3R - 258

3RD QUARTER MONITORING REPORT

11/10/2009



3R258



RECEIVED

2009 NOU 16 PM 1 56

November 10, 2009

Glenn Von Gonten Hydrologist and Groundwater Remediation New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

RE: Western Refining Southwest Inc. (Giant) Bloomfield Crude Station 3rd Quarter Soil Sampling Report

Certified Mail # 7009 0820 0000 0482 8613

Dear Mr. Von Gonten;

Please find enclosed, Western Refining Southwest's (Giant) Bloomfield Crude Station 3rd Quarter soil sampling and air monitoring report, prepared by Lodestar Services Incorporated.

If you have any questions or require additional information, please do not hesitate to contact me at (505) 632-4077 or at Bill.Robertson@wnr.com.

Sincerely, Western Refining

Bill Robertson Safety, Environmental & Regulatory Manager

Attachments Soil Sampling Report

Cc: Brandon Powell, NMOCD Allen Hains, Western Refining WNR File Lodestar Services, Incorporated

PO Box 4465 Durango, CO 81302 Office (970) 946-1093

November 6, 2009

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Mr. Bill Robertson Western Refining Southwest 111 CR 4990 Bloomfield, NM 87413

RE: Bloomfield Crude Station Soil Sampling

Dear Mr. Robertson,

On October 21, 2009, Lodestar Services, Incorporated (Lodestar) conducted quarterly gas monitoring and collected quarterly soil samples at Western Refining's (Western's) former Bloomfield Crude Station (BCS) to assess effectiveness of the bioventing system. The BCS is located on the southwest corner of Blanco Boulevard and Fifth Street in the city of Bloomfield, San Juan County, New Mexico. The site occupies approximately 5.5 acres within the N $\frac{1}{2}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$ of Section 22, Township 29 North, Range 11 West. Bioventing was initiated in February 2003 and a site map showing location of monitoring and injection points is attached.

Subsurface airflow and oxygen/carbon dioxide concentrations were monitored for the third quarter of 2009. Oxygen and carbon dioxide were measured using a GEM 500 [™] gas monitor. Each point was evacuated until the gas reading was stable. The results are listed in Table 1. The new measurements are comparable to the previous readings, indicating little change over the last quarter.

Soil samples were collected using a hand powered auger from a location approximately one foot or less away from where soil samples were collected during the initial subsurface investigation and at the same depth as the originals. The samples were screened in the field using headspace techniques and submitted for laboratory analysis for BTEX and TPH by USEPA methods 8021 and 8015, respectively. TPH levels in the monitoring wells have generally decreased during bioventing operations, as shown in Table 2. In 2002, all soil samples were well over NMOCD standards for TPH. Since 2002, TPH levels in soil samples at all locations have generally fallen. During the third quarter of 2009, two samples (IP-16 and MP-7) were over the NMOCD standard for TPH concentration. Sample IP-7 contained a TPH concentration of 97 ppm which is below the NMOCD standard. No concentration of TPH was detected in the other samples. All locations have been under NMOCD standards for BTEX concentrations since 2004. In October 2009 no BTEX concentrations were found in any of the samples.

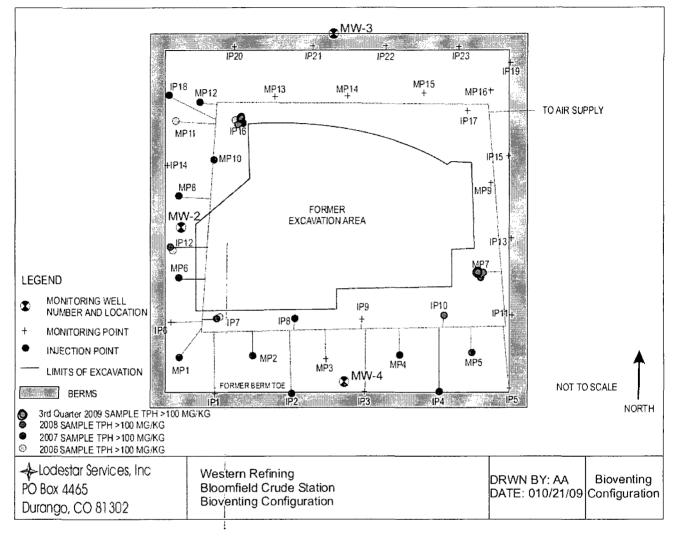
Based on the above results, Lodestar recommends maintaining the current injection/monitoring point configuration and conducting the annual gas monitoring and soil sampling in January. Lodestar appreciates this opportunity to perform these services for Western. If you have any questions or require additional information, please do not hesitate to call me at (970) 946-1093.

