

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

October 06, 2009

Ms Susan von Gonten
Geologist, Remedial Action Program
New Mexico Environmental Department
Petroleum Storage Tank Bureau
1301 Siler Road
Building B
Santa Fe, NM 87507

RE: 3rd Qtr (September 2009) Monitoring NAPL Recovery & Report for the former Capital 66 site located at 204 Montezuma in Santa Fe, NM. FID#: 27219 RID#: 324 WPID#: 15533

Dear Ms. von Gonten:

On behalf of Mr. Matt Champion of Champion Oil (Capital 66), R.T. Hicks Consultants, Ltd. is pleased to submit the attached report summarizing the results of the 3rd Quarter 2009 monitoring activities at the above referenced site. We conducted sampling and monitoring activities on September 20, 2009 in accordance with the current workplan (WPID: 15533) approved by the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) on August 19, 2009.

Please call me at (505) 266-5004 if you have any questions regarding this site.

Sincerely,
R.T. Hicks Consultants, Ltd.



Andrew Parker
Project Manager

Cc: Mr. Matt Champion; Capital 66

Cover Page
Form 1216
3rd Quarter (September 2009) Monitoring NAPL Recovery & Report

1. **Site Name:** Capital 66 / Champion Oil
2. **Responsible Party:** Matt Champion
3. **Responsible Party Mailing Address:**

PO Box 4970
Santa Fe, NM 87502

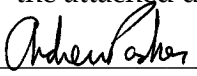
4. **Facility Number:** 27219
5. **Address/legal description:**

204 Montezuma
Santa Fe, NM 87505

6. **Author/consulting Company:** R.T. Hicks Consultants, Ltd.
7. **Date of report:** October 06, 2009
8. **Date of confirmation of release or date USTB was notified of the release:**
September 12, 1990

STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Signature: 

Name: Andrew Parker

Affiliation: R.T. Hicks Consultants, Ltd.

Title: Project Manager

Date: October 06, 2009

I. INTRODUCTION

R.T. Hicks Consultants, Ltd. (Hicks Consultants) prepared this report for Matt Champion, the responsible party, for the former Capital 66 (Champion Oil). The report was prepared in accordance with applicable sections of Part 12 of the New Mexico Environment Department Petroleum Storage Tank Regulations and Workplan ID 15533, which NMED Petroleum Storage Tank Bureau (PSTB) approved on August 19, 2009.

The former Capital 66 site is located at 204 Montezuma Ave, in Santa Fe, New Mexico (Figure 1). The property lies within an area of commercial use. The former Capital 66 dispensed gasoline. In September, 1990, a release of gasoline fuel was documented during the closure of the underground storage tank (UST). Matt Champion currently owns the property. The property is currently used as a restaurant, commonly known as Saveur: Creatively Prepared Foods.

A soil vapor extraction system (SVES) operated at the site from January 1994 through June 12, 1997. After several cycling episodes, EnecoTech recommended that the SVES be turned off due to declining petroleum hydrocarbon concentrations. The NMED concurred. Approximately 4,146 pounds of hydrocarbons were removed. The SVES and connecting pipelines have been removed from the property.

Oxygen Release Compounds (ORC) had been installed in ground water monitoring wells MW-1 and MW-3 in an effort to enhance passive biodegradation of hydrocarbons in the vicinity of the wells. The NMED did not approve the continued use of ORC; therefore, its use was discontinued. The dates of ORC use prior to June 2002 are unknown. ORC has not been used since June 2002.

This report summarizes ground water monitoring activities conducted at the site on September 20, 2009.

I.A Scope of work

Under the approved work plan (WPID 15533) the scope of work for the annual monitoring event includes: i) measuring fluid levels and collecting field parameters in three monitoring wells (MW-1, MW-2, and MW-3R) and ii) collecting ground water samples from the above referenced monitoring wells for laboratory analysis. Ground water samples were analyzed for volatile organic compounds using EPA Method 8260B and EDB using EPA Method 504.1.

I.B Quarter Highlights

We completed the following activities during the annual sampling event:

- Measured fluid levels in monitoring wells MW-01, MW-02, and MW-03R,
- Collected ground water samples from monitoring wells MW-1, MW-2, and MW-3R. MW-3R exhibited 0.01 feet of phased separated hydrocarbons (PSH),

- Ground water elevation is above the top of screen at all on-site wells, and
- Prepared Form 1216 monitoring report.

II. ACTIVITIES PERFORMED DURING THIS HALF

II.A Remediation System

No remediation system exists at the Capital 66 site.

II.B System Operation

No remediation system exists at the Capital 66 site.

II.C Monitoring Activities

On September 20, 2009, R.T. Hicks Consultants personnel measured depth to water in MW-01 and MW-02. Depth to water and depth to product was measured in MW-03R. Field parameters were obtained for temperature, specific conductance (temperature compensated), and pH.

R.T. Hicks Consultants personnel collected ground water samples from MW-01, MW-02, and MW-03R after purging monitoring wells of three casing volumes, unless the well purged dry. MW-03R contained 0.01-feet PSH. We submitted ground water samples under full chain-of-custody to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis of volatile organic compounds using EPA Method 8260B and EDB using EPA Method 504.1.

Appendix 1 contains our sampling protocol, Appendix 3 contains our field notes, and Appendix 6 contains the laboratory Certificate of Analysis.

II.D System Performance and Effectiveness

No remediation system exists at the former Capital 66 site.

II.E Containment of Release

Laboratory analyses of ground water samples indicate benzene and EDB concentrations in MW-01 exceed New Mexico's Water Quality Control Commission (WQCC) standards. The below table summarizes the major constituents of concern.

	PSH	Benzene	Toluene	Ethyl benzene	Xylenes	Naphthalene	EDB
MW-01	no	> WQCC	< WQCC	ND	< WQCC	ND	> WQCC
MW-02	no	< WQCC	ND	ND	ND	ND	ND
MW-03R	yes	ND	< WQCC	< WQCC	< WQCC	< WQCC	ND
ND = non-detect > WQCC = above New Mexico's Water Quality Control Commission standards < WQCC = below New Mexico's Water Quality Control Commission standards							

III. SUMMARY AND CONCLUSIONS

III.A Trends or Changes in Site Conditions

Ground water chemistry

- Laboratory analysis of ground water samples obtained from MW-01 indicate benzene and EDB concentrations are above NMWQCC standards. Benzene concentrations continue to fluctuate between 25 ug/L and 160 ug/L during the last 4 sampling events (October 2007 to September 2009). EDB concentrations continue to fluctuate between 0.063 and 0.26 ug/L during the same time period. Toluene, total xylenes, and naphthalene are below WQCC standards. Ethylbenzene is below laboratory detection limits.
- Laboratory analysis of ground water samples obtained from MW-02 indicate toluene, ethylbenzene, total xylenes, naphthalene, and EDB concentrations are below laboratory detection level. Benzene concentrations show a decreasing trend since May 2007, from 4.1 to 1.2 ug/L.
- MW-03R contained 0.01 feet of PSH. However, laboratory analyses indicated benzene concentrations were below laboratory detection limits. Toluene, ethylbenzene, total xylenes, and naphthalene were below WQCC standards.

Figure 2 shows benzene concentrations in ground water relative to site environs. Table 1 shows recent and historic BTEXN concentrations in ground water.

Ground water levels

Depth to water ranges from 18.1 to 21.6 feet below ground surface. Ground water elevation at all on-site monitoring wells is above the top of the screened interval. Ground water elevation exceeded the top of the screen sometime between the June 2006 and May 2007 sampling events. Since June 2006, gauging data at MW-03R shows a decrease in PSH thickness as water elevations exceeded the top of the screened interval. We believe the increase in ground water elevation prohibits PSH, if present, from entering the well casing.

