

**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results**  
TestAmerica - Portland, OR

QC Batch: 7081433 Soil Preparation Method: EPA 3550

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7081433-BLK1)</b>													Extracted: 08/30/07 11:30	
Fluoranthene	EPA 8270C	ND	---	0.329	mg/kg wet	1x	--	--	--	--	--	--	08/31/07 12:54	
Fluorene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Hexachlorobenzene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Hexachlorobutadiene	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
Hexachlorocyclopentadiene	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
Hexachloroethane	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Isophorone	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
2-Methylnaphthalene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
2-Methylphenol	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
3-,4-Methylphenol	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
2-Nitroaniline	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
3-Nitroaniline	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
4-Nitroaniline	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Nitrobenzene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
2-Nitrophenol	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
4-Nitrophenol	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
N-Nitrosodi-n-propylamine	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
N-Nitrosodiphenylamine	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Pentachlorophenol	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Phenol	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	0.996	"	"	--	--	--	--	--	--	"	
2,4,5-Trichlorophenol	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	
2,4,6-Trichlorophenol	"	ND	---	0.329	"	"	--	--	--	--	--	--	"	

Surrogate(s):	2-Fluorobiphenyl	Recovery:	88.4%	Limits:	33-126%	"	08/31/07 12:54
	2-Fluorophenol		68.9%		20-127%	"	"
	Nitrobenzene-d5		90.1%		25-131%	"	"
	Phenol-d6		84.2%		13-138%	"	"
	p-Terphenyl-d14		82.1%		38-142%	"	"
	2,4,6-Tribromophenol		78.4%		46-124%	"	"



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Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results**  
TestAmerica - Portland, OR

QC Batch: 7081433 Soil Preparation Method: EPA 3550

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Extracted: 08/30/07 11:30														
LCS (7081433-BS1)														
Acenaphthene	EPA 8270C	1.90	---	0.330	mg/kg wet	1x	--	2.50	75.9%	(46-120)	--	--	08/31/07 13:38	
4-Chloro-3-methylphenol	"	3.40	---	0.330	"	"	--	4.99	68.1%	(36-138)	--	--	"	
2-Chlorophenol	"	3.73	---	0.330	"	"	--	"	74.7%	(18-137)	--	--	"	
1,4-Dichlorobenzene	"	1.93	---	0.999	"	"	--	2.50	77.4%	(7-135)	--	--	"	
2,4-Dinitrotoluene	"	1.88	---	0.499	"	"	--	"	75.3%	(49-125)	--	--	"	
4-Nitrophenol	"	3.59	---	0.999	"	"	--	4.99	71.9%	(40-148)	--	--	"	
N-Nitrosodi-n-propylamine	"	2.33	---	0.330	"	"	--	2.50	93.3%	(20-138)	--	--	"	
Pentachlorophenol	"	1.91	---	0.999	"	"	--	4.99	38.3%	(22-129)	--	--	"	
Phenol	"	3.60	---	0.330	"	"	--	"	72.0%	(37-122)	--	--	"	
Pyrene	"	1.80	---	0.330	"	"	--	2.50	72.3%	(26-143)	--	--	"	
1,2,4-Trichlorobenzene	"	1.95	---	0.999	"	"	--	"	78.1%	(25-129)	--	--	"	

Surrogate(s)	Recovery	Limits	Analyzed
2-Fluorobiphenyl	80.1%	33-126%	08/31/07 13:38
2-Fluorophenol	68.7%	20-127%	"
Nitrobenzene-d5	82.9%	25-131%	"
Phenol-d6	85.3%	13-138%	"
p-Terphenyl-d14	70.6%	38-142%	"
2,4,6-Tribromophenol	79.4%	46-124%	"

**Matrix Spike (7081433-MS1)**

QC Source: PQH1091-02

Extracted: 08/30/07 11:30

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Extracted: 08/30/07 11:30														
Acenaphthene	EPA 8270C	2.38	---	0.838	mg/kg dry	2x	ND	3.17	75.1%	(26-150)	--	--	09/04/07 21:02	
4-Chloro-3-methylphenol	"	4.35	---	0.838	"	"	ND	6.35	68.5%	"	--	--	"	
2-Chlorophenol	"	4.54	---	0.838	"	"	ND	"	71.5%	(8-150)	--	--	"	
1,4-Dichlorobenzene	"	2.25	---	2.54	"	"	ND	3.17	70.9%	(4-150)	--	--	"	
2,4-Dinitrotoluene	"	2.45	---	1.27	"	"	ND	"	77.2%	(32-150)	--	--	"	
4-Nitrophenol	"	5.54	---	2.54	"	"	ND	6.35	87.2%	(20-175)	--	--	"	
N-Nitrosodi-n-propylamine	"	2.52	---	0.838	"	"	ND	3.17	79.5%	(10-150)	--	--	"	
Pentachlorophenol	"	4.31	---	2.54	"	"	ND	6.35	67.9%	(12-150)	--	--	"	
Phenol	"	4.32	---	0.838	"	"	ND	"	68.1%	(17-150)	--	--	"	
Pyrene	"	2.92	---	0.838	"	"	0.223	3.17	84.9%	(16-175)	--	--	"	
1,2,4-Trichlorobenzene	"	2.25	---	2.54	"	"	ND	"	70.8%	(18-150)	--	--	"	

Surrogate(s)	Recovery	Limits	Analyzed
2-Fluorobiphenyl	86.7%	33-126%	09/04/07 21:02
2-Fluorophenol	65.5%	20-127%	"
Nitrobenzene-d5	77.5%	25-131%	"
Phenol-d6	80.5%	13-138%	"
p-Terphenyl-d14	84.3%	38-142%	"
2,4,6-Tribromophenol	66.2%	46-124%	"

DRAFT REPORT

The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.205.00007 Project Manager: Steve Hammer	Report Created: 09/24/07 17:22
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**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results**  
TestAmerica - Portland, OR

QC Batch: 7081433      Soil Preparation Method: EPA 3550

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Matrix Spike Dup (7081433-MSD1)</b>			QC Source: PQH1091-02				Extracted: 08/30/07 11:30							
Acenaphthene	EPA 8270C	2.31	---	0.839	mg/kg dry	2x	ND	3.18	72.5%	(26-150)	3.34%	(60)	09/04/07 21:45	
4-Chloro-3-methylphenol	"	4.32	---	0.839	"	"	ND	6.36	68.0%	"	0.616%	"	"	
2-Chlorophenol	"	5.05	---	0.839	"	"	ND	"	79.4%	(8-150)	10.5%	"	"	
1,4-Dichlorobenzene	"	2.20	---	2.54	"	"	ND	3.18	69.3%	(4-150)	2.12%	"	"	
2,4-Dinitrotoluene	"	2.37	---	1.27	"	"	ND	"	74.4%	(32-150)	3.49%	"	"	
4-Nitrophenol	"	5.59	---	2.54	"	"	ND	6.36	87.8%	(20-175)	0.851%	"	"	
N-Nitrosodi-n-propylamine	"	2.67	---	0.839	"	"	ND	3.18	83.8%	(10-150)	5.42%	"	"	
Pentachlorophenol	"	4.50	---	2.54	"	"	ND	6.36	70.7%	(12-150)	4.17%	"	"	
Phenol	"	4.81	---	0.839	"	"	ND	"	75.6%	(17-150)	10.7%	"	"	
Pyrene	"	2.62	---	0.839	"	"	0.223	3.18	75.4%	(16-175)	10.7%	"	"	
1,2,4-Trichlorobenzene	"	2.12	---	2.54	"	"	ND	"	66.8%	(18-150)	5.65%	"	"	

Surrogate(s)	Recovery	Limits	Analyzed
2-Fluorobiphenyl	93.3%	33-126%	09/04/07 21:45
2-Fluorophenol	72.4%	20-127%	"
Nitrobenzene-d5	83.1%	25-131%	"
Phenol-d6	84.1%	13-138%	"
p-Terphenyl-d14	78.6%	38-142%	"
2,4,6-Tribromophenol	67.5%	46-124%	"



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**DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results**  
TestAmerica - Portland, OR

<b>QC Batch: 7081259</b>	<b>Water Preparation Method: 3520B Liq-Liq</b>
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Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7081259-BLK1)</b> <span style="float:right">Extracted: 08/27/07 15:00</span>														
Acenaphthene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	09/06/07 12:13	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	

<i>Surrogate(s): Fluorene-d10</i>	<i>Recovery: 94.5%</i>	<i>Limits: 25-125%</i>	"	09/06/07 12:13
<i>Pyrene-d10</i>	<i>103%</i>	<i>23-150%</i>	"	"
<i>Benzo (a) pyrene-d12</i>	<i>86.3%</i>	<i>10-125%</i>	"	"

<b>LCS (7081259-BS1)</b> <span style="float:right">Extracted: 08/27/07 15:00</span>														
Acenaphthene	EPA 8270m	2.39	---	0.200	ug/l	2x	--	2.50	95.4%	(26-135)	--	--	08/31/07 18:04	
Benzo (a) pyrene	"	2.55	---	0.200	"	"	--	"	102%	(38-137)	--	--	"	
Pyrene	"	2.40	---	0.200	"	"	--	"	95.9%	(33-133)	--	--	"	

<i>Surrogate(s): Fluorene-d10</i>	<i>Recovery: 100%</i>	<i>Limits: 25-125%</i>	"	08/31/07 18:04
<i>Pyrene-d10</i>	<i>102%</i>	<i>23-150%</i>	"	"
<i>Benzo (a) pyrene-d12</i>	<i>97.7%</i>	<i>10-125%</i>	"	"

<b>LCS Dup (7081259-BSD1)</b> <span style="float:right">Extracted: 08/27/07 15:00</span>														
Acenaphthene	EPA 8270m	2.50	---	0.200	ug/l	2x	--	2.50	99.9%	(26-135)	4.55%	(60)	08/31/07 18:33	
Benzo (a) pyrene	"	2.64	---	0.200	"	"	--	"	106%	(38-137)	3.48%	"	"	
Pyrene	"	2.49	---	0.200	"	"	--	"	99.6%	(33-133)	3.85%	"	"	

<i>Surrogate(s): Fluorene-d10</i>	<i>Recovery: 104%</i>	<i>Limits: 25-125%</i>	"	08/31/07 18:33
<i>Pyrene-d10</i>	<i>104%</i>	<i>23-150%</i>	"	"
<i>Benzo (a) pyrene-d12</i>	<i>102%</i>	<i>10-125%</i>	"	"



<b>SLR-Portland</b>	Project Name: <b>Crowley</b>	Report Created:
1800 Blankenship Road Suite 440	Project Number: 008.205.00007	09/24/07 17:22
West Linn, OR 97068	Project Manager: Steve Hammer	

**DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results**

TestAmerica - Portland, OR

QC Batch: 7090223

Soil Preparation Method: EPA 3550

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
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**Blank (7090223-BLK1)**

Extracted: 09/07/07 13:15

1-Methylnaphthalene	EPA 8270m	ND	---	13.4	ug/kg wet	1x	--	--	--	--	--	--	09/13/07 13:23	
2-Methylnaphthalene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Acenaphthene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	13.4	"	"	--	--	--	--	--	--	"	

Surrogate(s): Fluorene-d10	Recovery: 102%	Limits: 24-125%	"	09/13/07 13:23
Pyrene-d10	118%	41-141%	"	"
Benzo (a) pyrene-d12	109%	38-143%	"	"

**LCS (7090223-BS1)**

Extracted: 09/07/07 13:15

Acenaphthene	EPA 8270m	173	---	13.4	ug/kg wet	1x	--	167	104%	(33-139)	--	--	09/13/07 13:50	
Benzo (a) pyrene	"	173	---	13.4	"	"	--	"	104%	(45-149)	--	--	"	
Pyrene	"	211	---	13.4	"	"	--	"	127%	(39-138)	--	--	"	

Surrogate(s): Fluorene-d10	Recovery: 109%	Limits: 24-125%	"	09/13/07 13:50
Pyrene-d10	133%	41-141%	"	"
Benzo (a) pyrene-d12	107%	38-143%	"	"



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**DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results**  
TestAmerica - Portland, OR

<b>QC Batch: 7090223</b>	<b>Soil Preparation Method: EPA 3550</b>
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Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Matrix Spike (7090223-MS1)</b>			QC Source: PQH1091-02				Extracted: 09/07/07 13:15							
Acenaphthene	EPA 8270m	193	---	171	ug/kg dry	10x	20.0	213	81.0%	(33-139)	--	--	09/18/07 20:42	
Benzo (a) pyrene	"	225	---	171	"	"	138	"	40.9%	(45-149)	--	--	"	MHA
Pyrene	"	425	---	171	"	"	474	"	-22.8%	(39-138)	--	--	"	MHA
<i>Surrogate(s): Fluorene-d10</i>		<i>Recovery:</i>	<i>97.7%</i>	<i>Limits: 24-125%</i>		<i>"</i>							<i>09/18/07 20:42</i>	
<i>Pyrene-d10</i>			<i>90.4%</i>	<i>41-141%</i>		<i>"</i>							<i>"</i>	
<i>Benzo (a) pyrene-d12</i>			<i>77.4%</i>	<i>38-143%</i>		<i>"</i>							<i>"</i>	
<b>Matrix Spike Dup (7090223-MSD1)</b>			QC Source: PQH1091-02				Extracted: 09/07/07 13:15							
Acenaphthene	EPA 8270m	175	---	171	ug/kg dry	10x	20.0	213	73.0%	(33-139)	9.40%	(60)	09/18/07 21:09	
Benzo (a) pyrene	"	208	---	171	"	"	138	"	32.6%	(45-149)	8.19%	"	"	MHA
Pyrene	"	436	---	171	"	"	474	"	-17.7%	(39-138)	2.51%	"	"	MHA
<i>Surrogate(s): Fluorene-d10</i>		<i>Recovery:</i>	<i>87.8%</i>	<i>Limits: 24-125%</i>		<i>"</i>							<i>09/18/07 21:09</i>	
<i>Pyrene-d10</i>			<i>92.3%</i>	<i>41-141%</i>		<i>"</i>							<i>"</i>	
<i>Benzo (a) pyrene-d12</i>			<i>72.6%</i>	<i>38-143%</i>		<i>"</i>							<i>"</i>	



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**DRAFT: Percent Dry Weight (Solids) per Standard Methods - Laboratory Quality Control Results**  
 TestAmerica - Portland, OR

QC Batch: 7081216      Soil Preparation Method: Dry Weight

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Duplicate (7081216-DUP1)</b>							QC Source: PQH1091-04				Extracted: 08/25/07 12:04			
% Solids	NCA SOP	91.8	---	0.00	% by Weight	1x	92.5	--	--	--	0.760% (20)		08/25/07 12:04	



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7105021 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7105021-BLK1)</b>													Extracted: 09/05/07 08:33	
Benzene	EPA 8260B	ND	---	1.50	ug/kg wet	1x	--	--	--	--	--	--	09/05/07 10:19	
1,2-Dibromoethane (EDB)	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	4.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.50	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1,2-DCA-d4		Recovery: 109%		Limits: 65-145%		"						09/05/07 10:19		
Toluene-d8		98.3%		55-145%		"						"		
4-BFB		98.4%		50-145%		"						"		

**LCS (7105021-BS1)**

Extracted: 09/05/07 08:33

Benzene	EPA 8260B	37.6	---	1.50	ug/kg wet	1x	--	40.0	94.1%	(80-125)	--	--	09/05/07 09:24	
1,2-Dibromoethane (EDB)	"	35.2	---	5.00	"	"	--	"	88.0%	(70-130)	--	--	"	
1,2-Dichloroethane	"	38.7	---	1.25	"	"	--	"	96.8%	"	--	--	"	
Ethylbenzene	"	37.0	---	4.00	"	"	--	"	92.5%	(80-125)	--	--	"	
Methyl tert-butyl ether	"	37.2	---	1.00	"	"	--	"	93.0%	(70-130)	--	--	"	
n-Hexane	"	40.8	---	5.00	"	"	--	"	102%	"	--	--	"	
Naphthalene	"	37.0	---	10.0	"	"	--	"	92.5%	"	--	--	"	
Toluene	"	34.8	---	1.50	"	"	--	"	87.1%	(80-125)	--	--	"	
1,2,4-Trimethylbenzene	"	37.4	---	5.00	"	"	--	"	93.4%	(80-135)	--	--	"	
1,3,5-Trimethylbenzene	"	36.0	---	5.00	"	"	--	"	90.0%	(80-140)	--	--	"	
Total Xylenes	"	110	---	10.0	"	"	--	120	91.7%	(70-130)	--	--	"	
Surrogate(s): 1,2-DCA-d4		Recovery: 100%		Limits: 65-145%		"						09/05/07 09:24		
Toluene-d8		97.4%		55-145%		"						"		
4-BFB		99.2%		50-145%		"						"		





<b>SLR-Portland</b>	Project Name: <b>Crowley</b>	Report Created:
1800 Blankenship Road Suite 440	Project Number: 008.205.00007	09/24/07 17:22
West Linn, OR 97068	Project Manager: Steve Hammer	

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7105021      Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>LCS Dup (7105021-BSD1)</b>														
Extracted: 09/05/07 08:33														
Benzene	EPA 8260B	40.0	---	1.50	ug/kg wet	1x	--	40.0	99.9%	(80-125)	5.98%	(25)	09/05/07 09:52	
1,2-Dibromoethane (EDB)	"	41.4	---	5.00	"	"	--	"	103%	(70-130)	16.1%	(30)	"	
1,2-Dichloroethane	"	43.0	---	1.25	"	"	--	"	107%	"	10.4%	"	"	
Ethylbenzene	"	37.9	---	4.00	"	"	--	"	94.8%	(80-125)	2.46%	(25)	"	
Methyl tert-butyl ether	"	46.0	---	1.00	"	"	--	"	115%	(70-130)	21.1%	(30)	"	
n-Hexane	"	41.8	---	5.00	"	"	--	"	105%	"	2.35%	"	"	
Naphthalene	"	40.2	---	10.0	"	"	--	"	101%	"	8.36%	"	"	
Toluene	"	36.4	---	1.50	"	"	--	"	91.0%	(80-125)	4.38%	(25)	"	
1,2,4-Trimethylbenzene	"	38.5	---	5.00	"	"	--	"	96.3%	(80-135)	3.03%	"	"	
1,3,5-Trimethylbenzene	"	37.4	---	5.00	"	"	--	"	93.4%	(80-140)	3.65%	"	"	
Total Xylenes	"	112	---	10.0	"	"	--	120	93.7%	(70-130)	2.12%	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery:</i>	<i>110%</i>	<i>Limits: 65-145%</i>		<i>"</i>							<i>09/05/07 09:52</i>	
<i>Toluene-d8</i>			<i>99.3%</i>	<i>55-145%</i>		<i>"</i>							<i>"</i>	
<i>4-BFB</i>			<i>101%</i>	<i>50-145%</i>		<i>"</i>							<i>"</i>	