Sincerely, Lodestar Services, Inc.

Ashley Ager

Attachments: Site Map Table 1: Results of Air Monitoring Table 2: April 2009 Soil Sampling Results Hall Environmental Lab Report





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			2009	avg		2.1	0	0.8	0	0.3	3.9	0	0	0	3.6	0.2	0	0.9	6.8	0.3	0	0.7	0	4.3	1.7	0.8	0.9	0.2	0	0	2.9	1.9	0
			2009	October		3.1	0	1.4	0	0.2	1.3	0	0	0	5.2	0.0	0	2.1	9.4	0.9	0	2.1	0	4.3	2.4	2.4 4.2	2.8	0.0	0	0	4.6	5.6	0
	tage at	S	2008	avg		0.93	1.85	0.37	0.1	0.05	0.23	0.13	1.45	0.13	5.65	0.17	0.2	1.4	3.98	0.13	0.4	0.28	0.15	0.95	0.9	0.35	0.18	0.23	0.28	0.13	1.63	1.7	0.23
	Percen	r Point	2007	avg		2.8	0	0	0	1.1	5.4	2.5	0	0.2	6.5	0	1.4	0.45	2.03	0.1	0	0.23	2.9	1.38	0.95	0.15	0.43	0.2	2.1	0.2	0.5	0	0
	ioxide]	Monitoring Points	2006	avg	0								14.4		14.1	1.3		2.18	4.75	0.55		1.03		0.93	1.78	0.85	1.13	0.9				14.9	
	Carbon Dioxide Percentage at	Mon	2005	avg									3.5		4.87	4.47		2.07	13.7	0.47		2.13		2.37	5.8	4.1	2.33	2.03				6.33	
	Car		2004	avg									10.6		11	11.9		1.38	10.1	0.33		1.25		3.5	8.4	2.2	1.85	0.77	fra fotoa	• ••••••		14.5	
ng			2003	avg									13.4		6.52	1.03		1.74	6.84	1.21		1.1		1.24	6.36	1.2	0.94	0.66				12.1	
onitori			Pre-	test									0.8		1.8	0		0.2	1	0.8		1		0.4	0.6	1.4	0.4	0.6				1.2	
f Air M			2009	avg		18.1	20.6	17.8	20.4	19.9	11.4	20.5	20.6	20.9	10.6	17.3	20.8	18.0	13.6	20.0	20.6	19.6	20.7	20.1	18.8	19.8	19.4	19.7	20.6	20.7	17.1	19.0	20.6
Fable 1: Results of Air Monitoring			2009	October		18.2	21.1	15.0	20.4	21.1	18.3	20.9	21.1	21.9	10.3	11.5	21.0	13.6	7.0	20.5	21.1	19.4	20.5	20.3	19.5	19.4	18.2	18.7	21.1	21.0	15.8	17.0	21.0
Fable 1 :	at		2008	avg		19.1	12.4	20.2	20.3	20.3	19.6	20	10.8	20.2	14.6	20.4	18.8	18.9	14.4	20.2	14.3	20.4	19.2	19.7	19.7	20.2	20.3	20.7	19.5	20.2	18.2	13.4	18.7
	Percentage :	oring Points	2007	avg		17.1	20.5	20.2	20.5	19.2	15.1	18	20.5	18.1	14.5	20.4	18.4	19.5	18.5	20.3	20.5	17.6	17.6	19.1	19	20	20	20.2	17.9	20.4	17	20.5	30.5
		itoring	2006	avg			- 70 000						0		7.15	19.6		17.9	15.6	20		19.4		19.4	17.8	18.7	19.2	19.4				0	
- 10000	Oxygen	Monito	2005	avg									0.03		4.8	13.5		18.3	3.4	20.3		19		18.1	13.5	19.7	18.3	18.7				2	
000071 T 00000000, 110 100000			2004	avg									4.8		12.4	8.63		19	4.5	19.9		19.2		16.2	7.18	18.1	17.5	19.3				6.15	
			2003	avg									3.25		3.15	9.51		8.62	5.77	0.07		0.44		9.27	5.88	8.33	0.14	0.69				1.94	
· · · · · · · · · · · · · · · · · · ·			Pre-	test			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						20.2		17.2	20.9		20.9	19.9	20.9		20.9		20.9	20.5	20.9	20.9	20.9				19	
2 000000000000000000000000000000000000	Monitoring	Point				IP1	IP2	IP3	IP4	IP5	IP6	IP7	IP8	1P9	IP10	IP11	IP12	IP13	IP14	IP15	IP16	IP17	IP18	IP19	IP20	IP21	IP22	IP23	MP1	MP2	MP3	MP4	MP5