Ground water flow direction at the site is to the southwest. The ground water gradient at the site is 0.09.

Figure 3 is a map showing observed ground water elevations and potentiometric surface from the September 2009 sampling event. Table 4 summarizes recent and historic ground water levels. Table 4 also contains hydrographs for each well.

Appendix 8 shows a chart of benzene concentrations relative to ground water elevation over time for MW-01, MW-02, and the former MW-03 (P&Aed). The chart for MW-03R shows PSH thickness relative to ground water elevation over time.

III.B Assessment of Remediation System

No remediation system exists at the Capital 66 site.

III.C Recommendations

- Continue monitoring on a quarterly basis.

While the existing well network may define the magnitude of hydrocarbon impact at this site, the extent of the impact is not defined to the north, south or east. One can neither design a remedy nor determine if a remedy is urgently needed at this site without understanding of the extent of impact.

We believe the ground water flow direction needs further examination to determine the cause of the 8-foot difference (November 2007 data) in ground water elevations between the Capital 66 site and the 210 & 218 Montezuma site that is located west and across Cerrillos Road; and 10-foot difference between Capital 66 and the future Santa Fe Judicial Complex (Aug-Sept 2009). The 8 to 10-foot difference in ground water elevations may be the result of a survey elevation error. Well survey elevations conducted by Daniel B. Stephens and Associates (DBS&A) do not agree with well elevations noted on the earlier well completion logs submitted by Glorieta Geoscience, Inc. The Glorieta Geoscience well logs (MW-01 and MW-02) show well elevations approximately 2.99 feet lower than the elevations reported by (DBS&A). The difference in elevations may indicate a survey error occurred during one of the two surveys. An elevation error may explain the large difference in ground water elevations between the Capital 66 site and the 210 & 218 Motezuma site (DBS&A).

If you have any questions or comments, please contact Andrew Parker at 505-266-5004.

Sincerely,

R.T. Hicks Consultants, Ltd.

A handwritten signature in black ink, appearing to read "Andrew Parker". The signature is fluid and cursive, with the first name "Andrew" and last name "Parker" clearly distinguishable.

Andrew Parker
Project Manager

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

Figures

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

List of Figures			
Figures		Included	N/A
1	Site Map	x	
2	Ground Water Concentration Map	x	
3	Water Level Map	x	
4	Graphs Showing Hydrocarbon Removal over Time	See Table 5	



Explanation

- Former Capital 66 Site
- - - Saveur Creatively Prepared Foods Rsnt
- ⊕ Monitoring Well

R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Site Location Map

Former Capital 66 Site: 204 Montezuma Santa Fe, NM
 Facility ID: 27219

Figure 1

October 2009



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Benzene Concentration in Ground Water
 (September 20, 2009)
 Former Capital 66 Site: 204 Montezuma Santa Fe, NM
 Facility ID: 27219

Figure 2
 October 2009



Explanation

- Ground water elevation (feet msl)
- ⊕ Monitoring well with ground water elevation (ft msl)
- Former Capital 66
- Saveur Creatively Prepared Foods Rsnt

R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Potentiometric Surface (September, 2009)

Former Capital 66 Site: 204 Montezuma Santa Fe, NM
 Facility ID: 27219

Figure 3

October 2009

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

Tables

Site Name: Capital 66

USTB Facility #: 27219

Date: October 06, 2009

List of Tables			
Table		Included	N/A
1	Laboratory Results of Ground Water Sample Analysis	x	
2	Vapor Monitoring Results		x
3	Laboratory Results of Soil Sample Analyses		x
4	Water Level Measurements	x	
5	Hydrocarbon Removed as Free Product	x	
6	Summary of Free Product Levels (Included in Table 4)	See Table 4	
7	Summary of System Information		x
8	Summary of Maintenance Procedures		x

Table 1:
Laboratory Results of Ground Water Sample Analysis

Capital 66
Facility #: 27219
October 06, 2009

Well	Date	Benzene ug/L	Toluene ug/L	Ethyl Benzene ug/L	Total Xylenes ug/L	TPH ug/L	EDB ug/L	EDC ug/L	MTBE ug/L	Total Naphthalene ug/L
NMWQCC		10	750	750	620		0.1	10		30
MW-1	1/27/94		0.9		5.8	2.1				
	4/26/94	0.3			1.4	2.3				
	7/25/94				0.6	1				
	10/12/94								NA	
	1/25/95					1.6				
	4/12/95					0.75			NA	
	7/27/95	0.66		0.73	1.6	1.47			NA	
	11/7/95								NA	
	1/28/96					3			NA	
	10/30/96	6.2	0.7		2.8	0.71			NA	
	3/6/97	225	29.6	19.6	46.9	8.51	0.03	2.2	NA	
	9/3/97	4.1	ND	ND	ND	NA	ND	ND	NA	
	3/26/98	4.3	ND	ND	ND	ND	ND	ND	NA	
	11/20/98	0.8	<0.5	<0.5	0.5	NA	<0.01	<0.5	NA	
	2/18/99	22.6	<0.5	<0.5	<0.5	NA	<0.01	<0.5	NA	
	5/5/99	29.9	<0.5	<0.5	<0.5	NA	0.06	<0.5	NA	
	8/10/99	<0.5	<0.5	<0.5	<0.5	NA	0.1	<0.5	NA	
	3/9/00	330	16.5	8.4	13.7	NA	<0.1	<0.5	NA	
	6/14/00	51.2	0.6	<0.5	<0.5	NA	<0.1	<0.5	NA	
	9/6/00	1.4	<0.5	<0.5	<0.5	NA	<0.1	<0.5	NA	
	12/12/00	79.9	6.2	2.4	8.4	NA	<0.01	<0.5	NA	
	3/29/01	857	511	81.9	335	NA	<0.1	<0.5	NA	
	12/5/01	205	22.1	35.4	38.9	NA	<0.5	3.8	NA	35.3
	3/4/02	128	14	17.4	28.4	NA	<0.5	3.6	NA	19.3
	6/3/02	<0.5	1.4	<0.5	2.2	NA	<0.5	<0.5	NA	
	10/7/02	230	22	4.1	19.4	NA	<1	1.7	<1	14
	8/6/04	280	73	10	41	NA	0.075	3.1	<1	2.1
	11/2/04	9.8	1.9	<1	4.9	NA	<0.1	<1	<1	2.9
	2/13/06	92	7.3	2.4	19	NA	0.18	5	<1	5.5
	6/2/06	360	4.5	<1	<3	NA	0.27	4.5		8
	5/23/07	400	13	5.6	13	NA	0.55	<5	<5.0	15
	10/16/07	93	1.5	<1.0	<1.5	NA	0.16	<1.0	<1.0	3.8
	11/29/07	160	<5.0	<5.0	<7.5	NA	0.18	<5.0	<5.0	<10.0
	2/26/08	25	<1.0	<1.0	<1.5	NA	0.063	<1.0	<1.0	<2.0
	4/11/09	5.9	<1.0	<1.0	<1.5	NA	NA	2.6	<1.0	<2.0
	9/20/09	77	1.1	<1.0	4.9	NA	0.26	<1.0	<1.0	4.7