<b>Matrix Spike (7105021-MS1)</b>														
QC Source: BQ10054-01      Extracted: 09/05/07 08:33														
Benzene	EPA 8260B	19.4	---	0.721	ug/kg wet	1x	ND	19.2	101%	(60-125)	--	--	09/05/07 19:11	
1,2-Dibromoethane (EDB)	"	20.7	---	2.40	"	"	ND	"	108%	(60-140)	--	--	"	
1,2-Dichloroethane	"	21.4	---	0.601	"	"	ND	"	111%	"	--	--	"	
Ethylbenzene	"	17.5	---	1.92	"	"	ND	"	91.2%	(80-124)	--	--	"	
Methyl tert-butyl ether	"	22.8	---	0.481	"	"	ND	"	119%	(60-140)	--	--	"	
n-Hexane	"	18.7	---	2.40	"	"	ND	"	97.1%	"	--	--	"	
Naphthalene	"	14.2	---	4.81	"	"	ND	"	74.0%	"	--	--	"	
Toluene	"	17.3	---	0.721	"	"	ND	"	89.8%	(75-125)	--	--	"	
1,2,4-Trimethylbenzene	"	16.2	---	2.40	"	"	ND	"	84.4%	(10-150)	--	--	"	
1,3,5-Trimethylbenzene	"	16.5	---	2.40	"	"	ND	"	85.5%	"	--	--	"	
Total Xylenes	"	52.6	---	4.81	"	"	ND	57.7	91.1%	(70-130)	--	--	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery:</i>	<i>113%</i>	<i>Limits: 65-145%</i>		<i>"</i>							<i>09/05/07 19:11</i>	
<i>Toluene-d8</i>			<i>98.9%</i>	<i>55-145%</i>		<i>"</i>							<i>"</i>	
<i>4-BFB</i>			<i>102%</i>	<i>50-145%</i>		<i>"</i>							<i>"</i>	



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7105021 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Matrix Spike (7105021-MS2)</b>														
QC Source: BQ10054-08													Extracted: 09/05/07 08:33	
Benzene	EPA 8260B	19.7	---	0.737	ug/kg wet	1x	ND	19.7	100%	(60-125)	--	--	09/05/07 19:38	
1,2-Dibromoethane (EDB)	"	22.3	---	2.46	"	"	ND	"	114%	(60-140)	--	--	"	
1,2-Dichloroethane	"	22.3	---	0.615	"	"	ND	"	113%	"	--	--	"	
Ethylbenzene	"	18.7	---	1.97	"	"	ND	"	95.2%	(80-124)	--	--	"	
Methyl tert-butyl ether	"	23.7	---	0.492	"	"	ND	"	120%	(60-140)	--	--	"	
n-Hexane	"	18.8	---	2.46	"	"	ND	"	95.7%	"	--	--	"	
Naphthalene	"	17.2	---	4.92	"	"	ND	"	87.2%	"	--	--	"	
Toluene	"	18.3	---	0.737	"	"	ND	"	93.3%	(75-125)	--	--	"	
1,2,4-Trimethylbenzene	"	18.4	---	2.46	"	"	ND	"	93.8%	(10-150)	--	--	"	
1,3,5-Trimethylbenzene	"	18.9	---	2.46	"	"	ND	"	96.1%	"	--	--	"	
Total Xylenes	"	55.4	---	4.92	"	"	ND	59.0	93.9%	(70-130)	--	--	"	

Surrogate(s): 1,2-DCA-d4 Recovery: 116% Limits: 65-145% " 09/05/07 19:38  
Toluene-d8 101% 55-145% "  
4-BFB 107% 50-145% "

**Matrix Spike Dup (7105021-MSD2)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
QC Source: BQ10054-08													Extracted: 09/05/07 08:33	
Benzene	EPA 8260B	23.6	---	0.756	ug/kg wet	1x	ND	20.2	117%	(60-125)	17.8% (25)		09/05/07 20:06	
1,2-Dibromoethane (EDB)	"	26.1	---	2.52	"	"	ND	"	130%	(60-140)	15.7% (30)		"	
1,2-Dichloroethane	"	26.8	---	0.630	"	"	ND	"	133%	"	18.5%		"	
Ethylbenzene	"	21.2	---	2.02	"	"	ND	"	105%	(80-124)	12.3% (25)		"	
Methyl tert-butyl ether	"	29.8	---	0.504	"	"	ND	"	148%	(60-140)	23.2% (30)		"	M1
n-Hexane	"	22.9	---	2.52	"	"	ND	"	114%	"	19.6%		"	
Naphthalene	"	20.7	---	5.04	"	"	ND	"	103%	"	18.9%		"	
Toluene	"	20.8	---	0.756	"	"	ND	"	103%	(75-125)	12.4% (25)		"	
1,2,4-Trimethylbenzene	"	20.2	---	2.52	"	"	ND	"	100%	(10-150)	9.24%		"	
1,3,5-Trimethylbenzene	"	20.0	---	2.52	"	"	ND	"	99.4%	"	5.79%		"	
Total Xylenes	"	64.1	---	5.04	"	"	ND	60.5	106%	(70-130)	14.6% (30)		"	

Surrogate(s): 1,2-DCA-d4 Recovery: 120% Limits: 65-145% " 09/05/07 20:06  
Toluene-d8 98.0% 55-145% "  
4-BFB 101% 50-145% "



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7106045 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7106045-BLK1)</b>													Extracted: 09/06/07 08:00	
Acetone	EPA 8260B	ND	---	30.0	ug/kg wet	1x	--	--	--	--	--	--	09/06/07 13:05	
Benzene	"	ND	---	1.50	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	15.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane (EDB)	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	4.00	"	"	--	--	--	--	--	--	"	

DRAFT REPORT

*The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.*



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7106045 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7106045-BLK1)</b>													Extracted: 09/06/07 08:00	
Hexachlorobutadiene	EPA 8260B	ND	---	10.0	ug/kg wet	1x	--	--	--	--	--	--	09/06/07 13:05	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	20.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	20.0	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	7.78	---	3.50	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.50	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Surrogate(s):	1,2-DCA-d4	Recovery:	113%	Limits:	60-140%	"							09/06/07 13:05	
	Toluene-d8		102%		60-140%	"							"	
	4-BFB		99.9%		60-140%	"							"	



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7106045 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>LCS (7106045-BS1)</b>														
Extracted: 09/06/07 08:00														
Acetone	EPA 8260B	469	---	30.0	ug/kg wet	1x	--	400	117%	(70-130)	--	--	09/06/07 12:36	
Benzene	"	43.2	---	1.50	"	"	--	40.0	108%	(80-125)	--	--	"	
2-Butanone	"	512	---	15.0	"	"	--	400	128%	(70-130)	--	--	"	
Carbon disulfide	"	42.6	---	3.00	"	"	--	40.0	107%	"	--	--	"	
Chlorobenzene	"	41.9	---	2.00	"	"	--	"	105%	"	--	--	"	
1,2-Dibromoethane (EDB)	"	46.2	---	5.00	"	"	--	"	116%	"	--	--	"	
1,1-Dichloroethane	"	43.2	---	2.00	"	"	--	"	108%	"	--	--	"	
1,2-Dichloroethane	"	47.2	---	1.25	"	"	--	"	118%	"	--	--	"	
1,1-Dichloroethene	"	45.3	---	3.00	"	"	--	"	113%	"	--	--	"	
cis-1,2-Dichloroethene	"	43.4	---	3.00	"	"	--	"	109%	"	--	--	"	
Ethylbenzene	"	41.1	---	4.00	"	"	--	"	103%	(80-125)	--	--	"	
Hexachlorobutadiene	"	42.0	---	10.0	"	"	--	"	105%	(70-130)	--	--	"	
Methyl tert-butyl ether	"	48.0	---	1.00	"	"	--	"	120%	"	--	--	"	
n-Hexane	"	44.2	---	5.00	"	"	--	"	110%	"	--	--	"	
4-Methyl-2-pentanone	"	507	---	20.0	"	"	--	400	127%	"	--	--	"	
Naphthalene	"	41.2	---	10.0	"	"	--	40.0	103%	"	--	--	"	
Tetrachloroethene	"	42.5	---	2.00	"	"	--	"	106%	"	--	--	"	
Toluene	"	40.1	---	1.50	"	"	--	"	100%	(80-125)	--	--	"	
1,1,1-Trichloroethane	"	44.2	---	2.50	"	"	--	"	110%	(70-130)	--	--	"	
Trichloroethene	"	43.8	---	2.50	"	"	--	"	109%	"	--	--	"	
1,2,4-Trimethylbenzene	"	40.7	---	5.00	"	"	--	"	102%	(80-135)	--	--	"	
1,3,5-Trimethylbenzene	"	40.1	---	5.00	"	"	--	"	100%	(80-140)	--	--	"	
Total Xylenes	"	124	---	10.0	"	"	--	120	103%	(70-130)	--	--	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery: 116%</i>		<i>Limits: 60-140%</i>								<i>09/06/07 12:36</i>		
<i>Toluene-d8</i>		<i>100%</i>		<i>60-140%</i>								<i>"</i>		
<i>+BFB</i>		<i>104%</i>		<i>60-140%</i>								<i>"</i>		

**Matrix Spike (7106045-MS1)**

QC Source: BQ10053-02

Extracted: 09/06/07 08:00

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Acetone	EPA 8260B	510	---	30.0	ug/kg wet	1x	6.35	400	126%	(60-140)	--	--	09/06/07 15:24	
Benzene	"	24.7	---	1.50	"	"	ND	40.0	61.8%	(60-125)	--	--	"	
2-Butanone	"	522	---	15.0	"	"	1.55	400	130%	(60-140)	--	--	"	
Carbon disulfide	"	21.2	---	3.00	"	"	0.300	40.0	52.2%	"	--	--	"	M2
Chlorobenzene	"	22.3	---	2.00	"	"	ND	"	55.8%	"	--	--	"	M2
1,2-Dibromoethane (EDB)	"	26.0	---	5.00	"	"	ND	"	64.9%	"	--	--	"	M2
1,1-Dichloroethane	"	27.2	---	2.00	"	"	ND	"	67.9%	"	--	--	"	M2
1,2-Dichloroethane	"	27.8	---	1.25	"	"	ND	"	69.6%	"	--	--	"	M2
1,1-Dichloroethene	"	25.3	---	3.00	"	"	ND	"	63.3%	"	--	--	"	M2
cis-1,2-Dichloroethene	"	26.5	---	3.00	"	"	ND	"	66.4%	"	--	--	"	M2
Ethylbenzene	"	21.1	---	4.00	"	"	ND	"	52.8%	(80-124)	--	--	"	M2

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7106045 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
<b>Matrix Spike (7106045-MS1)</b>																
QC Source: BQ10053-02																
Extracted: 09/06/07 08:00																
Hexachlorobutadiene	EPA 8260B	14.6	---	10.0	ug/kg wet	1x	ND	40.0	36.6%	(60-140)	--	--	09/06/07 15:24	M2		
Methyl tert-butyl ether	"	25.7	---	1.00	"	"	ND	"	64.3%	"	--	--	"	M2		
n-Hexane	"	19.1	---	5.00	"	"	0.244	"	47.2%	"	--	--	"	M2		
4-Methyl-2-pentanone	"	540	---	20.0	"	"	ND	400	135%	"	--	--	"	M2		
Naphthalene	"	20.9	---	10.0	"	"	0.956	40.0	49.9%	"	--	--	"	M2		
Tetrachloroethene	"	19.6	---	2.00	"	"	ND	"	49.1%	"	--	--	"	M2		
Toluene	"	22.8	---	1.50	"	"	ND	"	57.0%	(75-125)	--	--	"	M2		
1,1,1-Trichloroethane	"	25.0	---	2.50	"	"	ND	"	62.4%	(60-140)	--	--	"	M2		
Trichloroethene	"	22.9	---	2.50	"	"	ND	"	57.2%	"	--	--	"	M2		
1,2,4-Trimethylbenzene	"	19.1	---	5.00	"	"	ND	"	47.8%	(10-150)	--	--	"	M2		
1,3,5-Trimethylbenzene	"	18.0	---	5.00	"	"	ND	"	45.0%	"	--	--	"	M2		
Total Xylenes	"	62.0	---	10.0	"	"	0.234	120	51.5%	(70-130)	--	--	"	M2		
<i>Surrogate(s): 1,2-DCA-d4</i>													<i>Recovery: 110%</i>	<i>Limits: 60-140%</i>	<i>"</i>	<i>09/06/07 15:24</i>
<i>Toluene-d8</i>													<i>101%</i>	<i>60-140%</i>	<i>"</i>	<i>"</i>
<i>4-BFB</i>													<i>107%</i>	<i>60-140%</i>	<i>"</i>	<i>"</i>

**Matrix Spike Dup (7106045-MSD1)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
QC Source: BQ10053-02														
Extracted: 09/06/07 08:00														
Acetone	EPA 8260B	485	---	30.0	ug/kg wet	1x	6.35	400	120%	(60-140)	5.04% (30)		09/06/07 15:53	
Benzene	"	43.8	---	1.50	"	"	ND	40.0	110%	(60-125)	55.7% (25)		"	R2
2-Butanone	"	515	---	15.0	"	"	1.55	400	128%	(60-140)	1.44% (30)		"	R2
Carbon disulfide	"	38.6	---	3.00	"	"	0.300	40.0	95.8%	"	58.2%		"	R2
Chlorobenzene	"	42.5	---	2.00	"	"	ND	"	106%	"	62.2%		"	R2
1,2-Dibromoethane (EDB)	"	48.2	---	5.00	"	"	ND	"	120%	"	59.9%		"	R2
1,1-Dichloroethane	"	45.0	---	2.00	"	"	ND	"	113%	"	49.5%		"	R2
1,2-Dichloroethane	"	47.6	---	1.25	"	"	ND	"	119%	"	52.4%		"	R2
1,1-Dichloroethane	"	43.8	---	3.00	"	"	ND	"	110%	"	53.5%		"	R2
cis-1,2-Dichloroethane	"	43.7	---	3.00	"	"	ND	"	109%	"	48.9%		"	R2
Ethylbenzene	"	41.7	---	4.00	"	"	ND	"	104%	(80-124)	65.6% (25)		"	R2
Hexachlorobutadiene	"	40.0	---	10.0	"	"	ND	"	100%	(60-140)	92.9% (30)		"	R2
Methyl tert-butyl ether	"	46.1	---	1.00	"	"	ND	"	115%	"	56.8%		"	R2
n-Hexane	"	44.2	---	5.00	"	"	0.244	"	110%	"	79.3%		"	R2
4-Methyl-2-pentanone	"	523	---	20.0	"	"	ND	400	131%	"	3.20%		"	R2
Naphthalene	"	43.4	---	10.0	"	"	0.956	40.0	106%	"	70.0%		"	R2
Tetrachloroethene	"	42.0	---	2.00	"	"	ND	"	105%	"	72.7%		"	R2
Toluene	"	41.1	---	1.50	"	"	ND	"	103%	(75-125)	57.4% (25)		"	R2
1,1,1-Trichloroethane	"	45.3	---	2.50	"	"	ND	"	113%	(60-140)	58.0% (30)		"	R2
Trichloroethene	"	42.5	---	2.50	"	"	ND	"	106%	"	59.9%		"	R2
1,2,4-Trimethylbenzene	"	41.7	---	5.00	"	"	ND	"	104%	(10-150)	74.2% (25)		"	R2
1,3,5-Trimethylbenzene	"	40.0	---	5.00	"	"	ND	"	100%	"	75.8%		"	R2

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7106045 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Matrix Spike Dup (7106045-MSD1)</b>														
							QC Source: BQI0053-02			Extracted: 09/06/07 08:00				
Total Xylenes	EPA 8260B	126	---	10.0	ug/kg wet	1x	0.234	120	104%	(70-130)	67.8%	(25)	09/06/07 15:53	R2
<i>Surrogate(s):</i>		<i>1,2-DCA-d4</i>		<i>Recovery: 109%</i>		<i>Limits: 60-140%</i>						<i>09/06/07 15:53</i>		
		<i>Toluene-d8</i>		<i>99.9%</i>		<i>60-140%</i>								
		<i>4-BFB</i>		<i>100%</i>		<i>60-140%</i>								

QC Batch: 7107059 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7107059-BLK1)</b>														
							Extracted: 09/07/07 18:10							
Acetone	EPA 8260B	ND	---	30.0	ug/kg wet	1x	--	--	--	--	--	--	09/07/07 22:17	
Benzene	"	ND	---	1.50	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	15.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane (EDB)	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	

DRAFT REPORT

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<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.205.00007 Project Manager: Steve Hammer	Report Created: 09/24/07 17:22
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**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7107059      Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7107059-BLK1)</b>													Extracted: 09/07/07 18:10	
1,1-Dichloroethene	EPA 8260B	ND	---	3.00	ug/kg wet	1x	--	--	--	--	--	--	09/07/07 22:17	
cis-1,2-Dichloroethene	"	ND	---	3.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	4.00	"	"	--	--	--	--	--	--	"	
Hexachlorobutadiene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	20.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	20.0	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	4.78	---	3.50	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.50	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.25	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	2.50	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	

Surrogate(s): 1,2-DCA-d4      Recovery: 117%      Limits: 65-145%      "      09/07/07 22:17

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7107059 Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
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**Blank (7107059-BLK1)**

Extracted: 09/07/07 18:10

Surrogate(s): Toluene-d8	Recovery: 94.5%	Limits: 55-145%	1x	09/07/07 22:17
-BFB	88.6%	50-145%	"	"

**LCS (7107059-BS1)**

Extracted: 09/07/07 18:10

Acetone	EPA 8260B	453	---	30.0	ug/kg wet	1x	--	400	113%	(70-130)	--	--	09/07/07 21:22	
Benzene	"	38.4	---	1.50	"	"	--	40.0	96.0%	(80-125)	--	--	"	
2-Butanone	"	459	---	15.0	"	"	--	400	115%	(70-130)	--	--	"	
Carbon disulfide	"	40.9	---	3.00	"	"	--	40.0	102%	"	--	--	"	
Chlorobenzene	"	38.8	---	2.00	"	"	--	"	96.9%	"	--	--	"	
1,2-Dibromoethane (EDB)	"	39.7	---	5.00	"	"	--	"	99.3%	"	--	--	"	
1,1-Dichloroethane	"	45.1	---	2.00	"	"	--	"	113%	"	--	--	"	
1,2-Dichloroethane	"	45.5	---	1.25	"	"	--	"	114%	"	--	--	"	
1,1-Dichloroethene	"	45.7	---	3.00	"	"	--	"	114%	"	--	--	"	
cis-1,2-Dichloroethene	"	46.0	---	3.00	"	"	--	"	115%	"	--	--	"	
Ethylbenzene	"	38.5	---	4.00	"	"	--	"	96.4%	"	--	--	"	
Hexachlorobutadiene	"	43.5	---	10.0	"	"	--	"	109%	"	--	--	"	
Methyl tert-butyl ether	"	40.6	---	1.00	"	"	--	"	102%	"	--	--	"	
n-Hexane	"	42.9	---	5.00	"	"	--	"	107%	"	--	--	"	
4-Methyl-2-pentanone	"	434	---	20.0	"	"	--	400	109%	"	--	--	"	
Naphthalene	"	48.1	---	10.0	"	"	--	40.0	120%	"	--	--	"	
Tetrachloroethene	"	37.8	---	2.00	"	"	--	"	94.5%	"	--	--	"	
Toluene	"	37.2	---	1.50	"	"	--	"	92.9%	(80-125)	--	--	"	
1,1,1-Trichloroethane	"	44.0	---	2.50	"	"	--	"	110%	(70-130)	--	--	"	
Trichloroethene	"	38.9	---	2.50	"	"	--	"	97.3%	"	--	--	"	
1,2,4-Trimethylbenzene	"	38.5	---	5.00	"	"	--	"	96.2%	(80-135)	--	--	"	
1,3,5-Trimethylbenzene	"	38.3	---	5.00	"	"	--	"	95.7%	(80-140)	--	--	"	
o-Xylene	"	40.7	---	5.00	"	"	--	"	102%	(70-130)	--	--	"	
m,p-Xylene	"	77.4	---	5.00	"	"	--	80.0	96.8%	"	--	--	"	
Total Xylenes	"	118	---	10.0	"	"	--	120	98.4%	"	--	--	"	