Table 1: Results of Air Monitoring

Mr. Bill Robertson July 30, 2009 Page 4 of 5

2009 avg 0.05 0.93 0.3 1.8 0.2 1.1 2005 includes data from 4/05, 7/05 and 10/05. The pump that injects air into the subsurface was being repaired during the 4th quarter monitoring event. 0 0 0 0 0 0 October 2009 1.46 0.8 4.9 0.0 3.2 0.1 0 0 0 0 0 0 Carbon Dioxide Percentage at 2008 0.15 0.33 0.28 0.15 0.74 avg 0.03 0.48 0.63 0.23 0.98 0.2 1.2 **Monitoring Points** 2007 0.03 0.330.3 1.08 1.45 1.18 avg 3.3 2.1 L. 4.6 2.2 3.2 2006 3.72 1.28 3.5 1.5 avg 1.2 0.7 2005 3.43 1.43 3.53 5.33 avg 4.2 1.5 2004 5.55 3.68 7.98 avg 8.25 0.98 1.4 2003 3.34 1.82 0.97 3.77 1.89 avg 5.6 0.6 0.06 0.79 Pretest 1.4 2009 19.9 19.7 20.6 19.4 20.6 19.6 20.8 20.6 avg 20.7 20.7 17.1 20 October Oxygen Percentage at 2009 20.9 18.0 20.7 20.9 21.0 12.2 19.7 20.2 20.2 18.6 21.1 21.1 2008 19.9 20.5 18.8 20.5 19.7 18.4 14.1 20.1 15.7 avg 20.1 16 19 Monitoring Points 2004 includes quarterly data from 4/04,7/04,10/04 and 1/05. 19.1 19.3 2007 20.5 16.8 17.2 19.7 17.3 19.2 19.1 19.6 avg 15.7 18.1 2007 includes data from 4/07, 7/07, 10/07 and 1/08. 2006 includes data from 4/06, 7/06, 10/06 and 1/07. 2003 includes data from 2/03,3/03,10/03 and 1/04. 18.4 2005 2006 19.3 15.8 18.9 15.9 avg 18.5 14.2 19.5 20.2 13.9 13.4 13.9 avg 14.2 19.3 14.1 14.9 2004 18.9 avg 7.85 19 8.3 2003 14.2 20.9 18.4 20.9 20.1 6.56 avg 13.1 Pre-19.2 18.6 20.5 test Monitoring Average MP15 **MP16** MP14 **MP13 MP10 MP12** MP9 MP11 MP7 MP8 MP6 Point

*Injection valve is broken and cannot shut off.