Table 1:
Laboratory Results of Ground Water Sample Analysis

Capital 66
Facility #: 27219
October 06, 2009

Well	Date	Benzene ug/L	Toluene ug/L	Ethyl Benzene ug/L	Total Xylenes ug/L	TPH ug/L	EDB ug/L	EDC ug/L	MTBE ug/L	Total Naphthalene ug/L
NMWQCC		10	750	750	620		0.1	10		30
MW-2	1/27/94									
	4/26/94									
	7/25/94									
	10/12/94								NA	
	1/25/95									
	4/12/95								NA	
	7/27/95								NA	
	11/7/95								NA	
	1/28/96	NS	NS	NS	NS	NS	NS	NS	NS	
	10/30/96								NA	
	3/6/97								NA	
	9/3/97	0.9	ND	ND	ND	NA	ND	ND	NA	
	3/26/98	311	6.5	ND	5.7	ND	3	12.5	NA	
	11/20/98	324	2.5	<0.5	2.3	NA	<0.01	12.1	NA	
	2/18/99	155	1.3	0.7	8.2	NA	<0.01	<0.5	NA	
	5/5/99	12.8	1.3	<0.5	0.9	NA	<0.01	<0.5	NA	
	8/10/99	17.9	<0.5	1.5	0.9	NA	<0.01	<0.5	NA	
	3/9/00	<0.5	<0.5	<0.5	<0.5	NA	<0.1	<0.5	NA	
	6/14/00	<0.5	<0.5	<0.5	<0.5	NA	<0.1	<0.5	NA	
	9/6/00	16.2	<0.5	<0.5	<0.5	NA	<0.1	<0.5	NA	
	12/12/00	51.3	<0.5	<0.5	<0.5	NA	<0.01	<0.5	NA	
	3/29/01	10.4	<0.5	<0.5	<0.5	NA	4.2	<0.5	NA	
	12/5/01	<0.5	<0.5	<0.5	<0.5	NA	<0.5	1.9	NA	<0.5
	3/4/02	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA	<0.5
	6/3/02	<0.5	<0.5	<0.5	<0.5	NA	<0.5	1	NA	<0.5
	10/7/02	<1	<1	<1	<2	NA	<1	<1	<1	<5
	8/6/04	3.8	<1	<1	2	NA	<.01	<.01	<1	<4
	11/2/04	430	71	10	48	NA	<.01	3.3	<1	<4
	2/13/06	1.1	<1	<1	<1	NA	<.01	1.8	<1	<4
	6/2/06	<1	<1	<1	<3.0	NA	<0.01	1.2	<1.5	<4
	5/23/07	4.1	<1.0	<1.0	1.5	NA	<1.0	<1.0	<1.0	<2.0
	10/16/07	<1.0	<1.0	<1.0	<1.5	NA	<1.0	1.1	<1.0	<2.0
	11/29/07	<1.0	<1.0	<1.0	<1.5	NA	<0.01	2	<1.0	<2.0
	2/26/08	1.5	<1.0	<1.0	<1.5	NA	<0.01	2.4	<1.0	<2.0
	4/11/09	<1.0	<1.0	<1.0	<1.5	NA	NA	2.6	<1.0	<2.0
	9/20/09	1.2	<1.0	<1.0	<1.5	NA	<0.01	2.3	<1.0	<2.0

Table 1:
Laboratory Results of Ground Water Sample Analysis

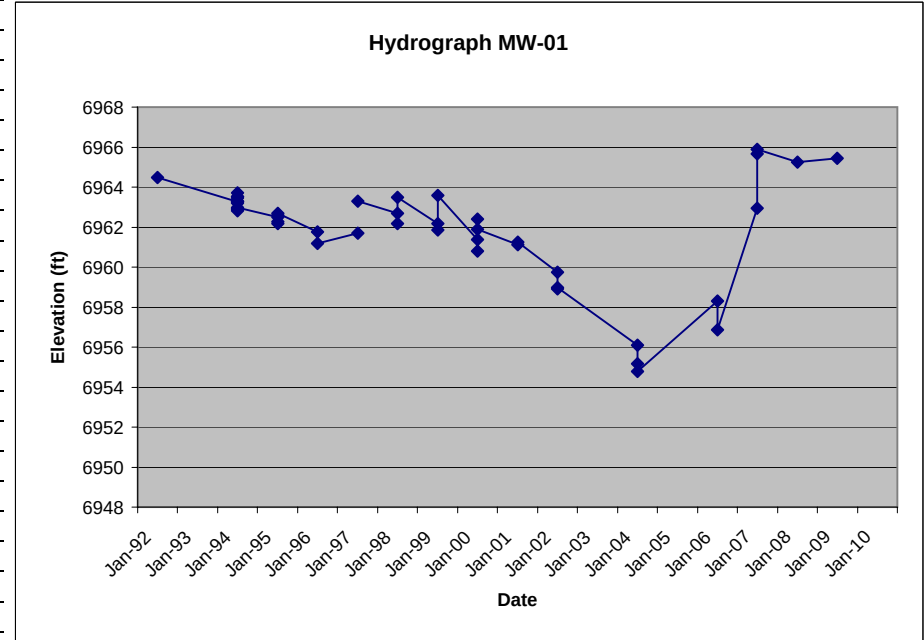
Capital 66
Facility #: 27219
October 06, 2009

Well	Date	Benzene ug/L	Toluene ug/L	Ethyl Benzene ug/L	Total Xylenes ug/L	TPH ug/L	EDB ug/L	EDC ug/L	MTBE ug/L	Total Naphthalene ug/L
NMWQCC		10	750	750	620		0.1	10		30
MW-3	1/27/94	8	8	34	470	8.9				
	4/26/94			20	390	20				
	7/25/94	11	7	14	480	8.8				
	10/12/94	10.6	10.1	16.5	238	4.17			NA	
	1/25/95	9.6	11.8	41.8	292	9.4				
	4/12/95	15.1	21.1	18.3	156	8.2			NA	
	7/27/95	11.2	7.7	28.5	117	7.02			NA	
	11/7/95	4.7	2.6	12.1	33.9	7.39			NA	
	1/28/96	13.9	6	27.3	58.9	4.74			NA	
	10/30/96	24.3	2.8	6.1	31.1	1.41	0.6	1.4	NA	
	3/6/97	6.3	1.2	4.1	14.1	1.39	ND	ND	NA	
	9/3/97	5.4	0.9	4	9.6	NA	ND	ND	NA	
	3/26/98	6.3	ND	4.4	3.1	2.37	ND	ND	NA	
	11/20/98	8.8	10.6	3.7	18.6	NA	<0.01	<0.5	NA	
	2/18/99	<0.5	<0.5	<0.5	<0.5	NA	<0.01	<0.5	NA	
	5/5/99	32.2	5.2	8.5	11.5	NA	0.5	<0.5	NA	
	8/10/99	NS	NS	NS	NS	NS	NS	NS	NS	
	3/9/00	71.7	17.2	20.7	5.3	NA	<0.1	<0.5	NA	
	6/14/00	59.2	19.3	2.1	2.9	NA	<0.1	<0.5	NA	
	9/6/00	78.7	9.1	4.4	7.7	NA	<0.1	<0.5	NA	
	12/12/00	37.7	5	9	14	NA	<0.01	<0.5	NA	
	3/29/01	241	29.9	25.2	118	NA	<0.1	<0.5	NA	
	12/5/01	251	74.2	93.7	78.9	NA	<0.5	1.5	NA	110
	3/4/02	340.7	20.8	17.8	12.3	NA	<0.5	3.6	NA	<0.5
	6/3/02	394	876	103	1289	NA	<0.5	3.3	NA	148
	10/7/02	2700	14000	1800	14200	NA	13	<1	<1	950
MW-03R	2/13/06		Well not sampled due to presence of NAPL							
	6/2/06		Well not sampled due to presence of NAPL							
	10/16/07		Well not sampled due to presence of NAPL							
	11/29/07		Well not sampled due to presence of NAPL							
	2/26/08		Well not sampled due to presence of NAPL							
	4/11/09	<5.0	800	1100	11000	NA	NA	<5.0	<5.0	780
	9/20/09	<1.0	2.9	4	75	NA	<0.01	<1.0	<1.0	11
ND - constituent Not Detected at or above method detection limit.										
<0.5 - constituent not detected in a concentration greater than the method detection limit as shown.										
NA - constituent Not Analyzed.										
NS - well Not Sampled										