Surrogate(s): 1,2-DCA-d4	Recovery: 111%	Limits: 65-145%	"	09/07/07 21:22
Toluene-d8	95.3%	55-145%	"	"
-BFB	94.7%	50-145%	"	"



THE LEADER IN ENVIRONMENTAL TESTING

<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.205.00007 Project Manager: Steve Hammer	Report Created: 09/24/07 17:22
---	--	-----------------------------------

**DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method) - Laboratory Quality Control Results**  
TestAmerica - Seattle, WA

QC Batch: 7107059      Soil Preparation Method: EPA 5035

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>LCS Dup (7107059-BSD1)</b>										Extracted: 09/07/07 18:10				
Acetone	EPA 8260B	400	---	30.0	ug/kg wet	1x	--	400	99.9%	(70-130)	12.5%	(30)	09/07/07 21:50	
Benzene	"	37.0	---	1.50	"	"	--	40.0	92.5%	(80-125)	3.69%	(25)	"	
2-Butanone	"	373	---	15.0	"	"	--	400	93.1%	(70-130)	20.7%	(30)	"	
Carbon disulfide	"	39.0	---	3.00	"	"	--	40.0	97.6%	"	4.68%	"	"	
Chlorobenzene	"	38.8	---	2.00	"	"	--	"	97.0%	"	0.155%	"	"	
1,2-Dibromoethane (EDB)	"	37.0	---	5.00	"	"	--	"	92.4%	"	7.15%	"	"	
1,1-Dichloroethane	"	43.3	---	2.00	"	"	--	"	108%	"	3.94%	"	"	
1,2-Dichloroethane	"	41.5	---	1.25	"	"	--	"	104%	"	9.33%	"	"	
1,1-Dichloroethene	"	43.0	---	3.00	"	"	--	"	108%	"	5.93%	"	"	
cis-1,2-Dichloroethene	"	42.5	---	3.00	"	"	--	"	106%	"	7.82%	"	"	
Ethylbenzene	"	39.2	---	4.00	"	"	--	"	97.9%	"	1.57%	"	"	
Hexachlorobutadiene	"	41.4	---	10.0	"	"	--	"	103%	"	5.02%	"	"	
Methyl tert-butyl ether	"	33.9	---	1.00	"	"	--	"	84.7%	"	18.1%	"	"	
n-Hexane	"	37.8	---	5.00	"	"	--	"	94.4%	"	12.7%	"	"	
4-Methyl-2-pentanone	"	383	---	20.0	"	"	--	400	95.8%	"	12.5%	"	"	
Naphthalene	"	39.5	---	10.0	"	"	--	40.0	98.7%	"	19.6%	"	"	
Tetrachloroethene	"	37.1	---	2.00	"	"	--	"	92.7%	"	1.87%	"	"	
Toluene	"	38.1	---	1.50	"	"	--	"	95.2%	(80-125)	2.52%	(25)	"	
1,1,1-Trichloroethane	"	41.5	---	2.50	"	"	--	"	104%	(70-130)	5.78%	(30)	"	
Trichloroethene	"	36.3	---	2.50	"	"	--	"	90.8%	"	6.94%	"	"	
1,2,4-Trimethylbenzene	"	36.4	---	5.00	"	"	--	"	91.1%	(80-135)	5.42%	(25)	"	
1,3,5-Trimethylbenzene	"	36.7	---	5.00	"	"	--	"	91.7%	(80-140)	4.30%	"	"	
o-Xylene	"	41.1	---	5.00	"	"	--	"	103%	(70-130)	0.930%	(30)	"	
m,p-Xylene	"	76.8	---	5.00	"	"	--	80.0	96.0%	"	0.791%	"	"	
Total Xylenes	"	118	---	10.0	"	"	--	120	98.2%	"	0.195%	(25)	"	

Surrogate(s):	1,2-DCA-d4	Recovery:	103%	Limits:	65-145%	"	09/07/07 21:50
	Toluene-d8		98.6%		55-145%	"	"
	4-BFB		91.9%		50-145%	"	"

DRAFT REPORT

*The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.*



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

## Notes and Definitions

### Report Specific Notes:

- M1 - The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M2 - The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MHA - Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- Q10 - Hydrocarbon pattern most closely resembles a blend of diesel range overlap as well as oil.
- Q12 - Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel or possibly biogenic interference.
- Q13 - Detected hydrocarbons do not have pattern and range consistent with typical petroleum products and may be due to biogenic interference.
- Q9 - Hydrocarbon pattern most closely resembles weathered diesel.
- R2 - The RPD exceeded the acceptance limit.
- RL1 - Reporting limit raised due to sample matrix effects.
- RL3 - Reporting limit raised due to high concentrations of non-target analytes.
- RL7 - Sample required dilution due to high concentrations of target analyte.
- Z3 - The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- ZX - Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

### Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL\* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. \*MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.



# TestAmerica

ANALYTICAL TESTING CORPORATION

## CHAIN OF CUSTODY REPORT

Work Order #: **2071091**  
TUNNAROUND REQUEST

CLIENT: **SUR**  
 REPORT TO: **1800 Blinkership Rd. St. 442**  
 ADDRESS: **West Linn, OR 97146**

PHONE: **(503) 723-4123** FAX:  
 PROJECT NAME: **Crowley**  
 PROJECT NUMBER:

ANALYSED BY: **C. Kramer**  
 CLIENT SAMPLE IDENTIFICATION

SAMPLING DATE/TIME

INVOICE TO:  
 P.O. NUMBER:

Organic & Inorganic Analyses  
 Petroleum Hydrocarbon Analyses  
 7 5 4 3 2 1 <1  
 5 4 3 2 1 <1  
 OTHER: \_\_\_\_\_ SPECIFIC: \_\_\_\_\_  
 \* Laboratory Requests Also show standard may incur Extra Charges

PRESERVATIVE  
 REQUESTED ANALYSES

RECEIVED BY: **John Kramer** DATE: **8/25/07**  
 PRINT NAME: **John Kramer** TIME: **10:00**  
 RECEIVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ TIME: \_\_\_\_\_

DATE: **8/25/07** TIME: **10:00**  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NWTR-10	NWTR-11	BTEX	EDS/MS	EPA/VOC	Gasoline/Alkyne	SVCs	SVCs	GC/MS	OTHER	# OF CONT.	LOCATION / COMMENTS	TA
GPE-1-5	8/24/07 10:30	X	X	X	X	X	X	X	X	X		5		
GPE-1-11	10:32	X	X	X	X	X	X	X	X	X		5		
GPE-1-GW	10:30	X	X	X	X	X	X	X	X	X		9		
GPE-2-5	9:34	X	X	X	X	X	X	X	X	X		5		
GPE-2-11	9:49	X	X	X	X	X	X	X	X	X		5		
GPE-2-GW	9:50	X	X	X	X	X	X	X	X	X		9		
GPE-3-5	11:47	X	X	X	X	X	X	X	X	X		5		
GPE-3-10	12:00	X	X	X	X	X	X	X	X	X		5		
GPE-3-GW	11:40	X	X	X	X	X	X	X	X	X		7		

ADDITIONAL REMARKS:  
 \* Gasoline additives: Naphthalene 1-methyl naphthalene, 2-methyl Naphthalene, n-Hexane, MTBE, Ethylene dibromide (EDB), 1,2-Dichloroethane (EDC)

435-420-9200 FAX 430-9210  
 500-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-562-9200 FAX 563-9210

11720 North Creek Pkwy N Suite 490, Doleail, WA 98011-8244  
 11922 E. First Ave, Spokane, WA 99206-5302  
 9405 SW Nimbus Ave, Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

# TestAmerica

ANALYTICAL TESTING CORPORATION

## CHAIN OF CUSTODY REPORT

Work Order #: **QA109**

### TURNAROUND REQUEST

In Business Days\*

Organic & Inorganic Analyses  
 Petroleum Hydrocarbon Analyses

10	7	5	4	3	2	1	<1
5	4	3	2	1	<1		

OTHER Specific: \_\_\_\_\_

\* Turnaround Requests Use above standards and occur each Charge

11720 North Creek Pkwy N Suite 400, Bellevue, WA 98011-8244  
 11922 E. First Ave, Spokane, WA 99206-5302  
 503-906-9200 FAX 906-9210  
 945 SW Nimbus Ave, Beaverton, OR 97008-7145  
 503-563-9200 FAX 563-9210  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

INVOICE TO:

CLIENT: **SLR**  
 REPORT TO: **1800 Blankenship Rd, Ste 4140**  
 ADDRESS: **West Linn, OR 97068**

P.O. NUMBER:

PRESERVATIVE

REQUESTED ANALYSES

SAMPLED BY:	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES				RECEIVED BY	DATE	TIME	FIRM
			NUTR. G	NUTR. D	BTEX	BTX				
GPE-4-5	C-Kramer	8/24/07 13:03	X	X	X	X	8/25/07	10:00	SLR	
GPE-4-11		13:11	X	X	X	X				
GPE-5-5		12:47	X	X	X	X				
GPE-5-9		12:50	X	X	X	X				
GPE-6-7		15:01	X	X	X	X				
GPE-6-11		15:05	X	X	X	X				
GPE-7-6		14:15	X	X	X	X				
GPE-7-10		14:20	X	X	X	X				
GPE-8-6		15:27	X	X	X	X				
GPE-8-7		15:30	X	X	X	X				

RECEIVED BY: **John Anthony** FIRM: **SLR**  
 PRINT NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
 RECEIVED BY: \_\_\_\_\_ FIRM: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

ADDITIONAL REMARKS:  
 \* Gasoline additives: naphthalene, 1-methyl naphthalene, 2-methyl naphthalene, n-hexane, MTBE, Ethylene dibromide (EDB), 1,2-dichloroethane (EDC)

# TestAmerica Sample Receipt Checklist

Work Order No. PAH1091  
 Client: SUB  
 Project: Crowley

Unpacked by: [Signature]  
 Date: 8/25  
 Initials: SM

Logged-in by: [Signature]  
 Date: 8/25  
 Initials: SM

Received by: [Signature]  
 Date: 8/25  
 Time: 10:00  
 Initials: SM

\*\*\*ESI Clients (see Section C)

Cooler Temperature (IR) 3.3 °C plastic glass NA (oil/air samples, ESI client)

Temperature out of range:  
 No Ice  
 Ice Melted  
 Within 4 Hours  
 Other

**A** Custody Seals: (#     ) **B**

Signature: [Signature] Dated:       
 None

Received from:

- TA Courier
- Senvoy
- UPS
- Fed Ex
- Client
- TDP
- DHL
- SDS
- Mid-Valley
- GS/TA
- GS/Senvoy
- Other:

Container Type:

- #Cooler(s)
- #Box(s)
- None (    ) #Other:

Coolant Type:

- Gel Ice
- Loose Ice
- None

Packing Material:

- Bubble Bags
- Styrofoam Cubbies
- None (    ) Other:

Sample Status:

(If N circled, see MOB)

General:			
Intact?	<u>Y</u>	<u>N</u>	
# Containers Match COC?	<u>Y</u>	<u>N</u>	none given
IDs Match COC?	<u>Y</u>	<u>N</u>	
For Analyses Requested:			
Correct Type & Preservation?	<u>Y</u>	<u>N</u>	
Adequate Volume?	<u>Y</u>	<u>N</u>	
Within Hold Time?	<u>Y</u>	<u>N</u>	
Volatiles:			
VOAs Free of Headspace?	<u>Y</u>	<u>N</u>	NA
TB on COC?	<u>Y</u>	<u>N</u>	NA
Metals:			
HFO3 Preserver?	<u>Y</u>	<u>N</u>	IIA

**C** \*\*\*ESI Clients Only

Army Corp:      Geiger (ticks/min):     

Temperature Blank:      °C not provided  
 All preserved bottles checked Y N  
 All preserved accordingly? Y N (see MOB)  
 (left) (middle) (right) (air)

Project Managers:

Comments:



# SECOR

International Incorporated

7730 SW MOHAWK STREET  
TUALATIN, OREGON 97062  
(503) 691-2030/692-7074 (FAX)

PAGE 1 OF 1

FACILITY Crowley JOB# \_\_\_\_\_ BORING/WELL GPD-6  
 LOCATION Vancouver, WA SURFACE ELEVATION NA  
 START 0815 FINISH 0900 0845 CASING TOP ELEVATION NA  
 LOGGED BY [Signature] MONITORING DEVICE Mini Probe 2000  
 SUBCONTRACTOR AND EQUIPMENT Cascade Drilling - Robert Probe  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
BLAWS 6"/6"/6"	Sample Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)				Depth Below Surface (feet)	
				5				5	
				0	MOSS / GRASS Sand, brown, loose, fine fanned, moist to dry			0	
		0.0	NS						
		0.0	NS						
		0.0	NS	5	silt, grey, firm, no fines, odor			5	
		0.0	NS						
		0.0	NS	10	Sand, coarse, brown to grey, moist to wet, No odor <del>with some fine sand at 17'</del>			10	
					Silt, grey, odor, some fine sand, med dense, wet				
				15				15	
		123			Boring terminated				
				20	PID erratic during headspace and background screening			20	
				25				25	

Boring terminated at \_\_\_\_\_ feet, sampler advanced to \_\_\_\_\_ feet.  
 Groundwater encountered at approximately \_\_\_\_\_ feet during drilling.

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				

(2.5Y 4/2) Munsell (1990) Soil Color Charts

DWG:

\* PID NOT FUNCTIONING PROPERLY -> STOPPED SCREENING



FACILITY \_\_\_\_\_ JOB# 1577. CRDW. 05 BORING/WELL OPD-7  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 0850 FINISH 0910 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER BLOWS 6"/6"/6"	Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
				5				5	
				0	MOSS/GRASS			0	
					SAND, BROWN W/REDSPECKS, MED. GRAINED, MOIST				
				5				5	
					THIN CLAY LENS (2-3") W/COARSE SAND MED-FINE GRAINED				
				10	SANDY SILT TO SILT, GRAY W/WOODS CHIPS; STRONG PETROLEUM ODOR; SLIGHT SHEEN, WET			10	
					BORING TERMINATED AT 12'				
				15				15	
				20				20	
				25				25	

Boring terminated at \_\_\_ feet, sampler advanced to \_\_\_ feet.  
 Groundwater encountered at approximately \_\_\_ feet during drilling.

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				

(2.5Y 4/2) Munsell (1990) Soil Color Charts

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL 6PD-2  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 0915 FINISH 0940 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic	
						SYM	PAT			
BLOWS 6"/6"/6"				5				5		
				0	MOSS SAND, BROWN W/RED, FINE TO MEDIUM GRAINED, MOIST STAIN ~1", NO ODDOR OR SHEEN - ORGANIC			0		
				5				5		
				10	SILTY SAND, GRAY, FINE GRAINED MOIST SILT, GRAY W/ WOOD CHIPS, STRONG ODDOR SLIGHT SHEEN WET			10		
		80.2		12	BORING TERMINATED AT 12'			12		
				15				15		
				20				20		
				25				25		
					Boring terminated at ___ feet, sampler advanced to ___ feet. Groundwater encountered at approximately ___ feet during drilling.					

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				

# SECOR International Incorporated

7730 SW MOHAWK STREET  
TUALATIN, OREGON 97062  
(503) 691-2030/692-7074 (FAX)

PAGE OF

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL 690-9  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1045 FINISH 1100 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
				5				5	
				0	DECOMPOSING LEAVES			0	
		0.0			SAND, BROWN, MED TO FINE GRAINED, MOIST				
		0.0			ORGANIC LENSE; BLACK ~ 3"				
		1.0		5				5	
		1.0		10	SILTY SAND, GRAY, FINE GRAINED, ODOR, MOIST			10	
		3.0		15	SILT, GRAY W/ WOOD CHIPS, ODOR (STRONG) MOIST, WET; MORE WOOD			15	
				16	BORING TERMINATED AT 16'			16	
				20				20	
				25				25	

Below water table

Boring terminated at \_\_\_ feet, sampler advanced to \_\_\_ feet.  
 Groundwater encountered at approximately \_\_\_ feet during drilling.

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				

(2.5Y 4/2) Munsell (1990) Soil Color Charts

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL SPD-10  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 0950 FINISH 1010 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
				5	* BELOW TREE -> DRY 2 NO MASS			5	
			NS	0	SAND, LIGHT BROWN, FINE TO MED. GRAINED, DRY MOIST			0	
	0.0								
	0.8								
	1.2				SILT CLAYE W/ WOOD CHIPS				
	1.7								
	1.7			10	NO RECOVERY (1.0-12.0)			10	
	0.0				SILTY SAND, LIGHT BROWN W/ WOOD CHIPS MOIST				
	1.5				SILT; GRAY W/ WOOD CHIPS (PURPLE TINT); ODOUR: NIET				
				15	BORING TERMINATED AT 16'			15	
				20				20	
				25				25	

Boring terminated at \_\_\_ feet, sampler advanced to \_\_\_ feet.  
 Groundwater encountered at approximately \_\_\_ feet during drilling.

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				

(2.5Y 4/2) Munsell (1990) Soil Color Charts

# SECOR International Incorporated

7730 SW MOHAWK STREET  
TUALATIN, OREGON 97062  
(503) 691-2030/692-7074 (FAX)

PAGE OF

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL SPD-11  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1540 FINISH 1605 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER BLOWS 6"/6"/6"	Depth (feet) Sample Interval	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
				5				5	
				0	MSSS/BRASS SAND, BROWN, FINE GRAINED, DRY			0	
	1.0		NS						
	1.0				NO RECOVERY FROM 3-6'				
	5.0			5	<del>BROWN</del> SAND, BROWN, FINE GRAINED, MOIST WITH SILT LENSES & <del>OXIDIZED</del> VS OXIDIZED LENSES 1" THICK			5	
	5.0			10	SAND, BROWN, FINE GRAINED, DRY/MOIST			10	
	5.0			15	ORGANICS MIXED WITH SAND TO GRAVEL WET, ODOR			15	
	5.0			20				20	
	5.0			25				25	
					Boring terminated at _____ feet, sampler advanced to _____ feet. Groundwater encountered at approximately _____ feet during drilling.				

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL GPD-12  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1510 FINISH 1535 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Sample Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic	
						SYM	PAT			
BLOWS 6"/6"/6"				5				5		
				0	DARK ORGANIC MATERIAL			0		
		0.0	NS		SAND, BROWN, MEDIUM TO FINE GRAIN DRY					
		0.0			MOIST					
		0.3		5				5		
		1.6			LAYERS OF OXIDIZED SAND (~1/4" THICK)					
		27		10	SAND, GRAY/WOOD CHIPS, FINE GRAINED WET, ODOR			10		
			S		SILT, GRAY, WET, PETROLEUM ODOR TRACE SAND			15		
				20				20		
				25				25		
					Boring terminated at ___ feet, sampler advanced to ___ feet. Groundwater encountered at approximately ___ feet during drilling.					

