED :April 26, 2007
SAMPLED BY :Robert Pike (OSHA)
AIR SAMPLE VOLUME : N.A. cubic ft sampled at N.A. SCFM
IDENTIFICATION :310544614 #1

DIVER'S BREATHING AIR ANALYSIS (CGA-E)

TESTS PERFORMED		ALLOWABLE LIMITS	PRESENT IN THIS SAMPLE	CONCLUSION
OXYGEN	% Vol	20 - 22	**21.**	**PASS**
NITROGEN	% Vol	Balance	**77.**	**N.A.**
CARBON DIOXIDE	ppmv	1000.	**356.**	**PASS**
CARBON MONOXIDE	ppmv	10.	**7.8**	**PASS**
TOTAL VOLATILE HYDROCARBONS + METHANE	ppmv	25.	**4.7**	**PASS**
TOTAL VOLATILE HYDROCARBONS NO METHANE	ppmv	25.	**1.9**	**PASS**
ODOR	ppmv	Not Objectionable	**Not Objectionable**	**N.A.**
MOISTURE (Dew Point *)	°F	- 64°F	**N.A.**	**N.A.**
OIL MIST + PARTICULATE	mg/m^3	5.0	**N.A.**	**N.A.**
FILTER APPEARANCE	ppmv	N.A.	**Clean & Dry**	**N.A.**

< = none present above this level. N.A. = Specification not available. * Dew Points warmer than -50°F destroys Hopcalite.

CONCLUSIONS (based on our own lab results above)
This air sample meets the requirements for CGA Grade E where tested.
The nature of the sampling process precluded a determination of moisture and Oil Mist + Particulate.

David H. Elgas
Laboratory Director

Data : Air Log 149
Invoice : 27391-A
Code : LAT
Review :

NFPA DEMA DAN SUPPORTING MEMBER AIHA Industrial Hygiene ACCREDITED LABORATORY

ANALYTICAL CHEMISTS, INC.

7551 Convoy Court, San Diego, CA 92111 Voice & FAX (800) 466-8898 www.AirAnalysis.com

Cal/OSHA
1209 Woodrow Ave, Suite C-4
Modesto, CA 95350

ATTN : Robert Pike
FAX : 209-576-6191
TEL : 209-576-6260

LABORATORY # : 391-2-07
DATE REPORTED : May 18, 2007
DATE RECEIVED : May 8, 2007
DATE SAMPLED : April 26, 2007
SAMPLED BY : Robert Pike (OSHA)
AIR SAMPLE VOLUME : N.A. cubic ft sampled at N.A. SCFM
IDENTIFICATION : 310544614 #2

DIVER'S BREATHING AIR ANALYSIS (CGA-E)

TESTS PERFORMED		ALLOWABLE LIMITS	PRESENT IN THIS SAMPLE	CONCLUSION
OXYGEN	% Vol	20 - 22	**21.**	**PASS**
NITROGEN	% Vol	Balance	**74.**	**N.A.**
CARBON DIOXIDE	ppmv	1000.	**449.**	**PASS**
CARBON MONOXIDE	ppmv	10.	**7.8**	**PASS**
TOTAL VOLATILE HYDROCARBONS + METHANE	ppmv	25.	**3.0**	**PASS**
TOTAL VOLATILE HYDROCARBONS NO METHANE	ppmv	25.	**0.7**	**PASS**
ODOR	ppmv	Not Objectionable	**Not Objectionable**	**N.A.**
MOISTURE (Dew Point *)	°F	- 64°F	**N.A.**	**N.A.**
OIL MIST + PARTICULATE	mg/m^3	5.0	**N.A.**	**N.A.**
FILTER APPEARANCE	ppmv	N.A.	**Clean & Dry**	**N.A.**

< = none present above this level. N.A. = Specification not available. * Dew Points warmer than -50°F destroys Hopcalite.

CONCLUSIONS (based on our own lab results above)

This air sample meets the requirements for CGA Grade E where tested.
The nature of the sampling process precluded a determination of moisture and Oil Mist + Particulate.