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

Well	Date	DTW	Elevation	Ground Water Above Screen
MW-1	9/22/92	21.11	6964.48	Yes
6985.59	1/28/94	22.32	6963.27	Yes
	2/25/94	22.69	6962.9	Yes
screen	3/21/94	22.79	6962.8	Yes
top	4/26/94	22.67	6962.92	Yes
6960.59	5/19/94	22.07	6963.52	Yes
bottom	6/21/94	22.08	6963.51	Yes
6950.59	7/25/94	22.3	6963.29	Yes
	8/30/94	21.87	6963.72	Yes
	9/15/94	22.14	6963.45	Yes
	10/12/94	22.33	6963.26	Yes
	11/17/94	22.4	6963.19	Yes
	12/6/94	22.6	6962.99	Yes
	1/25/95	23.08	6962.51	Yes
	4/12/95	23.42	6962.17	Yes
	5/25/95	23.31	6962.28	Yes
	6/26/95	NM		
	7/27/95	23	6962.59	Yes
	11/7/95	22.91	6962.68	Yes
	1/28/96	23.84	6961.75	Yes
	10/30/96	24.42	6961.17	Yes
	3/6/97	23.9	6961.69	Yes
	6/12/97	NM		
	9/3/97	22.29	6963.3	Yes
	1/6/98	22.9	6962.69	Yes
	3/26/98	23.42	6962.17	Yes
	11/20/98	22.1	6963.49	Yes
	2/18/99	23.41	6962.18	Yes
	5/5/99	23.75	6961.84	Yes
	8/10/99	22	6963.59	Yes
	3/9/00	24.2	6961.39	Yes
	6/14/00	24.78	6960.81	Yes
	9/6/00	23.2	6962.39	Yes
	12/12/00	23.71	6961.88	Yes
	3/29/01	24.47	6961.12	Yes
	12/5/01	24.33	6961.26	Yes
	3/4/02	25.86	6959.73	No
	6/3/02	26.67	6958.92	No



Notes: NM - well not measured DTW - depth to water DTP - depth to product

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

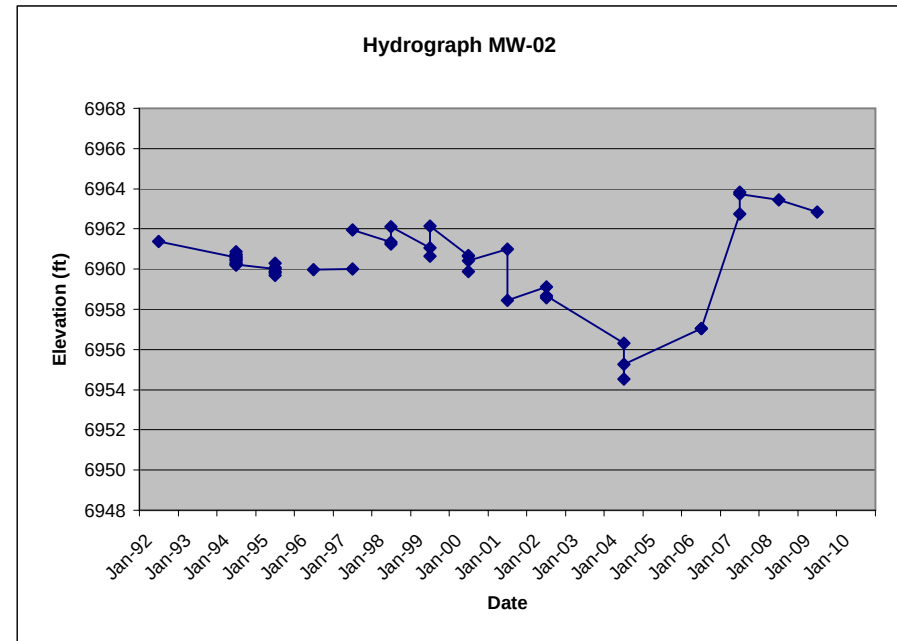
Well	Date	DTW	Elevation	Ground Water Above Screen
MW-1	10/5/02	26.62	6958.97	No
	4/3/04	29.48	6956.11	No
	8/6/04	30.41	6955.18	No
	11/2/04	30.8	6954.79	No
	2/13/06	27.29	6958.3	No
	6/2/06	28.73	6956.86	No
	5/23/07	22.65	6962.94	Yes
	10/15/07	19.92	6965.67	Yes
	11/29/07	19.7	6965.89	Yes
	2/26/08	20.35	6965.24	Yes
	9/20/09	20.15	6965.44	Yes

Notes: NM - well not measured DTW - depth to water DTP - depth to product

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

Well	Date	DTW	Elevation	Ground Water Above Screen
MW-2	9/22/92	23.06	6961.37	No
6984.43	1/28/94	23.85	6960.58	No
	2/25/94	24.17	6960.26	No
screen	3/21/94	24.24	6960.19	No
top	4/26/94	24.11	6960.32	No
6962.13	5/19/94	23.81	6960.62	No
bottom	6/21/94	23.68	6960.75	No
6952.13	7/25/94	23.98	6960.45	No
	8/30/94	23.55	6960.88	No
	9/15/94	23.71	6960.72	No
	10/12/94	23.9	6960.53	No
	11/17/94	24.02	6960.41	No
	12/6/94	24.21	6960.22	No
	1/25/95	24.42	6960.01	No
	4/12/95	24.75	6959.68	No
	5/25/95	24.61	6959.82	No
	6/26/95	24.55	6959.88	No
	7/27/95	24.37	6960.06	No
	11/7/95	24.13	6960.3	No
	1/28/96	NM		
	10/30/96	24.46	6959.97	No
	3/6/97	24.42	6960.01	No
	6/12/97	NM		
	9/3/97	22.48	6961.95	No
	1/6/98	23.08	6961.35	No
	3/26/98	23.18	6961.25	No
	11/20/98	22.33	6962.1	No
	2/18/99	23.38	6961.05	No
	5/5/99	23.79	6960.64	No
	8/10/99	22.3	6962.13	No
	3/9/00	23.75	6960.68	No
	6/14/00	24.56	6959.87	No
	9/6/00	23.78	6960.65	No
	12/12/00	24.02	6960.41	No
	3/29/01	23.45	6960.98	No
	12/5/01	25.97	6958.46	No
	3/4/02	25.33	6959.1	No
	6/3/02	25.86	6958.57	No