Table 1: Results of Air Monitoring

r. Bill Robertson	ly 30, 2009	ge 5 of 5
М.	July	Page

		Table	: 2: April 2	Table 2: April 2009 Soil Sampling Results	mpling R	esults		
			Lab			Ethyl		Total
	Depth	(and)	TPH (ma/lea)	Benzene (ma/ka)	Toluene benzene (ma/ka) (ma/ka)	benzene (سە/لەم)	Xylene (mo/kg)	BTEX (mo/ko)
NMOCD			100	10	21 Juli 2004	¢	a a	50 2
4/23/09			TOO	0				2
MP-11	12	0.7	pu	pu	pu	pu	pu	0
IP-16	6	1.6	330	pu	pu	pu	pu	0
MP-8	6	0.4	pu	pu	pu	pu	pu	0
IP-12	12	0.2	pu	pu	pu	pu	pu	0
IP-7	12	0.2	76	pu	pu	pu	pu	0
MP-3	9	0.5	pu	pu	pu	pu	pu	0
MP-7	9	2.0	2,260	pu	pu	pu	pu	0
IP-10	9	2.4	pu	pu	pu	pu	pu	0
nd: not detected	ected							



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COVER LETTER

Thursday, October 29, 2009

Bill Robertson Western Refining Southwest, Inc. #50 CR 4990 Bloomfield, NM 87413

TEL: (505) 632-4161 FAX (505) 632-3911

RE: Bloomfield Crude Station

Dear Bill Robertson:

Order No.: 0910410

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 10/22/2009 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001 Texas Lab# T104704424-08-TX



4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109 505.345.3975 ■ Fax 505.345.4107 www.hallenvironmental.com

CLIENT:Western Refining Southwest, Inc.Lab Order:0910410Project:Bloomfield Crude StationLab ID:0910410-01

4

Date: 29-Oct-09

Client Sample ID: MP-8 Collection Date: 10/21/2009 12:30:00 PM Date Received: 10/22/2009 Matrix: SOIL

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS				Analyst: SCC
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/27/2009 12:47:12 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/27/2009 12:47:12 PM
Surr: DNOP	89.6	61.7-135	%REC	1	10/27/2009 12:47:12 PM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	10/23/2009 4:11:56 PM
Surr: BFB	98.9	65.9-118	%REC	1	10/23/2009 4:11:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.050	mg/Kg	1	10/23/2009 4:11:56 PM
Toluene	ND	0.050	mg/Kg	1	10/23/2009 4:11:56 PM
Ethylbenzene	ND	0.050	mg/Kg	1	10/23/2009 4:11:56 PM
Xylenes, Total	ND	0.10	mg/Kg	1	10/23/2009 4:11:56 PM
Surr: 4-Bromofluorobenzene	100	64.7-120	%REC	1	10/23/2009 4:11:56 PM

Qualifiers:

*

Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 1 of 8

CLIENT:	Western Refining Se	outhwest, Inc.		Client Sam	ple ID: MP-3	
Lab Order:	0910410			Collection	Date: 10/21/200	9 1:00:00 PM
Project:	Bloomfield Crude S	tation		Date Re	ceived: 10/22/200	9
Lab ID:	0910410-02			N	fatrix: SOIL	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANG	E ORGANICS				Analyst: SCC
Diesel Range O	rganics (DRO)	ND	10	mg/Kg	1	10/27/2009 1:23:26 PM
Motor Oil Range	organics (MRO)	ND	50	mg/Kg	[`] 1	10/27/2009 1:23:26 PM
Surr: DNOP		90.5	61.7-135	%REC	1	10/27/2009 1:23:26 PM
EPA METHOD	8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range	Organics (GRO)	ND	5.0	mg/Kg	1	10/23/2009 4:42:26 PM
Surr: BFB		105	65.9-118	%REC	1	10/23/2009 4:42:26 PM
	8021B: VOLATILES					Analyst: NSB
Benzene		ND	0.050	mg/Kg	. 1	10/23/2009 4:42:26 PM
Toluene		ND	0.050	mg/Kg	1	10/23/2009 4:42:26 PM
Ethylbenzene		ND	0.050	mg/Kg	1	10/23/2009 4:42:26 PM
Xylenes, Total		ND	0.10	mg/Kg	1	10/23/2009 4:42:26 PM
Surr: 4-Bromo	ofluorobenzene	108	64.7-120	%REC	1	10/23/2009 4:42:26 PM