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				

# SECOR International Incorporated

7730 SW MOHAWK STREET  
TUALATIN, OREGON 97062  
(503) 691-2030/692-7074 (FAX)

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL # 6PD-13  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1415 FINISH 1435 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic	
						SYM	PAT			
BLOWS 6"/6"/6"	Sample Interval (feet)									
				5				5		
				0	GRASS			0		
					SAND, BROWN, FINE TO MEDIUM GRAINED, MOIST					
		43		5				5		
					SILT, GRAY W/WOOD, STRONG PETROLEUM ODOR, MOIST (~3" THICK)					
		93		10	SAND, FINE GRAINED, GRAY, STRONG ODOR, MOIST, DENSE (AT 9.5')			10		
					w/WOOD DEBRIS, WET					
		122		15	SILTY CLAY W/ORGANICS, GRAY, STRONG ODOR			15		
		169								
				16	TERMINATE BORING AT 16'			16		
				20				20		
				25				25		
Boring terminated at ___ feet, sampler advanced to ___ feet. Groundwater encountered at approximately ___ feet during drilling.										

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL GPD-14  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1440 FINISH 1505 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Sample Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
BLOWS 6"/6"/6"				5				5	
				0	MOSS / GRASS SAND, BROWN W/RED, FINE TO MEDIUM GRAINED, MOIST, OXIDATION LAYERS			0	
		0.0							
		0.0							
		0.5			SILT, GRAY W/WOODS, STRONG ODOR MOIST (w/4")				
					SILTY SAND, GRAY W/WOODS, FINE GRAINED, SLIGHT ODOR, MOIST (AT 7.5')				
		1.9			SAND, BROWN, FINE TO MED. GRAINED, MOIST				
		2.0			SAND BROWN SILTY SAND, GRAY W/WOOD, FINE GRAINED, ODOR				
		175			SILT, GRAY, WET, STRONG ODOR				
				25	Boring terminated at ___ feet, sampler advanced to ___ feet. Groundwater encountered at approximately ___ feet during drilling.			25	

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				



FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL CPD-15  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1635 FINISH 1655 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic	
						SYM	PAT			
				5				5	<p>*PID NOT READING ACCURATELY DUE TO RAIN</p>	
				0	MOSS / GRASS			0		
			NS		SAND, BROWN W/RED, MED-FINE GRAINED, MOIST					
				5	SILT, DK GRAY W/RED, WOOD CHIPS, SLIGHT ODOR (2-3" THICK), MOIST					
				10	SILT, DK GRAY, WOOD CHIPS, SLIGHT ODOR (2-4" THICK) AT 7', MOIST					
				10	SILTY SAND, BROWN, FINE GRAINED, MOIST AT 8'					
				10	GRAY GRAY WET					
				15	SILT, GRAY, W/WOODCHIPS; ODOR; WET					
				16	TERMINATE BORING AT 16'					
				20						
				25						
					Boring terminated at ___ feet, sampler advanced to ___ feet. Groundwater encountered at approximately ___ feet during drilling.					

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite	2" PVC Screen Casing (0.010 slots)	End Cap
No Recovery	SD Sheen Detected	Contact			
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				

FACILITY \_\_\_\_\_ JOB# \_\_\_\_\_ BORING/WELL GPB-16  
 LOCATION \_\_\_\_\_ SURFACE ELEVATION \_\_\_\_\_  
 START 1610 FINISH 1630 CASING TOP ELEVATION \_\_\_\_\_  
 LOGGED BY \_\_\_\_\_ MONITORING DEVICE \_\_\_\_\_  
 SUBCONTRACTOR AND EQUIPMENT \_\_\_\_\_  
 COMMENTS \_\_\_\_\_

SAMPLE NUMBER	Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to fine sand; odor; firm and dry in places	Unified Soil Classification System		Depth Below Surface (feet)	Well Construction Schematic
						SYM	PAT		
BLOWS 6"/6"/6"				5				5	
				0	MOSS / GRASS			0	
		0.2			SAND, BROWN w/RED., FINE GRAINED, ...				
		0.5			MOIST				
		8.2							
		0.9			w/LAYERS OF WOOD				
		4.0			CLAY LENSE w/WOOD ~ 1" THICK				
		22.1							
				10	SILTY SAND, GRAY w/WOOD CHIPS, WET, ODBR			10	
					SAND, GRAY, FINE GRAINED; WET; ODBR				
					SILT, GRAY, SLIGHT ODBR; WET;				
				15				15	
				20				20	
				25				25	
					Boring terminated at ___ feet, sampler advanced to ___ feet. Groundwater encountered at approximately ___ feet during drilling.				

Field Screen/Lithologic Description Sample	Groundwater Level at Time of Drilling	Gradational Contact	Concrete	10/20 Colorado Silica Sand	2" PVC Blank Casing
Preserved Sample	Static Groundwater Level	Contact Located Approximately	Bentonite		2" PVC Screen Casing (0.010 slots)
No Recovery	SD Sheen Detected	Contact			End Cap
* Sample Submitted for Laboratory Analysis	NS No Sheen Detected				
	NT Not Tested				
	(2.5Y 4/2) Munsell (1990) Soil Color Charts				

CROWLEY - GPS WELL LOCATIONS

2/11/05

ARRIVE AT SITE 0715

TAKE KNOWN PT-1 (ON CURVE OF ROAD: SE CORNER OF LAESSIN) (0930)

MW-1 (0935)

MW-7 (0939)

MW-21 (0942)

MW-15 (0945) - MANHOLE COVER W/ DELINEATOR

MW-14 (0949) - MANHOLE COVER: 2 "NEWER" MONUMENTS NEAR ROAD MARKED "33"  
 ↳ OFF ROAD ABOUT 15 FEET

MW-11 (0956)

MW-10 (1000)

MW-12 (1004)

MW-18 (1010)

MW-3 (1012)

PT-1 (1056)

PT-2 (1058)

PT-4 (1059)

PT-3 (1100)

RW-4 (1023)

PT-6 (1104)

RW-2 (1025) → MW-8

PT-5 (1105)

MW-7 → RW-1 (1027)

PT-7 (1108)

RW-10 → EX-2 (1024)

PT-8 (1107)

MW-1 (1032)

NW CORNER OF PUMP (1117)

MW-10 (1033)

KNOCK-OUT DRUM (1119)

MW-9 (1036)

~~SE CORNER OF 1 KO TANK (1122)~~

MW-2 (1039)

NE CORNER OF 2 KO TANK (1125)

MW-4 (1042)

S.W. CORNER OF 2 KO TANK (1128)

\* UNABLE TO LOCATE MW-5 OR MW-6

MIDPOINT #2 (1133)

RW-5 (1046)

MIDPOINT #1 (1131)

EXHAUST STACK (1139)

KO CARBON DRUM 1 (1141)

KO CARBON DRUM 2 (1143)

ELECTRICAL CONTROL BOX ON POWER POLE NEAR GATE OF SITE (~20 S.E. OF GATE POST) (1145)

**APPENDIX D**

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**AUGUST 2007 GROUNDWATER MONITORING EVENT FIELD DATA SHEETS**



**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: EMG, JMZ WELL I.D.: MW-1  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 11:27 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 11:33 ZPA ZUPA ZUOA  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/30/07</u>	<u>11:31</u>	<u>.25</u>	<u>16.01</u>	<u>124</u>	<u>6.30</u>	<u>1.348</u>	<u>-205</u>	<u>Brown Cloud of Chunks</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_  
 REMARKS: Well Dry before 4th UGA, 2 more UGAs taken 8/31/07

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: EMG, JMZ WELL I.D.: MW-2  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED \_\_\_\_\_ START (2400hr) 1:40 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY ( $\mu$ S/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/30</u>	<u>1:50</u>	_____	<u>7.41</u>	<u>0.192</u>	<u>7.57</u>	<u>69.88</u>	<u>-122.4</u>	<u>Black</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Black

SIGNATURE: \_\_\_\_\_ Page \_\_\_ of \_\_\_

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: EMG, JMZ WELL I.D.: MW-3  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 10:55 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 11:01  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY ( $\mu$ S/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/30/07</u>	_____	_____	<u>15.97</u>	<u>0.370</u>	<u>7.23</u>	<u>114.54</u>	<u>-87.0</u>	<u>clear</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_



# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: SAG, JMZ WELL I.D.: UW-11  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 12:10 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 12:16  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO <sup>0.25</sup> <del>15.8</del>	ORP <del>46.4</del>	TURBIDITY (visual)
	<u>12:14</u>	<u>.25</u>	<u>15.92</u>	<u>1468</u>	<u>6.77</u>			

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: EMG, JMZ WELL I.D.: MW-7  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 3:11 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 3:15 \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (uS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/30/07</u>	<u>3:11</u>	_____	<u>19.92</u>	<u>0.64</u>	<u>6.63</u>	<u>376.61</u>	<u>-089</u>	<u>Slight yellow</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Well went dry after 1/2 Liter.  
Saved 1/2 full amber because visible product

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

*Sample inspected in office, no product was visible, may have been a sheen, but no NAPL. SRH*

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: EMG, JNZ WELL I.D.: MW-8  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 2:55 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Want jug after approximately 1/2 cup

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: EMG, JMZ WELL I.D.: MW-9  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 1:31 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Well went dry before we could fill cell dark mud and slight hydrocarbon smell

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: EUG, JMZ WELL I.D.: MW-10  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 9/30/07 START (2400hr) \_\_\_\_\_ END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Well was dry.

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: SMG JR WELL I.D.: MW-11  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/31/07 START (2400hr) 8:58 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 9:03 SUCAS Z HELAM  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (uS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/31/07</u>	<u>9:01</u>	_____	<u>15.43</u>	<u>142</u>	<u>7.58</u>	<u>2.1302</u>	<u>11</u>	<u>yellow</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: SMG, SMZ WELL I.D.: MW-12  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/31/07 START (2400hr) 10:00 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 10:05 \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (uS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/31/07</u>	<u>10:04</u>	<u>25</u>	<u>17.01</u>	<u>147</u>	<u>7.30</u>	<u>11863</u>	<u>-57</u>	<u>slightly cloudy</u>

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 108-0205-000007 PURGED BY: \_\_\_\_\_ WELL I.D.: MW-13  
 CLIENT NAME: Crowley SAMPLED BY: JMZ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver, WA QA SAMPLES: \_\_\_\_\_

DATE PURGED \_\_\_\_\_ START (2400hr) \_\_\_\_\_ END (2400hr) \_\_\_\_\_  
 DATE SAMPLED 9/13/07 SAMPLE TIME (2400hr) 17:10  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY ( $\mu$ S/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_  
 80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: None.  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Brown, cloudy.

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_



# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: \_\_\_\_\_ WELL I.D.: MW-14  
 CLIENT NAME: Crowley SAMPLED BY: JM7 SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver, WA QA SAMPLES: \_\_\_\_\_

DATE PURGED \_\_\_\_\_ START (2400hr) \_\_\_\_\_ END (2400hr) \_\_\_\_\_  
 DATE SAMPLED 9/13/07 SAMPLE TIME (2400hr) 16:50  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump     Bailer (PVC)  
 Submersible Pump     Bailer (Stainless Steel)  
 Peristaltic Pump      Dedicated \_\_\_\_\_  
 Other: None  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump     Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump     Bailer (Stainless Steel)  
 Peristaltic Pump      Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Moisture was present at the bottom of the well however the well was primarily dry and was not able to sample.

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007      PURGED BY: SMG, JMZ      WELL I.D.: MW-16  
 CLIENT NAME: Crowley      SAMPLED BY: \_\_\_\_\_      SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington      QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/31/07      START (2400hr) 9:35      END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_      SAMPLE TIME (2400hr) 9:37  
 SAMPLE TYPE:      Groundwater       Surface Water \_\_\_\_\_      Treatment Effluent \_\_\_\_\_      Other \_\_\_\_\_

CASING DIAMETER:      2" \_\_\_\_\_      3" \_\_\_\_\_      4" \_\_\_\_\_      5" \_\_\_\_\_      6" \_\_\_\_\_      8" \_\_\_\_\_      Other \_\_\_\_\_  
 Casing Volume: (gallons per foot)      (0.17)      (0.38)      (0.67)      (1.02)      (1.50)      (2.60)      ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_      CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_      CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_      ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/31/07</u>	<u>9:36</u>	<u>.25</u>	<u>17.28</u>	<u>.215</u>	<u>6.81</u>	<u>60.87-80.5</u>		<u>clear</u>

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_      SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:       YES       NO      ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_      SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (  PVC or  disposable)  
 Submersible Pump       Bailer (Stainless Steel)  
 Peristaltic Pump       Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_      LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: \_\_\_\_\_      Page \_\_\_\_ of \_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: \_\_\_\_\_ WELL I.D.: MW-17  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07 START (2400hr) 10:15 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 10:22  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (uS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	<u>10:19</u>	<u>13.25</u>	<u>16.96</u>	<u>269</u>	<u>7.36</u>	<u>6.214</u>	<u>-99.9</u>	<u>yellow/cloudy</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (  PVC or  disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007      PURGED BY: EMG, JMZ      WELL I.D.: MU-18  
 CLIENT NAME: Crowley      SAMPLED BY: \_\_\_\_\_      SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington      QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/07      START (2400hr) \_\_\_\_\_      END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_      SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE:      Groundwater       Surface Water \_\_\_\_\_      Treatment Effluent \_\_\_\_\_      Other \_\_\_\_\_

CASING DIAMETER:      2" \_\_\_\_\_      3" \_\_\_\_\_      4" \_\_\_\_\_      5" \_\_\_\_\_      6" \_\_\_\_\_      8" \_\_\_\_\_      Other \_\_\_\_\_  
 Casing Volume: (gallons per foot)      (0.17)      (0.38)      (0.67)      (1.02)      (1.50)      (2.60)      ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_      CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_      CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_      ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_      SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:     YES     NO      ANALYSES: \_\_\_\_\_  
 ODOR: \_\_\_\_\_      SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump      \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump      \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump      \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump      \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_\_ Bladder Pump      \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump      \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 \_\_\_\_\_ Submersible Pump      \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump      \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_      LOCK#: \_\_\_\_\_

REMARKS: Well was dry.

SIGNATURE: \_\_\_\_\_

# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: SMG, JMZ WELL I.D.: UW-19  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/2007 START (2400hr) 9:44 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED 8/31/07 SAMPLE TIME (2400hr) ~~9:50~~ 8:07  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
<u>8/30/07</u>	<u>9:46</u>	<u>.25</u>	<u>18.15</u>	<u>425</u>	<u>6.31</u>	<u>29.23</u>	<u>-141.3</u>	<u>yellow</u>
<u>↓</u>	<u>9:49</u>	<u>.15</u>	<u><del>18.15</del> 18.15</u>	<u>353</u>	<u>6.70</u>	<u>50.05</u>	<u>-146.3</u>	<u>yellow</u>

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                    Bailer (PVC)  
 Submersible Pump                    Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                    Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump                    Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: stink, well went dry during purging will return next day to sample w/o purge. 1 liter taken well not dry - Visible Green to water

SIGNATURE: \_\_\_\_\_ Page    of

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: EMG, JHZ WELL I.D.: MW-21  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED \_\_\_\_\_ START (2400hr) 10:04 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Well was dry.

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

SLR International Corp

GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007
CLIENT NAME: Crowley
LOCATION: Vancouver Washington

PURGED BY:
SAMPLED BY: EMG / JMHZ

WELL I.D.: EX-2
SAMPLE I.D.:
QA SAMPLES:

DATE PURGED START (2400hr) END (2400hr)
DATE SAMPLED SAMPLE TIME (2400hr) 8:26
SAMPLE TYPE: Groundwater X Surface Water Treatment Effluent Other

CASING DIAMETER: 2" 3" 4" 5" 6" 8" Other
Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) =
DEPTH TO WATER (feet) =
WATER COLUMN HEIGHT (feet) =
CASING VOLUME (gal) =
CALCULATED PURGE (gal) =
ACTUAL PURGE (gal) =

FIELD MEASUREMENTS

Table with 9 columns: DATE, TIME (2400hr), VOLUME (L), TEMP. (degrees C), CONDUCTIVITY (µS/cm), pH (units), DO, ORP, TURBIDITY (visual). Multiple rows for data entry.

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER:
SAMPLE TURBIDITY:
80% RECHARGE: YES NO
ANALYSES:
ODOR:
SAMPLE VESSEL / PRESERVATIVE:

PURGING EQUIPMENT

Bladder Pump Bailer (Teflon)
Centrifugal Pump Bailer (PVC)
Submersible Pump Bailer (Stainless Steel)
X Peristaltic Pump Dedicated
Other:
Pump Depth:

SAMPLING EQUIPMENT

Bladder Pump Bailer (Teflon)
Centrifugal Pump Bailer ( PVC or disposable)
Submersible Pump Bailer (Stainless Steel)
X Peristaltic Pump Dedicated
Other:

WELL INTEGRITY:
REMARKS: Well was not purged due to potential dryness / shallow water depth
LOCK#:
SIGNATURE:

**SLR International Corp**

**GROUNDWATER SAMPLING FIELD DATA SHEET**

PROJECT #: 008.0205.000007 PURGED BY: SMG, JHZ WELL I.D.: RW-4  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED 8/30/2007 START (2400hr) 3:33 END (2400hr) \_\_\_\_\_  
 DATE SAMPLED \_\_\_\_\_ SAMPLE TIME (2400hr) 3:38 \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

**SAMPLING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Removed old system tubing, tubing was dry. No samples well was dry when tubing was removed. Found to be wet, placed back in well and was able to sample.  
 SIGNATURE: [Signature]



# SLR International Corp

## GROUNDWATER SAMPLING FIELD DATA SHEET

PROJECT #: 008.0205.000007 PURGED BY: EMG/JMZ WELL I.D.: RW-5  
 CLIENT NAME: Crowley SAMPLED BY: \_\_\_\_\_ SAMPLE I.D.: \_\_\_\_\_  
 LOCATION: Vancouver Washington QA SAMPLES: \_\_\_\_\_

DATE PURGED \_\_\_\_\_ START (2400hr) 2:40 pm END (2400hr) \_\_\_\_\_  
 DATE SAMPLED 8/30/07 SAMPLE TIME (2400hr) \_\_\_\_\_  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" \_\_\_\_\_ 5" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_ Other \_\_\_\_\_  
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = \_\_\_\_\_ CASING VOLUME (gal) = \_\_\_\_\_  
 DEPTH TO WATER (feet) = \_\_\_\_\_ CALCULATED PURGE (gal) = \_\_\_\_\_  
 WATER COLUMN HEIGHT (feet) = \_\_\_\_\_ ACTUAL PURGE (gal) = \_\_\_\_\_

### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (L)	TEMP. (degrees C)	CONDUCTIVITY (µS/cm)	pH (units)	DO	ORP	TURBIDITY (visual)
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

### SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: \_\_\_\_\_ SAMPLE TURBIDITY: \_\_\_\_\_

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: \_\_\_\_\_ SAMPLE VESSEL / PRESERVATIVE: \_\_\_\_\_

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: \_\_\_\_\_

#### SAMPLING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer ( \_\_\_\_\_ PVC or \_\_\_\_\_ disposable)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: \_\_\_\_\_ LOCK#: \_\_\_\_\_