Notes: NM - well not measured DTW - depth to water DTP - depth to product

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

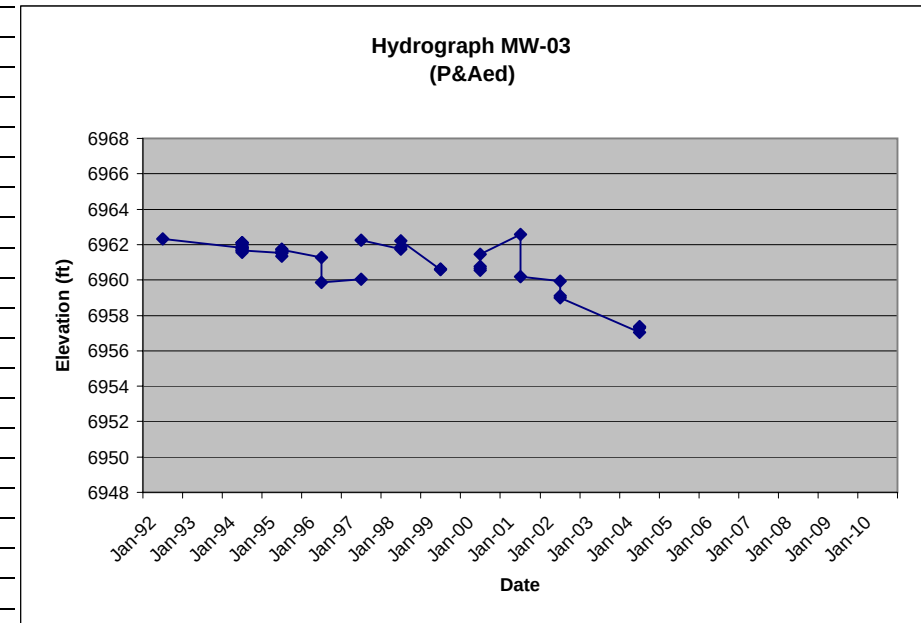
Well	Date	DTW	Elevation	Ground Water Above Screen
MW-2	10/5/02	25.77	6958.66	No
	4/3/04	28.13	6956.3	No
	8/6/04	29.91	6954.52	No
	11/2/04	29.17	6955.26	No
	2/13/06	27.37	6957.06	No
	6/2/06	27.4	6957.03	No
	5/23/07	21.7	6962.73	Yes
	10/15/07	20.59	6963.84	Yes
	11/29/07	20.71	6963.72	Yes
	2/26/08	21	6963.43	Yes
	9/20/09	21.6	6962.83	Yes

Notes: NM - well not measured DTW - depth to water DTP - depth to product

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

Well	Date	DTW	Elevation	Ground Water Above Screen
MW-3	9/22/92	22.14	6962.31	No
6984.45	1/28/94	22.65	6961.8	No
	2/25/94	22.8	6961.65	No
screen	3/21/94	22.88	6961.57	No
top	4/26/94	22.75	6961.7	No
6966.95	5/19/94	22.36	6962.09	No
bottom	6/21/94	22.35	6962.1	No
6956.95	7/25/94	22.64	6961.81	No
	8/30/94	22.36	6962.09	No
	9/15/94	22.44	6962.01	No
	10/12/94	22.55	6961.9	No
	11/17/94	22.62	6961.83	No
	12/6/94	22.77	6961.68	No
	1/25/95	22.92	6961.53	No
	4/12/95	23.12	6961.33	No
	5/25/95	22.93	6961.52	No
	6/26/95	22.85	6961.6	No
	7/27/95	22.71	6961.74	No
	11/7/95	22.73	6961.72	No
	1/28/96	23.18	6961.27	No
	10/30/96	24.6	6959.85	No
	3/6/97	24.42	6960.03	No
	6/12/97	NM		
	9/3/97	22.2	6962.25	No
	1/6/98	22.71	6961.74	No
	3/26/98	22.61	6961.84	No
	11/20/98	22.24	6962.21	No
	2/18/99	23.86	6960.59	No
	5/5/99	23.83	6960.62	No
	8/10/99	NM		
	3/9/00	23.79	6960.66	No
	6/14/00	23.67	6960.78	No
	9/6/00	23.9	6960.55	No
	12/12/00	22.98	6961.47	No
	3/29/01	21.87	6962.58	No
	12/5/01	24.26	6960.19	No
	3/4/02	24.51	6959.94	No
	6/3/02	25.34	6959.11	No



Notes: NM - well not measured DTW - depth to water DTP - depth to product

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

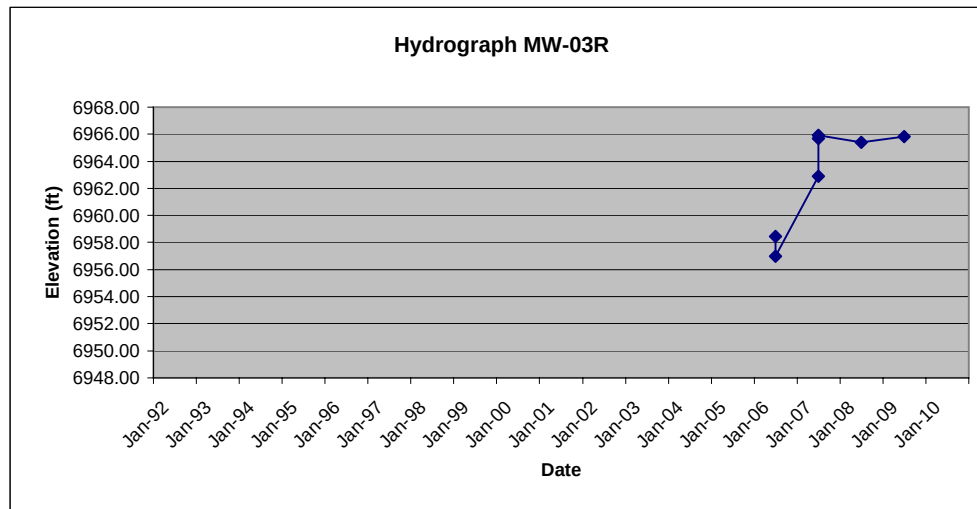
Well	Date	DTW	Elevation	Ground Water Above Screen
MW-3	10/5/02	25.47	6958.98	No
P&Aed	4/3/04	27.4	6957.05	No
	8/6/04	27.15	6957.3	No
	11/2/04	27.1	6957.35	No
	2/13/06	P&A		

Notes: NM - well not measured DTW - depth to water DTP - depth to product

Table 4:
Water Level Measurement
R.T. Hicks Constants

Capital 66
Facility #: 27219
October 06, 2009

Well	Date	DTW	DTP	NAPL Thickness	Elevation	Ground Water Above Screen
MW-3R	2/13/06	26.17	25.96	0.21	6958.44	No
6984.45	6/2/06	28.27	27.17	1.10	6957.01	No
	5/23/07	21.61	21.56	0.05	6962.88	Yes
screen	10/15/07	18.79	18.75	0.04	6965.69	Yes
top	11/29/07	18.57	18.54	0.03	6965.90	Yes
6962.45	2/26/08	19.08	19.05	0.03	6965.3925	Yes
bottom	9/20/09	18.61	18.6	0.01	6965.8475	Yes
6947.45						



Notes: NM - well not measured

DTW - depth to water

DTP - depth to product

Table 5:
Hydrocarbon Removed as Free Product

Capital 66
Facility #: 27219
October 06, 2009

Date	PSH Thickness (feet)	PSH Removed (gallons)
5/21/07	0.02	0.2
	Total PSH Removed	0.2
PSH	= Phase Separated Hydrocarbons	

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

Appendices

Site Name: Capital 66

USTB Facility #: 27219

Date: October 06, 2009

List of Appendices			
Appendix		Included	N/A
1	Sampling Protocol	x	
2	Calculations		x
3	Field Notes	x	
4	Soil Boring Logs		x
5	Monitoring Well Completion Diagrams		x
6	Laboratory Reports	x	
7	Health and Safety Plan		x
8	Benzene Concentration (or PSH Thickness) Relative to Ground Water Elevation Over Time	x	

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

Appendix 1

Sampling Protocol

Well Purging

A Solinst Interface Meter is used to determine depths to water and depths to product (as applicable) prior to collection of ground water samples. Water level information is compiled to determine volume of water in the well casing. Casing volume is calculated into gallons by subtracting the depth to water from the total depth to determine the height of water and then multiplying this by gallons per foot of storage. The gallons per foot of storage are calculated by squaring the measured inside diameter of well casing (in inches) and dividing by 24.5.