4

Date: 29-Oct-09

Qualifiers: Value exceeds Maximum Contaminant Level В Analyte detected in the associated Method Blank * Е Estimated value Н Holding times for preparation or analysis exceeded Analyte detected below quantitation limits MCL Maximum Contaminant Level J RL Reporting Limit Not Detected at the Reporting Limit ND

> Spike recovery outside accepted recovery limits S

Page 2 of 8

CLIENT:	Western Refining S	outhwest, Inc.		Clier	nt Sample I	D: IP-10	
Lab Order:	0910410			Co	llection Dat	te: 10/21/200	9 1:01:00 PM
Project:	Bloomfield Crude S	station		D	ate Receive	d: 10/22/200)9
Lab ID:	0910410-03				Matri	ix: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANG	E ORGANICS				· · · · · · · · · · · · · · · · · · ·	Analyst: SCC
Diesel Range O	rganics (DRO)	ND	10		mg/Kg	1	10/27/2009 1:59:21 PM
Motor Oil Range	Organics (MRO)	ND	50		mg/Kg	1	10/27/2009 1:59:21 PM
Surr: DNOP		80.6	61.7-135		%REC	1	10/27/2009 1:59:21 PM
EPA METHOD	8015B: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range	Organics (GRO)	ND	5.0		mg/Kg	· 1	10/23/2009 5:12:51 PM
Surr: BFB		102	65.9-118		%REC	1	10/23/2009 5:12:51 PM
EPA METHOD	8021B: VOLATILES						Analyst: NSB
Benzena		ND	0.050		mg/Kg	1	10/23/2009 5:12:51 PM
Toluene		NĎ	0.050		mg/Kg	1	10/23/2009 5:12:51 PM
Ethylbenzene		ND	0.050		mg/Kg	1	10/23/2009 5:12:51 PM
Xyienes, Total		ND	0.10		mg/Kg	1	10/23/2009 5:12:51 PM
Surr: 4-Bromo	ofluorobenzene	104	64.7-120		%REC	.1	10/23/2009 5:12:51 PM

Date: 29-Oct-09

Qualifiers:

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- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 3 of 8

CLIENT: Lab Order: Project: Lab ID:	Western Refining S 0910410 Bloomfield Crude S 0910410-04			Coll	t Sample ID ection Date: te Received: Matrix:	: 10/21/200 : 10/22/200	9 1:14:00 PM 9
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANG	E ORGANICS					Analyst: SCC
Diesel Range O	rganics (DRO)	960	100	I	mg/Kg	10	10/28/2009 2:34:11 AM
Motor Oil Range	e Organics (MRO)	1300	500	;	mg/Kg	10	10/28/2009 2:34:11 AM
Surr: DNOP		109	61.7-135		%REC	10	10/28/2009 2:34:11 AM
EPA METHOD	8015B: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range	Organics (GRO)	ND	5.0	I	m g/K g	1	10/23/2009 5:43:14 PM
Surr: BFB		105	65.9-118	(%REC	1	10/23/2009 5:43:14 PM
EPA METHOD	8021B: VOLATILES						Analyst: NSB
Benzene		ND	0.050	1	mg/Kg	1	10/23/2009 5:43:14 PM
Toluene		ND	0.050	ı	ng/Kg	1	10/23/2009 5:43:14 PM
Ethylbenzene		ND	0.050	ı	mg/Kg	1	10/23/2009 5:43:14 PM
Xylenes, Total		ND	0.10		ng/Kg	1	10/23/2009 5:43:14 PM
Surr: 4-Bromo	ofluorobenzene	107	64.7-120	c	%REC	1	10/23/2009 5:43:14 PM

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Date: 29-Oct-09

Qualifiers: * Value exceeds Maximum Contaminant Level

- E Estimated value
- J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level

RL Reporting Limit

Page 4 of 8

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CLIENT:Western Refining Southwest, Inc.Lab Order:0910410Project:Bloomfield Crude StationLab ID:0910410-05