REMARKS: Well was dry

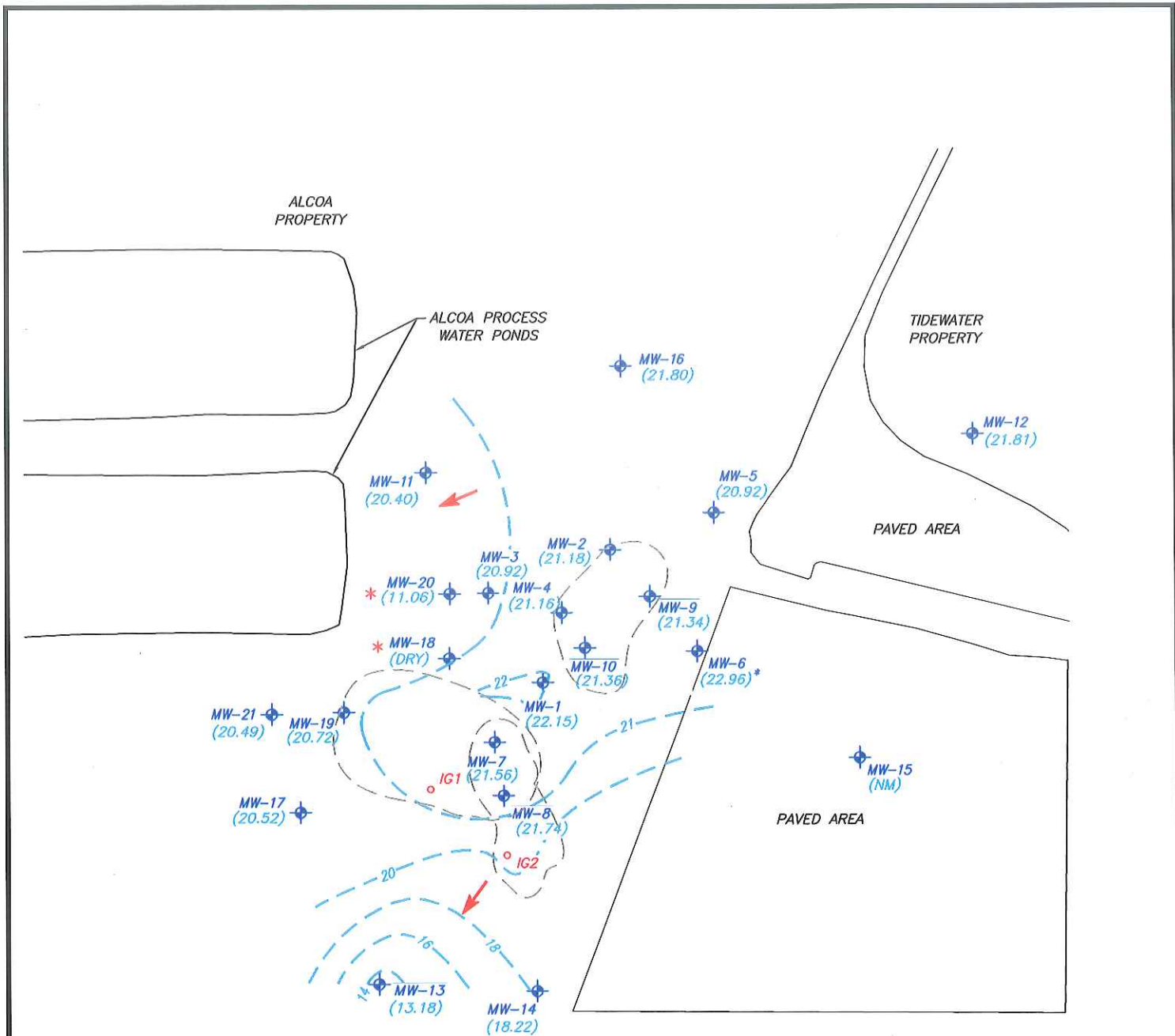
SIGNATURE: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

## APPENDIX E

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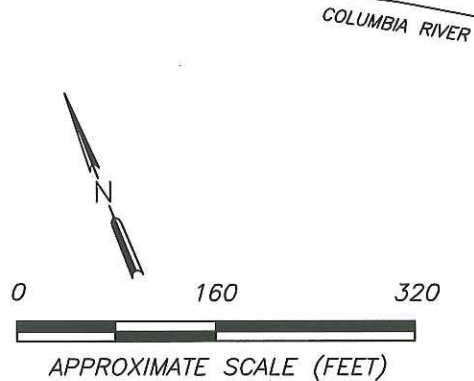
### HISTORICAL GROUNDWATER GRADIENTS






**LEGEND**

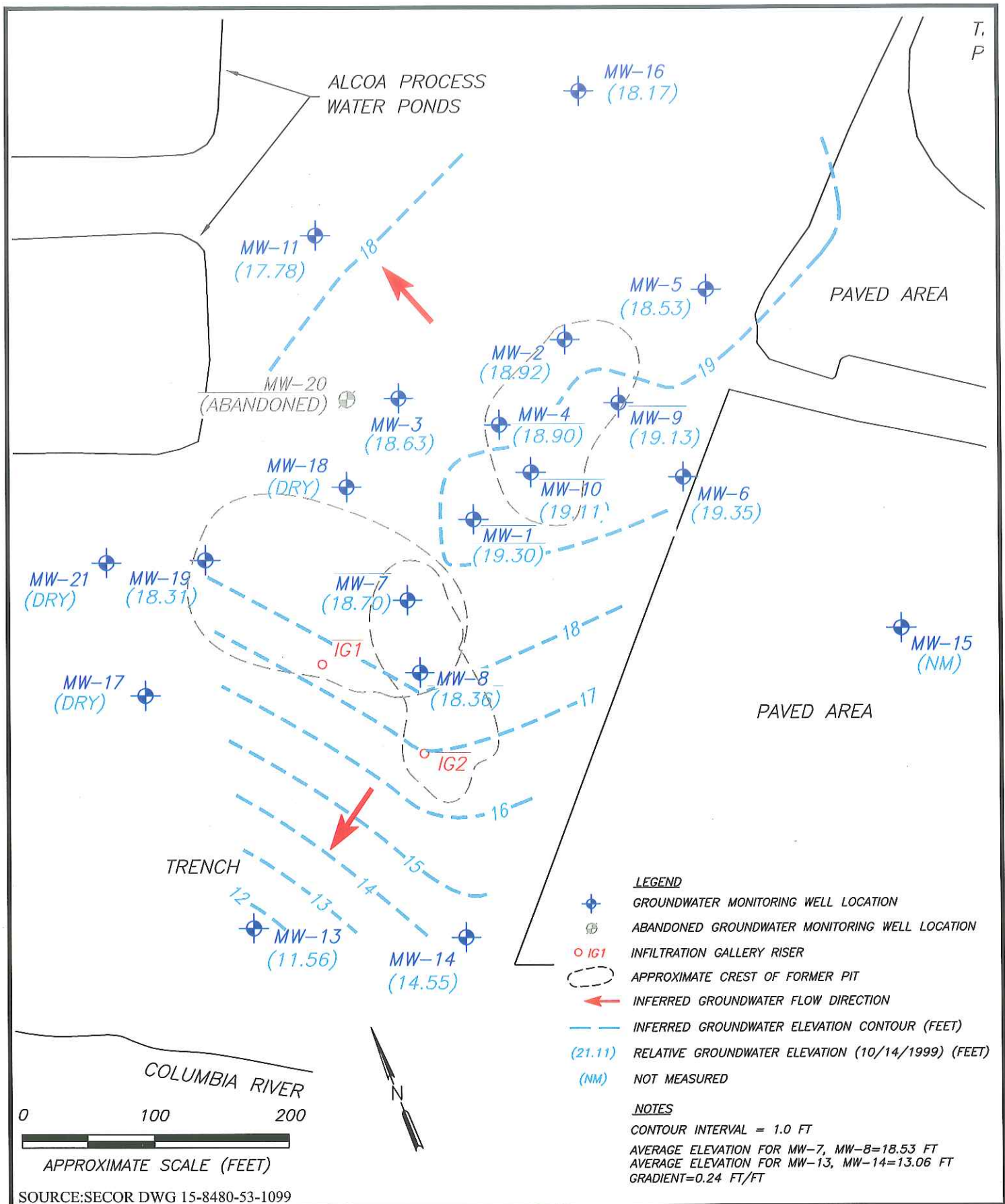
- GROUNDWATER MONITORING WELL LOCATION
- IG1 INFILTRATION GALLERY RISER
- APPROXIMATE CREST OF FORMER PIT
- NOT USED FOR CONTOUR GENERATION
- INFERRED GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR (FEET)
- (219.11) RELATIVE GROUNDWATER ELEVATION (5/7/1999) (FEET)
- AVERAGE ELEVATION FOR MW-7, MW-8=21.65 FT
- AVERAGE ELEVATION FOR MW-13, MW-14=15.7 FT
- GRADIENT=0.26 FT/FT



SOURCE: SECOR DWG F3190112

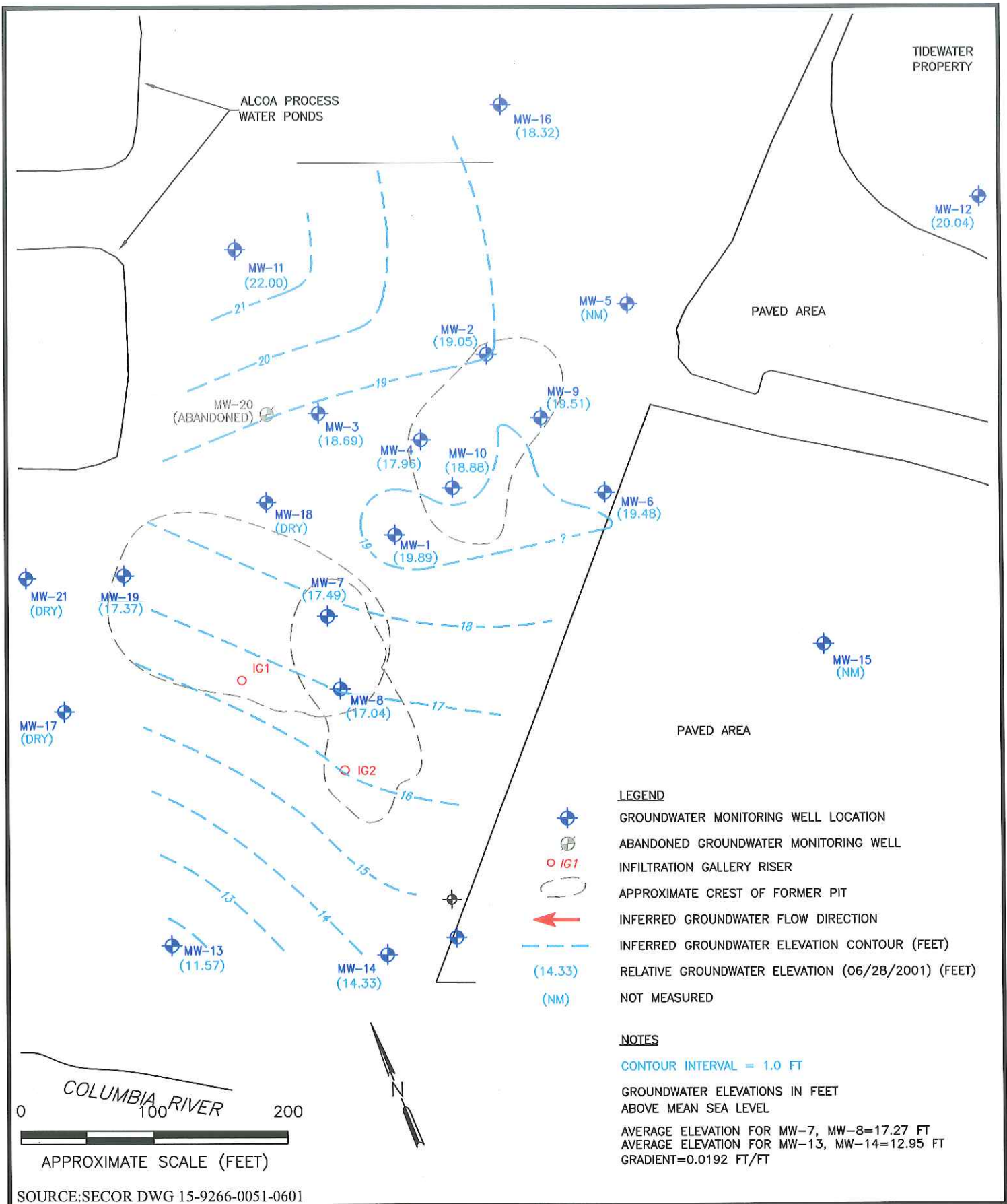
	<p>1800 Blankenship Road Suite 440 West Linn, OR 97068</p> <p>T: 503-723-4423 F: 503-723-4436</p>	<p>DATE 10/07 DWN. EMG APPR. _____ REVIS. _____ PROJECT NO. 008.0205.00007</p>	<p><b>FIGURE E-1</b> <b>FORMER COLUMBIA MARINE</b> <b>LINES FACILITY</b> <b>6305 LOWER RIVER ROAD</b> <b>VANCOUVER, WASHINGTON</b> <b>GROUNDWATER ELEVATION CONTOUR MAP</b></p>
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	1800 Blankenship Road Suite 440 West Linn, OR 97068 T: 503-723-4423 F: 503-723-4436	DATE 10/07 DWN. EMG APPR. _____ REVIS. _____ PROJECT NO. 008.0205.00007	<b>FIGURE E-2</b> <b>FORMER COLUMBIA MARINE</b> <b>LINES FACILITY</b> 6305 LOWER RIVER ROAD VANCOUVER, WASHINGTON <b>GROUNDWATER ELEVATION CONTOUR MAP</b>
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SOURCE: SECOR DWG 15-9266-0051-0601



1800 Blankenship Road  
Suite 440  
West Linn, OR 97068

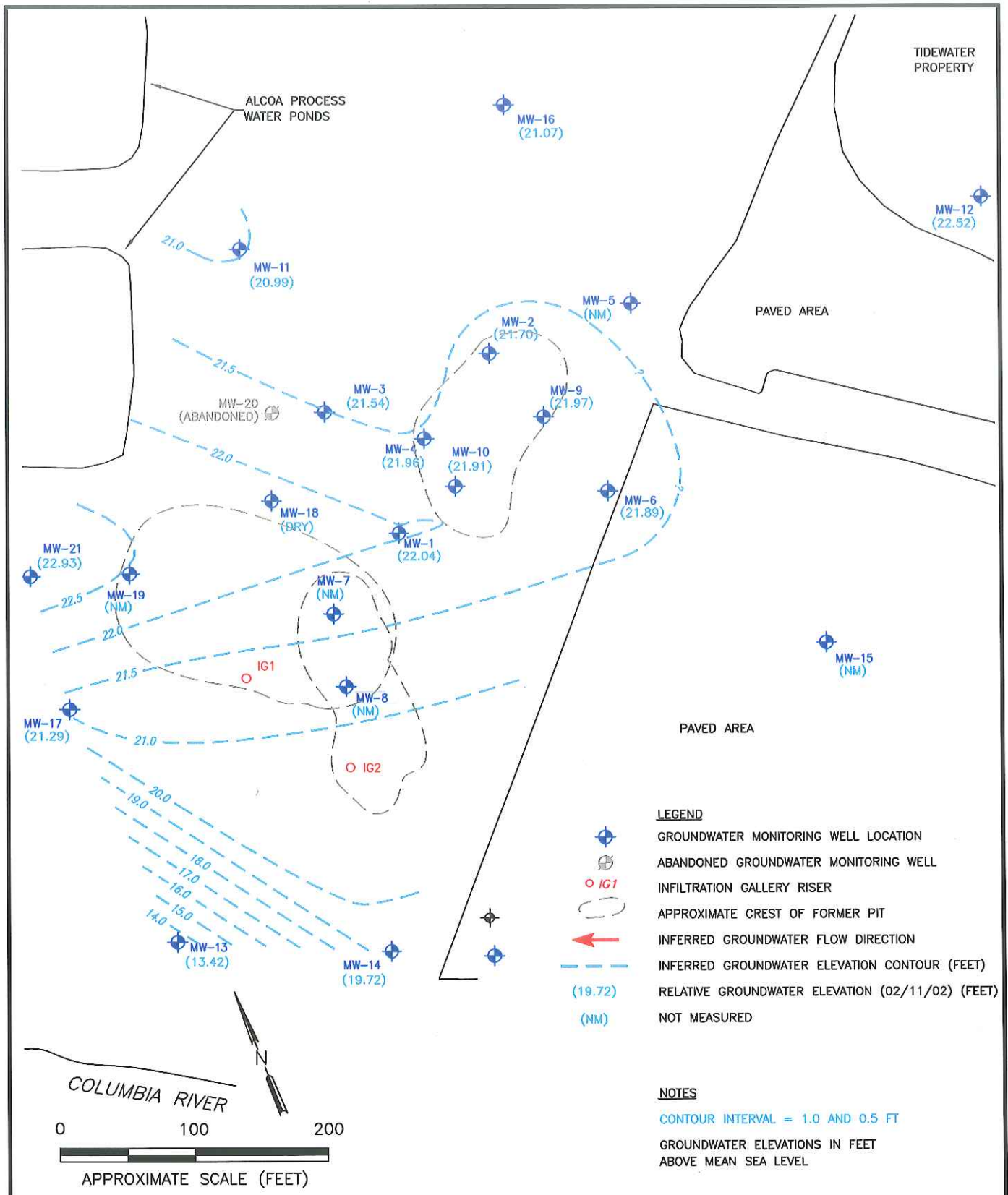
T: 503-723-4423  
F: 503-723-4436

DATE 10/07  
DWN. EMG  
APPR. \_\_\_\_\_  
REVIS. \_\_\_\_\_  
PROJECT NO. 008.0205.00007

**FIGURE E-3**  
**FORMER COLUMBIA MARINE**  
**LINES FACILITY**  
**6305 LOWER RIVER ROAD**  
**VANCOUVER, WASHINGTON**  
**GROUNDWATER ELEVATION CONTOUR MAP**







SOURCE:SECOR DWG 150T-8805-62-0202



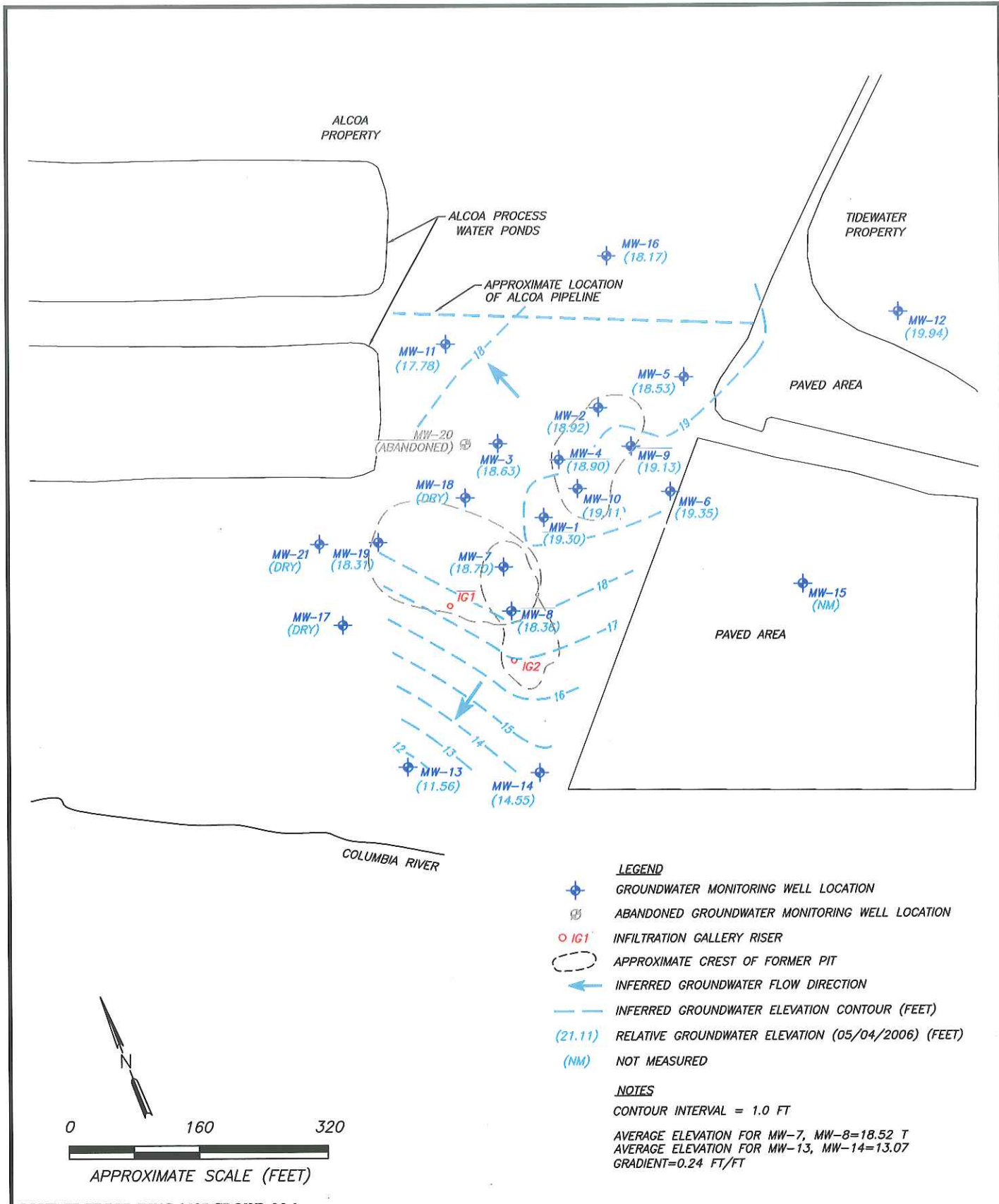
1800 Blankenship Road  
Suite 440  
West Linn, OR 97068