The volume of water in the well casing is multiplied by three to determine the gallons to purge (three casing volumes).

Field Parameters

Prior to sampling and after purging three casing volumes, field parameters in the well are monitored until field parameters stabilize. Field parameters are collected using a Hanna Combo pH & EC meter (model HI 98129). Water temperature, pH, and temperature compensated specific conductivity are monitored and logged in a field book.

Wells are both purged and sampled using disposable, dedicated polyethylene bailers. Bottom-emptying devices are used to extract ground water samples from the bailers to minimize volatilization and to ensure sample integrity.

Field equipment is decontaminated after each use.

Ground Water Sampling

Ground water samples to be analyzed for volatile organic analytes (VOAs) are collected in 40-milliliter (mL) glass vials containing hydrochloric acid or mercuric acid preservative and sealed with Teflon Septa caps. Generally, one more 40-mL vial than necessary for analysis is collected in case a sample is lost or broken in transit to the laboratory or in the analysis process. Sample containers are filled to prevent headspace in the vials. Ground water samples to be analyzed for TPH are collected in 1-Liter amber glass jars. Ground water analyzed for dissolved iron, lead, and manganese are field-filtered with 0.45-micron disposable filters, or lab filtered. These samples are collected in 250-mL plastic containers, and preserved with nitric acid to a pH of less than 2. Samples analyzed for nitrate and sulfate will be collected in 500-

Site Name: Capital 66

USTB Facility #: 27219

Date: October 06, 2009

mL plastic containers with no preservative. Soil samples to be analyzed for hydrocarbon constituents are collected in 6-oz jars.

All samples are labeled with the monitoring well name, the date of collection, the initials of the person sampling, any preservative present, and the appropriate analysis needed. All samples are placed in a zip lock plastic bag and stored in an insulated cooler with ice for delivery to the laboratory for analyses, and are kept with full chain-of-custody documentation.

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

Appendix 3

Field Notes

Sunday Sept 20, 2009
Scattered Thunderstorms
Partly Cloudy 72°F

MW-01 @ 17:00

DTW = 20.15

DTP = -

TD = 30.75

$10.6 \times .16 \times 3 = 5.09$ gallons
purged dry at 4 gallons

SC = 1746 μ S

8260 B

pH = 7.35

504.1 EDB

T°C = 18.6

MW-02 @ 15:50

DTW = 21.60

TD = 30.95

$9.35 \times .16 \times 3 = 4.49$ gallons

T° = 19.9°C

pH = 7.18

8260 B

SC = 1238 μ S

504.1 EDB

MW-03R @ 16:30

DTW = 18.61

DTP = 18.60

TD = 37

$18.4 \times .16 \times 3 = 8.83$ gallons

pH = 7.41

SC = 1317 μ S

Temp = 19.4

504.1 EDB

8260 B

Site Name: Capital 66
USTB Facility #: 27219
Date: October 06, 2009

Appendix 6

Laboratory Reports

COVER LETTER

Thursday, September 24, 2009

Andrew Parker
R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104

TEL: (505) 266-5004

FAX (505) 266-0745

RE: Champion Oil

Order No.: 0909422

Dear Andrew Parker:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 9/21/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Laboratory Manager

NM Lab # NM9425

AZ license # AZ0682

ORELAP Lab # NM100001

Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-01

Client Sample ID: MW-02
Collection Date: 9/20/2009 3:50:00 PM
Date Received: 9/21/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JDC
1,2-Dibromoethane	ND	0.010		µg/L	1	9/22/2009 11:41:45 AM
Surr: 1,2,3-Trichloropropane	97.3	60-131		%REC	1	9/22/2009 11:41:45 AM
EPA METHOD 8260B: VOLATILES						Analyst: DAM
Benzene	1.2	1.0		µg/L	1	9/22/2009 7:52:30 PM
Toluene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Ethylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2-Dichloroethane (EDC)	2.3	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Naphthalene	ND	2.0		µg/L	1	9/22/2009 7:52:30 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	9/22/2009 7:52:30 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	9/22/2009 7:52:30 PM
Acetone	ND	10		µg/L	1	9/22/2009 7:52:30 PM
Bromobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Bromodichloromethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Bromoform	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Bromomethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
2-Butanone	ND	10		µg/L	1	9/22/2009 7:52:30 PM
Carbon disulfide	ND	10		µg/L	1	9/22/2009 7:52:30 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Chlorobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Chloroethane	ND	2.0		µg/L	1	9/22/2009 7:52:30 PM
Chloroform	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Chloromethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
2-Chlorotoluene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
4-Chlorotoluene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
cis-1,2-DCE	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/22/2009 7:52:30 PM
Dibromochloromethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Dibromomethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-01

Client Sample ID: MW-02
Collection Date: 9/20/2009 3:50:00 PM
Date Received: 9/21/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DAM
2,2-Dichloropropane	ND	2.0		µg/L	1	9/22/2009 7:52:30 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
2-Hexanone	ND	10		µg/L	1	9/22/2009 7:52:30 PM
Isopropylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/22/2009 7:52:30 PM
Methylene Chloride	ND	3.0		µg/L	1	9/22/2009 7:52:30 PM
n-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
n-Propylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Styrene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/22/2009 7:52:30 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/22/2009 7:52:30 PM
Vinyl chloride	ND	1.0		µg/L	1	9/22/2009 7:52:30 PM
Xylenes, Total	ND	1.5		µg/L	1	9/22/2009 7:52:30 PM
Surr: 1,2-Dichloroethane-d4	91.2	54.6-141		%REC	1	9/22/2009 7:52:30 PM
Surr: 4-Bromofluorobenzene	100	60.1-133		%REC	1	9/22/2009 7:52:30 PM
Surr: Dibromofluoromethane	93.6	78.5-130		%REC	1	9/22/2009 7:52:30 PM
Surr: Toluene-d8	100	79.5-126		%REC	1	9/22/2009 7:52:30 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Estimated value
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-02

Client Sample ID: MW-03R
Collection Date: 9/20/2009 4:30:00 PM
Date Received: 9/21/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JDC
1,2-Dibromoethane	ND	0.010		µg/L	1	9/22/2009 11:54:05 AM
Surr: 1,2,3-Trichloropropane	123	60-131		%REC	1	9/22/2009 11:54:05 AM
EPA METHOD 8260B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Toluene	2.9	1.0		µg/L	1	9/23/2009 12:46:52 PM
Ethylbenzene	4.0	1.0		µg/L	1	9/23/2009 12:46:52 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2,4-Trimethylbenzene	51	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,3,5-Trimethylbenzene	13	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Naphthalene	11	2.0		µg/L	1	9/23/2009 12:46:52 PM
1-Methylnaphthalene	8.0	4.0		µg/L	1	9/23/2009 12:46:52 PM
2-Methylnaphthalene	15	4.0		µg/L	1	9/23/2009 12:46:52 PM
Acetone	ND	10		µg/L	1	9/23/2009 12:46:52 PM
Bromobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Bromodichloromethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Bromoform	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Bromomethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
2-Butanone	ND	10		µg/L	1	9/23/2009 12:46:52 PM
Carbon disulfide	ND	10		µg/L	1	9/23/2009 12:46:52 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Chlorobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Chloroethane	ND	2.0		µg/L	1	9/23/2009 12:46:52 PM
Chloroform	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Chloromethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
2-Chlorotoluene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
4-Chlorotoluene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
cis-1,2-DCE	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/23/2009 12:46:52 PM
Dibromochloromethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Dibromomethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-02