Date: 29-Oct-09

 Client Sample ID:
 MP-11

 Collection Date:
 10/21/2009 1:30:00 PM

 Date Received:
 10/22/2009

 Matrix:
 SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE	ORGANICS					Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/28/2009 9:20:36 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/28/2009 9:20:36 AM
Surr: DNOP	148	61.7-135	S	%REC	1	10/28/2009 9:20:36 AM
EPA METHOD 8015B: GASOLINE RAN	IGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	- 5.0		mg/Kg	1	10/23/2009 6:13:36 PM
Surr: BFB	93.9	65.9-118		%REC	1	10/23/2009 6:13:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	10/23/2009 6:13:36 PM
Toluene	ND	0.050		mg/Kg	1	10/23/2009 6:13:36 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/23/2009 6:13:36 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/23/2009 6:13:36 PM
Surr: 4-Bromofluorobenzene	94.6	64.7-120		%REC	1	10/23/2009 6:13:36 PM

Qualifiers:

*

Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level

RL Reporting Limit

Page 5 of 8

CLIENT: Lab Order: Project: Lab ID:	Western Refining S 0910410 Bloomfield Crude S 0910410-06	·		Co	nt Sample ID: llection Date: ate Received: Matrix:	10/21/2009 10/22/2009	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANG	E ORGANICS					Analyst: SCC
Diesel Range O	rganics (DRO)	ND	10		mg/Kg	1 .	10/27/2009 2:35:19 PM
Motor Oil Range	e Organics (MRO)	ND	50		mg/Kg	1	10/27/2009 2:35:19 PM
Surr: DNOP		99.1	61.7-135		%REC	1	10/27/2009 2:35:19 PM
EPA METHOD 8	8015B: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range	Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2009 10:49:36 PM
Surr: BFB		102	65.9-118		%REC	1	10/23/2009 10:49:36 PM
EPA METHOD 8	3021B: VOLATILES						Analyst: NSB
Benzene		ND	0.050		mg/Kg	1	10/23/2009 10:49:36 PM
Toluene		ND	0.050		mg/Kg	1	10/23/2009 10:49:36 PM
Ethylbenzene		ND	0.050		mg/Kg	1	10/23/2009 10:49:36 PM
Xylenes, Total		ND	0.10		mg/Kg	1	10/23/2009 10:49:36 PM
Surr: 4-Bromo	ofluorobenzene	105	64.7-120		%REC	1	10/23/2009 10:49:36 PM

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Date: 29-Oct-09

Qualifiers:

*

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 6 of 8

	······································	
CLIENT:	Western Refining Southwest, Inc.	Client Sample ID:
Lab Order:	0910410	Collection Date:
Project:	Bloomfield Crude Station	Date Received:
Lab ID:	0910410-07	Matrix:

Date: 29-Oct-09

Client Sample ID: IP-7 Collection Date: 10/21/2009 1:53:00 PM Date Received: 10/22/2009 Matrix: SOIL

Analyses	Result	PQL	Qual Uni	its	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE	ORGANICS					Analyst: SCC
Diesel Range Organics (DRO)	16	10	mg/	′Kg	1	10/29/2009 9:01:14 AM
Motor Oil Range Organics (MRO)	81	50	mg/	'Kg	1	10/29/2009 9:01:14 AM
Surr: DNOP	93.2	61.7-135	%R	EC	1	10/29/2009 9:01:14 AM
EPA METHOD 8015B: GASOLINE RAM	NGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/i	Kg	1	10/23/2009 11:19:55 PM
Surr: BFB	88.3	65.9-118	%R	EC	ļ	10/23/2009 11:19:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050	mg/l	Kg	1	10/23/2009 11:19:55 PM
Toluene	ND	0.050	mg/l	Kg	1	10/23/2009 11:19:55 PM
Ethylbenzene	ND	0.050	mg/ł	Kg	1	10/23/2009 11:19:55 PM
Xylenes, Total	ND	0.10	mg/ł	Kg	1	10/23/2009 11:19:55 PM
Surr: 4-Bromofluorobenzene	86.8	64.7-120	%RE	EC	1	10/23/2009 11:19:55 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 7 of 8