David H. Elgas

Data : Air Log 150
Invoice : 27391-A
Code : LAT
Review :

David H. Elgas
Laboratory Director

NFPA DEMA DAN SUPPORTING MEMBER AIHA Industrial Hygiene ACCREDITED LABORATORY

ANALYTICAL CHEMISTS, INC.

7551 Convoy Court, San Diego, CA 92111 Voice & FAX (800) 466-8898 www.AirAnalysis.com

Cal/OSHA
1209 Woodrow Ave, Suite C-4
Modesto, CA 95350

ATTN : Robert Pike
FAX : 209-576-6191
TEL : 209-576-6260

LABORATORY #	: 391-2-07
DATE REPORTED	: May 18, 2007
DATE RECEIVED	: May 8, 2007
DATE SAMPLED	: April 26, 2007
SAMPLED BY	: Robert Pike (OSHA)
AIR SAMPLE VOLUME	: N.A. cubic ft sampled at N.A. SCFM
IDENTIFICATION	: 310544614 1 & 2

SPECIAL COMMENTS

As mentioned above, the two samples meet (where tested) the CGA Grade E criteria for Diver's Air. Although not requested, we performed a GCMS run on the two samples in an attempt to see if there were any low level hydrocarbons present in the sample. We did find traces of Toluene in both samples, but the largest amount in the samples was about 0.025 ppmv.

We have no data regarding the survivability of Toluene (or any other hydrocarbon) in aluminum cylinders or SCUBA flasks (aluminum or steel) containing compressed air. This is to say that if the air was tainted when first breathed, we cannot guess what that original level of contaminant(s) might have been based on an analysis performed several months after the accident. It is noteworthy that low levels of toluene have little odor; at best the toluene would smell slightly sweet rather than objectionable.

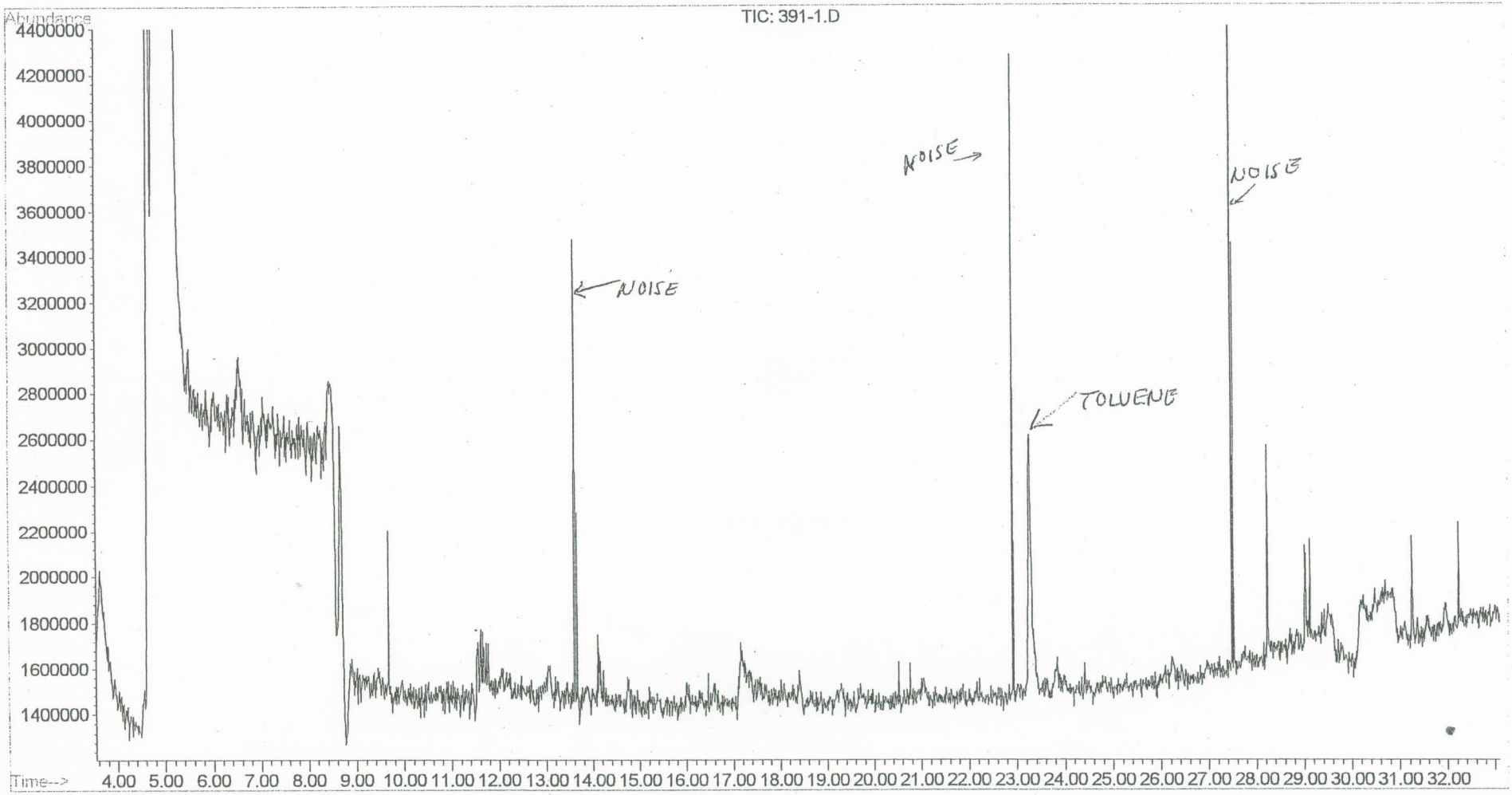
The obvious question is always "where did the toluene come from?" There are several plausible explanations:

1) It has been something of a trade secret that toluene is often blended with other oils during the manufacturing of certain types of synthetic compressor oils. This is necessary to keep the components of the oil from separating. Toluene is volatile enough that it will evaporate from a hot compressor, however, that toluene may accumulate in SCUBA flasks and storage flasks, thereby becoming part of the breathing air used by a diver. The prevention of this is to run the compressor for several hours but vent the air so that it is not collected for actual use.

2) If the compressor oil was a mineral oil, we understand that the combination of heat and pressure can cause the mineral oil to form both carbon monoxide and BTEX compounds (Benzene, Toluene, Ethylbenzene and Xylenes). If the filters are still effective (dry), these compounds will be trapped out of the air stream.

David H. Elgas
President
Analytical Chemists, Inc.

File : C:\MS2007\AS022907\TESTDATA\391-1.D
Operator : dhe
Acquired : 9 May 2007 16:28 using AcqMethod AIRSUIT
Instrument : 5972GC/MS
Sample Name: 391-1-07 150cc canister 214E
Misc Info :
Vial Number: 1



ANALYTICAL CHEMISTS, INC. 7551 Convoy Court, San Diego, CA 92111 Voice & Fax (858) 560-4916

GAS ANALYSIS

Laboratory Use Only.	Specification & Time Request:	Address for this Report:	Address for the Invoice:
Date/Time: May 8, 2007 1:30pm Rec'd By: INVOICE #: 27391-A PO #:	1 Diver's Air: US Navy L-1 2 ASDS & Host Ship Air Special 3 Chamber Post Painting 4 Oxygen Compatible Air Special 5 Emergency/Fire/Rescue CGA-D 6 Oxygen* USN L-2 or Mil-PRF-27210G 7 Nitrogen* (BB-N-411C) A-A-59503 8 High Purity Breathing Air BB-A-1034 9 Other ?	Cal/OSHA – c/o Robert Pike 1209 Woodrow Ave. Suite C-4 Modesto, CA 95350 209-576-6260-Office 209-576-6191-Fax	Cal/OSHA – c/o Robert Pike 1209 Woodrow Ave. Suite C-4 Modesto, CA 95350 209-576-6260-Office 209-576-6191-Fax

	SAMPLE IDENTIFICATION & DESCRIPTION	SAMPLED BY	DATE & TIME SAMPLED
1	#1 3105446614	Robert Pike	4/26/07 2:30pm
2	#2 3105446614	Robert Pike	4/26/07 2pm
3			
4			
5			
6			
7			
8			
9			
10			

LAB # 391

ANALYTICAL CHEMISTS, INC.