Client Sample ID: MW-03R
Collection Date: 9/20/2009 4:30:00 PM
Date Received: 9/21/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DAM
2,2-Dichloropropane	ND	2.0		µg/L	1	9/23/2009 12:46:52 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
2-Hexanone	ND	10		µg/L	1	9/23/2009 12:46:52 PM
Isopropylbenzene	1.9	1.0		µg/L	1	9/23/2009 12:46:52 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/23/2009 12:46:52 PM
Methylene Chloride	ND	3.0		µg/L	1	9/23/2009 12:46:52 PM
n-Butylbenzene	3.2	1.0		µg/L	1	9/23/2009 12:46:52 PM
n-Propylbenzene	5.0	1.0		µg/L	1	9/23/2009 12:46:52 PM
sec-Butylbenzene	1.2	1.0		µg/L	1	9/23/2009 12:46:52 PM
Styrene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/23/2009 12:46:52 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/23/2009 12:46:52 PM
Vinyl chloride	ND	1.0		µg/L	1	9/23/2009 12:46:52 PM
Xylenes, Total	75	1.5		µg/L	1	9/23/2009 12:46:52 PM
Surr: 1,2-Dichloroethane-d4	101	54.6-141		%REC	1	9/23/2009 12:46:52 PM
Surr: 4-Bromofluorobenzene	99.0	60.1-133		%REC	1	9/23/2009 12:46:52 PM
Surr: Dibromofluoromethane	99.6	78.5-130		%REC	1	9/23/2009 12:46:52 PM
Surr: Toluene-d8	98.4	79.5-126		%REC	1	9/23/2009 12:46:52 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-03

Client Sample ID: MW-01
Collection Date: 9/20/2009 5:00:00 PM
Date Received: 9/21/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JDC
1,2-Dibromoethane	0.26	0.010		µg/L	1	9/22/2009 12:06:26 PM
Surr: 1,2,3-Trichloropropane	105	60-131		%REC	1	9/22/2009 12:06:26 PM
EPA METHOD 8260B: VOLATILES						Analyst: DAM
Benzene	77	1.0		µg/L	1	9/22/2009 8:48:47 PM
Toluene	1.1	1.0		µg/L	1	9/22/2009 8:48:47 PM
Ethylbenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2,4-Trimethylbenzene	2.7	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Naphthalene	4.7	2.0		µg/L	1	9/22/2009 8:48:47 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	9/22/2009 8:48:47 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	9/22/2009 8:48:47 PM
Acetone	ND	10		µg/L	1	9/22/2009 8:48:47 PM
Bromobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Bromodichloromethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Bromoform	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Bromomethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
2-Butanone	ND	10		µg/L	1	9/22/2009 8:48:47 PM
Carbon disulfide	ND	10		µg/L	1	9/22/2009 8:48:47 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Chlorobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Chloroethane	ND	2.0		µg/L	1	9/22/2009 8:48:47 PM
Chloroform	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Chloromethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
2-Chlorotoluene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
4-Chlorotoluene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
cis-1,2-DCE	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/22/2009 8:48:47 PM
Dibromochloromethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Dibromomethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Estimated value
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-03

Client Sample ID: MW-01
Collection Date: 9/20/2009 5:00:00 PM
Date Received: 9/21/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DAM
2,2-Dichloropropane	ND	2.0		µg/L	1	9/22/2009 8:48:47 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
2-Hexanone	ND	10		µg/L	1	9/22/2009 8:48:47 PM
Isopropylbenzene	1.4	1.0		µg/L	1	9/22/2009 8:48:47 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/22/2009 8:48:47 PM
Methylene Chloride	ND	3.0		µg/L	1	9/22/2009 8:48:47 PM
n-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
n-Propylbenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Styrene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/22/2009 8:48:47 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/22/2009 8:48:47 PM
Vinyl chloride	ND	1.0		µg/L	1	9/22/2009 8:48:47 PM
Xylenes, Total	4.9	1.5		µg/L	1	9/22/2009 8:48:47 PM
Surr: 1,2-Dichloroethane-d4	96.1	54.6-141		%REC	1	9/22/2009 8:48:47 PM
Surr: 4-Bromofluorobenzene	97.9	60.1-133		%REC	1	9/22/2009 8:48:47 PM
Surr: Dibromofluoromethane	96.8	78.5-130		%REC	1	9/22/2009 8:48:47 PM
Surr: Toluene-d8	100	79.5-126		%REC	1	9/22/2009 8:48:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-04

Client Sample ID: Trip Blank
Collection Date:
Date Received: 9/21/2009
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: JDC
1,2-Dibromoethane	ND	0.010		µg/L	1	9/22/2009 12:18:52 PM
Surr: 1,2,3-Trichloropropane	76.3	60-131		%REC	1	9/22/2009 12:18:52 PM
EPA METHOD 8260B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Toluene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Ethylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Naphthalene	ND	2.0		µg/L	1	9/22/2009 9:16:57 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	9/22/2009 9:16:57 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	9/22/2009 9:16:57 PM
Acetone	ND	10		µg/L	1	9/22/2009 9:16:57 PM
Bromobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Bromodichloromethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Bromoform	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Bromomethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
2-Butanone	ND	10		µg/L	1	9/22/2009 9:16:57 PM
Carbon disulfide	ND	10		µg/L	1	9/22/2009 9:16:57 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Chlorobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Chloroethane	ND	2.0		µg/L	1	9/22/2009 9:16:57 PM
Chloroform	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Chloromethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
2-Chlorotoluene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
4-Chlorotoluene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
cis-1,2-DCE	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/22/2009 9:16:57 PM
Dibromochloromethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Dibromomethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 24-Sep-09

CLIENT: R.T. Hicks Consultants, LTD
Lab Order: 0909422
Project: Champion Oil
Lab ID: 0909422-04

Client Sample ID: Trip Blank
Collection Date:
Date Received: 9/21/2009
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DAM
2,2-Dichloropropane	ND	2.0		µg/L	1	9/22/2009 9:16:57 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
2-Hexanone	ND	10		µg/L	1	9/22/2009 9:16:57 PM
Isopropylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/22/2009 9:16:57 PM
Methylene Chloride	ND	3.0		µg/L	1	9/22/2009 9:16:57 PM
n-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
n-Propylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Styrene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/22/2009 9:16:57 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/22/2009 9:16:57 PM
Vinyl chloride	ND	1.0		µg/L	1	9/22/2009 9:16:57 PM
Xylenes, Total	ND	1.5		µg/L	1	9/22/2009 9:16:57 PM
Surr: 1,2-Dichloroethane-d4	93.1	54.6-141		%REC	1	9/22/2009 9:16:57 PM
Surr: 4-Bromofluorobenzene	100	60.1-133		%REC	1	9/22/2009 9:16:57 PM
Surr: Dibromofluoromethane	93.6	78.5-130		%REC	1	9/22/2009 9:16:57 PM
Surr: Toluene-d8	99.5	79.5-126		%REC	1	9/22/2009 9:16:57 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

QA/QC SUMMARY REPORT

Client: R.T. Hicks Consultants, LTD
Project: Champion Oil

Work Order: 0909422

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 504.1: EDB											
Sample ID: MB-20161		MBLK									
1,2-Dibromoethane	ND	µg/L	0.010								
Sample ID: LCS-20161		LCS									
1,2-Dibromoethane	0.1050	µg/L	0.010	0.1	0	105	70	130			
Sample ID: LCSD-20161		LCSD									
1,2-Dibromoethane	0.1090	µg/L	0.010	0.1	0	109	70	130	3.74	20	