T: 503-723-4423  
F: 503-723-4436

DATE 10/07  
DWN. EMG  
APPR. \_\_\_\_\_  
REVIS. \_\_\_\_\_  
PROJECT NO. 008.0205.00007

**FIGURE E-4**  
**FORMER COLUMBIA MARINE**  
**LINES FACILITY**  
**6305 LOWER RIVER ROAD**  
**VANCOUVER, WASHINGTON**  
**GROUNDWATER ELEVATION CONTOUR MAP**





SOURCE:SECOR DWG 1507.CROWL.05.6



1800 Blankenship Road  
Suite 440  
West Linn, OR 97068

T: 503-723-4423  
F: 503-723-4436

DATE 10/07  
DWN. EMG  
APPR. \_\_\_\_\_  
REVIS. \_\_\_\_\_  
PROJECT NO. 008.0205.00007

**FIGURE E-5**  
**FORMER COLUMBIA MARINE**  
**LINES FACILITY**  
**6305 LOWER RIVER ROAD**  
**VANCOUVER, WASHINGTON**  
**GROUNDWATER ELEVATION CONTOUR MAP**



**APPENDIX F**

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**AUGUST 2007 SOIL ANALYTICAL RESULTS**



September 24, 2007

Steve Hammer  
SLR-Portland  
1800 Blankenship Road Suite 440  
West Linn, OR 97068

RE: Crowley

Enclosed are the results of analyses for samples received by the laboratory on 08/25/07 10:00.  
The following list is a summary of the Work Orders contained in this report, generated on 09/24/07  
17:22.

If you have any questions concerning this report, please feel free to contact me.

---

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PQH1091	Crowley	008.205.00007

---





**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GPE-1-5	PQH1091-01	Soil	08/24/07 10:30	08/25/07 10:00
GPE-1-11	PQH1091-02	Soil	08/24/07 10:32	08/25/07 10:00
GPE-1-GW	PQH1091-03	Water	08/24/07 10:30	08/25/07 10:00
GPE-2-5	PQH1091-04	Soil	08/24/07 09:34	08/25/07 10:00
GPE-2-11	PQH1091-05	Soil	08/24/07 09:49	08/25/07 10:00
GPE-2-GW	PQH1091-06	Water	08/24/07 09:50	08/25/07 10:00
GPE-3-5	PQH1091-07	Soil	08/24/07 11:47	08/25/07 10:00
GPE-3-10	PQH1091-08	Soil	08/24/07 12:00	08/25/07 10:00
GPE-3-GW	PQH1091-09	Water	08/24/07 11:40	08/25/07 10:00
GPE-4-5	PQH1091-10	Soil	08/24/07 13:03	08/25/07 10:00
GPE-4-11	PQH1091-11	Soil	08/24/07 13:11	08/25/07 10:00
GPE-5-5	PQH1091-12	Soil	08/24/07 12:47	08/25/07 10:00
GPE-5-9	PQH1091-13	Soil	08/24/07 12:50	08/25/07 10:00
GPE-6-7	PQH1091-14	Soil	08/24/07 15:01	08/25/07 10:00
GPE-6-11	PQH1091-15	Soil	08/24/07 15:05	08/25/07 10:00
GPE-7-6	PQH1091-16	Soil	08/24/07 14:15	08/25/07 10:00
GPE-7-10	PQH1091-17	Soil	08/24/07 14:20	08/25/07 10:00
GPE-8-6	PQH1091-18	Soil	08/24/07 15:27	08/25/07 10:00
GPE-8-9	PQH1091-19	Soil	08/24/07 15:30	08/25/07 10:00

DRAFT REPORT

*The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.*



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Gasoline Hydrocarbons per NW TPH-Gx Method**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-01 (GPE-1-5)</b>										<b>Soil</b> <b>Sampled: 08/24/07 10:30</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	5.73	mg/kg dry	1x	7081533	08/31/07 11:26	09/06/07 11:28	
Surrogate(s): a,a,a-TFT			84.1%		50 - 150 %	"				"
<b>PQH1091-02 (GPE-1-11)</b>										<b>Soil</b> <b>Sampled: 08/24/07 10:32</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	10.2	---	4.11	mg/kg dry	1x	7081533	08/31/07 11:26	09/01/07 21:30	
Surrogate(s): a,a,a-TFT			95.1%		50 - 150 %	"				"
<b>PQH1091-03RE1 (GPE-1-GW)</b>										<b>Water</b> <b>Sampled: 08/24/07 10:30</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	199	---	80.0	ug/l	1x	7090070	09/04/07 13:50	09/05/07 19:53	
Surrogate(s): 4-BFB			101%		50 - 150 %	"				"
<b>PQH1091-04 (GPE-2-5)</b>										<b>Soil</b> <b>Sampled: 08/24/07 09:34</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	45.7	---	4.22	mg/kg dry	1x	7081533	08/31/07 11:26	09/01/07 21:58	
Surrogate(s): a,a,a-TFT			97.6%		50 - 150 %	"				"
<b>PQH1091-05 (GPE-2-11)</b>										<b>Soil</b> <b>Sampled: 08/24/07 09:49</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	6.18	---	4.32	mg/kg dry	1x	7081533	08/31/07 11:26	09/01/07 22:26	
Surrogate(s): a,a,a-TFT			98.5%		50 - 150 %	"				"
<b>PQH1091-06 (GPE-2-GW)</b>										<b>Water</b> <b>Sampled: 08/24/07 09:50</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	7081445	08/30/07 09:31	08/31/07 14:41	
Surrogate(s): 4-BFB			82.2%		50 - 150 %	"				"
<b>PQH1091-07 (GPE-3-5)</b>										<b>Soil</b> <b>Sampled: 08/24/07 11:47</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	3.94	mg/kg dry	1x	7081533	08/31/07 11:26	09/01/07 22:53	
Surrogate(s): a,a,a-TFT			96.1%		50 - 150 %	"				"
<b>PQH1091-08 (GPE-3-10)</b>										<b>Soil</b> <b>Sampled: 08/24/07 12:00</b>
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	4.17	mg/kg dry	1x	7081533	08/31/07 11:26	09/02/07 00:16	
Surrogate(s): a,a,a-TFT			98.3%		50 - 150 %	"				"

DRAFT REPORT

The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Gasoline Hydrocarbons per NW TPH-Gx Method**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-09 (GPE-3-GW)</b>		<b>Water</b>		<b>Sampled: 08/24/07 11:40</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	162	----	80.0	ug/l	1x	7081445	08/30/07 09:31	08/31/07 15:13	
Surrogate(s): 4-BFB		80.0%		50 - 150 %		"				"
<b>PQH1091-10 (GPE-4-5)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 13:03</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	----	4.26	mg/kg dry	1x	7081533	08/31/07 11:26	09/02/07 00:43	
Surrogate(s): a,a,a-TFT		97.9%		50 - 150 %		"				"
<b>PQH1091-11 (GPE-4-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 13:11</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	----	4.21	mg/kg dry	1x	7090166	09/06/07 13:05	09/07/07 10:10	
Surrogate(s): a,a,a-TFT		84.8%		50 - 150 %		"				"
<b>PQH1091-12 (GPE-5-5)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 12:47</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	----	4.09	mg/kg dry	1x	7090166	09/06/07 13:05	09/07/07 11:05	
Surrogate(s): a,a,a-TFT		89.6%		50 - 150 %		"				"
<b>PQH1091-13 (GPE-5-9)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 12:50</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	----	4.14	mg/kg dry	1x	7090166	09/06/07 13:05	09/07/07 11:33	
Surrogate(s): a,a,a-TFT		92.5%		50 - 150 %		"				"
<b>PQH1091-14 (GPE-6-7)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:01</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	----	4.19	mg/kg dry	1x	7081533	08/31/07 11:26	09/02/07 01:11	
Surrogate(s): a,a,a-TFT		95.7%		50 - 150 %		"				"
<b>PQH1091-15 (GPE-6-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:05</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	753	---	4.67	mg/kg dry	1x	7081533	08/31/07 11:26	09/02/07 03:29	
Surrogate(s): a,a,a-TFT		101%		50 - 150 %		"				"
<b>PQH1091-16 (GPE-7-6)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 14:15</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	3.93	mg/kg dry	1x	7081533	08/31/07 11:26	09/06/07 11:56	
Surrogate(s): a,a,a-TFT		90.8%		50 - 150 %		"				"

DRAFT REPORT

The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.



**SLR-Portland**

1800 Blankenship Road Suite 440  
 West Linn, OR 97068

Project Name: **Crowley**  
 Project Number: 008.205.00007  
 Project Manager: Steve Hammer

Report Created:  
 09/24/07 17:22

**DRAFT: Gasoline Hydrocarbons per NW TPH-Gx Method**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-17 (GPE-7-10)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 14:20</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	173	----	3.96	mg/kg dry	1x	7081533	08/31/07 11:26	09/02/07 02:34	
<i>Surrogate(s): a,a,a-TFT</i>			99.0%		50 - 150 %	"				"
<b>PQH1091-18 (GPE-8-6)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:27</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	18.1	----	4.14	mg/kg dry	1x	7081533	08/31/07 11:26	09/02/07 04:51	
<i>Surrogate(s): a,a,a-TFT</i>			95.6%		50 - 150 %	"				"
<b>PQH1091-19 (GPE-8-9)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:30</b>						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	5.15	mg/kg dry	1x	7081533	08/31/07 11:26	09/06/07 12:23	
<i>Surrogate(s): a,a,a-TFT</i>			89.3%		50 - 150 %	"				"

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-01 (GPE-1-5)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 10:30</b>						
Diesel Range Organics	NWTPH-Dx	150	----	16.6	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 17:58	Q12
Heavy Oil Range Hydrocarbons	"	234	----	33.1	"	"	"	"	"	"
Surrogate(s): 1-Chlorooctadecane		76.0%		50 - 150 %						
<b>PQH1091-02 (GPE-1-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 10:32</b>						
Diesel Range Organics	NWTPH-Dx	43.1	---	16.4	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 18:34	
Heavy Oil Range Hydrocarbons	"	ND	----	32.8	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		77.7%		50 - 150 %						
<b>PQH1091-03 (GPE-1-GW)</b>		<b>Water</b>		<b>Sampled: 08/24/07 10:30</b>						
Diesel Range Organics	NWTPH-Dx	2.83	----	0.245	mg/l	1x	7081504	08/31/07 10:30	08/31/07 14:27	Q9
Heavy Oil Range Hydrocarbons	"	0.714	----	0.490	"	"	"	"	"	Q13
Surrogate(s): 1-Chlorooctadecane		100%		50 - 150 %						
<b>PQH1091-04 (GPE-2-5)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 09:34</b>						
Diesel Range Organics	NWTPH-Dx	1900	----	13.4	mg/kg dry	1x	7081505	08/31/07 13:00	09/01/07 02:18	Q9
Heavy Oil Range Hydrocarbons	"	520	----	26.8	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		78.2%		50 - 150 %						
<b>PQH1091-05 (GPE-2-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 09:49</b>						
Diesel Range Organics	NWTPH-Dx	34.3	----	15.5	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 19:10	
Heavy Oil Range Hydrocarbons	"	ND	---	31.0	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		84.4%		50 - 150 %						
<b>PQH1091-06 (GPE-2-GW)</b>		<b>Water</b>		<b>Sampled: 08/24/07 09:50</b>						
Diesel Range Organics	NWTPH-Dx	1.17	---	0.245	mg/l	1x	7081504	08/31/07 10:30	08/31/07 14:45	Q9
Heavy Oil Range Hydrocarbons	"	ND	----	0.490	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		100%		50 - 150 %						
<b>PQH1091-07 (GPE-3-5)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 11:47</b>						
Diesel Range Organics	NWTPH-Dx	256	----	13.2	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 19:46	Q12
Heavy Oil Range Hydrocarbons	"	416	----	26.4	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		77.8%		50 - 150 %						

DRAFT REPORT

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<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.205.00007 Project Manager: Steve Hammer	Report Created: 09/24/07 17:22
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**DRAFT: Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-08 (GPE-3-10)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 12:00</b>					
Diesel Range Organics	NWTPH-Dx	ND	---	15.8	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 20:22	
Heavy Oil Range Hydrocarbons	"	ND	---	31.7	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			87.5%		50 - 150 %	"				
<b>PQH1091-09 (GPE-3-GW)</b>		<b>Water</b>			<b>Sampled: 08/24/07 11:40</b>					
Diesel Range Organics	NWTPH-Dx	5.59	---	0.245	mg/l	1x	7081504	08/31/07 10:30	08/31/07 15:04	Q9
Heavy Oil Range Hydrocarbons	"	1.66	---	0.490	"	"	"	"	"	Q13
<i>Surrogate(s): 1-Chlorooctadecane</i>			107%		50 - 150 %	"				
<b>PQH1091-10 (GPE-4-5)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 13:03</b>					
Diesel Range Organics	NWTPH-Dx	329	---	69.4	mg/kg dry	5x	7081505	08/31/07 13:00	09/01/07 02:54	Q9
Heavy Oil Range Hydrocarbons	"	462	---	139	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			72.9%		50 - 150 %	"				
<b>PQH1091-11 (GPE-4-11)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 13:11</b>					
Diesel Range Organics	NWTPH-Dx	30.7	---	16.6	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 22:09	
Heavy Oil Range Hydrocarbons	"	ND	---	33.2	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			84.3%		50 - 150 %	"				
<b>PQH1091-12 (GPE-5-5)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 12:47</b>					
Diesel Range Organics	NWTPH-Dx	27.2	---	12.9	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 22:44	
Heavy Oil Range Hydrocarbons	"	57.6	---	25.7	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			54.9%		50 - 150 %	"				
<b>PQH1091-13 (GPE-5-9)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 12:50</b>					
Diesel Range Organics	NWTPH-Dx	20.1	---	16.1	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 23:20	
Heavy Oil Range Hydrocarbons	"	ND	---	32.1	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			88.8%		50 - 150 %	"				
<b>PQH1091-14 (GPE-6-7)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 15:01</b>					
Diesel Range Organics	NWTPH-Dx	104	---	71.0	mg/kg dry	5x	7081505	08/31/07 13:00	09/01/07 03:29	Q12
Heavy Oil Range Hydrocarbons	"	66.1	---	62.5	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			77.6%		50 - 150 %	"				

DRAFT REPORT

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<b>SLR-Portland</b>	Project Name: <b>Crowley</b>	Report Created:
1800 Blankenship Road Suite 440	Project Number: 008.205.00007	09/24/07 17:22
West Linn, OR 97068	Project Manager: Steve Hammer	

**DRAFT: Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-15 (GPE-6-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:05</b>						
Diesel Range Organics	NWTPH-Dx	3580	---	16.8	mg/kg dry	1x	7081505	08/31/07 13:00	08/31/07 23:55	Q9
Heavy Oil Range Hydrocarbons	"	192	---	33.6	"	"	"	"	"	Q10
<i>Surrogate(s): 1-Chlorooctadecane</i>			84.9%		50 - 150 %	"				
<b>PQH1091-16 (GPE-7-6)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 14:15</b>						
Diesel Range Organics	NWTPH-Dx	141	----	25.7	mg/kg dry	2x	7081505	08/31/07 13:00	09/01/07 05:16	Q12
Heavy Oil Range Hydrocarbons	"	81.4	----	51.3	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			76.3%		50 - 150 %	"				
<b>PQH1091-17 (GPE-7-10)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 14:20</b>						
Diesel Range Organics	NWTPH-Dx	9020	----	334	mg/kg dry	20x	7081505	08/31/07 13:00	09/04/07 12:43	Q9
Heavy Oil Range Hydrocarbons	"	ND	----	668	"	"	"	"	"	RL7
<i>Surrogate(s): 1-Chlorooctadecane</i>			NR		50 - 150 %	"				Z3
<b>PQH1091-18 (GPE-8-6)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:27</b>						
Diesel Range Organics	NWTPH-Dx	7080	---	318	mg/kg dry	20x	7081505	08/31/07 13:00	09/04/07 13:01	Q9
Heavy Oil Range Hydrocarbons	"	ND	----	637	"	"	"	"	"	RL7
<i>Surrogate(s): 1-Chlorooctadecane</i>			NR		50 - 150 %	"				Z3
<b>PQH1091-19 (GPE-8-9)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:30</b>						
Diesel Range Organics	NWTPH-Dx	ND	---	16.5	mg/kg dry	1x	7081505	08/31/07 13:00	09/01/07 01:42	
Heavy Oil Range Hydrocarbons	"	ND	----	33.1	"	"	"	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>			86.9%		50 - 150 %	"				



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.205.00007 Project Manager: Steve Hammer	Report Created: 09/24/07 17:22
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**DRAFT: Extractable Petroleum Hydrocarbons per Washington DOE**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-02 (GPE-1-11)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 10:32</b>					
C8-C10 Aromatics	WDOE EPH	ND	----	6.34	mg/kg dry	1x	7090284	09/07/07 17:10	09/15/07 13:14	
C10-C12 Aromatics	"	ND	----	6.34	"	"	"	"	"	
C12-C16 Aromatics	"	ND	----	6.34	"	"	"	"	"	
<b>C16-C21 Aromatics</b>	"	<b>10.2</b>	---	6.34	"	"	"	"	"	
C21-C34 Aromatics	"	ND	----	6.34	"	"	"	"	"	
C8-C10 Aliphatics	"	ND	----	6.34	"	"	"	"	"	
C10-C12 Aliphatics	"	ND	----	6.34	"	"	"	"	"	
<b>C12-C16 Aliphatics</b>	"	<b>16.1</b>	---	6.34	"	"	"	"	"	
<b>C16-C21 Aliphatics</b>	"	<b>17.2</b>	---	6.34	"	"	"	"	"	
<b>C21-C34 Aliphatics</b>	"	<b>9.52</b>	---	6.34	"	"	"	"	"	
Total EPH (Calc.)	"	ND	---	63.4	"	"	[CALC]	"	"	
<i>Surrogate(s):</i>	<i>o-Terphenyl</i>		<i>69.6%</i>		<i>60 - 140 %</i>	"				"
	<i>Squalane</i>		<i>76.2%</i>		<i>60 - 140 %</i>	"				"

<b>PQH1091-05 (GPE-2-11)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 09:49</b>					
C8-C10 Aromatics	WDOE EPH	ND	----	6.15	mg/kg dry	1x	7090284	09/07/07 17:10	09/15/07 13:45	
C10-C12 Aromatics	"	ND	----	6.15	"	"	"	"	"	
C12-C16 Aromatics	"	ND	----	6.15	"	"	"	"	"	
C16-C21 Aromatics	"	ND	----	6.15	"	"	"	"	"	
C21-C34 Aromatics	"	ND	----	6.15	"	"	"	"	"	
C8-C10 Aliphatics	"	ND	----	6.15	"	"	"	"	"	
C10-C12 Aliphatics	"	ND	----	6.15	"	"	"	"	"	
C12-C16 Aliphatics	"	ND	----	6.15	"	"	"	"	"	
<b>C16-C21 Aliphatics</b>	"	<b>8.57</b>	---	6.15	"	"	"	"	"	
C21-C34 Aliphatics	"	ND	----	6.15	"	"	"	"	"	
Total EPH (Calc.)	"	ND	----	61.5	"	"	[CALC]	"	"	
<i>Surrogate(s):</i>	<i>o-Terphenyl</i>		<i>69.9%</i>		<i>60 - 140 %</i>	"				"
	<i>Squalane</i>		<i>100%</i>		<i>60 - 140 %</i>	"				"

<b>PQH1091-11 (GPE-4-11)</b>		<b>Soil</b>			<b>Sampled: 08/24/07 13:11</b>					
C8-C10 Aromatics	WDOE EPH	ND	----	6.44	mg/kg dry	1x	7090284	09/07/07 17:10	09/15/07 14:15	
C10-C12 Aromatics	"	ND	----	6.44	"	"	"	"	"	
C12-C16 Aromatics	"	ND	----	6.44	"	"	"	"	"	
<b>C16-C21 Aromatics</b>	"	<b>6.46</b>	---	6.44	"	"	"	"	"	
C21-C34 Aromatics	"	ND	----	6.44	"	"	"	"	"	
C8-C10 Aliphatics	"	ND	----	6.44	"	"	"	"	"	
C10-C12 Aliphatics	"	ND	----	6.44	"	"	"	"	"	
<b>C12-C16 Aliphatics</b>	"	<b>9.64</b>	---	6.44	"	"	"	"	"	
<b>C16-C21 Aliphatics</b>	"	<b>9.35</b>	---	6.44	"	"	"	"	"	
<b>C21-C34 Aliphatics</b>	"	<b>7.98</b>	---	6.44	"	"	"	"	"	

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Extractable Petroleum Hydrocarbons per Washington DOE**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-11 (GPE-4-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 13:11</b>						
Total EPH (Calc.)	WDOE EPH	ND	---	64.4	mg/kg dry	1x	[CALC]	09/07/07 17:10	09/15/07 14:15	
Surrogate(s):	<i>o</i> -Terphenyl	64.5%		60 - 140 %		"			"	
	Squalane	91.5%		60 - 140 %		"			"	
<b>PQH1091-15 (GPE-6-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 15:05</b>						
C8-C10 Aromatics	WDOE EPH	ND	----	6.80	mg/kg dry	1x	7090284	09/07/07 17:10	09/15/07 14:46	
C10-C12 Aromatics	"	19.0	---	6.80	"	"	"	"	"	
C12-C16 Aromatics	"	151	---	6.80	"	"	"	"	"	
C16-C21 Aromatics	"	331	----	6.80	"	"	"	"	"	
C21-C34 Aromatics	"	70.2	----	6.80	"	"	"	"	"	
C8-C10 Aliphatics	"	38.4	----	34.0	"	5x	"	"	09/19/07 13:21	
C10-C12 Aliphatics	"	347	----	34.0	"	"	"	"	"	
C12-C16 Aliphatics	"	1350	----	34.0	"	"	"	"	"	
C16-C21 Aliphatics	"	971	----	34.0	"	"	"	"	"	
C21-C34 Aliphatics	"	165	----	34.0	"	"	"	"	"	
Total EPH (Calc.)	"	3440	----	204	"	"	[CALC]	"	"	
Surrogate(s):	<i>o</i> -Terphenyl	98.6%		60 - 140 %		1x			09/15/07 14:46	
	Squalane	94.7%		60 - 140 %		5x			09/19/07 13:21	
<b>PQH1091-17 (GPE-7-10)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 14:20</b>						
C8-C10 Aromatics	WDOE EPH	ND	----	13.3	mg/kg dry	2x	7090284	09/07/07 17:10	09/19/07 13:51	RL7
C10-C12 Aromatics	"	42.8	---	13.3	"	"	"	"	"	
C12-C16 Aromatics	"	301	----	13.3	"	"	"	"	"	
C16-C21 Aromatics	"	561	----	13.3	"	"	"	"	"	
C21-C34 Aromatics	"	112	----	13.3	"	"	"	"	"	
C8-C10 Aliphatics	"	121	----	66.7	"	10x	"	"	"	
C10-C12 Aliphatics	"	753	---	66.7	"	"	"	"	"	
C12-C16 Aliphatics	"	2560	----	66.7	"	"	"	"	"	
C16-C21 Aliphatics	"	1610	----	66.7	"	"	"	"	"	
C21-C34 Aliphatics	"	224	----	66.7	"	"	"	"	"	
Total EPH (Calc.)	"	6290	----	400	"	"	[CALC]	"	"	
Surrogate(s):	<i>o</i> -Terphenyl	77.0%		60 - 140 %		2x			"	
	Squalane	91.1%		60 - 140 %		10x			"	

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**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQHI091-02 (GPE-1-11)</b>		<b>Soil</b>						<b>Sampled: 08/24/07 10:32</b>		
1-Methylnaphthalene	EPA 8270C	ND	----	0.421	mg/kg dry	1x	7081433	08/30/07 11:30	09/08/07 20:48	
Acenaphthene	"	ND	----	0.421	"	"	"	"	09/04/07 23:54	
Acenaphthylene	"	ND	----	0.421	"	"	"	"	"	
Anthracene	"	ND	----	0.421	"	"	"	"	"	
Benzo (a) anthracene	"	ND	----	0.421	"	"	"	"	"	
Benzo (a) pyrene	"	ND	----	0.421	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	----	0.421	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	----	0.421	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	----	0.421	"	"	"	"	"	
Benzoic Acid	"	ND	----	1.28	"	"	"	"	"	
Benzyl alcohol	"	ND	----	1.28	"	"	"	"	"	
4-Bromophenyl phenyl ether	"	ND	----	0.421	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	----	0.421	"	"	"	"	"	
4-Chloro-3-methylphenol	"	ND	----	0.421	"	"	"	"	"	
4-Chloroaniline	"	ND	----	2.55	"	"	"	"	"	
Bis(2-chloroethoxy)methane	"	ND	----	0.421	"	"	"	"	"	
Bis(2-chloroethyl)ether	"	ND	----	0.421	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	"	ND	----	0.421	"	"	"	"	"	
2-Chloronaphthalene	"	ND	----	0.421	"	"	"	"	"	
2-Chlorophenol	"	ND	----	0.421	"	"	"	"	"	
4-Chlorophenyl phenyl ether	"	ND	----	0.421	"	"	"	"	"	
Chrysene	"	ND	----	0.421	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	----	1.28	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	----	0.421	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	----	0.421	"	"	"	"	"	
Dibenzofuran	"	ND	----	0.421	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	1.28	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	1.28	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	1.28	"	"	"	"	"	
3,3'-Dichlorobenzidine	"	ND	----	1.28	"	"	"	"	"	
2,4-Dichlorophenol	"	ND	----	0.421	"	"	"	"	"	
Diethyl phthalate	"	ND	----	0.421	"	"	"	"	"	
2,4-Dimethylphenol	"	ND	----	1.28	"	"	"	"	"	
Dimethyl phthalate	"	ND	----	0.421	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	"	ND	----	1.28	"	"	"	"	"	
2,4-Dinitrophenol	"	ND	----	2.55	"	"	"	"	"	
2,4-Dinitrotoluene	"	ND	----	0.639	"	"	"	"	"	
2,6-Dinitrotoluene	"	ND	----	0.639	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	----	2.55	"	"	"	"	"	
Fluoranthene	"	ND	----	0.421	"	"	"	"	"	
Fluorene	"	ND	----	0.421	"	"	"	"	"	
Hexachlorobenzene	"	ND	----	0.421	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	1.28	"	"	"	"	"	

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
 West Linn, OR 97068

Project Name: **Crowley**  
 Project Number: 008.205.00007  
 Project Manager: Steve Hammer

Report Created:  
 09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-02 (GPE-1-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 10:32</b>						
Hexachlorocyclopentadiene	EPA 8270C	ND	---	1.28	mg/kg dry	1x	7081433	08/30/07 11:30	09/04/07 23:54	
Hexachloroethane	"	ND	----	1.28	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	"	ND	----	0.421	"	"	"	"	"	"
Isophorone	"	ND	----	0.421	"	"	"	"	"	"
2-Methylnaphthalene	"	ND	----	0.421	"	"	"	"	"	"
2-Methylphenol	"	ND	----	0.421	"	"	"	"	"	"
3-,4-Methylphenol	"	ND	----	0.421	"	"	"	"	"	"
Naphthalene	"	ND	----	0.421	"	"	"	"	"	"
2-Nitroaniline	"	ND	----	0.421	"	"	"	"	"	"
3-Nitroaniline	"	ND	----	1.28	"	"	"	"	"	"
4-Nitroaniline	"	ND	----	0.421	"	"	"	"	"	"
Nitrobenzene	"	ND	----	0.421	"	"	"	"	"	"
2-Nitrophenol	"	ND	----	0.421	"	"	"	"	"	"
4-Nitrophenol	"	ND	----	1.28	"	"	"	"	"	"
N-Nitrosodi-n-propylamine	"	ND	----	0.421	"	"	"	"	"	"
N-Nitrosodiphenylamine	"	ND	----	0.421	"	"	"	"	"	"
Pentachlorophenol	"	ND	----	1.28	"	"	"	"	"	"
Phenanthrene	"	ND	----	0.421	"	"	"	"	"	"
Phenol	"	ND	----	0.421	"	"	"	"	"	"
Pyrene	"	ND	----	0.421	"	"	"	"	"	"
1,2,4-Trichlorobenzene	"	ND	----	1.28	"	"	"	"	"	"
2,4,5-Trichlorophenol	"	ND	----	0.421	"	"	"	"	"	"
2,4,6-Trichlorophenol	"	ND	----	0.421	"	"	"	"	"	"
<i>Surrogate(s):</i>	<i>2-Fluorobiphenyl</i>		<i>95.0%</i>		<i>33 - 126 %</i>	<i>"</i>				<i>"</i>
	<i>2-Fluorophenol</i>		<i>64.0%</i>		<i>20 - 127 %</i>	<i>"</i>				<i>"</i>
	<i>Nitrobenzene-d5</i>		<i>79.9%</i>		<i>25 - 131 %</i>	<i>"</i>				<i>"</i>
	<i>Phenol-d6</i>		<i>84.2%</i>		<i>13 - 138 %</i>	<i>"</i>				<i>"</i>
	<i>p-Terphenyl-d14</i>		<i>90.9%</i>		<i>38 - 142 %</i>	<i>"</i>				<i>"</i>
	<i>2,4,6-Tribromophenol</i>		<i>79.7%</i>		<i>46 - 124 %</i>	<i>"</i>				<i>"</i>



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.205.00007 Project Manager: Steve Hammer	Report Created: 09/24/07 17:22
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**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-03 (GPE-1-GW)</b>		<b>Water</b>					<b>Sampled: 08/24/07 10:30</b>			
1-Methylnaphthalene	EPA 8270C	9.22	----	4.81	ug/l	1x	7081372	08/29/07 17:25	09/08/07 15:49	
Acenaphthene	"	ND	----	4.81	"	"	"	"	"	
Acenaphthylene	"	ND	----	4.81	"	"	"	"	"	
Anthracene	"	ND	----	4.81	"	"	"	"	"	
Benzo (a) anthracene	"	ND	----	4.81	"	"	"	"	"	
Benzo (a) pyrene	"	ND	----	4.81	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	----	4.81	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	----	4.81	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	----	4.81	"	"	"	"	"	
Benzoic Acid	"	ND	----	48.1	"	"	"	"	"	
Benzyl alcohol	"	ND	----	9.62	"	"	"	"	"	
4-Bromophenyl phenyl ether	"	ND	----	4.81	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	----	4.81	"	"	"	"	"	
4-Chloro-3-methylphenol	"	ND	----	4.81	"	"	"	"	"	
4-Chloroaniline	"	ND	----	19.2	"	"	"	"	"	
Bis(2-chloroethoxy)methane	"	ND	----	9.62	"	"	"	"	"	
Bis(2-chloroethyl)ether	"	ND	----	4.81	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	"	ND	----	9.62	"	"	"	"	"	
2-Chloronaphthalene	"	ND	----	4.81	"	"	"	"	"	
2-Chlorophenol	"	ND	----	4.81	"	"	"	"	"	
4-Chlorophenyl phenyl ether	"	ND	----	4.81	"	"	"	"	"	
Chrysene	"	ND	----	4.81	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	----	4.81	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	----	4.81	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	----	4.81	"	"	"	"	"	
Dibenzofuran	"	ND	----	4.81	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	4.81	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	4.81	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	4.81	"	"	"	"	"	
3,3'-Dichlorobenzidine	"	ND	----	4.81	"	"	"	"	"	
2,4-Dichlorophenol	"	ND	----	4.81	"	"	"	"	"	
Diethyl phthalate	"	ND	----	4.81	"	"	"	"	"	
2,4-Dimethylphenol	"	ND	----	9.62	"	"	"	"	"	
Dimethyl phthalate	"	ND	----	4.81	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	"	ND	----	9.62	"	"	"	"	"	
2,4-Dinitrophenol	"	ND	----	24.0	"	"	"	"	"	
2,4-Dinitrotoluene	"	ND	----	4.81	"	"	"	"	"	
2,6-Dinitrotoluene	"	ND	----	4.81	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	----	9.62	"	"	"	"	"	
Fluoranthene	"	ND	----	4.81	"	"	"	"	"	
Fluorene	"	ND	----	4.81	"	"	"	"	"	
Hexachlorobenzene	"	ND	----	4.81	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	9.62	"	"	"	"	"	

DRAFT REPORT

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**SLR-Portland**

 1800 Blankenship Road Suite 440  
 West Linn, OR 97068

 Project Name: **Crowley**  
 Project Number: 008.205.00007  
 Project Manager: Steve Hammer

 Report Created:  
 09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-03 (GPE-1-GW)</b>										
		<b>Water</b>								
										<b>Sampled: 08/24/07 10:30</b>
Hexachlorocyclopentadiene	EPA 8270C	ND	----	9.62	ug/l	1x	7081372	08/29/07 17:25	09/08/07 15:49	
Hexachloroethane	"	ND	----	9.62	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	"	ND	----	4.81	"	"	"	"	"	"
Isophorone	"	ND	----	4.81	"	"	"	"	"	"
2-Methylnaphthalene	"	ND	----	4.81	"	"	"	"	"	"
2-Methylphenol	"	ND	----	9.62	"	"	"	"	"	"
3-,4-Methylphenol	"	ND	----	4.81	"	"	"	"	"	"
Naphthalene	"	ND	----	4.81	"	"	"	"	"	"
2-Nitroaniline	"	ND	----	4.81	"	"	"	"	"	"
3-Nitroaniline	"	ND	----	9.62	"	"	"	"	"	"
4-Nitroaniline	"	ND	----	9.62	"	"	"	"	"	"
Nitrobenzene	"	ND	----	4.81	"	"	"	"	"	"
2-Nitrophenol	"	ND	----	4.81	"	"	"	"	"	"
4-Nitrophenol	"	ND	----	24.0	"	"	"	"	"	"
N-Nitrosodi-n-propylamine	"	ND	----	9.62	"	"	"	"	"	"
N-Nitrosodiphenylamine	"	ND	----	4.81	"	"	"	"	"	"
Pentachlorophenol	"	ND	----	9.62	"	"	"	"	"	"
Phenanthrene	"	ND	----	4.81	"	"	"	"	"	"
Phenol	"	ND	----	4.81	"	"	"	"	"	"
Pyrene	"	ND	----	4.81	"	"	"	"	"	"
1,2,4-Trichlorobenzene	"	ND	----	4.81	"	"	"	"	"	"
2,4,5-Trichlorophenol	"	ND	----	4.81	"	"	"	"	"	"
2,4,6-Trichlorophenol	"	ND	----	4.81	"	"	"	"	"	"
<i>Surrogate(s):</i>										
	2-Fluorobiphenyl		76.7%		22 - 120 %	"				"
	2-Fluorophenol		68.5%		5 - 120 %	"				"
	Nitrobenzene-d5		86.8%		26 - 127 %	"				"
	Phenol-d6		80.7%		4 - 121 %	"				"
	p-Terphenyl-d14		63.0%		37 - 130 %	"				"
	2,4,6-Tribromophenol		64.0%		21 - 129 %	"				"



**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-05 (GPE-2-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 09:49</b>						
1-Methylnaphthalene	EPA 8270C	ND	---	0.398	mg/kg dry	1x	7081433	08/30/07 11:30	09/08/07 19:23	
Acenaphthene	"	ND	---	0.398	"	"	"	"	09/05/07 00:36	
Acenaphthylene	"	ND	---	0.398	"	"	"	"	"	
Anthracene	"	ND	---	0.398	"	"	"	"	"	
Benzo (a) anthracene	"	ND	---	0.398	"	"	"	"	"	
Benzo (a) pyrene	"	ND	---	0.398	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	---	0.398	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	---	0.398	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	---	0.398	"	"	"	"	"	
Benzoic Acid	"	ND	---	1.21	"	"	"	"	"	
Benzyl alcohol	"	ND	---	1.21	"	"	"	"	"	
4-Bromophenyl phenyl ether	"	ND	---	0.398	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	---	0.398	"	"	"	"	"	
4-Chloro-3-methylphenol	"	ND	---	0.398	"	"	"	"	"	
4-Chloroaniline	"	ND	---	2.41	"	"	"	"	"	
Bis(2-chloroethoxy)methane	"	ND	---	0.398	"	"	"	"	"	
Bis(2-chloroethyl)ether	"	ND	---	0.398	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	"	ND	---	0.398	"	"	"	"	"	
2-Chloronaphthalene	"	ND	---	0.398	"	"	"	"	"	
2-Chlorophenol	"	ND	---	0.398	"	"	"	"	"	
4-Chlorophenyl phenyl ether	"	ND	---	0.398	"	"	"	"	"	
Chrysene	"	ND	---	0.398	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	---	1.21	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	---	0.398	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	---	0.398	"	"	"	"	"	
Dibenzofuran	"	ND	---	0.398	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	---	1.21	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	---	1.21	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	---	1.21	"	"	"	"	"	
3,3'-Dichlorobenzidine	"	ND	---	1.21	"	"	"	"	"	
2,4-Dichlorophenol	"	ND	---	0.398	"	"	"	"	"	
Diethyl phthalate	"	ND	---	0.398	"	"	"	"	"	
2,4-Dimethylphenol	"	ND	---	1.21	"	"	"	"	"	
Dimethyl phthalate	"	ND	---	0.398	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	"	ND	---	1.21	"	"	"	"	"	
2,4-Dinitrophenol	"	ND	---	2.41	"	"	"	"	"	
2,4-Dinitrotoluene	"	ND	---	0.603	"	"	"	"	"	
2,6-Dinitrotoluene	"	ND	---	0.603	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	2.41	"	"	"	"	"	
Fluoranthene	"	ND	---	0.398	"	"	"	"	"	
Fluorene	"	ND	---	0.398	"	"	"	"	"	
Hexachlorobenzene	"	ND	---	0.398	"	"	"	"	"	
Hexachlorobutadiene	"	ND	---	1.21	"	"	"	"	"	

DRAFT REPORT

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**SLR-Portland**

1800 Blankenship Road Suite 440  
 West Linn, OR 97068

Project Name: **Crowley**  
 Project Number: 008.205.00007  
 Project Manager: Steve Hammer

Report Created:  
 09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-05 (GPE-2-11)</b>		<b>Soil</b>		<b>Sampled: 08/24/07 09:49</b>						
Hexachlorocyclopentadiene	EPA 8270C	ND	---	1.21	mg/kg dry	1x	7081433	08/30/07 11:30	09/05/07 00:36	
Hexachloroethane	"	ND	---	1.21	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	"	ND	---	0.398	"	"	"	"	"	"
Isophorone	"	ND	---	0.398	"	"	"	"	"	"
2-Methylnaphthalene	"	ND	---	0.398	"	"	"	"	"	"
2-Methylphenol	"	ND	---	0.398	"	"	"	"	"	"
3,4-Methylphenol	"	ND	---	0.398	"	"	"	"	"	"
Naphthalene	"	ND	---	0.398	"	"	"	"	"	"
2-Nitroaniline	"	ND	---	0.398	"	"	"	"	"	"
3-Nitroaniline	"	ND	---	1.21	"	"	"	"	"	"
4-Nitroaniline	"	ND	---	0.398	"	"	"	"	"	"
Nitrobenzene	"	ND	---	0.398	"	"	"	"	"	"
2-Nitrophenol	"	ND	---	0.398	"	"	"	"	"	"
4-Nitrophenol	"	ND	---	1.21	"	"	"	"	"	"
N-Nitrosodi-n-propylamine	"	ND	---	0.398	"	"	"	"	"	"
N-Nitrosodiphenylamine	"	ND	---	0.398	"	"	"	"	"	"
Pentachlorophenol	"	ND	---	1.21	"	"	"	"	"	"
Phenanthrene	"	ND	---	0.398	"	"	"	"	"	"
Phenol	"	ND	---	0.398	"	"	"	"	"	"
Pyrene	"	ND	---	0.398	"	"	"	"	"	"
1,2,4-Trichlorobenzene	"	ND	---	1.21	"	"	"	"	"	"
2,4,5-Trichlorophenol	"	ND	---	0.398	"	"	"	"	"	"
2,4,6-Trichlorophenol	"	ND	---	0.398	"	"	"	"	"	"
<i>Surrogate(s):</i>										
	<i>2-Fluorobiphenyl</i>		<i>101%</i>		<i>33 - 126 %</i>	<i>"</i>				<i>"</i>
	<i>2-Fluorophenol</i>		<i>66.7%</i>		<i>20 - 127 %</i>	<i>"</i>				<i>"</i>
	<i>Nitrobenzene-d5</i>		<i>80.0%</i>		<i>25 - 131 %</i>	<i>"</i>				<i>"</i>
	<i>Phenol-d6</i>		<i>83.9%</i>		<i>13 - 138 %</i>	<i>"</i>				<i>"</i>
	<i>p-Terphenyl-d14</i>		<i>90.2%</i>		<i>38 - 142 %</i>	<i>"</i>				<i>"</i>
	<i>2,4,6-Tribromophenol</i>		<i>72.8%</i>		<i>46 - 124 %</i>	<i>"</i>				<i>"</i>



**SLR-Portland**

 1800 Blankenship Road Suite 440  
 West Linn, OR 97068

 Project Name: **Crowley**  
 Project Number: 008.205.00007  
 Project Manager: Steve Hammer

 Report Created:  
 09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-06 (GPE-2-GW)</b>		<b>Water</b>			<b>Sampled: 08/24/07 09:50</b>					
1-Methylnaphthalene	EPA 8270C	ND	---	4.76	ug/l	1x	7081372	08/29/07 17:25	09/08/07 15:05	
Acenaphthene	"	ND	---	4.76	"	"	"	"	"	
Acenaphthylene	"	ND	---	4.76	"	"	"	"	"	
Anthracene	"	ND	---	4.76	"	"	"	"	"	
Benzo (a) anthracene	"	ND	---	4.76	"	"	"	"	"	
Benzo (a) pyrene	"	ND	---	4.76	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	---	4.76	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	---	4.76	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	---	4.76	"	"	"	"	"	
Benzoic Acid	"	ND	---	47.6	"	"	"	"	"	
Benzyl alcohol	"	ND	---	9.52	"	"	"	"	"	
4-Bromophenyl phenyl ether	"	ND	---	4.76	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	---	4.76	"	"	"	"	"	
4-Chloro-3-methylphenol	"	ND	---	4.76	"	"	"	"	"	
4-Chloroaniline	"	ND	---	19.0	"	"	"	"	"	
Bis(2-chloroethoxy)methane	"	ND	---	9.52	"	"	"	"	"	
Bis(2-chloroethyl)ether	"	ND	---	4.76	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	"	ND	---	9.52	"	"	"	"	"	
2-Chloronaphthalene	"	ND	---	4.76	"	"	"	"	"	
2-Chlorophenol	"	ND	---	4.76	"	"	"	"	"	
4-Chlorophenyl phenyl ether	"	ND	---	4.76	"	"	"	"	"	
Chrysene	"	ND	---	4.76	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	---	4.76	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	---	4.76	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	---	4.76	"	"	"	"	"	
Dibenzofuran	"	ND	---	4.76	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	---	4.76	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	---	4.76	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	---	4.76	"	"	"	"	"	
3,3'-Dichlorobenzidine	"	ND	---	4.76	"	"	"	"	"	
2,4-Dichlorophenol	"	ND	---	4.76	"	"	"	"	"	
Diethyl phthalate	"	ND	---	4.76	"	"	"	"	"	
2,4-Dimethylphenol	"	ND	---	9.52	"	"	"	"	"	
Dimethyl phthalate	"	ND	---	4.76	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	"	ND	---	9.52	"	"	"	"	"	
2,4-Dinitrophenol	"	ND	---	23.8	"	"	"	"	"	
2,4-Dinitrotoluene	"	ND	---	4.76	"	"	"	"	"	
2,6-Dinitrotoluene	"	ND	---	4.76	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	9.52	"	"	"	"	"	
Fluoranthene	"	ND	---	4.76	"	"	"	"	"	
Fluorene	"	ND	---	4.76	"	"	"	"	"	
Hexachlorobenzene	"	ND	---	4.76	"	"	"	"	"	
Hexachlorobutadiene	"	ND	---	9.52	"	"	"	"	"	

DRAFT REPORT

*The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.*





**SLR-Portland**

1800 Blankenship Road Suite 440  
West Linn, OR 97068

Project Name: **Crowley**  
Project Number: 008.205.00007  
Project Manager: Steve Hammer

Report Created:  
09/24/07 17:22

**DRAFT: Semivolatile Organic Compounds per EPA Method 8270C**  
TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQH1091-06 (GPE-2-GW)</b>		<b>Water</b>		<b>Sampled: 08/24/07 09:50</b>						
Hexachlorocyclopentadiene	EPA 8270C	ND	----	9.52	ug/l	1x	7081372	08/29/07 17:25	09/08/07 15:05	
Hexachloroethane	"	ND	----	9.52	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	----	4.76	"	"	"	"	"	
Isophorone	"	ND	----	4.76	"	"	"	"	"	
2-Methylnaphthalene	"	ND	----	4.76	"	"	"	"	"	
2-Methylphenol	"	ND	----	9.52	"	"	"	"	"	
3-,4-Methylphenol	"	ND	----	4.76	"	"	"	"	"	
Naphthalene	"	ND	----	4.76	"	"	"	"	"	
2-Nitroaniline	"	ND	----	4.76	"	"	"	"	"	
3-Nitroaniline	"	ND	----	9.52	"	"	"	"	"	
4-Nitroaniline	"	ND	----	9.52	"	"	"	"	"	
Nitrobenzene	"	ND	----	4.76	"	"	"	"	"	
2-Nitrophenol	"	ND	----	4.76	"	"	"	"	"	
4-Nitrophenol	"	ND	----	23.8	"	"	"	"	"	
N-Nitrosodi-n-propylamine	"	ND	----	9.52	"	"	"	"	"	
N-Nitrosodiphenylamine	"	ND	----	4.76	"	"	"	"	"	
Pentachlorophenol	"	ND	----	9.52	"	"	"	"	"	
Phenanthrene	"	ND	----	4.76	"	"	"	"	"	
Phenol	"	ND	----	4.76	"	"	"	"	"	
Pyrene	"	ND	----	4.76	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	4.76	"	"	"	"	"	
2,4,5-Trichlorophenol	"	ND	----	4.76	"	"	"	"	"	
2,4,6-Trichlorophenol	"	ND	----	4.76	"	"	"	"	"	
<i>Surrogate(s):</i>										
	2-Fluorobiphenyl		82.9%		22 - 120 %	"				"
	2-Fluorophenol		68.8%		5 - 120 %	"				"
	Nitrobenzene-d5		85.9%		26 - 127 %	"				"
	Phenol-d6		80.0%		4 - 121 %	"				"
	p-Terphenyl-d14		65.7%		37 - 130 %	"				"
	2,4,6-Tribromophenol		72.1%		21 - 129 %	"				"

DRAFT REPORT

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**APPENDIX G**

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**AUGUST 2007 GROUNDWATER ANALYTICAL RESULTS**



October 03, 2007

Steve Hammer  
SLR-Portland  
1800 Blankenship Road Suite 440  
West Linn, OR 97068

RE: Crowley

Enclosed are the results of analyses for samples received by the laboratory on 09/17/07 08:42.  
The following list is a summary of the Work Orders contained in this report, generated on 10/03/07  
16:02.

If you have any questions concerning this report, please feel free to contact me.

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<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PQI0523	Crowley	008.0205.00007

---

*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.0205.00007 Project Manager: Steve Hammer	Report Created: 10/03/07 16:02
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## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-13	PQ10523-01	Water	09/13/07 17:10	09/17/07 08:42

TestAmerica - Portland, OR

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*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b>	Project Name: <b>Crowley</b>	Report Created:
1800 Blankenship Road Suite 440	Project Number: 008.0205.00007	10/03/07 16:02
West Linn, OR 97068	Project Manager: Steve Hammer	

**Gasoline Hydrocarbons per NW TPH-Gx Method**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQI0523-01 (MW-13)</b>		<b>Water</b>			<b>Sampled: 09/13/07 17:10</b>					
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	—	80.0	ug/l	1x	7090890	09/21/07 09:36	09/22/07 12:39	
Surrogate(s): 4-BFB			97.5%		50 - 150 %	"				"

*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.0205.00007 Project Manager: Steve Hammer	Report Created: 10/03/07 16:02
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**Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQI0523-01 (MW-13)</b>		<b>Water</b>			<b>Sampled: 09/13/07 17:10</b>					
Diesel Range Organics	NWTPH-Dx	0.476	—	0.243	mg/l	1x	7090846	09/21/07 10:15	09/21/07 15:37	Q12
Heavy Oil Range Hydrocarbons	"	ND	—	0.485	"	"	"	"	"	"
Surrogate(s): 1-Chlorooctadecane			77.2%		50 - 150 %	"				"

TestAmerica - Portland, OR

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*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.0205.00007 Project Manager: Steve Hammer	Report Created: 10/03/07 16:02
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**Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup**  
 TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQI0523-01 (MW-13)</b>		<b>Water</b>								
		<b>Sampled: 09/13/07 17:10</b>								
Diesel Range Organics	NWTPH-Dx	ND	----	0.243	mg/l	1x	7090846	09/21/07 10:15	09/25/07 17:35	
Heavy Oil Range Hydrocarbons	"	ND	----	0.485	"	"	"	"	"	"
<i>Surrogate(s): 1-Chlorooctadecane</i>			91.7%		50 - 150 %	"				"





**SLR-Portland**

1800 Blankenship Road Suite 440  
 West Linn, OR 97068

Project Name: **Crowley**  
 Project Number: 008.0205.00007  
 Project Manager: Steve Hammer

Report Created:  
 10/03/07 16:02

**BTEX Compounds per EPA Method 8260B**

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
<b>PQ10523-01 (MW-13)</b>		<b>Water</b>						<b>Sampled: 09/13/07 17:10</b>		
Benzene	EPA 8260B	ND	---	0.500	ug/l	1x	7091079	09/26/07 16:30	09/26/07 18:11	
Toluene	"	ND	---	0.500	"	"	"	"	"	"
Ethylbenzene	"	ND	---	0.500	"	"	"	"	"	"
Xylenes (total)	"	ND	---	1.00	"	"	"	"	"	"
<i>Surrogate(s):</i>										
<i>4-BFB</i>			99.9%		80 - 120 %	"				"
<i>1,2-DCA-d4</i>			112%		80 - 120 %	"				"
<i>Dibromofluoromethane</i>			110%		80 - 120 %	"				"
<i>Toluene-d8</i>			113%		80 - 120 %	"				"

*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.0205.00007 Project Manager: Steve Hammer	Report Created: 10/03/07 16:02
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**Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results**  
TestAmerica - Portland, OR

<b>QC Batch: 7090890</b>	<b>Water Preparation Method: EPA 5030B</b>
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Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7090890-BLK1)</b>													Extracted: 09/21/07 09:36	
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	09/21/07 18:55	
<i>Surrogate(s): 4-BFB</i>		<i>Recovery: 116%</i>		<i>Limits: 50-150%</i>										09/21/07 18:55
<b>LCS (7090890-BS2)</b>													Extracted: 09/21/07 09:36	
Gasoline Range Hydrocarbons	NW TPH-Gx	435	---	80.0	ug/l	1x	--	500	86.9%	(70-130)	--	--	09/21/07 17:41	
<i>Surrogate(s): 4-BFB</i>		<i>Recovery: 117%</i>		<i>Limits: 50-150%</i>										09/21/07 17:41
<b>LCS Dup (7090890-BSD2)</b>													Extracted: 09/21/07 09:36	
Gasoline Range Hydrocarbons	NW TPH-Gx	434	---	80.0	ug/l	1x	--	500	86.8%	(70-130)	0.187%	(35)	09/21/07 18:13	
<i>Surrogate(s): 4-BFB</i>		<i>Recovery: 120%</i>		<i>Limits: 50-150%</i>										09/21/07 18:13
<b>Duplicate (7090890-DUP1)</b>													QC Source: PQ10405-01 Extracted: 09/21/07 09:36	
Gasoline Range Hydrocarbons	NW TPH-Gx	727	---	80.0	ug/l	1x	718	--	--	--	1.16%	(35)	09/22/07 01:49	
<i>Surrogate(s): 4-BFB</i>		<i>Recovery: 114%</i>		<i>Limits: 50-150%</i>										09/22/07 01:49
<b>Duplicate (7090890-DUP2)</b>													QC Source: PQ10467-01 Extracted: 09/21/07 09:36	
Gasoline Range Hydrocarbons	NW TPH-Gx	1240	---	80.0	ug/l	1x	1250	--	--	--	0.989%	(35)	09/22/07 09:52	
<i>Surrogate(s): 4-BFB</i>		<i>Recovery: 105%</i>		<i>Limits: 50-150%</i>										09/22/07 09:52

TestAmerica - Portland, OR

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*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.0205.00007 Project Manager: Steve Hammer	Report Created: 10/03/07 16:02
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**Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method - Laboratory Quality Control Results**  
 TestAmerica - Portland, OR

QC Batch: 7090846      Water Preparation Method: EPA 3520/600 Series

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7090846-BLK1)</b>													Extracted: 09/21/07 10:15	
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	09/21/07 12:55	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>83.7%</i>	<i>Limits: 50-150%</i>		<i>"</i>							<i>09/21/07 12:55</i>	
<b>LCS (7090846-BS1)</b>													Extracted: 09/21/07 10:15	
Diesel Range Organics	NWTPH-Dx	2.23	---	0.250	mg/l	1x	--	2.54	87.6%	(50-150)	--	--	09/21/07 13:16	
Heavy Oil Range Hydrocarbons	"	1.26	---	0.500	"	"	--	1.55	81.6%	"	--	--	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>80.4%</i>	<i>Limits: 50-150%</i>		<i>"</i>							<i>09/21/07 13:16</i>	
<b>LCS Dup (7090846-BSD1)</b>													Extracted: 09/21/07 10:15	
Diesel Range Organics	NWTPH-Dx	2.34	---	0.250	mg/l	1x	--	2.54	92.1%	(50-150)	5.00%	(50)	09/21/07 13:36	
Heavy Oil Range Hydrocarbons	"	1.34	---	0.500	"	"	--	1.55	86.2%	"	5.50%	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery:</i>	<i>86.2%</i>	<i>Limits: 50-150%</i>		<i>"</i>							<i>09/21/07 13:36</i>	

TestAmerica - Portland, OR

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*Sarah Rockwell*

Sarah Rockwell For Christina Woodcock, Project Manager



<b>SLR-Portland</b> 1800 Blankenship Road Suite 440 West Linn, OR 97068	Project Name: <b>Crowley</b> Project Number: 008.0205.00007 Project Manager: Steve Hammer	Report Created: 10/03/07 16:02
---	---	-----------------------------------

**Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results**  
 TestAmerica - Portland, OR

QC Batch: 7090846      Water Preparation Method: EPA 3520/600 Series

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
<b>Blank (7090846-BLK1)</b>													Extracted: 09/21/07 10:15	
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	09/25/07 15:16	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 81.6%</i>		<i>Limits: 50-150%</i>		"						09/25/07 15:16		
<b>LCS (7090846-BS1)</b>													Extracted: 09/21/07 10:15	
Diesel Range Organics	NWTPH-Dx	2.61	---	0.250	mg/l	1x	--	2.54	103%	(50-150)	--	--	09/25/07 15:43	
Heavy Oil Range Hydrocarbons	"	1.66	---	0.500	"	"	--	1.55	107%	"	--	--	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 85.5%</i>		<i>Limits: 50-150%</i>		"						09/25/07 15:43		
<b>LCS Dup (7090846-BSD1)</b>													Extracted: 09/21/07 10:15	
Diesel Range Organics	NWTPH-Dx	2.69	---	0.250	mg/l	1x	--	2.54	106%	(50-150)	2.92% (50)		09/25/07 17:07	
Heavy Oil Range Hydrocarbons	"	1.56	---	0.500	"	"	--	1.55	101%	"	6.08%	"	"	
<i>Surrogate(s): 1-Chlorooctadecane</i>		<i>Recovery: 105%</i>		<i>Limits: 50-150%</i>		"						09/25/07 17:07		

TestAmerica - Portland, OR

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*Sarah Rockwell*  
 Sarah Rockwell For Christina Woodcock, Project Manager