7551 Convoy Court, San Diego, CA 92111 Voice & FAX (800) 466-8898 www.AirAnalysis.com

Cal/OSHA
1209 Woodrow Ave, Suite C-4
Modesto, CA 95350

ATTN : Robert Pike
FAX : 209-576-6191
TEL : 209-576-6260

LABORATORY # : 391-1-07
DATE REPORTED : May 18, 2007
DATE RECEIVED : May 8, 2007
DATE SAMPLED : April 26, 2007
SAMPLED BY : Robert Pike (OSHA)
AIR SAMPLE VOLUME : N.A. cubic ft sampled at N.A. SCFM
IDENTIFICATION : 310544614 #1

DIVER'S BREATHING AIR ANALYSIS (CGA-E)

TESTS PERFORMED		ALLOWABLE LIMITS	PRESENT IN THIS SAMPLE	CONCLUSION
OXYGEN	% Vol	20 - 22	**21.**	**PASS**
NITROGEN	% Vol	Balance	**77.**	**N.A.**
CARBON DIOXIDE	ppmv	1000.	**356.**	**PASS**
CARBON MONOXIDE	ppmv	10.	**7.8**	**PASS**
TOTAL VOLATILE HYDROCARBONS + METHANE	ppmv	25.	**4.7**	**PASS**
TOTAL VOLATILE HYDROCARBONS NO METHANE	ppmv	25.	**1.9**	**PASS**
ODOR	ppmv	Not Objectionable	**Not Objectionable**	**N.A.**
MOISTURE (Dew Point *)	°F	- 64°F	**N.A.**	**N.A.**
OIL MIST + PARTICULATE	mg/m^3	5.0	**N.A.**	**N.A.**
FILTER APPEARANCE	ppmv	N.A.	**Clean & Dry**	**N.A.**

< = none present above this level. N.A. = Specification not available. * Dew Points warmer than -50°F destroys Hopcalite.

CONCLUSIONS (based on our own lab results above)
This air sample meets the requirements for CGA Grade E where tested.
The nature of the sampling process precluded a determination of moisture and Oil Mist + Particulate.

Data : Air Log 149
Invoice : 27391-A
Code : LAT
Review :

David H. Elgas
Laboratory Director

ANALYTICAL CHEMISTS, INC.

7551 Convoy Court, San Diego, CA 92111 Voice & FAX (800) 466-8898 www.AirAnalysis.com

Cal/OSHA
1209 Woodrow Ave, Suite C-4
Modesto, CA 95350

ATTN : Robert Pike
FAX : 209-576-6191
TEL : 209-576-6260

LABORATORY # : 391-2-07
DATE REPORTED : May 18, 2007
DATE RECEIVED : May 8, 2007
DATE SAMPLED : April 26, 2007
SAMPLED BY : Robert Pike (OSHA)
AIR SAMPLE VOLUME : N.A. cubic ft sampled at N.A. SCFM
IDENTIFICATION : 310544614 #2

DIVER'S BREATHING AIR ANALYSIS (CGA-E)

TESTS PERFORMED		ALLOWABLE LIMITS	PRESENT IN THIS SAMPLE	CONCLUSION
OXYGEN	% Vol	20 - 22	**21.**	**PASS**
NITROGEN	% Vol	Balance	**74.**	**N.A.**
CARBON DIOXIDE	ppmv	1000.	**449.**	**PASS**
CARBON MONOXIDE	ppmv	10.	**7.8**	**PASS**
TOTAL VOLATILE HYDROCARBONS + METHANE	ppmv	25.	**3.0**	**PASS**
TOTAL VOLATILE HYDROCARBONS NO METHANE	ppmv	25.	**0.7**	**PASS**
ODOR	ppmv	Not Objectionable	**Not Objectionable**	**N.A.**
MOISTURE (Dew Point *)	°F	- 64°F	**N.A.**	**N.A.**
OIL MIST + PARTICULATE	mg/m^3	5.0	**N.A.**	**N.A.**
FILTER APPEARANCE	ppmv	N.A.	**Clean & Dry**	**N.A.**

< = none present above this level. N.A. = Specification not available. * Dew Points warmer than -50°F destroys Hopcalite.

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The nature of the sampling process precluded a determination of moisture and Oil Mist + Particulate.

Data : Air Log 150
Invoice : 27391-A
Code : LAT
Review :

David H. Elgas
Laboratory Director

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ATTN : Robert Pike
FAX : 209-576-6191
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LABORATORY #	: 391-2-07
DATE REPORTED	: May 18, 2007
DATE RECEIVED	: May 8, 2007
DATE SAMPLED	: April 26, 2007
SAMPLED BY	: Robert Pike (OSHA)
AIR SAMPLE VOLUME	: N.A. cubic ft sampled at N.A. SCFM
IDENTIFICATION	: 310544614 1 & 2

SPECIAL COMMENTS

As mentioned above, the two samples meet (where tested) the CGA Grade E criteria for Diver's Air. Although not requested, we performed a GCMS run on the two samples in an attempt to see if there were any low level hydrocarbons present in the sample. We did find traces of Toluene in both samples, but the largest amount in the samples was about 0.025 ppmv.

We have no data regarding the survivability of Toluene (or any other hydrocarbon) in aluminum cylinders or SCUBA flasks (aluminum or steel) containing compressed air. This is to say that if the air was tainted when first breathed, we cannot guess what that original level of contaminant(s) might have been based on an analysis performed several months after the accident. It is noteworthy that low levels of toluene have little odor; at best the toluene would smell slightly sweet rather than objectionable.

The obvious question is always "where did the toluene come from?" There are several plausible explanations:

1) It has been something of a trade secret that toluene is often blended with other oils during the manufacturing of certain types of synthetic compressor oils. This is necessary to keep the components of the oil from separating. Toluene is volatile enough that it will evaporate from a hot compressor, however, that toluene may accumulate in SCUBA flasks and storage flasks, thereby becoming part of the breathing air used by a diver. The prevention of this is to run the compressor for several hours but vent the air so that it is not collected for actual use.

2) If the compressor oil was a mineral oil, we understand that the combination of heat and pressure can cause the mineral oil to form both carbon monoxide and BTEX compounds (Benzene, Toluene, Ethylbenzene and Xylenes). If the filters are still effective (dry), these compounds will be trapped out of the air stream.

David H. Elgas
President
Analytical Chemists, Inc.

State of California
DEPARTMENT OF INDUSTRIAL [illegible]ATIONS
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

Office: Modesto

CHAIN OF CUSTODY

I. Acquisition of Evidence:

On 2/7/07 (date), Robert Pike (SE/IH) was assigned to conduct an inspection at DWR (establishment name)
Dos Amigos 25001 Pole Line Rd Los Banos, CA 93635.

On 2/7/07 (date) the SE/IH arrived at the worksite to inspect and during the course of the inspection the SE/IH determined that it was necessary to acquire the following evidence to substantiate a violation.

The following item(s) were received from Bill Collins (name/title) of Department (employer) Water Resources on 4/26/07 (date), 2:00pm (time), A copy was given to same as a receipt:

(1) Air Sample #1 from Bauer Breathing Air Compressor (description of item)

(2) Air Sample #2 from Bauer Breathing Air Compressor (description of item)

(3) Model - JR11-6
Serial - 023783 (description of item)

SE/IH 4/26/07 (date) 2:00pm (time)

II. Storage:

The above item(s) collected for inspection _____ (Cal/OSHA 1 No.)

have been stored at the following location: _____

from _____ (date) to _____ (date).

III. Release:

The above item(s) is(are) no longer required for the inspection and have been released to _____ (name/title)

_____ of _____ (employer) on _____ (date), _____ (time).

_____ (SE/IH signature) _____ (date) _____ (time) _____ (D.M. initials) _____ (date)

2 (Region) 4 (District) 90994 (SE/IH ID) 049-07 (Optional Report No.) 310544614 (Cal/OSHA 1 No.)