Qualifiers:

E Estimated value
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: R.T. Hicks Consultants, LTD
 Project: Champion Oil

Work Order: 0909422

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	--------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 8260B: VOLATILES

Sample ID: 0909422-03a msd

MSD

Batch ID: R35407 Analysis Date: 9/23/2009 2:25:03 AM

Benzene	95.01	µg/L	1.0	20	77.26	88.7	78.9	115	2.67	15	
Toluene	18.10	µg/L	1.0	20	1.118	84.9	80.5	105	4.00	15	
Chlorobenzene	17.19	µg/L	1.0	20	0	86.0	85	102	3.37	15	
1,1-Dichloroethene	21.34	µg/L	1.0	20	0	107	80.2	128	3.15	17.8	
Trichloroethene (TCE)	19.47	µg/L	1.0	20	0	97.3	70.3	125	2.02	19.8	

Sample ID: 5ml rb

MBLK

Batch ID: R35407 Analysis Date: 9/22/2009 9:03:04 AM

Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	1.0								
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	1.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: R.T. Hicks Consultants, LTD
Project: Champion Oil

Work Order: 0909422

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	--------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 8260B: VOLATILES

Sample ID: 5ml rb

MBLK

Batch ID: R35407 Analysis Date: 9/22/2009 9:03:04 AM

2,2-Dichloropropane	ND	µg/L	2.0
1,1-Dichloropropene	ND	µg/L	1.0
Hexachlorobutadiene	ND	µg/L	1.0
2-Hexanone	ND	µg/L	10
Isopropylbenzene	ND	µg/L	1.0
4-Isopropyltoluene	ND	µg/L	1.0
4-Methyl-2-pentanone	ND	µg/L	10
Methylene Chloride	ND	µg/L	3.0
n-Butylbenzene	ND	µg/L	1.0
n-Propylbenzene	ND	µg/L	1.0
sec-Butylbenzene	ND	µg/L	1.0
Styrene	ND	µg/L	1.0
tert-Butylbenzene	ND	µg/L	1.0
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0
Tetrachloroethene (PCE)	ND	µg/L	1.0
trans-1,2-DCE	ND	µg/L	1.0
trans-1,3-Dichloropropene	ND	µg/L	1.0
1,2,3-Trichlorobenzene	ND	µg/L	1.0
1,2,4-Trichlorobenzene	ND	µg/L	1.0
1,1,1-Trichloroethane	ND	µg/L	1.0
1,1,2-Trichloroethane	ND	µg/L	1.0
Trichloroethene (TCE)	ND	µg/L	1.0
Trichlorofluoromethane	ND	µg/L	1.0
1,2,3-Trichloropropane	ND	µg/L	2.0
Vinyl chloride	ND	µg/L	1.0
Xylenes, Total	ND	µg/L	1.5

Sample ID: 5ml rb

MBLK

Batch ID: R35435 Analysis Date: 9/23/2009 9:01:15 AM

Benzene	ND	µg/L	1.0
Toluene	ND	µg/L	1.0
Ethylbenzene	ND	µg/L	1.0
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0
1,2,4-Trimethylbenzene	ND	µg/L	1.0
1,3,5-Trimethylbenzene	ND	µg/L	1.0
1,2-Dichloroethane (EDC)	ND	µg/L	1.0
1,2-Dibromoethane (EDB)	ND	µg/L	1.0
Naphthalene	ND	µg/L	2.0
1-Methylnaphthalene	ND	µg/L	4.0
2-Methylnaphthalene	ND	µg/L	4.0
Acetone	ND	µg/L	10
Bromobenzene	ND	µg/L	1.0
Bromodichloromethane	ND	µg/L	1.0
Bromoform	ND	µg/L	1.0
Bromomethane	ND	µg/L	1.0

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: R.T. Hicks Consultants, LTD
 Project: Champion Oil

Work Order: 0909422

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 5ml rb		MBLK				Batch ID: R35435		Analysis Date: 9/23/2009 9:01:15 AM			
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	1.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethane (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								

Qualifiers:

E Estimated value
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: R.T. Hicks Consultants, LTD
 Project: Champion Oil

Work Order: 0909422

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	--------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 8260B: VOLATILES

Sample ID: 5ml rb

MBLK

Batch ID: R35435 Analysis Date: 9/23/2009 9:01:15 AM

Trichloroethene (TCE) ND µg/L 1.0
 Trichlorofluoromethane ND µg/L 1.0
 1,2,3-Trichloropropane ND µg/L 2.0
 Vinyl chloride ND µg/L 1.0
 Xylenes, Total ND µg/L 1.5

Sample ID: 100ng lcs

LCS

Batch ID: R35407 Analysis Date: 9/22/2009 9:59:19 AM

Benzene 20.49 µg/L 1.0 20 0 102 76.7 114
 Toluene 19.25 µg/L 1.0 20 0 96.3 78.4 117
 Chlorobenzene 18.57 µg/L 1.0 20 0 92.8 80.7 127
 1,1-Dichloroethene 22.90 µg/L 1.0 20 0 115 80.2 128
 Trichloroethene (TCE) 21.88 µg/L 1.0 20 0 109 77.4 115

Sample ID: 100ng lcs

LCS

Batch ID: R35435 Analysis Date: 9/23/2009 9:57:26 AM

Benzene 19.69 µg/L 1.0 20 0 98.5 76.7 114
 Toluene 18.11 µg/L 1.0 20 0 90.6 78.4 117
 Chlorobenzene 18.22 µg/L 1.0 20 0 91.1 80.7 127
 1,1-Dichloroethene 21.45 µg/L 1.0 20 0 107 80.2 128
 Trichloroethene (TCE) 20.61 µg/L 1.0 20 0 103 77.4 115

Sample ID: 0909422-03a ms

MS

Batch ID: R35407 Analysis Date: 9/23/2009 1:57:00 AM

Benzene 97.58 µg/L 1.0 20 77.26 102 78.9 115
 Toluene 18.83 µg/L 1.0 20 1.118 88.6 80.5 105
 Chlorobenzene 17.78 µg/L 1.0 20 0 88.9 85 102
 1,1-Dichloroethene 22.03 µg/L 1.0 20 0 110 80.2 128
 Trichloroethene (TCE) 19.86 µg/L 1.0 20 0 99.3 70.3 125

Qualifiers:

E Estimated value
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **RT HICKS**

Date Received:

9/21/2009

Work Order Number **0909422**

Received by: **AMF**

Checklist completed by:

Signature

Date

Sample ID labels checked by:

Initials

Matrix:

Carrier name: Client drop-off

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☒	
Chain of custody present?	Yes ☒	No ☐		
Chain of custody signed when relinquished and received?	Yes ☒	No ☐		
Chain of custody agrees with sample labels?	Yes ☒	No ☐		
Samples in proper container/bottle?	Yes ☒	No ☐		
Sample containers intact?	Yes ☒	No ☐		
Sufficient sample volume for indicated test?	Yes ☒	No ☐		
All samples received within holding time?	Yes ☒	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☒	No ☐	Number of preserved bottles checked for pH:
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☒	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒	<2 >12 unless noted below.
Container/Temp Blank temperature?	7.1°	<6° C Acceptable		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Site Name: Capital 66

USTB Facility #: 27219

Date: October 06, 2009

Appendix 8

Benzene Concentration (or PSH Thickness) Relative to Ground Water Elevation Over Time