CLIENT:	Western Refining Se	Western Refining Southwest, Inc. Client San		Sample ID	: IP-16		
Lab Order:	0910410			Coll	ection Date	: 10/21/200	09 2:03:00 PM
Project:	Bloomfield Crude S	tation		Da	te Received	: 10/22/200)9
Lab ID:	0910410-08	·			Matrix	: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANG	E ORGANICS					Analyst: SCC
Diesel Range C	organics (DRO)	130	10	I	mg/Kg	1	10/29/2009 9:36:49 AM
Motor Oil Range Organics (MRO)		200	50	I	m g/K g	1	10/29/2009 9:36:49 AM
Surr: DNOP		97.1	61.7-135		%REC	1	10/29/2009 9:36:49 AM
EPA METHOD	8015B: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range	Organics (GRO)	ND	5.0	,	ng/Kg	1 ·	10/23/2009 11:50:16 PM
Surr: BFB	- · · ·	100	65.9-118	Ģ	%REC	1	10/23/2009 11:50:16 PM
EPA METHOD	8021B: VOLATILES						Analyst: NSB
Benzene		ND	0.050	r	ng/Kg	1	10/23/2009 11:50:16 PM
Toluene		ND	0.050	r	ng/Kg	1	10/23/2009 11:50:16 PM
Ethylbenzene		ND	0.050	r	ng/Kg	1	10/23/2009 11:50:16 PM
Xylenes, Total		ND	0.10	r	ng/Kg	1	10/23/2009 11:50:16 PM
Surr: 4-Brome	ofluorobenzene	103	64.7-120	q	%REC	1	10/23/2009 11:50:16 PM

Date: 29-Oct-09

Qualifiers:

*

Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 8 of 8

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.

4

Project: Bloomfield Crude Station

Work Order: 0910410

Analyte	Result	Units	PQL	SPK Vi	a SPK ref	%Rec L	owLimit Hi	ghLimit %RP[%RPD RPDLimit Qual		
Method: EPA Method 8015B: D Sample ID: MB-20405)iesel Range	o Organics MBLK				Batch ID:	20405	Analysis Date:	10/27/2009 10:23:08 AN		
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Motor Oil Range Organics (MRO)	ND	mg/Kg	50					•			
Sample ID: LCS-20405		LCS				Batch ID:	20405	Analysis Date:	10/27/2009 10:59:07 AM		
Diesel Range Organics (DRO)	32.47	mg/Kg	10	50	0	64.9	64.6	116			
Method: EPA Method 8015B; G	asoline Rar	ige							· ·		
Sample ID: MB-20396		MBLK			•	Batch ID:	20396	Analysis Date:	10/24/2009 2:52:20 AM		
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: LCS-20396		LCS				Batch ID:	20396	Analysis Date:	10/24/2009 1:51:37 AM		
Gasoline Range Organics (GRO)	28.21	mg/Kg	5.0	25	1.51	107	64.4	133			
Method: EPA Method 8021B: V	olatiles										
Sample ID: MB-20396		MBLK				Batch ID:	20396	Analysis Date:	10/24/2009 2:52:20 AM		
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: LCS-20396		LCS				Batch ID:	20396	Analysis Date:	10/24/2009 2:22:02 AM		
Benzene	0.9124	mg/Kg	0.050	1	0.0154	89.7	78.8	132			
Toluene	0.9116	mg/Kg	0.050	1	0.0111	90.1	78.9	112			
Ethylbenzene	0.9562	mg/Kg	0.050	1	0	95.6	69.3	125			
Kylenes, Total	2.881	mg/Kg	0.10	3	0	96.0	73	128			

Qualifiers:

E Estimated value

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Page 1

Samp	ole Receipt C	hecklist		
Client Name WESTERN REFINING SOUT	a construction of the second se	Date Receiv	ed:	10/22/2009
Work Order Number 0910410		Received b	y: TLS	
Checklist completed by:	106	B C	labels checked by: _	Initials
Matrix: Carrier nam	e: <u>Greyhound</u>			· · ·
Shipping container/cooler in good condition?	Yes 🗹	No 🗌	Not Present	
Custody seals Intact on shipping container/cooler?	Yes 🗹	No 🗌	Not Present	Not Shipped
Custody seals intact on sample bottles?	Yes 🗹	No 🗌	N/A	
Chain of custody present?	Yes 🗹	No 🗌		
Chain of custody signed when relinquished and received?	Yes 🗹	No 🗌		
Chain of custody agrees with sample labels?	Yes 🗹	No 🗔		
Samples in proper container/bottle?	Yes 🗹	No 🗔		
Sample containers intact?	Yes 🗹	No 🗔		
Sufficient sample volume for indicated test?	Yes 🗹	No 🗌		
All samples received within holding time?	Yes 🗹	No 🗌		Number of preserved
Water - VOA vials have zero headspace? No VOA vials su	bmitted 🗹	Yes 🗌	No 🗖	bottles checked for pH:
Water - Preservation labels on bottle and cap match?	Yes 🗋	No 🗌	N/A 🖌	
Water - pH acceptable upon receipt?	Yes 🗌	No 🗌	N/A 🗹	<2 >12 unless noted below.
Container/Temp Blank temperature?	5.9°	<6° C Accepta		bolow.
COMMENTS:		If given sufficier	it time to cool.	
			=====	
Client contacted Date contacted:		Per	son contacted	
		Per		
Contacted by: Regarding:				
Contacted by: Regarding:				
Contacted by: Regarding:				
Contacted by: Regarding:				

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ENVIRONMENTAL YSIS LABORATORY environmental.com Albuquerque, NM 87109 Fax 505-345-4107 alysis Request										- 5
BO M 87 M 87 410	(AOV-im92) 0] t 2
IALL ENVIRONME IALL ENVIRONME NALYSIS LABOR/ www.hallenvironmental.com ms NE - Albuquerque, NM 87109 ns NE - Albuquerque, NM 87107 5-3975 Fax 505-345-4107 Analysis Request	(AOV) 803		<u> </u>		-+		_			~ ~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	11 Pesticides / 8082 PCB's				<u> </u>					
HALL ENVI ANALYSIS www.hallenvironme kins NE - Albuquero 845-3975 Fax 50	RA 8 Metals ons (F,CI,NO ₃ ,NO ₂ ,PO4,SO4)			}	\rightarrow			$\left \right $	 ┝╌╺┝╸	- Ser
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HALL ANAL www.half dins NE - 45-3975	(1.403 borheM) 8						1		 	1 2 5
HALL ANAL www.he Hawkins NE 505-345-3975	(1.814 bodieM) H	11					-			S C F
ANA ANA www.h 4901 Hawkins NE Tel. 505-345-397	(leseiO\sad G15B (Gas/Diesel)		X	×	\triangleleft	<	$\langle \rangle$	\leq		Remarks: Please Copy results to ala@lockstarservices.com
- 49 - 49 - 49	EX + MTBE + TPH (Gas only)]			
	(1508) 8'8MT⊂TTMB's (8021)	<u>-8 X</u>	\succ	\mathbf{X}	≫	\leq^{\times}	\searrow	\bowtie	 	2°,
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Turn-Around Time: A Standard Project Name: Project #:	Project Manager. Sampler: Dev Sampler: Dev Sampler: Dev Container Pre	4c2 / 2	4/02 /2		20	402 1 L 14- 12	12	412/2		Received by:
REFINING Son 490 87413	D Level 4 (Full Validation) Sample Request ID	8-9M	E-GM	0		TD-13.	T-7-7	91-dT		Time: Relinquished by: 18:16 D - Received by: Time: Relinquished by: Time: Relinquished by: Received by: Rece
-of-Custo Report	Matrix	1.3	Soil	Sci I	501			Seil		Relinquished by:
Chain-of Client: WCS4 Zill R Mailing Address: 1 Blownfeld	email or Fax#: QA/QC Package: X Standard Accreditation D NELAP D EDD (Type) Date Time	0/21/04/1230	1300	1301		125C		102 102		Volution 18:46 Date: Time:
Client:	email or Faxt QA/QC Packag X Standard Accreditation C NELAP Date Tim	10/21/0	1221 09	1011201	02109	NU21154	0/17/0	िंथि हिन		Date: Date: