HIP - \_\_125\_\_\_

# GENERAL CORRESPONDENCE

YEAR(S): 2013 to Present

#### Jones, Brad A., EMNRD

From: Eileen Shannon < EShannon@kleinfelder.com>

Sent: Monday, November 18, 2013 6:32 AM

To: Jones, Brad A., EMNRD

Cc: jagwhite@eprod.com (jagwhite@eprod.com); Runell Seale (RSeale@eprod.com); Heap,

James; Luke Davis (luke1d@msn.com); Theresa Ancell; Barbara Everett

Subject: WEP III - Seg 5 Additional Source Water for Hydrostatic Testing

Attachments: Marley Well\_Radium Results 11 5 2013.pdf; Rpt\_1310902\_Final\_v1.pdf

Apologies if I sent this twice. I thought I had sent it, but found it in my draft email folder...

Hi Brad,

On behalf of Enterprise Products Operating Company LLC (Enterprise), Kleinfelder West, Inc. is submitting this notice of a change in source water for hydrostatic testing of Segment 5 of Enterprise's Western Expansion Pipeline III.

Because of difficulties with their water system, the original proposed source for water (Vaughn Duran Water System) may not have sufficient water, or any water, available to Enterprise for use in the hydrostatic test. In addition to the Vaughn Duran Water System and the Roswell Municipal Water System, Enterprise would like to add the following as potential source of water for the Segment 5 hydrostatic testing:

Marley Well (33.623692°, -104.545024°) POD # RA 02478A

Radium concentrations are as follows:

- Marley Well
  - o Radium-226 0.528 +/- 0.536 pCi/L
  - o Radium-228 0.372 +/- 0.319 pCi/L

Available laboratory analytical data is attached.

Please call if you have questions or need additional information

Eileen

Eileen Shannon P.G. Project Manager 9019 Washington NE, Building A Albuquerque, NM 87113 o| 505.344.7373 Ext. 254 c| 505.307.0722 f| 505.344.1711





Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 1310A05

Theresa Ancell HRL Compliance Solutions 2385 F 1/2 Road Grand Junction, CO 81505 TEL: (970) 243-3271

FAX

RE: Enterprise WEP III Water Sampling

Dear Theresa Ancell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/21/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

#### **ANALYTICAL RESULTS**

Project:

PWS:

1310A05

Pace Project No.: 30105896

Sample: 1310A05-001 Marley Well

Parameters

Lab ID: 30105896001

Collected: 10/21/13 10:30 Received: 10/24/13 09:00 Matrix: Water

Sample Type:

Method Act ± Unc (MDC)

Units pCI/L

Analyzed 11/04/13 13:16 13982-63-3

CAS No. Qual

Radium-226 Radium-228 EPA 903.1 EPA 904.0

Site ID:

0.528 ± 0.536 (0.812) 0.372 ± 0.319 (0.640)

pCl/L

11/04/13 10:52 15262-20-1



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601

(724)850-5600

#### **QUALITY CONTROL DATA**

Project:

1310A05

Pace Project No.:

30105896

QC Batch:

RADC/17595

Analysis Method:

EPA 903.1

QC Batch Method:

EPA 903.1

Analysis Description:

903.1 Radium-226

Associated Lab Samples:

30105896001

Matrix: Water

METHOD BLANK: 650722 Associated Lab Samples: 30105896001

Parameter

Act ± Unc (MDC)

Units

Analyzed

Qualiflers

Radium-226

 $-0.259 \pm 0.402 \quad (0.971)$ 

pCI/L

11/04/13 12:16



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

#### **QUALITY CONTROL DATA**

Project:

1310A05

Pace Project No.:

30105896

QC Batch:

RADC/17608

Analysis Method:

EPA 904.0

QC Batch Method:

EPA 904.0

Analysis Description:

904.0 Radium 228

Associated Lab Samples:

30105896001

Matrix: Water

METHOD BLANK: 651402
Associated Lab Samples:

30105896001

Parameter

Act ± Unc (MDC)

Units

Analyzed

Qualifiers

Radium-228

0.447 ± 0.280 (0.523)

pCi/L

11/04/13 10:54

#### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: HRL COMPLIANCE SOL Work Order Number:	1310A05		RoptNo:	1
Received by/date: MG 102113				
Logged By: Lindsay Mangin 10/21/2013 2:45:00 PN	1	July HILGO		
Completed By: Lindsay Mangin 10/22/3013 7:35:17 AN		a william		
Reviewed By: MA IA22/13		() 3" <del>0</del> ~		
Chain of Custody				
1. Custody seals intact on sample bottles?	Yes 🗌	No 🗔	Not Present 🗹	
2. Is Chain of Custody complete?	Yes 🗹	No 🗌	Not Present	
3. How was the sample delivered?	Client			
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🗌	No 🗹	NA $\square$	
	Approved	by client,		
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗌	No 🗹	NA $\square$	
6. Complete) in accordance (20)	Approved	<u>by client.</u> No <b>✓</b>		
Sample(s) in proper container(s)?	Yes $\square$	NO E		
7. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗆		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗌	No 🗹		
9. Was preservative added to bottles?	Yes 🗹	No 🗆	NA $\square$	
			SEE REMARKS	
10.VOA vials have zero headspace?	Yes 🗀	No └┘	No VOA Vials	
11. Were any sample containers received broken?	Yes 🗆	No 🕊	# of preserved	1)
12. Does paperwork match bottle labels?	Yes <b>✓</b>	No 🗆	bottles checked for pH:	$\sigma$
(Note discrepancies on chain of custody)	100			r >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗀	Adjusted?	W
14. Is it clear what analyses were requested?	Yes 🗹	No 🗆		+ & C
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🔽	No ∐ [	Checked by: <	TO TO
(ii iio, notify customer for authorization.)				7
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified: Date:	NAME OF THE OWNER, OF THE OWNER,	- Contractor Contractor of		
By Whom: Via:	eMail [	Phone 🗌 Fax	in Person	
Regarding:	A	NEL PERSON NAME OF STREET, OF STREET, O	MELLONG BEGINNERS ON ASSET STREET, THE PROPERTY OF THE	
Client Instructions:	Secret State Co. Commence	and the second s	a dollar controller and the second	
17. Additional remarks:		1		
Poured off into 2 1 liter HDPE containers and preserved with 2r	nL HNO3	1921		
18. Cooler Information	O OTO (ALGEBRA)	) Sometingskape of		
Cooler No Temp °C Condition Seal Intact Seal No S  1 20.5 Good Not Present	Seal Date	Signed By		

HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	uly)	(SI)	OB MIS MIS	(l.	PO 3. (A(A) (A) (A) (A) (A) (A) (A) (A) (A) (	BE (G) both both both both both both both both	BTEX + MT BTEX + MT TPH 8015B TPH (Methored (B31) BCRA 8 Methored (F,C) Anions (F,C) 8081 Pesticons (F,C) 8260B (VO) 8270 (Semi	*							Remarks: Redrum 226 \$ 228 only	is mostly the sub-contracted date will be clearly installed on the contract and executed
Turn-Around Time:	☐ Standard Kush	Project Name: WEP III	Wicher Sampling	Project #: [3-110:2	Segment S Marier Wall		There's Ancel		<	On Ice: 🗆 Yes 🖻 No	띭	Container Preservative HEAL No. Type 1510H)5	3-16 Plat Habs -001							Received by:  Date Time  Machine Time  Time	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
hain-of-Custody Record	Client HRL Constrante. Solutions Inc		Mailing Address: 2385 Fys Rad		Phone #: 970 462 5440	email or Fax#: Tanc. 14 8 14 ( Com. Com. Project Manager:	QA/QC Package:	☐ Standard ☐ Level 4 (Full Validation)	no	□ NELAP □ Other □	□ EDD (Type)	Date Time Matrix Sample Request ID	10/21/14 1030 Agin as Marley Well					Section 1990 Control	7 0	boly 1/13   Resinquished by: Date: Time: Relinquished by:	



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 1310902

November 15, 2013

Theresa Ancell HRL Compliance Solutions 2385 F 1/2 Road Grand Junction, CO 81505

TEL: (970) 462-5440

FAX

RE: Enterprise WEP III Water Sampling

Dear Theresa Ancell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/17/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report** Lab Order 1310902

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/15/2013

**CLIENT:** HRL Compliance Solutions Client Sample 1D: Marley Well Seg. 5 Enterprise WEP III Water Sampling Collection Date: 10/17/2013 1:00:00 PM **Project:** 

Received Date: 10/17/2013 5:00:00 PM Lab ID: 1310902-001 Matrix: AQUEOUS

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8011/504.1: EDB					Analyst	LRW
1,2-Dibromoethane	ND	0.010	μg/L	1	10/22/2013 4:21:52 PM	9954
EPA METHOD 8082: PCB'S					Analyst:	SCC
Aroclor 1016	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Aroclor 1221	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Aroclor 1232	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Aroclor 1242	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Aroclor 1248	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Aroclor 1254	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Aroclor 1260	ND	1.0	μg/L	1	10/29/2013 1:16:56 PM	9993
Surr: Decachlorobiphenyl	87.2	17-123	%REC	1	10/29/2013 1:16:56 PM	9993
Surr: Tetrachloro-m-xylene	71.6	22.6-113	%REC	1	10/29/2013 1:16:56 PM	9993
EPA METHOD 8310: PAHS					Analyst:	scc
Naphthalene	ND	2.0	μg/L	1	10/30/2013 7:34:53 AM	9994
1-Methylnaphthalene	ND	2.0	μg/L	1	10/30/2013 7:34:53 AM	9994
2-Methylnaphthalene	ND	2.0	μg/L	1	10/30/2013 7:34:53 AM	9994
Acenaphthylene	ND	2.5	μg/L	1	10/30/2013 7:34:53 AM	9994
Acenaphthene	ND	5.0	μg/L	1	10/30/2013 7:34:53 AM	9994
Fluorene	ND	0.80	μg/L	1	10/30/2013 7:34:53 AM	9994
Phenanthrene	ND	0.60	μg/L	1	10/30/2013 7:34:53 AM	9994
Anthracene	ND	0.60	μg/L	1	10/30/2013 7:34:53 AM	9994
Fluoranthene	ND	0.30	μg/L	1	10/30/2013 7:34:53 AM	9994
Pyrene	ND	0.30	μg/L	1	10/30/2013 7:34:53 AM	9994
Benz(a)anthracene	ND	0.070	μg/L	1	10/30/2013 7:34:53 AM	9994
Chrysene	ND	0.20	μg/L	1	10/30/2013 7:34:53 AM	9994
Benzo(b)fluoranthene	ND	0.10	μg/L	1	10/30/2013 7:34:53 AM	9994
Benzo(k)fluoranthene	ND	0.070	μg/L	1	10/30/2013 7:34:53 AM	9994
Benzo(a)pyrene	ND	0.070	μg/L	1	10/30/2013 7:34:53 AM	9994
Dibenz(a,h)anthracene	ND	0.12	μg/L	1	10/30/2013 7:34:53 AM	9994
Benzo(g,h,i)perylene	ND	0.12	μg/L	1	10/30/2013 7:34:53 AM	9994
Indeno(1,2,3-cd)pyrene	ND	0.25	μg/L	1	10/30/2013 7:34:53 AM	9994
Surr: Benzo(e)pyrene	72.5	43.2-113	%REC	1	10/30/2013 7:34:53 AM	9994
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Fluoride	0.53	0.10	mg/L	1	10/18/2013 10:17:57 AM	1 R14218
Chloride	1800	100	mg/L	200	10/22/2013 6:32:35 PM	R14286
Nitrogen, Nitrate (As N)	3.2	0.10	mg/L	1	10/18/2013 10:17:57 AM	1 R14218
Sulfate	1500	50	mg/L	100	10/21/2013 11:44:51 PM	1 R14248
EPA METHOD 200.7: DISSOLVED META	<b>ALS</b>				Analyst:	JLF

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Sample pH greater than 2 for VOA and TOC only
- RL Reporting Detection Limit

# Analytical Report

Lab Order 1310902

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/15/2013

**CLIENT:** HRL Compliance Solutions

Client Sample ID: Marley Well Seg. 5

Project:

Enterprise WEP III Water Sampling

Collection Date: 10/17/2013 1:00:00 PM

**Lab ID:** 1310902-001

Matrix: AQUEOUS

Received Date: 10/17/2013 5:00:00 PM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED M	ETALS				Analys	t: JLF
Aluminum	ND	0.020	mg/L	1	11/5/2013 5:13:18 PM	R14586
Barium	0.015	0.0020	mg/L	1	11/5/2013 5:13:18 PM	R14586
Boron	0.27	0.040	mg/L	1	11/5/2013 5:13:18 PM	R14586
Cadmium	ND	0.0020	mg/L	1	11/5/2013 5:13:18 PM	R14586
Chromium	ND	0.0060	mg/L	1	11/5/2013 5:13:18 PM	R14586
Cobalt	ND	0.0060	mg/L	1	11/5/2013 5:13:18 PM	R14586
Copper	ND	0.0060	mg/L	1	11/5/2013 5:13:18 PM	R14586
Iron	0.048	0.020	mg/L	1	11/5/2013 5:13:18 PM	R14586
Manganese	0.0029	0.0020	mg/L	1	11/5/2013 5:13:18 PM	R14586
Molybdenum	ND	0.0080	mg/L	1	11/5/2013 5:13:18 PM	R14586
Nickel	ND	0.010	mg/L	1	11/5/2013 5:13:18 PM	R14586
Silver	ND	0.025	mg/L	5	11/11/2013 8:17:45 AM	R14699
Zinc	ND	0.010	mg/L	1	11/5/2013 5:13:18 PM	R14586
EPA 200.8: DISSOLVED METALS					Analys	: DBD
Arsenic	ND	0.0010	mg/L	1	11/4/2013 3:05:04 PM	R14570
Lead	ND	0.0010	mg/L	1	11/4/2013 3:05:04 PM	R14570
Selenium	0.0088	0.0050	mg/L	5	11/6/2013 4:53:26 PM	R14642
Uranium	0.0061	0.0010	mg/L	1	11/4/2013 3:05:04 PM	R14570
EPA METHOD 245.1: MERCURY					Analys	: JML
Mercury	ND	0.00020	mg/L	1	10/22/2013 5:55:17 PM	9934
EPA METHOD 8260B: VOLATILES					Analys	: DJF
Benzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Toluene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Ethylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Naphthalene	ND	2.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1-Methylnaphthalene	ND	4.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
2-Methylnaphthalene	ND	4.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Acetone	ND	10	μg/L	1	10/18/2013 1:10:57 PM	R14211
Bromobenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Bromodichloromethane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Bromoform	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Bromomethane	ND	3.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
2-Butanone	ND	10	μg/L	1	10/18/2013 1:10:57 PM	R14211

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 2 of 27

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

#### **Analytical Report** Lab Order 1310902

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/15/2013

**CLIENT:** HRL Compliance Solutions Client Sample ID: Marley Well Seg. 5 Enterprise WEP III Water Sampling Collection Date: 10/17/2013 1:00:00 PM Project:

1310902-001 Matrix: AQUEOUS Received Date: 10/17/2013 5:00:00 PM Lab ID:

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	DJF
Carbon disulfide	ND	10	μg/L	1	10/18/2013 1:10:57 PM	R1421
Carbon Tetrachloride	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Chlorobenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Chloroethane	ND	2.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Chloroform	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Chloromethane	ND	3.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
2-Chlorotoluene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
4-Chlorotoluene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
cis-1,2-DCE	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Dibromochloromethane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Dibromomethane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,2-Dichlorobenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,3-Dichlorobenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,4-Dichlorobenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Dichlorodifluoromethane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,1-Dichloroethane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,1-Dichloroethene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,2-Dichloropropane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,3-Dichloropropane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
2,2-Dichloropropane	ND	2.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
1,1-Dichloropropene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R1421
Hexachlorobutadiene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
2-Hexanone	ND	10	μg/L	1	10/18/2013 1:10:57 PM	R1421
Isopropylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
4-Isopropyltoluene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
4-Methyl-2-pentanone	ND	10	μg/L	1	10/18/2013 1:10:57 PM	R14211
Methylene Chloride	ND	3.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
n-Butylbenzene	ND	3.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
n-Propylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
sec-Butylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Styrene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
tert-Butylbenzene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
trans-1,2-DCE	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	10/18/2013 1:10:57 PM	R14211

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit

  - Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

# **Analytical Report**

#### Lab Order 1310902

Date Reported: 11/15/2013

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** HRL Compliance Solutions

Client Sample ID: Marley Well Seg. 5

Project:

Enterprise WEP III Water Sampling

Collection Date: 10/17/2013 1:00:00 PM

Lab ID:

1310902-001

Matrix: AQUEOUS

Received Date: 10/17/2013 5:00:00 PM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst	:: DJF
1,2,3-Trichlorobenzene	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
1,2,4-Trichlorobenzene	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
1,1,1-Trichloroethane	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
1,1,2-Trichloroethane	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
Trichloroethene (TCE)	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
Trichlorofluoromethane	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
1,2,3-Trichloropropane	ND	2.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
Vinyl chloride	ND	1.0		μg/L	1	10/18/2013 1:10:57 PM	R14211
Xylenes, Total	ND	1.5		μg/L	1	10/18/2013 1:10:57 PM	R14211
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/18/2013 1:10:57 PM	R14211
Surr: 4-Bromofluorobenzene	88.2	70-130		%REC	1	10/18/2013 1:10:57 PM	R14211
Surr: Dibromofluoromethane	95.1	70-130		%REC	1	10/18/2013 1:10:57 PM	R14211
Surr: Toluene-d8	94.8	70-130		%REC	1	10/18/2013 1:10:57 PM	R14211
TOTAL PHENOLICS BY SW-846 9067						Analyst	scc
Phenolics, Total Recoverable	ND	2.5		μg/L	1	10/21/2013	9927
SM4500-H+B: PH						Analyst	JML
рН	7.73	1.68	Н	pH units	1	10/22/2013 8:43:04 PM	R14281
SM2540C MOD: TOTAL DISSOLVED SO	DLIDS					Analyst	KS
Total Dissolved Solids	5300	20.0	٠	mg/L	1	10/21/2013 5:15:00 PM	9903

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
  - Sample pH greater than 2 for VOA and TOC only.

    Page 4 of 27
- Reporting Detection Limit RL

# Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com 504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Cilent:

HALL ENVIRONMENTAL ANALYSIS LAB

Batch #:

131022029

Address:

4901 HAWKINS NE SUITE D **ALBUQUERQUE, NM 87109** 

**Project Name:** 

1310902

Attn:

**ANDY FREEMAN** 

## **Analytical Results Report**

Sample Number

131022029-001

Sampling Date

10/17/2013

Date/Time Received 10/22/2013 11:50 AM

Client Sample ID

1310902-0011 / MARLEY WELL SEG. 5

Sampling Time 1:00 PM

Water

Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/30/2013	CRW	EPA 335.4	

**Authorized Signature** 

MCL

EPA's Maximum Contaminant Level

ND

Not Detected

PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory. The results reported relate only to the samples indicated.

Soll/solid results are reported on a dry-weight basis unless otherwise noted.

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:

Enterprise WEP III Water Sampling

Sample ID MB	Samp	Type: ME	BLK	Tes	Code: El	PA Method	200.7: Dissol	ved Meta	ls	
Client ID: PBW	Bato	h ID: R1	4586	F	tunNo: 1	4586				
Prep Date:	Analysis I	Date: 11	1/5/2013	S	SeqNo: 4	19170	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020								
Barium	ND	0.0020								
Boron	ND	0.040								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Соррег	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Molybdenum	ND	0.0080								
Nickel	ND	0.010								
Zinc	ND	0.010								

Samp	Type: LC	S	TestCode: EPA Method 200.7: Dissolved Metals								
Bato	h ID: <b>R1</b>	4586	F	RunNo: 1	4586						
Analysis I	Date: <b>1</b> 1	1/5/2013	S	eqNo: 4	19171	Units: mg/L					
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
0.54	0.020	0.5000	0	107	85	115					
0.50	0.0020	0.5000	0	99.1	85	115					
0.49	0.040	0.5000	0	98.1	85	115					
0.51	0.0020	0.5000	0	101	85	115					
0.51	0.0060	0.5000	0	103	85	115					
0.49	0.0060	0.5000	0	98.6	85	115					
0.49	0.0060	0.5000	0	97.6	85	115					
0.49	0.020	0.5000	0	98.3	85	115					
0.50	0.0020	0.5000	0	99.4	85	115					
0.49	0.0080	0.5000	0	98.5	85	115					
0.47	0.010	0.5000	0	94.5	85	115					
0.52	0.010	0.5000	0	105	85	115					
	Result  0.54  0.50  0.49  0.51  0.49  0.49  0.49  0.49  0.49  0.49  0.50  0.49  0.47	Batch ID: R1 Analysis Date: 11 Result PQL 0.54 0.020 0.50 0.0020 0.49 0.040 0.51 0.0060 0.49 0.0060 0.49 0.0060 0.49 0.020 0.50 0.0020 0.50 0.0020 0.49 0.0080 0.49 0.0080	0.54         0.020         0.5000           0.50         0.0020         0.5000           0.49         0.040         0.5000           0.51         0.0020         0.5000           0.51         0.0060         0.5000           0.49         0.0060         0.5000           0.49         0.020         0.5000           0.50         0.0020         0.5000           0.49         0.0080         0.5000           0.49         0.0080         0.5000           0.47         0.010         0.5000	Batch ID: R14586         R Analysis Date: 11/5/2013         SPK value SPK Ref Val           Result         PQL         SPK value         SPK Ref Val           0.54         0.020         0.5000         0           0.50         0.0020         0.5000         0           0.49         0.040         0.5000         0           0.51         0.0020         0.5000         0           0.49         0.0060         0.5000         0           0.49         0.0060         0.5000         0           0.49         0.020         0.5000         0           0.50         0.0020         0.5000         0           0.49         0.0020         0.5000         0           0.49         0.0080         0.5000         0           0.49         0.0080         0.5000         0           0.49         0.0080         0.5000         0	Batch ID: R14586         RunNo: 1           Analysis Date: 11/5/2013         SeqNo: 4           Result         PQL         SPK value         SPK Ref Val         %REC           0.54         0.020         0.5000         0         107           0.50         0.0020         0.5000         0         99.1           0.49         0.040         0.5000         0         98.1           0.51         0.0020         0.5000         0         103           0.49         0.0060         0.5000         0         98.6           0.49         0.0060         0.5000         0         97.6           0.49         0.020         0.5000         0         98.3           0.50         0.0020         0.5000         0         99.4           0.49         0.0020         0.5000         0         99.4           0.49         0.0080         0.5000         0         98.5           0.49         0.0080         0.5000         0         98.5           0.49         0.0080         0.5000         0         98.5           0.49         0.0080         0.5000	Batch ID: R14586       RunNo: 14586         Analysis Date: 11/5/2013       SeqNo: 419171         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit         0.54       0.020       0.5000       0       107       85         0.50       0.0020       0.5000       0       99.1       85         0.49       0.040       0.5000       0       98.1       85         0.51       0.0020       0.5000       0       103       85         0.49       0.0060       0.5000       0       98.6       85         0.49       0.0060       0.5000       0       97.6       85         0.49       0.0020       0.5000       0       98.3       85         0.50       0.0020       0.5000       0       99.4       85         0.49       0.0020       0.5000       0       99.4       85         0.49       0.0020       0.5000       0       99.4       85         0.49       0.0080       0.5000       0       99.4       85         0.49       0.0080       0.5000	Batch ID: R14586         RunNo: 14586           Analysis Date: 11/5/2013         SeqNo: 419171         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           0.54         0.020         0.5000         0         107         85         115           0.50         0.040         0.5000         0         99.1         85         115           0.49         0.040         0.5000         0         98.1         85         115           0.51         0.0020         0.5000         0         101         85         115           0.49         0.0060         0.5000         0         103         85         115           0.49         0.0060         0.5000         0         98.6         85         115           0.49         0.0060         0.5000         0         97.6         85         115           0.49         0.020         0.5000         0         98.3         85         115           0.49         0.020         0.5000         0         98.3         85         115           0.50         0.0020 <td>Batch ID: R14586         RunNo: 14586           Analysis Date: 11/5/2013         SeqNo: 419171         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           0.54         0.020         0.5000         0         107         85         115           0.50         0.0020         0.5000         0         99.1         85         115           0.49         0.040         0.5000         0         98.1         85         115           0.51         0.0020         0.5000         0         103         85         115           0.51         0.0060         0.5000         0         103         85         115           0.49         0.0060         0.5000         0         98.6         85         115           0.49         0.0060         0.5000         0         97.6         85         115           0.49         0.0020         0.5000         0         98.3         85         115           0.49         0.0020         0.5000         0         99.4         85         115           0.49<td>Batch ID: R14586         RunNo: 14586           Analysis Date:         11/5/2013         SeqNo: 419171         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit           0.54         0.020         0.5000         0         107         85         115           0.50         0.0020         0.5000         0         99.1         85         115           0.49         0.040         0.5000         0         98.1         85         115           0.51         0.0020         0.5000         0         101         85         115           0.51         0.0060         0.5000         0         103         85         115           0.49         0.0060         0.5000         0         98.6         85         115           0.49         0.0060         0.5000         0         97.6         85         115           0.49         0.0020         0.5000         0         98.3         85         115           0.49         0.020         0.5000         0         98.5         85         115           0</td></td>	Batch ID: R14586         RunNo: 14586           Analysis Date: 11/5/2013         SeqNo: 419171         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           0.54         0.020         0.5000         0         107         85         115           0.50         0.0020         0.5000         0         99.1         85         115           0.49         0.040         0.5000         0         98.1         85         115           0.51         0.0020         0.5000         0         103         85         115           0.51         0.0060         0.5000         0         103         85         115           0.49         0.0060         0.5000         0         98.6         85         115           0.49         0.0060         0.5000         0         97.6         85         115           0.49         0.0020         0.5000         0         98.3         85         115           0.49         0.0020         0.5000         0         99.4         85         115           0.49 <td>Batch ID: R14586         RunNo: 14586           Analysis Date:         11/5/2013         SeqNo: 419171         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit           0.54         0.020         0.5000         0         107         85         115           0.50         0.0020         0.5000         0         99.1         85         115           0.49         0.040         0.5000         0         98.1         85         115           0.51         0.0020         0.5000         0         101         85         115           0.51         0.0060         0.5000         0         103         85         115           0.49         0.0060         0.5000         0         98.6         85         115           0.49         0.0060         0.5000         0         97.6         85         115           0.49         0.0020         0.5000         0         98.3         85         115           0.49         0.020         0.5000         0         98.5         85         115           0</td>	Batch ID: R14586         RunNo: 14586           Analysis Date:         11/5/2013         SeqNo: 419171         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit           0.54         0.020         0.5000         0         107         85         115           0.50         0.0020         0.5000         0         99.1         85         115           0.49         0.040         0.5000         0         98.1         85         115           0.51         0.0020         0.5000         0         101         85         115           0.51         0.0060         0.5000         0         103         85         115           0.49         0.0060         0.5000         0         98.6         85         115           0.49         0.0060         0.5000         0         97.6         85         115           0.49         0.0020         0.5000         0         98.3         85         115           0.49         0.020         0.5000         0         98.5         85         115           0		

Sample ID MB	SampType: MBLK TestCode: I	EPA Method 200.7: Dissolved Metals
Client ID: PBW	Batch ID: R14699 RunNo:	14699
Prep Date:	Analysis Date: 11/11/2013 SeqNo:	423021 Units: mg/L
Analyte	Result PQL SPK value SPK Ref Val %REC	C LowLimit HighLimit %RPD RPDLimit Qual
Silver	ND 0.0050	

Silver ND 0.0050

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 5 of 27

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902 15-Nov-13

Client:

**HRL Compliance Solutions** 

Result

Project:

Enterprise WEP III Water Sampling

Sample ID MB PBW SampType: MBLK

TestCode: EPA Method 200.7: Dissolved Metals

Client ID:

Batch ID: R14699

RunNo: 14699

Prep Date:

Analysis Date: 11/11/2013

SeqNo: 423023

Units: mg/L HighLimit

%RPD

%RPD

**RPDLimit** Qual

Analyte Silver

ND 0.0050

Sample ID LCS Client ID: LCSW SampType: LCS Batch ID: R14699 TestCode: EPA Method 200.7: Dissolved Metals RunNo: 14699

115

Prep Date:

Analysis Date: 11/11/2013

0.1000

SeqNo: 423025

LowLimit

LowLimit

85

Units: mg/L

Analyte Silver

Result PQL

0.11

%REC

105

HighLimit

**RPDLimit** Qual

Sample ID LCS

SampType: LCS

SPK value SPK Ref Val %REC LowLimit

TestCode: EPA Method 200.7: Dissolved Metals

Client ID: LCSW

Batch ID: R14699

0.0050

RunNo: 14699

Units: mg/L

Prep Date: Analyte

Analysis Date: 11/11/2013

SeqNo: 423026

%RPD **RPDLimit** Qual

**PQL** SPK value SPK Ref Val

SPK value SPK Ref Val

%REC 111

HighLimit

Silver

0.1000 0.11 0.0050

85 115

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- RSD is greater than RSDlimit o
- RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- Р Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

Analyte detected in the associated Method Blank

Page 6 of 27

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

HRL Compliance Solutions

Project:	. 7	Enterprise WEP I	II Water	Sampling										
Sample ID	LCS	Sam	pType: LC	s	Tes	stCode: E	PA 200.8:	Dissolved Me	tals					
Client ID:	LCSW	Bat	ch ID: R1	14570	ı	RunNo: 1	4570							
Prep Date:		Analysis	Date: 1	1/4/2013	:	SeqNo: 4	18605	Units: mg/L						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Arsenic		0.025	0.0010	0.02500	0	101	85	115						
Lead		0.024	0.0010	0.02500	0	97.5	85	115						
Uranium		0.024	0.0010	0.02500	0	97.9	85	115						
Sample ID	LCS	Samı	Type: LC	s	TestCode: EPA 200.8: Dissolved Metals									
Client ID:	LCSW	Bat	ch ID: R1	4570	F	RunNo: 14570								
Prep Date:		Analysis	Date: 1	1/4/2013	•	SeqNo: 4	18606	Units: mg/L						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Arsenic		0.025	0.0010	0.02500	0	99.2	85	115						
Lead		0.024	0.0010	0.02500	0	97.9	85	115						
Uranium		0.025	0.0010	0.02500	0	101	85	115						
Sample ID	LCS	Samp	Type: LC	s	Tes	tCode: El	PA 200.8: [	Dissolved Me	als					
Client ID:	LCSW	Bat	ch ID: R1	4570	F	RunNo: 1	4570							
Prep Date:		Analysis	Date: 11	1/4/2013	8	SeqNo: 4	18607	Units: mg/L						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Lead		0.025	0.0010	0.02500	0	99.3	85	115						
Sample ID	LCS	Samp	Type: LC	S	Tes	tCode: El	PA 200.8: E	Dissolved Met	als					
Client ID:	LCSW	Bate	ch ID: R1	4570	F	RunNo: 14	4570							
Prep Date:		Analysis	Date: <b>11</b>	/4/2013	s	SeqNo: 4	18608	Units: mg/L						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Lead		0.025	0.0010	0.02500	0	99.9	85	115						
Sample ID	MB	Samp	Туре: МВ	BLK	Tes	Code: EF	PA 200.8: D	issolved Met	als					
Client ID:	PBW	Bato	ch ID: R1	4570	R	lunNo: 14	4570							
Prep Date:		Analysis	Date: 11	/4/2013	s	eqNo: 41	18609	Units: mg/L						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Arsenic		ND	0.0010											
_ead		ND	0.0010											
Jranium		ND	0.0010											

## Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits J
- $\mathbf{o}$ RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit
- Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1

1310902 15-Nov-13

Client:

HRL Compliance Solutions

Project:	Enterprise WEP III Water Sampling
Sample ID MB Client ID: PBV Prep Date:	SampType: MBLK TestCode: EPA 200.8: Dissolved Metals  V Batch ID: R14570 RunNo: 14570  Analysis Date: 11/4/2013 SeqNo: 418610 Units: mg/L
Analyte Arsenic Lead Uranium	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual  ND 0.0010  ND 0.0010  ND 0.0010
Sample ID MB Client ID: PBV Prep Date:	Analysis Date: 11/4/2013 SeqNo: 418611 Units: mg/L
Analyte Lead	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual  ND 0.0010
Sample ID MB Client ID: PBW Prep Date: Analyte Lead	SampType: MBLK TestCode: EPA 200.8: Dissolved Metals  Batch ID: R14570 RunNo: 14570  Analysis Date: 11/4/2013 SeqNo: 418612 Units: mg/L  Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual  ND 0.0010
Sample ID MB Client ID: PBV Prep Date: Analyte Selenium	SampType: MBLK TestCode: EPA 200.8: Dissolved Metals  W Batch ID: R14642 RunNo: 14642  Analysis Date: 11/6/2013 SeqNo: 421212 Units: mg/L  Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual  ND 0.0010
Sample ID MB Client ID: PBV Prep Date: Analyte Selenium	SampType: MBLK TestCode: EPA 200.8: Dissolved Metals  W Batch ID: R14642 RunNo: 14642  Analysis Date: 11/6/2013 SeqNo: 421213 Units: mg/L  Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual  ND 0.0010
Sample ID LCS Client ID: LCS Prep Date: Analyte	• • •
,	

#### Qualifiers:

Selenium

\* Value exceeds Maximum Contaminant Level.

0.025

0.0010

0.02500

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank

85

115

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

101

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

0

Page 8 of 27

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902 15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:

Enterprise WEP III Water Sampling

Sample ID LCS

SampType: LCS

TestCode: EPA 200.8: Dissolved Metals

Client ID: LCSW

Batch ID: R14642

RunNo: 14642

Prep Date:

Analysis Date: 11/6/2013

SeqNo: 421216 Units: mg/L

Analyte

Result **PQL** SPK value SPK Ref Val

%REC LowLimit

HighLimit

%RPD **RPDLimit** 

Qual

0.0010

97.8

Selenium

0.024

0.02500

115

Qualifiers: Value exceeds Maximum Contaminant Level.

Value above quantitation range E

Analyte detected below quantitation limits

RSD is greater than RSDlimit O

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit

Sample pH greater than 2 for VOA and TOC only. P

RLReporting Detection Limit Page 9 of 27

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:

Enterprise WEP III Water Sampling

Sample ID MB-9934

SampType: MBLK

TestCode: EPA Method 245.1: Mercury

LowLimit

Client ID:

PBW

Batch ID: 9934

RunNo: 14288

Prep Date: 10/21/2013 Analysis Date: 10/22/2013

SPK value SPK Ref Val

SeqNo: 410007

Units: mg/L HighLimit

**RPDLimit** 

Qual

Analyte Mercury

Client ID:

Prep Date:

Result **PQL** ND 0.00020

Sample ID LCS-9934

**LCSW** 

SampType: LCS

Batch ID: 9934

**PQL** 

0.00020

TestCode: EPA Method 245.1: Mercury

SPK value SPK Ref Val %REC LowLimit

10/21/2013

RunNo: 14288

%RPD

%RPD

Analyte

Analysis Date: 10/22/2013

0.0048

0.005000

SeqNo: 410008 %REC

95.4

Units: mg/L HighLimit

**RPDLimit** Qual

Mercury

SampType: MS

TestCode: EPA Method 245.1: Mercury

Sample ID 1310902-001FMS Client ID: Marley Well Seg. 5

Sample ID 1310902-001FMSD

10/21/2013

Batch ID: 9934

RunNo: 14288

Analysis Date: 10/22/2013

SeqNo: 410028

Units: mg/L

Analyte

Prep Date:

**PQL** SPK value SPK Ref Val 0.0047 0.00020 0.005000

%REC 93.7

LowLimit HighLimit 75 125 **RPDLimit** Qual

Mercury

SampType: MSD

SPK value SPK Ref Val %REC LowLimit

0

TestCode: EPA Method 245.1: Mercury

Client ID: Marley Well Seg. 5

RunNo: 14288

Analyte

Prep Date:

10/21/2013

Batch ID: 9934 Analysis Date: 10/22/2013

**PQL** 

SeqNo: 410029

Units: mg/L HighLimit

**RPDLimit** 

Qual

Mercury

0.0047 0.00020 0.005000 93.1

75

125

%RPD 0.684

%RPD

20

Qualifiers:

S

Value exceeds Maximum Contaminant Level

Spike Recovery outside accepted recovery limits

Ε Value above quantitation range

Analyte detected below quantitation limits

O RSD is greater than RSDlimit

RPD outside accepted recovery limits R

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

Sample pH greater than 2 for VOA and TOC only.

ND Not Detected at the Reporting Limit

RLReporting Detection Limit

Р

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1310902

15-Nov-13

Client:

HRL Compliance Solutions

Project:	Enterpris	e WEP III	Water	Sampling							
Sample ID	A5	SampT	ype: Co	CV_5	Tes	tCode: E	PA Method	300.0: Anior	ıs		
Client ID:	BatchQC	Batch	ı ID: R1	14218	ı	RunNo: 1	14218				
Prep Date:		Analysis D	)ate: 1	0/18/2013	;	SeqNo: 4	107380	Units: mg/L	-		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		1.5	0.10	1.600	0	91.6	90	110			
Nitrogen, Nitra	te (As N)	4.8	0.10	4.800	0	99.5	90	110			
Sample ID	мв	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	PBW	Batch	iD: R1	14218	F	RunNo: 1	14218				
Prep Date:		Analysis D	ate: 1	0/18/2013		SeqNo: 4	107382	Units: mg/L	•		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		ND	0.10								
Nitrogen, Nitra	te (As N)	ND	0.10		-						
Sample ID	LCS	SampT	ype: LC	s	Tes	tCode: E	PA Method	300.0: Anion	S		
Client ID:	LCSW	Batch	ID: R1	14218	F	RunNo: 1	4218				
Prep Date:		Analysis D	ate: 10	0/18/2013	5	SeqNo: 4	107383	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		0.45	0.10	0.5000	0	90.3	90	110			
Nitrogen, Nitral	te (As N)	2.4	0.10	2.500	0	94.5	90	110			
Sample ID	1310902-001EMS	SampT	ype: MS	3	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	Marley Well Seg. 9	5 Batch	ID: <b>R1</b>	4218	F	RunNo: 1	4218				
Prep Date:		Analysis D	ate: 10	0/18/2013	8	SeqNo: 4	07385	Units: mg/L			
Analyte	· · · · · · · · · · · · · · · · · · ·	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride		0.76	0.10	0.5000	0.5287	47.0	76.9	114			S
Nitrogen, Nitrat	e (As N)	5.6	0.10	2.500	3.178	96.9	93	113			
Sample ID	1310902-001EMSE	) SampT	ype: <b>MS</b>	SD	Tes	Code: E	PA Method	300.0: Anion	s		
Client ID:	Marley Well Seg. 5	5 Batch	ID: <b>R1</b>	4218	F	tunNo: 1	4218				
Prep Date:		Analysis Da	ate: 10	0/18/2013	S	eqNo: 4	07386	Units: mg/L			
Analyte		Result	PQL		SPK Ref Val			HighLimit	%RPD	RPDLimit	Qual
Fluoride	(4. 40)	0.78	0.10	0.5000		51.2		114	2.74	20	S
Nitrogen, Nitrate	e (As N)	5.5	0.10	2.500	3.178	94.6	93	113	1.05	20	
Comple ID	A6	SampTy	ype: CC	V_6	Test	Code: El	PA Method	300.0: Anion	S		
Sample ID		, ,		_							
,	BatchQC		ID: R1	4218	R	unNo: 1	4218				
,			ID: R1			unNo: 14		Units: mg/L			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- o RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RLReporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1310902

15-Nov-13

Project:	Enterprise WEP III Water Sampling
Client:	HRL Compliance Solutions

Project: E	nterprise WEP III Water Sampling			
Sample ID A6	SampType: CCV_6	TestCode: EPA Method	l 300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/18/2013	SeqNo: 407392	Units: mg/L	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Fluoride	2.4 0.10 2.400	0 101 90	110	
Nitrogen, Nitrate (As N)	7.4 0.10 7.200	0 103 90	110	
Sample ID A4	SampType: CCV_4	TestCode: EPA Method	300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/18/2013	SeqNo: 407404	Units: mg/L	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Fluoride	0.99 0.10 1.000	0 98.7 90	110	
Nitrogen, Nitrate (As N)	2.8 0.10 3.000	0 93.4 90	110	· · · · · · · · · · · · · · · · · · ·
Sample ID A5	SampType: CCV_5	TestCode: EPA Method	300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/18/2013	SeqNo: 407416	Units: mg/L	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Fluoride	1.6 0.10 1.600	0 101 90	110	
Nitrogen, Nitrate (As N)	4.6 0.10 4.800	0 96.5 90	110	
Sample ID A6	SampType: CCV_6	TestCode: EPA Method	300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/18/2013	SeqNo: 407428	Units: mg/L	
Analyte		SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Fluoride	2.5 0.10 2.400	0 106 90	110	
Nitrogen, Nitrate (As N)	7.4 0.10 <b>7</b> .200	0 103 90	110	
Sample ID A4	SampType: CCV_4	TestCode: EPA Method	300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/18/2013	SeqNo: 407440	Units: mg/L	
Analyte		SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Fluoride	1.0 0.10 1.000	0 100 90	110	
Nitrogen, Nitrate (As N)	2.7 0.10 3.000	0 90.6 90	110	
Sample ID A5	SampType: CCV_5	TestCode: EPA Method	300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/19/2013	SeqNo: 407452	Units: mg/L	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project: Enter	prise WEP III Water Sampling			
Sample ID A5	SampType: CCV_5	TestCode: EPA Metho	d 300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/19/2013	SeqNo: 407452	Units: mg/L	
Analyte	Result PQL SPK value	e SPK Ref Val %REC LowLimi	t HighLimit %RPD	RPDLimit Qual
Fluoride	1.6 0.10 1.60			
Nitrogen, Nitrate (As N)	4.7 0.10 4.80	0 97.0 90	) 110	
Sample ID MB	SampType: MBLK	TestCode: EPA Metho	d 300.0: Anions	
Client ID: PBW	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/19/2013	SeqNo: 407454	Units: mg/L	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimi	t HighLimit %RPD	RPDLimit Qual
Fluoride	ND 0.10			
Nitrogen, Nitrate (As N)	ND 0.10			
Sample ID LCS	SampType: LCS	TestCode: EPA Metho	d 300.0: Anions	
Client ID: LCSW	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/19/2013	SeqNo: 407455	Units: mg/L	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimi	t HighLimit %RPD	RPDLimit Qual
Fluoride	0.53 0.10 0.500			
Nitrogen, Nitrate (As N)	2.4 0.10 2.50	0 0 94.1 90	110	
Sample ID A6	SampType: CCV_6	TestCode: EPA Metho	d 300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/19/2013	SeqNo: 407464	Units: mg/L	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimi	t HighLimit %RPD	RPDLimit Qual
Fluoride	2.5 0.10 2.40			
Nitrogen, Nitrate (As N)	7.4 0.10 7.20	0 0 103 90	110	
Sample ID A5	SampType: CCV_5	TestCode: EPA Metho	d 300.0: Anions	
Client ID: BatchQC	Batch ID: R14218	RunNo: 14218		
Prep Date:	Analysis Date: 10/19/2013	SeqNo: 407476	Units: mg/L	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimi	HighLimit %RPD	RPDLimit Qual
Fluoride	1.7 0.10 1.60		110	
Nitrogen, Nitrate (As N)	4.7 0.10 4.80	0 0 98.9 90	110	
Sample ID A5	SampType: CCV_5	TestCode: EPA Metho	d 300.0: Anions	
Client ID: BatchQC	Batch ID: R14248	RunNo: 14248		
Prep Date:	Analysis Date: 10/21/2013	SeqNo: 408497	Units: mg/L	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- RSD is greater than RSDlimit O
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:		Enterprise WEP II	I Water	Sampling							
Sample ID	A5	Samp	Туре: С	CV_5	Tes	tCode: E	PA Method	300.0: Anion	S		
Client ID:	BatchQ	C Bate	ch ID: R	14248	F	RunNo: 1	14248				
Prep Date:		Analysis	Date: 1	10/21/2013	;	SeqNo: 4	108497	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		20	0.50	20.00	0	101	90	110			
Sample ID	МВ	Samp	Type: M	BLK	Tes	tCode: E	PA Method	300.0: Anion	3		
Client ID:	PBW	Bato	ch ID: R	14248	F	RunNo: 1	14248				
Prep Date:		Analysis	Date: 1	0/21/2013		SeqNo: 4	108499	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		ND	0.50	)							
Sample ID	LCS	Samp	Type: L	cs	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	LCSW	Bato	ch ID: R	14248	F	RunNo: 1	14248				
Prep Date:		Analysis	Date: 1	0/21/2013		SeqNo: 4	108500	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		10	0.50	10.00	0	102	90	110			
Sample ID	A6	Samp	Type: C	CV_6	Tes	tCode: E	PA Method	300.0: Anions	3	-	
Client ID:	BatchQ	Bato	ch ID: R	14248	F	RunNo: 1	14248				
Prep Date:		Analysis	Date: 1	0/21/2013	5	SeqNo: 4	108509	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		31	0.50	30.00	0	103	90	110			
Sample ID	A4	Samp	Туре: С	CV_4	Tes	tCode: E	PA Method	300.0: Anions	;		
Client ID:	BatchQ	Bato	ch ID: R	14248	F	RunNo: 1	14248				
Prep Date:		Analysis	Date: 1	0/21/2013	5	SeqNo: 4	108521	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		12	0.50	12.50	0	96.4	90	110			
Sample ID	A5	Samp	Type: C	CV_5	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	BatchQ	Bato	h ID: R	14248	F	RunNo: 1	4248				
Prep Date:		Analysis	Date: 1	0/21/2013	8	SeqNo: 4	108533	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### Qualifiers:

Sulfate

Value exceeds Maximum Contaminant Level.

20

0.50

20.00

- E Value above quantitation range
- Analyte detected below quantitation limits
- o RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded

90

110

Not Detected at the Reporting Limit

98.5

- Sample pH greater than 2 for VOA and TOC only.
- RLReporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:		ise WEP III									
Sample ID	A6	SampT	ype: C0	CV_6	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	BatchQC	Batch	ID: R1	4248	ı	RunNo: 1	4248				
Prep Date:		Analysis D	ate: 1	0/21/2013	;	SeqNo: 4	108545	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		31	0.50	30.00	0	103	90	110			
Sample ID	МВ	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	PBW	Batch	ID: R1	4248	F	RunNo: 1	4248				
Prep Date:		Analysis D	ate: 10	0/21/2013		SeqNo: 4	108547	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		ND	0.50								
Sample ID	LCS	SampT	ype: LC	s	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	LCSW	Batch	ID: R1	4248	F	RunNo: 1	4248				
Prep Date:		Analysis D	ate: 10	0/21/2013	•	SeqNo: 4	08548	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		9.9	0.50	10.00	0	98.9	90	110			
Sample ID	A4	SampT	ype: CC	CV_4	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	BatchQC	Batch	ID: <b>R1</b>	4248	F	RunNo: 1	4248				
Prep Date:		Analysis D	ate: 10	0/21/2013	5	SeqNo: 4	08557	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		12	0.50	12.50	0	96.4	90	110			
Sample ID	A6	SampT	pe: CC	CV_6	Tes	tCode: E	PA Method	300.0: Anions	;		
Client ID:	BatchQC	Batch	ID: <b>R1</b>	4248	F	RunNo: 1	4248				
Prep Date:		Analysis Da	ate: 10	0/22/2013	5	SeqNo: 4	08568	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate		31	0.50	30.00	0	103	90	110			
Sample ID	A4	SampT	/pe: CC	V_4	Tes	tCode: E	PA Method	300.0: Anions	3		
Client ID:	BatchQC	Batch	ID: R1	4248	F	RunNo: 1	4248				
Prep Date:		Analysis Da	ate: 10	0/22/2013	5	SeqNo: 4	08575	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

#### Qualifiers:

Sulfate

\* Value exceeds Maximum Contaminant Level.

12

0.50

12.50

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank

90

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

96.3

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

reparation of analysis exceeded

110

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## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client: HRL Compliance Solutions

Project: Enterprise WEP III Water Sampling

Sample ID	A5	SampType: CCV_5	TestCode: EPA Method	300.0: Anions	
Client ID:	BatchQC	Batch ID: R14286	RunNo: 14286		
Prep Date:		Analysis Date: 10/22/2013	SeqNo: 409825	Units: mg/L	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride		7.9 0.50 8.000	0 98.5 90	110	
Sample ID	MB	SampType: MBLK	TestCode: EPA Method	300.0: Anions	
Client ID:	PBW	Batch ID: R14286	RunNo: 14286		
Prep Date:		Analysis Date: 10/22/2013	SeqNo: 409827	Units: mg/L	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride		ND 0.50			
Sample ID	LCS-b	SampType: LCS	TestCode: EPA Method	300.0: Anions	
Client ID:	LCSW	Batch ID: R14286	RunNo: 14286		
Prep Date:		Analysis Date: 10/22/2013	SeqNo: 409829	Units: mg/L	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride		4.7 0.50 5.000	0 94.6 90	110	
Sample ID	A6	SampType: CCV_6	TestCode: EPA Method	300.0: Anions	
Client ID:	BatchQC	Batch ID: R14286	RunNo: 14286		
Prep Date:		Analysis Date: 10/22/2013	SeqNo: 409837	Units: mg/L	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride		13 0.50 12.00	0 104 90	110	
Sample ID	A4	SampType: CCV_4	TestCode: EPA Method	300.0: Anions	
Client ID:	BatchQC	Batch ID: R14286	RunNo: 14286		
Prep Date:		Analysis Date: 10/22/2013	SeqNo: 409849	Units: mg/L	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride		4.8 0.50 5.000	0 95.4 90	110	
Sample ID	A5	SampType: CCV_5	TestCode: EPA Method	300.0: Anions	
Client ID:	BatchQC	Batch ID: R14286	RunNo: 14286		
1					

## Qualifiers:

Prep Date:

Analyte

Chloride

\* Value exceeds Maximum Contaminant Level.

Analysis Date: 10/22/2013

**PQL** 

0.50

Result

7.9

SPK value SPK Ref Val

0

8.000

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

SeqNo: 409861

98.4

%REC LowLimit

90

Units: mg/L

HighLimit

110

%RPD

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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**RPDLimit** 

Qual

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:		rise WEP III Wat								
Sample ID	A6	SampType:	CCV_6	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	BatchQC	Batch ID:	R14286	F	RunNo: 1	14286				
Prep Date:		Analysis Date:	10/22/2013	,	SeqNo: 4	109873	Units: mg/L			
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		12 0.	50 12.00	0	103	90	110			
Sample ID	A4	SampType:	CCV_4	Tes	tCode: E	PA Method	300.0: Anion	s		
Client ID:	BatchQC	Batch ID:	R14286	F	RunNo: 1	4286				
Prep Date:		Analysis Date:	10/22/2013	5	SeqNo: 4	109885	Units: mg/L			
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.7 0.	50 5.000	0	94.8	90	110			
Sample ID	МВ	SampType:	MBLK	Tes	tCode: E	PA Method	300.0: Anion	S		
Client ID:	PBW	Batch ID:	R14286	F	RunNo: 1	4286				
Prep Date:		Analysis Date:	10/23/2013	5	SeqNo: 4	09895	Units: mg/L			
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 0.	50						_	
Sample ID	LCS	SampType:	LCS	Tes	tCode: E	PA Method	300.0: Anion	\$		
Client ID:	LCSW	Batch ID:	R14286	F	RunNo: 1	4286				
Prep Date:		Analysis Date:	10/23/2013	8	SeqNo: 4	09896	Units: mg/L			
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.7 0.	50 5.000	0	93.5	90	110			
Sample ID	A5	SampType:	CCV_5	Tes	Code: E	PA Method	300.0: Anion	3		
Client ID:	BatchQC	Batch ID:	R14286	F	RunNo: 1	4286				
Prep Date:		Analysis Date:	10/23/2013	S	eqNo: 4	09897	Units: mg/L			
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		7.8 0.9	50 8.000	0	97.7	90	110			
Sample ID	A6	SampType:	CCV_6	Test	Code: El	PA Method	300.0: Anions	3		
Client ID:	BatchQC	Batch ID:	R14286	R	unNo: 1	4286				
Prep Date:		Analysis Date:	10/23/2013	S	eqNo: 4	09909	Units: mg/L			
Analyte		Result PQ		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		12 0.9	50 12.00	0	103	90	110			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDImit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

- Page 17 of 27
- Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

HRL Compliance Solutions

Project:

Enterprise WEP III Water Sampling

Sample ID A4

SampType: CCV\_4

TestCode: EPA Method 300.0: Anions

Client ID: BatchQC

Batch ID: R14286

RunNo: 14286

Prep Date:

Units: mg/L

Analysis Date: 10/23/2013

SeqNo: 409921

Analyte

SPK value SPK Ref Val 0.50

%REC

HighLimit LowLimit

**RPDLimit** %RPD

Qual

Chloride

4.8

5.000

0

96.3

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

0 RSD is greater than RSDlimit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

P Sample pH greater than 2 for VOA and TOC only.

Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Result

Result

0.11

0.11

Project:

Enterprise WEP III Water Sampling

Sample ID MB-9954

SampType: MBLK

TestCode: EPA Method 8011/504.1: EDB

Analyte

Client ID: PBW Batch ID: 9954

RunNo: 14254

Prep Date: 10/22/2013 Analysis Date: 10/22/2013 **PQL** 

SeqNo: 409071

Units: µg/L HighLimit

%RPD

**RPDLimit** 

Qual

1,2-Dibromo-3-chloropropane 1.2-Dibromoethane

ND 0.10 ND 0.010

Sample ID LCS-9954

SampType: LCS

SPK value SPK Ref Val %REC LowLimit

TestCode: EPA Method 8011/504.1: EDB

Client ID: LCSW

Batch ID: 9954

RunNo: 14254

Prep Date: 10/22/2013

Analysis Date: 10/22/2013

SeqNo: 409072

Units: µg/L

Analyte

SPK value SPK Ref Val **PQL** 

%REC LowLimit 110

0

HighLimit 130 %RPD **RPDLimit** Qual

1,2-Dibromo-3-chloropropane 1,2-Dibromoethane

0.10 0.1000 0.010 0.1000

107

70 70 130

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit

Page 19 of 27

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

HRL Compliance Solutions

Project:

Enterprise WEP III Water Sampling

Sample ID	MB 0003	SampT	was: ME	DI 1/	Ton	Codo: E	DA Mathad	9092: BCB's			
Sample ID		•	ype: ME			TestCode: EPA Method 8082: PCB's					
Client ID:	PBW	Batcr	1D: 99	93	RunNo: <b>14435</b>						
Prep Date:	10/24/2013	Analysis D	ate: 10	0/29/2013	5	SeqNo: 4	14697	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016		ND	1.0								
Aroclor 1221		ND	1.0								
Arodor 1232		ND	1.0								
Aroclor 1242		ND	1.0								
Aroclor 1248		ND	1.0								
Aroclor 1254		ND	1.0								
Aroclor 1260		ND	1.0								
Surr: Decachle	orobiphenyl	1.9		2.500		76.8	17	123			
Surr: Tetrachle	oro-m-xylene	1.7		2.500		66.8	22.6	113			
Sample ID I	LCS-9993	SampT	ype: LC	s	Test	Code: El	PA Method	8082: PCB's			
Client ID: L	LCSW	93	R	tunNo: 14	4435						
Prep Date:	10/24/2013	Analysis D	ate: 10	/29/2013	s	eqNo: 4	14698	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016		3.9	1.0	5.000	0	77.4	18.6	134			
Aroclor 1260		4.1	1.0	5.000	0	82.2	35.7	137			
Surr: Decachlo	orobiphenyl	1.9		2.500		77.6	17	123			
Surr: Tetrachlo	oro-m-xylene	1.7		2.500		69.2	22.6	113			
Sample ID 1	1310902-001DMS	SampT	ype: MS		Test	Code: EF	PA Method	8082: PCB's			****
Client ID:	Marley Well Seg. 5	5 Batch	ID: 999	93	R	unNo: 14	4435				
Prep Date:	10/24/2013	Analysis D	ate: 10	/29/2013	S	eqNo: 4	14724	Units: µg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016		3.5	1.0	5.000	0	70.2	70	130			
Aroclor 1260		4.3	1.0	5.000	0	85.8	61.1	129			
Surr: Decachle	orobiphenyl	2.3		2.500		90.4	17	123			
Surr: Tetrachlo	oro-m-xylene	1.7		2.500		67.2	22.6	113			
Sample ID 1	1310902-001DMSE	SampT	ype: MS	SD .	Test	Code: EF	PA Method	8082: PCB's			
Client ID:	Marley Well Seg. 5	Batch	ID: 999	93	R	unNo: 14	1435				
Prep Date:	10/24/2013	Analysis Da	ate: 10	/29/2013	S	eqNo: 41	14725	Units: µg/L			

#### Qualifiers:

Analyte

Aroclor 1016

Aroclor 1260

Surr: Decachlorobiphenyl

Surr: Tetrachloro-m-xylene

\* Value exceeds Maximum Contaminant Level.

Result

3.7

4.5

2.4

1.8

PQL

1.0

1.0

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

LowLimit

70

17

61.1

22.6

HighLimit

130

129

123

113

%RPD

4.95

5.57

0

0

ND Not Detected at the Reporting Limit

%REC

73.7

90.8

96.4

71.2

0

0

- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

SPK value SPK Ref Val

5.000

5.000

2.500

2.500

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**RPDLimit** 

20

0

0

12.9

Qual

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:

Enterprise WEP III Water Sampling

Sample ID 5ml rb	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: <b>R1</b>	4211	F	RunNo: 1	4211				
Prep Date:	Analysis D	ate: 10	)/18/2013	5	SeqNo: 4	09253	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
. ,										

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1310902

15-Nov-13

Client:

**HRL** Compliance Solutions

Project:

Enterprise WEP III Water Sampling

Sample ID 5ml rb	SampT	уре: МЕ	BLK	Tes	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	1D: <b>R1</b>	4211	F	tunNo: 1	4211				
Prep Date:	Analysis D	ate: 10	/18/2013	S	eqNo: 4	09253	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.8	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	9.2		10.00		92.4	70	130			

Sample ID 100ng Ics	SampType: LCS			Tes						
Client ID: LCSW	Batc	Batch ID: <b>R14211</b> Analysis Date: <b>10/18/2013</b>			RunNo: 1	4211				
Prep Date:	Analysis [				SeqNo: 4	09255	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	23	1.0	20.00	0	116	82.2	124			
Chlorobenzene	21	1.0	20.00	0	106	70	130			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client: HRL Compliance Solutions

Project: Enterprise WEP III Water Sampling

Sample ID 100ng Ics	SampType: LCS			Tes	TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch	1D: <b>R1</b>	4211	F	RunNo: 1	4211					
Prep Date:	Analysis D	ysis Date: 10/18/2013 SeqNo: 409255 Ur				Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,1-Dichloroethene	25	1.0	20.00	0	127	83.5	155				
Trichloroethene (TCE)	22	1.0	20.00	0	112	70	130				
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130				
Surr: 4-Bromofluorobenzene	8.8		10.00		88.3	70	130				
Surr: Dibromofluoromethane	8.7		10.00		86.6	70	130				
Surr: Toluene-d8	9.5		10.00		95.1	70	130				

Sample ID 1310902-001ams	SampT	ype: MS	3	Tes	TestCode: EPA Method 8260B: VOLATILES					
Client ID: Marley Well Seg.	5 Batch	1D: <b>R1</b>	4211	F	RunNo: 1	4211				
Prep Date:	Analysis D	ate: 10	)/18/2013	S	SeqNo: 4	09258	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	67.9	137			
Toluene	22	1.0	20.00	0	109	77	127			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	121	66.5	131			
Trichloroethene (TCE)	20	1.0	20.00	0	102	66.3	134			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.6	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.8	70	130			
Surr: Dibromofluoromethane	8.3		10.00		83.0	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Sample ID 1310902-001amsd	SampT	ype: <b>MS</b>	SD	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: Marley Well Seg.	5 Batch	1D: <b>R1</b>	4211	F	RunNo: 1	4211				
Prep Date:	Analysis D	ate: 10	)/18/2013	S	SeqNo: 4	09259	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	67.9	137	0.575	20	
Toluene	22	1.0	20.00	0	110	77	127	0.601	20	
Chlorobenzene	20	1.0	20.00	0	102	70	130	1.28	20	
1,1-Dichloroethene	23	1.0	20.00	0	116	66.5	131	4.54	20	
Trichloroethene (TCE)	19	1.0	20.00	0	97.0	66.3	134	5.14	20	
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.1		10.00		90.9	70	130	0	0	
Surr: Dibromofluoromethane	8.8		10.00		88.2	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		95.5	70	130	0	0	

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: 1310902

15-Nov-13

Client: HRL Compliance Solutions

Project: Enterprise WEP III Water Sampling

Sample ID MB-9994	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8310: PAHs			
Client ID: PBW	Batcl	h ID: 999	34	F	RunNo: 1	4437				
Prep Date: 10/24/2013	Analysis E	Date: 10	/30/2013	5	SeqNo: 4	14816	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	2.0								
2-Methylnaphthalene	ND	2.0								
Acenaphthylene	ND	2.5								
Acenaphthene	ND	5.0								
Fluorene	ND	0.80								
Phenanthrene	ND	0.60								
Anthracene	ND	0.60								
Fluoranthene	ND	0.30								
Pyrene	ND	0.30								
Benz(a)anthracene	ND	0.070								
Chrysene	ND	0.20								
Benzo(b)fluoranthene	ND	0.10								
Benzo(k)fluoranthene	ND	0.070								
Benzo(a)pyrene	ND	0.070								
Dibenz(a,h)anthracene	ND	0.12								
Benzo(g,h,i)perylene	ND	0.12								
Indeno(1,2,3-cd)pyrene	ND	0.25								
Surr: Benzo(e)pyrene	21		20.00		105	43.2	113			

Sample ID LCS-9994	SampType: LCS TestCode: EPA Method 8310: PAHs									_
Client ID: LCSW	Batcl	h ID: 99	94	F	RunNo: 1	4437				
Prep Date: 10/24/2013	Analysis D	)ate: 10	0/30/2013	S	SeqNo: 4	14818	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	48	2.0	80.00	0	60.6	50.3	86.5			
1-Methylnaphthalene	49	2.0	80.20	0	61.2	50.3	91.6			
2-Methylnaphthalene	51	2.0	80.00	0	63.9	48.2	94.9			
Acenaphthylene	51	2.5	80.20	0	63.6	53.2	93.7			
Acenaphthene	50	5.0	80.00	0	62.5	51.6	95.9			
Fluorene	5.1	0.80	8.020	0	63.1	31.9	97.4			
Phenanthrene	2.7	0.60	4.020	0	66.4	52.7	90.3			
Anthracene	2.6	0.60	4.020	0	65.4	49.9	88.1			
Fluoranthene	5.4	0.30	8.020	0	66.8	51.4	94.4			
Pyrene	4.5	0.30	8.020	0	55.9	47.7	89.5			
Benz(a)anthracene	0.50	0.070	0.8020	0	62.3	34.2	108			
Chrysene	2.5	0.20	4.020	0	61.2	32.9	96.8			
Benzo(b)fluoranthene	0.66	0.10	1.002	0	65.9	55.9	103			
Benzo(k)fluoranthene	0.33	0.070	0.5000	0	66.0	57.9	108			

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

HRL Compliance Solutions

Project:

Enterprise WEP III Water Sampling

Sample ID LCS-9994	SampType: LCS			Tes	tCode: E	PA Method	<u> </u>			
Client ID: LCSW	Batcl	h ID: 99	94	F	RunNo: 1	4437				
Prep Date: 10/24/2013	Analysis Date: 10/30/2013			8	SeqNo: 4	14818	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.32	0.070	0.5020	0	63.7	55.6	107			
Dibenz(a,h)anthracene	0.66	0.12	1.002	0	65.9	57.9	104			
Benzo(g,h,i)perylene	0.59	0.12	1.000	0	59.0	57.2	105			
Indeno(1,2,3-cd)pyrene	1.5	0.25	2.004	0	72.9	53.5	102			
Surr: Benzo(e)pyrene	18		20.00		91.4	43.2	113			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 25 of 27

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:

Enterprise WEP III Water Sampling

Sample ID MB-9927

SampType: MBLK

TestCode: Total Phenolics by SW-846 9067

Client ID:

PBW

Batch ID: 9927

**PQL** 

2.5

RunNo: 14212 SeqNo: 407258

Units: µg/L

**RPDLimit** 

Qual

Analyte

Prep Date: 10/21/2013

Analysis Date: 10/21/2013

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

%RPD

Phenolics, Total Recoverable

ND

Result

Result

Sample ID LCS-9927 Client ID: LCSW

Prep Date: 10/21/2013

SampType: LCS

Analysis Date: 10/21/2013

RunNo: 14212

Batch ID: 9927

SeqNo: 407259

Units: µg/L

**RPDLimit** Qual

Analyte

**PQL** 

SPK value SPK Ref Val 20.00

%REC 92.8

LowLimit

HighLimit

Phenolics, Total Recoverable

19

2.5

TestCode: Total Phenolics by SW-846 9067

125

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range Ε

Analyte detected below quantitation limits

O RSD is greater than RSDlimit

RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits В Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH greater than 2 for VOA and TOC only.

RLReporting Detection Limit Page 26 of 27

### **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1310902

15-Nov-13

Client:

**HRL Compliance Solutions** 

Project:

Client ID:

Enterprise WEP III Water Sampling

Sample ID MB-9903

SampType: MBLK

TestCode: SM2540C MOD: Total Dissolved Solids

**PBW** 

Batch ID: 9903

RunNo: 14238

Prep Date: 10/18/2013

Analysis Date: 10/21/2013 **PQL** 

Analyte

SPK value SPK Ref Val %REC LowLimit

Units: mg/L SeqNo: 407891

> %RPD **RPDLimit**

Qual

Total Dissolved Solids

ND 20.0

Sample ID LCS-9903

SampType: LCS

TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: LCSW

Batch ID: 9903

RunNo: 14238

Units: mg/L

HighLimit

Prep Date: 10/18/2013 Analysis Date: 10/21/2013

SeqNo: 407892

Analyte

**PQL** 

HighLimit

%RPD **RPDLimit**  Qual

20.0

1000

100

Total Dissolved Solids

SPK value SPK Ref Val

1000

Result

%REC

80

LowLimit

120

Qualifiers:

Value exceeds Maximum Contaminant Level.

Spike Recovery outside accepted recovery limits

Value above quantitation range E

J Analyte detected below quantitation limits

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

Analyte detected in the associated Method Blank В

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH greater than 2 for VOA and TOC only.

Reporting Detection Limit

Page 27 of 27



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

### Sample Log-In Check List

Client Name: HRL COMPLIANCE SOL Work Order Number	or: 1310902		RcptNo: 1
Received by/date: U6 101713			
Logged By: Lindsay Mangin 10/17/2013 5:00:00 F	PM	of little	
Completed By: Lindsay Mangin 10/18/2013 7:38:34 A	<b>AM</b>	And Hope	
Reviewed By: MA 10(18/13		000	
Chain of Custody			
1. Custody seals intact on sample bottles?	Yes 🗀	No 🗆	Not Present <b>⊻</b>
2. Is Chain of Custody complete?	Yes ☑	No 🗌	Not Present
3. How was the sample delivered?	Client		
l on In			
Log In	Yes 🗹	No 🗌	na 🗆
4. Was an attempt made to cool the samples?	Tes 💌	140 🗀	
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆
6. Sample(s) in proper container(s)?	Yes 🗹	No 🗀	
7. Sufficient sample volume for indicated test(s)?	Yes 🗹	No 🗌	
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗸	No 🗌	
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗆
10.VOA vials have zero headspace?	Yes 🗹	No 🗌	No VOA Viais
11. Were any sample containers received broken?	Yes	No 🗹	# of preserved
			bottles checked
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No □	for pH: (<2 or > 2 Unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗆	Adjusted
14. Is it clear what analyses were requested?	Yes 🗹	No 🗆	0.0
15. Were all holding times able to be met?	Yes 🗹	No 🗆	Checked by:
(If no, notify customer for authorization.)			O
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗆	na 🗹
Person Notified: Date:			
By Whom: Via:	The state of the s	Phone Fax	☐ In Person
Regarding:			
Client Instructions:	AND AND ADDRESS OF THE PARTY OF		A. C.
17. Additional remarks:	his ac and collect dis or half his cod de dis its affaile, at 1 *** . *	y sy salahada salahan kananadariya	A MANAGEMENT OF THE STATE OF TH
18. Cooler Information  Cooler No Temp C Condition Seal Intact Seal No	Seal Date	Signed By	
1 4.4 Good Not Present	Jean Date	AMING DY	
<u> </u>			

	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	(*O	PCB's	(1.80 (1.40) (1.40) (1.40) (1.40) (1.40) (1.40) (1.40) (1.40)	(GH 50) or tales of 41	BTEX + MTI TPH 8015B TPH (Metho TPH (Metho TPH) (Metho	×									Remarks:	Y This contact of the
Turn-Around Time:	□ Standard □ Rush	Project Name:	Weter Sempling	Project # 13 - 116. ك	Second 5 Marian Well	Project Manager:	Therese Ancen	Sampler: Mark Sikelianos	e Temperature: 4.4	Container Preservative HEAL NO X Type and # Type HEAL NO X X Type	3-40m1 We locy -CO	2.40 m1 vbr 5 Sort	1- L Ambaldasey	1-500 M Pist	1- 50 m LA box	3	HOW IN DOOR			Received by:  Date Time Ren Received by:  Date Time	>
	Client: HRI Compigace Solutions Inc		Mailing Address: 2385 Fy2 Road	en Co 81635		britang.com	QA/QC Package:	Accreditation	□ EDD (Type)	Matrix Sample Request ID	2 23 Nath ye Marion Bases 5 Marion War Ser, 5	-							C	Sate: Time: Relinquishery:	

### Jones, Brad A., EMNRD

From: Eileen Shannon < EShannon@kleinfelder.com > Sent: Wednesday, October 23, 2013 9:43 AM

To: Jones, Brad A., EMNRD

Cc: jagwhite@eprod.com (jagwhite@eprod.com); Runell Seale (RSeale@eprod.com); Heap,

James; Theresa Ancell; Luke Davis (luke1d@msn.com)

Subject: RE: HIP-125 - WEP III - Seg 5 additional water source information for hydrostatic

testing

Brad, based on our discussion a few minutes ago, I am retracting this email request. I will resubmit it in a new email and will not include the Marley well.

Once the analytical results are received from the Marley well, I will submit an additional request to add the Marley well, with a copy of the analytical.

Thanks, Eileen

From: Eileen Shannon

Sent: Wednesday, October 23, 2013 8:16 AM

**To:** Jones, Brad A., EMNRD (<u>brad.a.jones@state.nm.us</u>)

Cc: jagwhite@eprod.com (jagwhite@eprod.com); Runell Seale (RSeale@eprod.com); Heap, James; Theresa Ancell; Luke

Davis (luke1d@msn.com)

**Subject:** HIP-125 - WEP III - Seg 5 additional water source information for hydrostatic testing

Hi Brad.

On behalf of Enterprise Products Operating Company LLC (Enterprise), Kleinfelder West, Inc. is submitting this notice of a change in source water for hydrostatic testing of Segment 5 of Enterprise's Western Expansion Pipeline III.

Because of difficulties with their water system, the original proposed source for water (Vaughn Duran Water System) may not have sufficient water, or any water, available to Enterprise for use in the hydrostatic test. In addition to the Vaughn Duran Water System, Enterprise would like to add the following as potential sources of water for the Segment 5 hydrostatic testing:

- Roswell Municipal Water System (Water System No. NM3520203); and
- Marley Well (33.623692°, -104.545024°)

Radium concentrations are as follows:

- **Roswell Municipal Water System** 
  - o Rad-266 0.31 pCi/L
  - Rad-228 0.04 pCi/L
- Marley Well (Radium results pending sample collected on 10/21/13 (COC attached))

Available laboratory analytical data is attached for Roswell MWS. The Marley well was sampled on 10/17/13 for NMAC 20.6.2.3103 constituents (except radium which was collected for analysis on 10/21/13). Results will be submitted to you once they are received.

Please call if you have questions or need additional information

Eileen

Eileen Shannon P.G.
Project Manager
9019 Washington NE, Building A
Albuquerque, NM 87113
o| 505.344.7373 Ext. 254
c| 505.307.0722
f| 505.344.1711



#### Jones, Brad A., EMNRD

From: Eileen Shannon <EShannon@kleinfelder.com>

Sent: Wednesday, October 23, 2013 8:16 AM

**To:** Jones, Brad A., EMNRD

Cc: jagwhite@eprod.com (jagwhite@eprod.com); Runell Seale (RSeale@eprod.com); Heap,

James; Theresa Ancell; Luke Davis (luke1d@msn.com)

**Subject:** HIP-125 - WEP III - Seg 5 additional water source information for hydrostatic testing

Attachments: RMWS.pdf; COC Marley Well.pdf; Marley well radium COC.pdf

Hi Brad,

On behalf of Enterprise Products Operating Company LLC (Enterprise), Kleinfelder West, Inc. is submitting this notice of a change in source water for hydrostatic testing of Segment 5 of Enterprise's Western Expansion Pipeline III.

Because of difficulties with their water system, the original proposed source for water (Vaughn Duran Water System) may not have sufficient water, or any water, available to Enterprise for use in the hydrostatic test. In addition to the Vaughn Duran Water System, Enterprise would like to add the following as potential sources of water for the Segment 5 hydrostatic testing:

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- Marley Well (33.623692°, -104.545024°)

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Please call if you have questions or need additional information

Eileen

Eileen Shannon P.G. Project Manager 9019 Washington NE, Building A Albuquerque, NM 87113 o| 505.344.7373 Ext. 254 c| 505.307.0722 f| 505.344.1711



### **Chem/Rad Sample Results**

#### **Return Links**

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No. :	NM3520203	Federal Type :	С
Water System Name :	ROSWELL MUNICIPAL WATER SYSTEM	State Type :	C
Principal County Served :	CHAVES	Primary Source :	GW
Status : Lab Sample No. :	A 1309223-002A	Activity Date : Collection Date :	06-01-1977 08-31-2013

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Analyte Code	e Name Cod		INSA	Level Type	Reporting Level	Concentration	Monitoring Period Begin Date	Period End	
	COPPER, FREE	200.8	N	MRL	.01 MG/L	0.30 MG/L	01-01-2013	12-31-2015	
1030	LEAD	200.8	N	MRL	.001 MG/L	0.0013 MG/L	01-01-2013	12-31-2015	

### **Chem/Rad Sample Results**

Return Links

Water System No.: NM3520203

Federal Type: C

Water System Name :

Lab Sample No.:

CHLOROFORM

BROMOFORM

TTHM

Status:

Analyte

Code

2941

2942

2943

2944

2950

ROSWELL MUNICIPAL WATER SYSTEM

Less

than

Indicato

Y

Y

Y

N

1307937-001A

Method

Code

524.2

524.2

524.2

524.2

524.2

State Type:

level

0.0 UG/L

Principal County Served : CHAVES

**Analyte Name** 

BROMODICHLOROMETHANE

DIBROMOCHLOROMETHANE

Primary Source : Activity Date : Collection Date :

Level Reporting Concentration

Level

5 UG/L

5 UG/L

5 UG/L

5 UG/L

0 UG/L

GW 06-01-1977 07-16-2013

Period

Begin Date

Monitoring Monitoring

01-01-2013 | 12-31-2013

Period End

Date

Chem/Rad Samples

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE \$\infty\$ MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Type

MRL

MRL

MRL

MRI

MRL

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

### Glossary

### **Chem/Rad Sample Results**

Return Links

Water System No.:

NM3520203

Federal Type: ROSWELL MUNICIPAL WATER State Type:

C

Chem/Rad

Water System Name:

**SYSTEM** 

C

Samples

**Principal County** Served:

**CHAVES** 

**Primary Source:** 

GW

Analyte List

Status: Lab Sample No.:

1307963-001A

Activity Date : Collection Date : 06-01-1977 07-16-2013

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Analyte Code	Analyte Name	Method Code	Less than Indicator	Level Type		Concentration level	Monitoring Period Begin Date	Period End
2378	1,2,4- TRICHLOROBENZENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
	CIS-1,2- DICHLOROETHYLENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2955	XYLENES, TOTAL	524.2	Y	MRL	1 UG/L		01-01-2013	12-31-2013
2964	DICHLOROMETHANE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2968	O-DICHLOROBENZENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2969	P-DICHLOROBENZENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2976	VINYL CHLORIDE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2977	1,1-DICHLOROETHYLENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
	TRANS-1,2- DICHLOROETHYLENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2980	1,2-DICHLOROETHANE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2981	1,1,1-TRICHLOROETHANE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
1 7007	CARBON TETRACHLORIDE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2983	1,2-DICHLOROPROPANE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2984	TRICHLOROETHYLENE	524.2	N	MRL	.5 UG/L	2.8 UG/L	01-01-2013	12-31-2013
2985	1,1,2-TRICHLOROETHANE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2987	TETRACHLOROETHYLENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2989	CHLOROBENZENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2990	BENZENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2991	TOLUENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2992	ETHYLBENZENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013
2996	STYRENE	524.2	Y	MRL	.5 UG/L		01-01-2013	12-31-2013

### **Chem/Rad Sample Results**

#### **Return Links**

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No. :	NM3520203	Federal Type :	C
Motor System Name	. ROSWELL MUNICIPAL	State Turns	0

Water System Name : WATER SYSTEM State Type :

Principal County Served : CHAVES Primary Source : GW

 Status:
 A
 Activity Date:
 06-01-1977

 Lab Sample No.:
 1307971-001A
 Collection Date:
 07-16-2013

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE  $\Leftrightarrow$  MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Analyte Code	Analyte Name	Method Code	Less than Indicator			Concentration		Monitoring Period End Date
1 103X	NITRATE- NITRITE	300.0	N	MRL	1 MG/L	1.3 MG/L	01-01-2013	12-31-2013

### **Chem/Rad Sample Results**

#### **Return Links**

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No. :	NM3520203	Federal Type :	С
Water System Name :	ROSWELL MUNICIPAL WATER SYSTEM	State Type :	C
Principal County Served :	CHAVES	Primary Source :	GW
Status : Lab Sample No. :	A 1102318-02A	Activity Date : Collection Date :	06-01-1977 02-08-2011

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE >> MOR) associated to the selected sample. Results for Microbial Analytes are not included.

1	Analyte Code			Less than Indicator			Concentration level		Monitoring Period End Date
	1025	FLUORIDE	300.0	N	MRL	.1 MG/L	0.86 MG/L	01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

#### Return Links

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No. : NM3520203 Federal Type: ROSWELL MUNICIPAL Water System Name: State Type:  $\mathbf{C}$ WATER SYSTEM **Principal County CHAVES** Primary Source: GW Served: 06-01-1977 Status: **Activity Date:** Lab Sample No.: 1102318-06A **Collection Date:** 02-08-2011

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results for Microbial Analytes are not included.

	Analyte Code	Analyte Name	Method Code	Less than Indicator			Concentration		Monitoring Period End Date
1	1024	CYANIDE	335.4	Y	MRL	.01 MG/L		01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

#### **Return Links**

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

#### Glossary

Water System No.: Federal Type: NM3520203 ROSWELL MUNICIPAL Water System Name: State Type:  $\mathbf{C}$ **WATER SYSTEM Principal County CHAVES** Primary Source: GW Served: Status: **Activity Date:** 06-01-1977

Collection Date:

02-08-2011

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE  $\Leftrightarrow$  MOR) associated to the selected sample. Results for Microbial Analytes are not included.

1102318-05A

Lab Sample No.:

A m a livita	Analista	Method	Less	Larval	Danautina	Componentian	Monitoring	Monitoring
Analyte Code	Analyte Name	Code	than Indicator	Tyna		Concentration level	Period Begin Date	Period End Date
1005	ARSENIC	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1010	BARIUM	200.7	N	MRL	.002 MG/L	0.020 MG/L	01-01-2011	12-31-2013
1015	CADMIUM	200.7	Y	MRL	.002 MG/L		01-01-2011	12-31-2013
1020	CHROMIUM	200.7	Y	MRL	.006 MG/L		01-01-2011	12-31-2013
1035	MERCURY	245.1	Y	MRL	.0002 MG/L		01-01-2011	12-31-2013
1036	NICKEL	200.7	Y	MRL	.01 MG/L		01-01-2011	12-31-2013
1045	SELENIUM	200.8	N	MRL	.001 MG/L	0.0012 MG/L	01-01-2011	12-31-2013
1052	SODIUM	200.7	N	MRL	1 MG/L	25.00 MG/L		
1074	ANTIMONY, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1075	BERYLLIUM, TOTAL	200.7	Y	MRL	.002 MG/L		01-01-2011	12-31-2013
1085	THALLIUM, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1095	ZINC	200.7	Y	MRL	.01 MG/L			

### **Chem/Rad Sample Results**

Return Links

Water System No. :

Lab Sample No. :

NM3520203 ROSWELL MUNICIPAL WATER

SYSTEM

Federal Type:

C

C State Type: GW **Primary Source:** 

Chem/Rad Samples

Water System Name: Principal County Served: CHAVES Status:

1102318-04A

**Activity Date:** 06-01-1977 Collection Date : 02-08-2011

Analyte List

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE <> MOR)

associated to the selected sample. Results for Microbial Analytes are not included.

Water System Detail Water Systems Water System Search County Map Glossary

ſ	Analyte		Method	Less	Level	Reporting	Concentration	Monitoring	Monitoring
ľ	Code	Analyte Name	Code	tnan	Type		level	rerioa	Period End
-				Indicator		<u> </u>		Begin Date	
ļ		ENDRIN	505	Y	MRL	.02 UG/L		01-01-2011	
L		BHC-GAMMA	505	Y	MRL	.04 UG/L		01-01-2011	12-31-2013
L	2015	METHOXYCHLOR	505	Y	MRL	.2 UG/L		01-01-2011	12-31-2013
L	2020	TOXAPHENE	505	Y	MRL	2 UG/L		01-01-2011	12-31-2013
L	2031	DALAPON	515.1	Y	MRL	1 UG/L		01-01-2011	12-31-2013
L	2032	DIQUAT	549.2	Y	MRL	.8 UG/L		01-01-2011	12-31-2013
	2033	ENDOTHALL	548.1	Y	MRL	10 UG/L		01-01-2011	12-31-2013
	2034	GLYPHOSATE	547	Y	MRL	9 UG/L		01-01-2011	12-31-2013
Γ	2035	DI(2-ETHYLHEXYL) ADIPATE	525.2	Y	MRL	.2 UG/L		01-01-2011	12-31-2013
Γ	2036	OXAMYL	531.1	Y	MRL	4 UG/L		01-01-2011	12-31-2013
٧ſ	2037	SIMAZINE	525.2	Y	MRL	.15 UG/L		01-01-2011	12-31-2013
ſ	2039	DI(2-ETHYLHEXYL) PHTHALATE	525.2	Y	MRL	.6 UG/L		01-01-2011	12-31-2013
ſ	2040	PICLORAM	515.1	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
ſ	2041	DINOSEB	515.1	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
ſ	2042	HEXACHLOROCYCLOPENTADIENE	525.2	Y	MRL	.2 UG/L		01-01-2011	12-31-2013
ſ	2046	CARBOFURAN	531.1	Y	MRL	2 UG/L		01-01-2011	12-31-2013
	2050	ATRAZINE	525.2	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
	2051	LASSO	525.2	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
ſ	2065	HEPTACHLOR	505	Y	MRL	.08 UG/L		01-01-2011	12-31-2013
ſ	2067	HEPTACHLOR EPOXIDE	505	Y	MRL	.04 UG/L		01-01-2011	12-31-2013
	2105	2,4-D	515.1	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
	2110	2,4,5-TP	515.1	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
	2274	HEXACHLOROBENZENE	525.2	Y	MRL	.2 UG/L		01-01-2011	12-31-2013
Γ	2306	BENZO(A)PYRENE	525.2	Y	MRL	.02 UG/L		01-01-2011	12-31-2013
	2326	PENTACHLOROPHENOL	515.1	Y	MRL	.04 UG/L		01-01-2011	12-31-2013
		TOTAL POLYCHLORINATED BIPHENYLS (PCB)	505	Y	MRL	.5 UG/L		01-01-2011	12-31-2013
	2931	1,2-DIBROMO-3-CHLOROPROPANE	504.1	Y	MRL	.1 UG/L		01-01-2011	12-31-2013
	2946	ETHYLENE DIBROMIDE	504.1	Y	MRL	.01 UG/L		01-01-2011	12-31-2013
	2959	CHLORDANE	505	Y	MRL	.4 UG/L		01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

#### **Return Links**

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

### Glossary

Water System No.: NM3520203 Federal Type: C ROSWELL MUNICIPAL C Water System Name: State Type: WATER SYSTEM **Principal County CHAVES Primary Source:** GW Served: Status : **Activity Date:** 06-01-1977 Lab Sample No.: 2011005918 **Collection Date:** 02-08-2011

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE >> MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Analyte Code	Analyte Name	Method Code	i inan	Type		Concentration level		Monitoring Period End Date
4000	GROSS ALPHA, EXCL. RADON & U	null	null	MRL	null null	2.7 PCI/L	01-01-2008	12-31-2013
4002	GROSS ALPHA, INCL. RADON & U	SM 7110 B	N	MRL	1.1 PCI/L	3.4 PCI/L		
1 411116 1	COMBINED URANIUM	200.8	N	MRL	1 UG/L	1.0 UG/L	01-01-2008	12-31-2013
4010	COMBINED RADIUM (- 226 & -228)	null	null	MRL	nuIl nuIl	0.35 PCI/L	01-01-2008	12-31-2013
4020	RADIUM-226	903.1	N	MRL	.01 PCI/L	0.31 PCI/L		
4030	RADIUM-228	904.0	N	MRL	.19 PCI/L	0.04 PCI/L		
	GROSS BETA PARTICLE ACTIVITY	SM 7110 B	N	MRL	1.7 PCI/L	3.7 PCI/L		

### **Chem/Rad Sample Results**

Return Links

Water System No.:

NM3520203

Federal Type:

C

Water System Name :

ROSWELL MUNICIPAL WATER

State Type:

C

Chem/Rad Samples

SYSTEM **Principal County Served: CHAVES** 

**Primary Source:** 

GW06-01-1977

Status : Lab Sample No. :

AB53761

**Activity Date: Collection Date:** 

10-30-2003

Analyte List

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE CODE  $\Leftrightarrow$  MOR)

associated to the selected sample. Results for Microbial Analytes are not included.

Water System Detail

Water Systems

Water System Search

County Map

Glossary

2380   CIS-1,2-DICHLOROETHYLENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20		alyte ode	Analyte Name	Method Code		i i vne	Reporting Level	Concentration level		
2210   CHLOROMETHANE   null   Y   MRL   5 UG/L   null	20	030	P-ISOPROPYI TOI LIENE	null		_	5 LIG/I	null	begin Date	Date
2212   DICHLORODIFLUOROMETHANE   null   Y   MRL   5 UG/L   null	-									
2214   BROMOMETHANE   null   Y   MRL   5 UG/L   null						_				
2216   CHLOROETHANE   null   Y   MRL   S UG/L   null	<u> </u>									
2218   TRICHLOROFLUROMETHANE   null   Y   MRL   5 UG/L   null	<u> </u>									
2224   TRANS-1,3-DICHLOROPROPENE   null   Y   MRL   5 UG/L   0 UG/L	-	_								
2228   CIS-1,3-DICHLOROPROPENE   null   Y   MRL   .5 UG/L   null										
2232   1,2-DIBROMOETHYLENE   null   Y   MRL   5 UG/L   null	_	_								
2246   HEXACHLOROBUTADIENE   null   Y   MRL   .5 UG/L   null	_									
2248 NAPHTHALENE										
2378   1,2,4-TRICHLOROBENZENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20										
2380   CIS-1,2-DICHLOROETHYLENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20	23	378	1.2.4-TRICHLOROBENZENE	null	Y	MRL		null	01-01-2002	12-31-2004
2410   1,1-DICHLOROPROPENE   null   Y   MRL   .5 UG/L   null	23	_		null	Y	MRL		null		12-31-2004
2412         1,3-DICHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2413         1,3-DICHLOROPROPENE         null         Y         MRL         .5 UG/L         null           2414         1,2,3-TRICHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2416         2,2-DICHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2418         1,2,4-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2420         1,2,3-TRICHLOROBENZENE         null         Y         MRL         .5 UG/L         null           2422         N-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2424         1,3,5-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2426         TERT-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null </td <td>24</td> <td>408</td> <td>DIBROMOMETHANE</td> <td>null</td> <td>Y</td> <td>MRL</td> <td>.5 UG/L</td> <td>null</td> <td></td> <td></td>	24	408	DIBROMOMETHANE	null	Y	MRL	.5 UG/L	null		
2413   1,3-DICHLOROPROPENE   null   Y   MRL   .5 UG/L   null	24	410	1,1-DICHLOROPROPENE	null	Y	MRL	.5 UG/L	null		
2414   1,2,3-TRICHLOROPROPANE   null   Y   MRL   .5 UG/L   null	24	412	1,3-DICHLOROPROPANE	null	Y	MRL	.5 UG/L	null		
2416         2,2-DICHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2418         1,2,4-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2420         1,2,3-TRICHLOROBENZENE         null         Y         MRL         .5 UG/L         null           2422         N-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2424         1,3,5-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3- CHLOROFORM         null         Y         MRL         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         .644 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         0 UG/L           2945	24	413	1,3-DICHLOROPROPENE	null	Y	MRL	.5 UG/L	null		
2418         1,2,4-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2420         1,2,3-TRICHLOROBENZENE         null         Y         MRL         .5 UG/L         null           2422         N-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2424         1,3,5-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2426         TERT-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3- CHLOROFORM         null         Y         MRL         .5 UG/L         null           2941         CHLOROFORM         null         N         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         .813 UG/L           2943         BROMOCHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2946         ETHYLENE	24	414	1,2,3-TRICHLOROPROPANE	null	Y	MRL	.5 UG/L	null		
2420   1,2,3-TRICHLOROBENZENE   null   Y   MRL   .5 UG/L   null	24	416	2,2-DICHLOROPROPANE	null	Y	MRL	.5 UG/L	null		
2422         N-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2424         1,3,5-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2426         TERT-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3-CHLOROPANE         null         Y         MRL         .5 UG/L         null           2941         CHLOROFORM         null         N         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         4.41 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         0 UG/L           2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964	24	418	1,2,4-TRIMETHYLBENZENE	null	Y	MRL	.5 UG/L	null		
2424         1,3,5-TRIMETHYLBENZENE         null         Y         MRL         .5 UG/L         null           2426         TERT-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3-CHLOROPANE         null         Y         MRL         .5 UG/L         null           2941         CHLOROFORM         null         N         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         .441 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         0 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002	24	420	1,2,3-TRICHLOROBENZENE	null	Y	MRL	.5 UG/L	null		
2426         TERT-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3- CHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2941         CHLOROFORM         null         N         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         4.41 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         0 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L	24	422	N-BUTYLBENZENE	null	Y	MRL	.5 UG/L	null		
2428         SEC-BUTYLBENZENE         null         Y         MRL         .5 UG/L         null           2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3-CHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2941         CHLOROFORM         null         N         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         4.41 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         0 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null	24	424	1,3,5-TRIMETHYLBENZENE	null	Y	MRL	.5 UG/L	null		
2430         BROMOCHLOROMETHANE         null         Y         MRL         .5 UG/L         null           2931         1,2-DIBROMO-3-CHLOROPROPANE         null         Y         MRL         .5 UG/L         null           2941         CHLOROFORM         null         N         .5 UG/L         .644 UG/L           2942         BROMOFORM         null         N         .5 UG/L         4.41 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         2.101 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         0 UG/L           2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20	24	426	TERT-BUTYLBENZENE	null	Y	MRL	.5 UG/L	null		
2931   1,2-DIBROMO-3-CHLOROPROPANE   null   Y   MRL   .5 UG/L   null	24	428	SEC-BUTYLBENZENE	null	Y	MRL	.5 UG/L	null		
2931   CHLOROPROPANE   null   Y   MRL   .5 UG/L   null       2941   CHLOROFORM   null   N   .5 UG/L   .644 UG/L     2942   BROMOFORM   null   N   .5 UG/L   4.41 UG/L     2943   BROMODICHLOROMETHANE   null   N   .5 UG/L   .813 UG/L     2944   DIBROMOCHLOROMETHANE   null   N   .5 UG/L   2.101 UG/L     2946   ETHYLENE DIBROMIDE   null   Y   MRL   .5 UG/L   0 UG/L     2955   XYLENES, TOTAL   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2964   DICHLOROMETHANE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2965   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2967   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2968   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2969   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2960   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2961   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2962   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2963   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2964   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2965   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2966   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2967   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2968   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20     2968   O-CHLOROTOLUENE   null   Y   MRL   .5 UG/L   null   01-01-2002   12-31-20	24	430	BROMOCHLOROMETHANE	null	Y	MRL	.5 UG/L	null		
2942         BROMOFORM         null         N         .5 UG/L         4.41 UG/L           2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         2.101 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         0 UG/L           2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null	29	931	-,	null	Y	MRL	.5 UG/L	null		
2943         BROMODICHLOROMETHANE         null         N         .5 UG/L         .813 UG/L           2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         2.101 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         0 UG/L           2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null	29	941	CHLOROFORM	null	N		.5 UG/L	.644 UG/L		
2944         DIBROMOCHLOROMETHANE         null         N         .5 UG/L         2.101 UG/L           2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         0 UG/L           2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null         null	29	942	BROMOFORM	null	N		.5 UG/L	4.41 UG/L		
2946         ETHYLENE DIBROMIDE         null         Y         MRL         .5 UG/L         0 UG/L           2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null	29	943	BROMODICHLOROMETHANE	null	N		.5 UG/L	.813 UG/L		
2955         XYLENES, TOTAL         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null	29	944	DIBROMOCHLOROMETHANE	null	N		.5 UG/L	2.101 UG/L		
2964         DICHLOROMETHANE         null         Y         MRL         .5 UG/L         null         01-01-2002         12-31-20           2965         O-CHLOROTOLUENE         null         Y         MRL         .5 UG/L         null	29	946	ETHYLENE DIBROMIDE	null	Y	MRL	.5 UG/L	0 UG/L		
2965 O-CHLOROTOLUENE null Y MRL .5 UG/L null	29	955	XYLENES, TOTAL	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
	29	964	DICHLOROMETHANE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2966 P-CHLOROTOLUENE null Y MRL .5 UG/L null	29	965	O-CHLOROTOLUENE	null	Y	MRL	.5 UG/L	null		
	29	966	P-CHLOROTOLUENE	null	Y	MRL	.5 UG/L	null		

2967	M-DICHLOROBENZENE	null	Y	MRL	.5 UG/L	null		1
2968	O-DICHLOROBENZENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2969	P-DICHLOROBENZENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2976	VINYL CHLORIDE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2977	1,1-DICHLOROETHYLENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2978	1,1-DICHLOROETHANE	null	Y	MRL	.5 UG/L	null		
2979	TRANS-1,2- DICHLOROETHYLENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2980	1,2-DICHLOROETHANE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2981	1,1,1-TRICHLOROETHANE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2982	CARBON TETRACHLORIDE	null	Y	MRL	.5 UG/L	null	01-01-2002	I2-31-2004
2983	1,2-DICHLOROPROPANE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2984	TRICHLOROETHYLENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2985	1,1,2-TRICHLOROETHANE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2986	1,1,1,2-TETRACHLOROETHANE	null	Y	MRL	.5 UG/L	null		
2987	TETRACHLOROETHYLENE	null	Y	MRL	.5 UG/L	nuil	01-01-2002	12-31-2004
2988	1,1,2,2-TETRACHLOROETHANE	null	Y	MRL	.5 UG/L	null		
2989	CHLOROBENZENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2990	BENZENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2991	TOLUENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2992	ETHYLBENZENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2993	BROMOBENZENE	null	Y	MRL	.5 UG/L	null		
2994	ISOPROPYLBENZENE	null	Y	MRL	.5 UG/L	null		
2996	STYRENE	null	Y	MRL	.5 UG/L	null	01-01-2002	12-31-2004
2998	N-PROPYLBENZENE	null	Y	MRL	.5 UG/L	null		

**Total Number of Records Fetched = 60** 

 $\mathbf{C}$ 

Primary Source: GW

### **Drinking Water Branch**

### **Chem/Rad Sample Results**

#### **Return Links**

Chem/Rad Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No. : NM3520203 Federal Type:

ROSWELL MUNICIPAL Water System Name : State Type: WATER SYSTEM

**Principal County CHAVES** 

Served:

Status: **Activity Date:** 06-01-1977 WC944231 Collection Date: 07-26-1994 Lab Sample No.:

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE  $\Leftrightarrow$  MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Analyte Code	Analyte Name		Less than Indicator		Concentration	Monitoring Period End Date
1055	SULFATE	300.0	N	0 null	482 MG/L	

# State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey, Division Director Oil Conservation Division



October 9, 2013

Ms. Shiver Nolan Enterprise Products Operating LLC P.O. Box 4324 Houston, Texas 77210

Re: Hydrostatic Test Discharge Permit

Permit: HIP-125

**Enterprise Products Operating, LLC Western Expansion Pipeline III, Segment 5** 

Locations: Unit A of Section 5, Township 1 South, Range 19 East, NMPM,

Lincoln County, New Mexico

Dear Ms. Nolan:

The New Mexico Oil Conservation Division (OCD) has received Enterprise Products Operating LLC's (Enterprise) notice of intent, dated October 2, 2013 and an email dated October 4, 2013, for authorization to discharge approximately 340,000 gallons of wastewater generated from a hydrostatic test of a new 16-inch diameter natural gas gathering system transmission pipeline approximately 30.3 miles (159,475 feet) long, located approximately 27 miles southeast of Vaughn, New Mexico. The proposed discharge/collection/retention location is within Enterprise's pipeline easement right-of-way and adjacent private property, located within Unit A of Section 5, Township 1 South, Range 19 East, NMPM, Lincoln County, New Mexico. The submittal provided the required information in order to deem the application "administratively" complete. OCD approves the Guadalupe Communicator as the newspaper of general circulation for the published notice and the discharge and/or collection location (within Enterprise's pipeline easement right-of-way and adjacent private property) and the post office in Vaughn, New Mexico as proposed posting locations.

Therefore, the July 2006 New Mexico Water Quality Control Commission (WQCC) regulations notice requirements (20.6.2.3108 NMAC) must be satisfied and demonstrated to the OCD. The hydrostatic test discharge event shall not be initiated until Enterprise's and OCD's notice periods pass, the permit is issued, and the additional permit fee is paid, if applicable.

Enterprise Products Operating LLC

Permit: HIP-125 October 9, 2013 Page 2 of 2

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <a href="mailto:brad.a.jones@state.nm.us">brad.a.jones@state.nm.us</a>.

Sincerely,

Brad A. Jones

**Environmental Engineer** 

BAJ/baj

cc: OCD District IV Office, Santa Fe

Mr. Jim Heap, Enterprise Products Operating, LLC, Midland, TX 79701

# ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of Check No. 689546 dated 8/9/13
or cash received on $\frac{10/8/13}{}$ in the amount of \$ $\frac{700.00}{}$
from KLEWFELDER WEST, INC.
for H1P - 125
Submitted by: BRAD JONES Date: 10/9/13
Submitted to ASD by: Lupe SHERMAN Date: 10/9/13
Received in ASD by: Date:
Filing Fee New Facility: Renewal:
Modification Other V PERMIT FEE
Organization Code 521.07 Applicable FY 14
To be deposited in the Water Quality Management Fund.
Full Payment or Annual Increment

T LOG														
CHECK RECEIP										Amount				000
IÇE DAILN	\$700.00							\$ 700.00		Sub Acct				3329039000
F FIELD OFF PROGRAM ACCOUNT CODE	0410								AL SHEET	Share Acct	496402	496402	496402	
ALBUQUERQUE CHECK/MONEY ORDER#	945689	,							REVENUE TRANSMITTAL SHEET	Dept.	23200	28501	22600	232900
AENT - AL PATE OF CHECK F	E1/b/8								REVENU	Fund	34000	40000	99100	34100
NEW MEXICO ENVIRONMENT DEPARTMENT - A   DATE   WALK- RECEIVED   IN	KLEINFELDER WEST, INC									Description	Liquid Waste	Water Recreation Facilities	Food Permit Fees	ОТНЕК
N MEXIO	>													
NEN PATE WA RECEIVED	61/8/01							TOTAL						

### Jones, Brad A., EMNRD

From: Eileen Shannon <EShannon@kleinfelder.com>

**Sent:** Friday, October 04, 2013 11:50 AM

To: Jones, Brad A., EMNRD

Cc: jagwhite@eprod.com (jagwhite@eprod.com); Runell Seale (RSeale@eprod.com); Katie

Knights; Jill Hernandez

Subject: WEP III - Segment 5 - Public Notice Ad in the Santa Rosa News

Hi Brad,

Although we are still waiting on the notification of administrative completeness for Seg 5, we were following up on specifics needed for submittal of the public notice to the *Santa Rosa News*. I just wanted to forward this info on – particularly the point that there is no more *Santa Rosa News*. They are now called *The Guadalupe Communicator*.

I wasn't sure how you would like to handle this from a paperwork status. If you need us to resubmit something, please let me know. I am confused by this email has we have had several rounds of communication with them (both email and by phone) and this is the first we have heard about the name change.

Let me know the best way to efficiently handle this.

Thanks, Eileen

Eileen Shannon P.G. Project Manager 9019 Washington NE, Building A Albuquerque, NM 87113 o| 505.344.7373 Ext. 254 c| 505.307.0722 f| 505.344.1711



From: Katie Knights

**Sent:** Friday, October 04, 2013 11:39 AM

To: Eileen Shannon

Subject: FW: Public Notice Ad in the Santa Rosa News

FYI...

**From:** M.E. Sprengelmeyer [mailto:ersthap@hotmail.com]

Sent: Friday, October 04, 2013 11:27 AM

To: Katie Knights

Subject: RE: Public Notice Ad in the Santa Rosa News

Thank you. That's larger than I was expecting and will have to ask our advertising director to get you the exact price, with proofs, on Tuesday morning.

I would recommend running it in 10-point type or larger. If that's OK with you, I will have her send you the proof and price on Tuesday.

FYI, the name of our newspaper is The Guadalupe County Communicator (the only publication in Guadalupe County). A predecessor, the Santa Rosa News, ceased operations here in 2009, although they posted our address on their web site to take care of folks like you.

M.E. Sprengelmeyer (575)472-3555 office <u>ErstHap@hotmail.com</u>

"In the future, TV will be so good that the printed word will function as an art form only." -- David Byrne, 1985

From: KKnights@kleinfelder.com

To: menewspaper@hotmail.com; comsilvercom@plateautel.net

Subject: Public Notice Ad in the Santa Rosa News

Date: Fri, 4 Oct 2013 16:52:20 +0000

Hello -

I just got off the phone with you and I have attached the public notice that we will need published on Thursday 10/10/13. We need both the English and Spanish text run. The display ad needs to be at least three inches by four inches in size (not in the classified section). We will also need affidavit of publication once it is published.

Please send me a quote with a proof.

Let me know if you need any other information.

Thank you, Katie.

Katie Knights 9019 Washington St NE Bldg. A Albuquerque, NM 87113 0/ 505.344.7373 F/ 505.344.1711





# ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS HOLDINGS LLC (General Partner) PEOEIVED OCC

2013 OCT -3 P 3: 15

October 2, 2013

VIA Fed Ex

Mr. Brad Jones New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division 1220 St. Francis Drive Santa Fe, NM 87505

Dear Mr. Jones:

RE: Enterprise Products Operating LLC

Submittal of Notice of Intent to Discharge Hydrostatic Test Water

Western Expansion Pipeline III, Segment 5

Guadalupe, Lincoln and De Baca Counties, New Mexico

Enterprise Products Operating LLC (Enterprise) will be constructing Segment 5 of the Western Expansion Pipeline III as an expansion to their natural gas gathering system. Please find enclosed an application for authorization to discharge hydrostatic test water following hydrostatic testing of the new pipeline. The enclosed application includes the requested revisions to the unofficial drafts that you reviewed.

Because of unforeseen delays in BLM & BIA permitting, we are having to adjust our original schedule of where we are working within our overall project, and as such, this application is now inside the preferred 90-day window, whereas our original schedule would have allowed for a full 90-day review.

Thank you for your assistance with this request. If you have any questions or require additional information, please feel free to call Enterprise's environmental consultant, Ms. Eileen Shannon, 505.307.0722, or myself at 713.392.2458.

Sincerely,

James G. White

Sr. Environmental Scientist

-) - 1. WAR

cc: James Heap, Enterprise

Shiver Nolan, Enterprise



October 1, 2013 Project No.: 134288

Mr. Brad Jones New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division 1220 St. Francis Drive Santa Fe, NM 87505

Subject:

Submittal of a Notice of Intent to Perform Hydrostatic Test

WEP III – Segment 5

Guadalupe, Lincoln, and De Baca Counties, New Mexico

Dear Mr. Jones:

On behalf of Enterprise Products Operating LLC (Enterprise), Kleinfelder West, Inc. (Kleinfelder) is submitting this Notice of Intent (NOI) for a hydrostatic test to be conducted on Segment 5 of Enterprise's Western Expansion Pipeline III (WEP III).

Kleinfelder has included the required information for the NOI as stated in the "Guidelines for Hydrostatic Test Dewatering" dated January 11, 2007. Attached to this NOI are the following:

- Background Information;
- Notice of Intent Plan;
- Figure 1 New Enterprise Pipeline, WEP III Segment 5;
- Figure 2 New Enterprise Pipeline, WEP III Segment 5 Discharge Location;
- Figure 3 Dissipation and Discharge Area;
- Appendix A Certification of Siting Criteria;
- Appendix B Water Feature, Water Well Information and Floodplain information;
- Appendix C Area Mine Information;
- Appendix D Geology;
- Appendix E Area Landownership;
- Appendix F Public Notice;
- Appendix G Electro-Coagulation Process Information; and
- Appendix H Vaughn Duran Water System Analytical Data.

A check totaling \$700 made out to the New Mexico Water Quality Management Fund is included with this NOI for the \$100 filing fee and the \$600 permit fee.

Kleinfelder prepared this NOI in a manner consistent with the level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. The information provided in this document is based on our understanding of the information provided by Enterprise.

Should you have any questions, please feel free to contact Eileen Shannon (Kleinfelder) at 505.344.7373 or Jimmy White (Enterprise) at 713.381.1785.

Respectfully submitted,

KLEINFELDER WEST, INC.

Reviewed by:

Melissa E. Cote Professional Eileen L. Shannon, PG Project Manager

cc: James White, Enterprise Products Operating LLC, PO Box 4324, Houston, TX 77210

### **Background Information**

- The U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) requires periodic pressurized tests on all DOT-regulated pipelines and all newly installed pipelines to verify the integrity and safety of pipeline systems. Because the pipeline is part of a natural gas gathering system, waste water generated during hydrostatic testing is classified as RCRA-exempt waste water and does not require management as a RCRA waste or disposal at a RCRA-approved facility.
- The Enterprise Western Expansion Pipeline (WEP) III line is a new, welded, steel 16inch diameter line. The section to be hydrostatically tested, Segment 5 of the WEP III pipeline is 30.3 miles or 159,475 feet long (Figure 1);
- The pipeline is part of a gathering system that transports natural gas from the Piceance and San Juan Basins to processing facilities located in Hobbs, New Mexico and Houston, Texas;
- The source water for the hydrostatic testing is the Vaughn Duran Water System (NM 3515310);
- Placement of water into the northern portion of Segment 5 (MP 144.7 to MP 150.9) is scheduled to start on November 5, 2013 (Figure 1). Water will be added to the pipeline just east US 285 (approximately MP 144.7). After the testing of one section of the pipeline is complete, the water will be held in that portion of the pipeline until the construction of the next portion of Segment 5 (to the south) is completed. The order of testing is as follows:
  - o MP 144.7 to 150.9
  - o MP 150.9 to 156.2
  - o MP 156.2 to 162.8
  - o MP 162.8 to 168.7
  - o MP 168.7 to 174.9
- Upon completion of test, the water will be analyzed for water quality (discussed in item j).
  Provided that the test water meets the requirements NMAC 20.6.3013, it will be
  discharged to the ground surface within the Enterprise right-of-way at MP 156.2.
  Approximately 340,000 gallons are expected to be discharged to the ground surface and
  on adjacent properties on or around November 15, 2013.
- Per NMAC 20.6.2.3108, a sample of the public notice is included in Appendix F; and
- Per NMAC 20.6.2.3108, public notice will be made in English and Spanish by the following methods:
  - 1. A 2 feet by 3 feet in size sign will be posted at the discharge location;
  - 2. Written notice will be posted at the Vaughn, New Mexico post office;
  - 3. Written notice of the discharge by mail to owners of record of properties adjacent to the boundary of the property where the discharge site is located;
  - 4. The notice will be sent by certified mail, return receipt requested, to the owner of the discharge site; and

5. A synopsis of the notice will be published in a display ad at least three inches by four inches in size in *The Santa Rosa News*. Public notice is published every Thursday, and the paper requires the information at least two days prior to publication.

#### Notice of Intent Plan

On behalf of Enterprise, Kleinfelder is submitting this NOI plan as outlined in NMOCD Guidance document, "Guidelines for Hydrostatic Test Dewatering," (revised January 11, 2007). The NOI plan includes the following items:

#### Item a. Name and address of the proposed discharger:

Legally Responsible Party

Mr. Leonard W. Mallett, Group Sr. VP, Engineering POC: Ms. Shiver Nolan, Sr. Compliance Administrator

P.O. Box 4324

Houston, Texas 77210

713.381.6595

Local Representative

Mr. Jim Heap

Enterprise Products Operating LLC 1031 Andrews Highway, Suite 320

Midland, TX 79701 432.686.5404

# Item b. Location of the discharge, including a street address, if available, and sufficient information to locate the facility with respect to surrounding landmarks:

The section of the pipeline to be tested is located in Guadalupe, Lincoln, and De Baca Counties. Water from the hydrostatic testing will be discharged to the ground in the 125-foot construction right-of-way (ROW) and adjacent properties near the south-central portion of WEP III Segment 5 at MP 156.2. The discharge area includes:

- In the pipeline ROW, an area approximately 125 feet wide by 95.6 feet long (approximately 68,358 square feet); and
- In the adjacent property southwest of the ROW an area of approximately 113,218 square feet. Landowner permission is included in Appendix E.

The location of the pipeline to be hydrostatically tested and the proposed discharge location are shown on Figure 1.

The location of the hydrostatic discharge area is located approximately 27 miles southeast of Vaughn, New Mexico. Directions to the discharge site from Vaughn, New Mexico are:

- From the intersection of US-285 (8<sup>th</sup> Street) and Magnolia St., head east on US-285 S (8<sup>th</sup> Street) and continue to follow US-285 S to the southeast for 29.1 miles;
- Turn west on an unnamed road for 2.3 miles;
- Turn south on an unnamed road for 0.2 miles;
- · Turn west on an unnamed road for 0.6 miles; and
- The site is on the left side of the road.

The approximate coordinates for the discharge area location are: Latitude 34.259130°; Longitude -104.963834°.

#### Item c. Legal description of the discharge location:

The discharge location is located:

- In the NE/4 of the NE/4 of Section 5, Township 1 South, Range 19 East (Figure 1).
- The latitude and longitude coordinates are provided in item b.

## Item d. Maps (site-specific and regional) indicating the location of the pipelines to be tested:

- Figure 1 Regional map showing topography, the pipeline section undergoing testing, and the hydrostatic test water discharge location.
- Figure 2 Site-specific map showing the hydrostatic test water discharge area.

# Item e. A demonstration of compliance to the following siting criteria or justification for any exceptions:

Shapefiles were downloaded from various electronic sources and were included in a Geographic Information System (GIS) database for preparation of this NOI. The maps generated from this database were reviewed between June 3 and August 7, 2013. Detailed references for the various shape files are included in the Reference section. Sources used for preparation of the maps in this NOI are included on the individual figures.

i. Within 200 feet of a watercourse, lakebed, sinkhole, or playa lake:

No watercourses, lakebeds, sinkholes, or playa lakes were observed within 200 feet of the discharge area during the site visit (Appendix A). A search of watercourses, lakebeds, sinkholes, and playa lakes in the vicinity of the discharge area was completed by reviewing a topographic map and using the GIS database. None were indicated during the review. A copy of the site-specific topographic map is included in Appendix B, Figure B-1.

ii. Within an existing wellhead protection area or 100-year floodplain;

No springs were identified on the topographic map within 1,000 feet of the discharge area (Figure B-1, Appendix B) and no springs were observed during the site inspection (Appendix A). No water supply wells are located within 1,000 feet of the discharge area (Figure B-2, Appendix B).

The New Mexico Office of the State Engineer (OSE) website was checked for water supply wells located in the vicinity of the site. Based on data obtained from the OSE and Go-Tech websites, accessed on June 3, 2013, domestic and livestock wells are located approximately 4.8 miles to the east-northeast of the proposed discharge area (Figure B-2, Appendix B).

This area has not been mapped by the Federal Emergency Management Administration, so no floodplain information was available for review. Based on a review of the topographic map, (Figure B-3 in Appendix B), the discharge area is in an area of fairly flat topography and at higher elevation than a nearby ephemeral stream, and is not likely to be in a floodplain.

iii. Within, or within 500 feet of, a wetland;

No wetlands were observed during the site inspection (Appendix A). A topographic map provided by the U.S. Fish and Wildlife Service National Wetlands Inventory database was reviewed for wetlands in the vicinity of the site. Wetlands were not observed in or within 500 feet of the perimeter of the discharge area. A copy of the topographic map is included in Appendix B, Figure B-1.

iv. Within the area overlying a subsurface mine; or

A map generated from the New Mexico Mining and Minerals Division GIS database was reviewed for active mines. No active mines were noted at or in the vicinity of the proposed discharge area (Figure C-1 in Appendix C). Mr. Mike Tompson, with the New Mexico Abandoned Mine Lands Program, was contacted on July 22, 2013 to assess the presence of abandoned subsurface mines in the vicinity of the proposed discharge area. According to Mr. Tompson, there is no record of abandoned subsurface mines within a half mile radius of the proposed discharge site (see email, Appendix C).

v. Within 500 feet from the nearest permanent residence, school, hospital, institution or church.

No permanent residences, school, hospital, institution or church were noted on aerial photographs of the area (Figure 2), nor were they noted during the site visit (Appendix A).

#### Item f. A brief description of the activities that produce the discharge;

Pressure testing with water, also known as hydrostatic testing, is one of the tools pipeline operators use to verify pipeline integrity. The purpose of hydrostatic testing of a pipeline is to determine the extent to which potential defects might threaten the pipeline's ability to sustain maximum allowable operation pressure. Because this is new piping, previous contents of the pipe do not need to be cleared. Potable water will be introduced into the pipeline and then the pipeline will be pressurized to a pressure greater than maximum operating pressure for approximately eight hours. If leaks or breaks occur, the pipeline is repaired or the affected piping is replaced, and then re-tested. Once the test is complete, the water will be discharged from the pipeline into the dissipation and discharge system.

#### Item g. The method and location for collection and retention of fluids and solids;

Because the piping is new, solids are not anticipated to be produced as a result of the hydrostatic testing. Once the hydrostatic testing has been, the water will be tested for water quality as described in *item j*. Once approval to discharge has been received, the test water will be allowed to flow from the pipeline into the 125-foot right-of-way and adjacent property.

# Item h. A brief description of best management practices to be implemented to contain the discharge onsite and to control erosion;

Non-woven geotextile fabric will be installed beneath the dissipation structure to prevent scouring. Hay bales will be used to control erosion as the water is discharged from the pipeline at a rate of 1,500 gallons per minute (gpm) into the hydrostatic waste water dissipation and discharge system. A connector pipe is attached to the end of the pipeline and to a baffle "T" located within the dissipation structure. Pipeline water will gradually be released from the dissipation structure at a low flow rate onto the 125-foot ROW and adjacent property. The dissipation and discharge structure will be built to maintain the proper flow rate to avoid scouring the landscape. A diagram of the hydrostatic waste water dissipation and discharge system is shown in Figure 3.

# Item i. A request for approval of an alternative treatment, use, and/or discharge location (other than the original discharge site), if necessary;

No alternate use or discharge location is proposed.

If hydrostatic test water analytical results exceed the water quality standards of NMAC 20.6.2.3103, the test water will be treated using an electro-coagulation cleaning process and a separate filtering system. This process is described in Appendix G.

After the electro-coagulation process is completed, the water will be tested again as described in Appendix G. If it does still not meet the water quality standards of NMAC 20.6.2.3103 required for discharge approval, the water will be hauled and disposed of as described in *item k*.

#### Item j. A proposed hydrostatic test wastewater sampling plan;

Enterprise requests that it not be required to test for Radium 226/228. The Vaughn Duran Water System, sampled on January 24, 2012, had the following results for radium (in pCi/L): Radium - 226 at 0.09  $\pm$  0; and Radium - 228 at 0.04. These levels are below the 30 pCi/L standard in NMAC 20.6.2.3103. A copy of available analytical data for the Vaughn Duran Water System is included in Appendix H.

Prior to discharge, Enterprise will collect and analyze a sample of the water used in the hydrostatic testing. The sample will be collected from the discharge location (MP-156.2). The sample will be analyzed using the following methods.

SAMPLING PLAN FOR COMPLIANCE WITH NMAC 20.6.3103 (A), (B), (C)								
ANALYTES	METHOD	BOTTLE TYPE/PRESERVATIVE						
Volatile Organics	8260B	3 x 40 ml VOA's / HCI						
Ethlylene dibromide	504.1	2 x 40 ml VOA's / Na <sub>2</sub> S <sub>2</sub> 0 <sub>3</sub>						
Polychlorinated Biphenols	8082	2 x liter amber / unpreserved						
Polynuclear Aromatic Hydrocarbons	8310	1 x liter amber / unpreserved						
Phenols	9067	1 x liter amber / H <sub>2</sub> S0 <sub>4</sub>						
	300.0	1 x 500 ml plastic / unpreserved						
Anions, TDS, pH	SM 2540C SM 4500-H+B	1 x 125 ml plastic / H <sub>2</sub> S04						
Mercury	245.1	1 x 500 ml plastic / HN0 <sub>3</sub>						
Dissolved Metals	200.7 / 200.8	1 x 125 ml plastic + filter & syringe / HNO <sub>3</sub>						
Total Cyanide	335.4	1 x 500 ml plastic amber / NaOH						

Once the results have been received, they will be forwarded to the NMOCD. Upon NMOCD concurrence that the discharge water meets the water quality standards of NMAC 20.6.2.3103, Enterprise will discharge the water in accordance with the approved discharge permit.

A proposed method of disposal of fluids and solids after test completion, including closure of any pits, in case the water generated from test exceeds the standards as set forth in Subsections A, B, and C of the 20.6.2.3103 NMAC (the New Mexico Water Quality Control Commission Regulations);

As described in Appendix G, if after the electro-coagulation process, if the test water still exceeds discharge requirements, the water will be transported from the project site in DOTapproved tanker trucks by NMOCD-approved haulers to one of the following waste water disposal companies:

- Basin Disposal, Inc. (API 30-045-26862, Disposal Well No. 1: IPI-149-0) in Aztec, New Mexico:
- Agua Moss, LLC (Permit # UIC-I-005) on Crouch Mesa, in Bloomfield New Mexico; or
- Gandy Marley, Inc. (Permit # NM1-19-0) on Highway 380 between Tatum and Roswell. New Mexico.

The water will be transported by one or more of the following NMOCD-approved haulers:

- Dawn Trucking Co. (C133-31);
- M&R Trucking, Inc. (C133-399);
- Three Rivers Trucking, Inc. (C133-335);or
- Triple S Trucking Co., Inc. (C133-372).

Any solids generated using the electro-coagulation process will be disposed at one of the following facilities:

- Gandy Marley Inc., in Chaves County (Permit No. 19);
- Lea Land Inc. in Lea County (Permit No. 24); or
- R360 Permian Basin LLC (formerly Controlled Recovery Inc.) in Lea County (Permit No.

#### A brief description of the expected quality and volume of the discharge;

The volume of the hydrostatic test water is expected to be discharged is approximately 340,000 gallons. The source of water used for the hydrostatic test will be municipal water from the Vaughn Duran Water System. A copy of the most recent water analytical data available for the Vaughn Duran Water System is included in Appendix H. New piping will be tested which should not impact the quality of the water to be discharged.

#### Item m. Geological characteristics of the subsurface at the proposed discharge site;

Soils in the area are dominated by gently sloping Pastura loam that is very shallow and shallow, well-drained soil on uplands (USDA, et al, 1983). The Pastura loam is formed in alluvium derived dominantly from limestone and is comprised of loam overlying clay loam and gravelly clay loam, which overlies indurated caliche. The Pastura soil has moderate permeability and very low water capacity.

The soil overlies the Permian Artesia Group (Pat) and the Paleozoic San Andres Formation (Psa) adjacent to the west (Figure D-1, Appendix D). The Artesia Group has shelf facies forming broad south-southeast trending outcrops from the Glorieta to the Artesia area. The San Andres Formation is comprised of limestone and dolomite with minor shale and is Guadalupian to the south and part Leonardian to the north (USGS, 2013). Karst was not identified at or in the vicinity of the discharge area in the database search, Figure D-2 (Appendix D).

# Item n. The depth to and total dissolved solids concentration of the ground water most likely to be affected by the discharge; and

A search of the OSE and Go-Tech websites, accessed on June 10, 2013, found limited available water quality data on wells in the vicinity of the site. Information on the closest wells to the site, located approximately 4.8 miles northeast of the site, is summarized below:

Well ID	Ground Surface Elevation (feet amsl <sup>a</sup> )	Depth to Water (feet)	Groundwater Elevation (feet amsl <sup>a</sup> )
RA 08695	5140	115	5025
RA 08694	5140	95	5045
FS 01166	5168	135	5033

<sup>&</sup>lt;sup>a</sup> amsl = above mean sea level

Based on the topographic map, ground elevation at the discharge location is approximately 5140 feet amsl, and therefore, the depth to water is anticipated to be similar to the depth to water observed at the closet wells (95 - 107 feet below ground surface).

Regional water quality data from a literature search is summarized below:

• Total dissolved solids (TDS) concentrations in the region generally range from 2,100 to 2,300 parts per million (Dinwiddie et al, 1983).

Item o. Identification of landowners at, and adjacent to, the discharge collection/retention site. Landowners within 1/3-mile of the boundary of the discharge point or temporary frac tank storage area within the Enterprise pipeline easement:

The landowner of record for the property at the discharge location is:

Map Parcel ID (E-1)	Property Owner
А	Marley Ranches, LTD 4901 Whitney Lane Roswell, NM 88203

Signed permission from the landowner to discharge onto private property north of the ROW is included in Appendix E.

The landowners of record for properties adjacent to the property where the discharge will occur are:

Map Parcel	
ID (E-1)	Property Owner
	Bureau of Land Management
	Rio Puerco Field Office
В	435 Montano Road NE
Ì	Albuquerque, NM 87107
	Attn: Connie Maestas, Realty Specialist
	New Mexico State Land Office
C	PO Box 1148
	Santa Fe, NM 87504
	Regina S Oldham
D	19861 Robin Way
	Saratoga, CA 95070
•	William J Hanratty
E	2608 Bay Meadows
	Roswell, NM 88203
_	Martin Ranch Company
F	23090 W Ash Creek Rd
,	Wilcox, AZ 85643
_	Big Creek
G	4420 Tower Rd SW
	Albuquerque, NM 87121
	Road Runner Ranches
Н	PO Box 1738
	Roswell, NM 88201
l .	Bob H Byrd
	PP Box 416
	Corona, NM 88318
	Annie Lyon
J	2002 Westridge Road Apt. 405
	Carlsbad, NM 88220
	John and Carol Bethel Living Trust
K	5502 East 109 <sup>th</sup> Street
	Tulsa, OK 74137
	Carlene J Seay
L	PO Box 1526
	Kamiah, ID 83536

Figure E-1 illustrates the parcel locations discussed above

#### References

Go-Tech, New Mexico Water database (NM WAIDS, accessed June 10, 2013, http://octane.nmt.edu/waterquality/data/gwatersearch.aspx.

Dinwiddie, G.A. and Clebsch, Jr., A., 1983. "Water Resources of Guadalupe County New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 3.

Office of the State Engineer (OSE) database search accessed in June 10, 2013, <a href="http://nmwrrs.ose.state.nm.us/nmwrrs/index.html">http://nmwrrs.ose.state.nm.us/nmwrrs/index.html</a>.

United States Department of Agriculture, Soil Conservation Service, United States Department of the Interior Bureau of Land Management, and New Mexico Agricultural Experiment Station, 1983. "Soil Survey of Lincoln County Area, New Mexico".

United States Geological Survey, Mineral Resources On-Line Spatial Data, accessed June 10, 2013, <a href="http://mrdata.usgs.gov/geology/state/state.php?state=NM">http://mrdata.usgs.gov/geology/state/state.php?state=NM</a>

### **GIS References**

### NM Topographic 7.5' quadrangle maps

- Camaleon Draw East
- Cowboy Mesa
- Cowboy Mesa NE
- Cowboy Mesa NW
- Cowboy Mesa SW
- Devils Well
- Duoro
- Duran NE
- El Morro Mesa
- Gacho Hill
- Gacho Hill NW
- Gacho Hill SE
- Gacho Hill SW
- Gallo Spring Canyon NE
- Loco Draw
- Ramon
- Ramon SW
- Red Bluff Draw East
- The Old Dry Lake
- Wire Lake
- Wright Ranch
- Yeso Mesa
- Yeso Mesa SE
- Yeso NW

#### Basemap for inset on Figure 1

-ESRI World Street Map. Sources: ESRI, DeLorme, NAVTEQ, TomTom, USGS,
 Intermap, iPC, NRCAN, ESRI Japan, METI, ESRI China (Hong Kong), ESRI (Thailand)

#### Aerial imagery on Figure 2,

 ESRI World Imagery; ESRI DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community. Date of image: 10/12/2011

#### State and County boundaries

- ESRI Street Map North America dated August 17, 2010

### Cities and Towns; Urban areas

- \*TIGER urban areas 2010 (tl\_2010\_35\_place10.shp) 2010 Census data
- ESRI Street Map North America dated August 17, 2010

#### **PLSS**

\*BLM GIS dataset dated June 3, 2013

#### Surface waters (streams and water bodies)

\*National Hydrography Dataset, USGS, GIS dataset downloaded May 4, 2011

#### Wetlands

- \*National Wetlands Inventory, USF&WS, GIS dataset downloaded May 4, 2011

#### **OSE Wells**

- \*New Mexico Office of the State Engineer, Excel spreadsheet dated of July 2011

#### Floodplains, Segment 5

- \*S\_FLD\_HAZ\_LN downloaded from New Mexico Resource Geographic Information System Program, http://rgis.unm.edu/ GIS shapefile downloaded June 5, 2013
- No FEMA mapping available for this area

#### Mines

- New Mexico Mining and Minerals Division, February 2012
- \*Coal mine permit boundaries shapefile from RGIS, downloaded June 17, 2013
- Potash areas from BLM Carlsbad Field Office basemap, downloaded May 8, 2012

#### Geology

- USGS OFR 2005-21351. Stoeser, D.B., G.N. Green, L.C. Morath, W.D. Heran, A.B. Wilson, D.W. Moore, and B.S. Van Gosen, 2005. Preliminary Integrated Geologic Map Databases for the United States; Central States: Montana, Wyoming, Colorado, New Mexico, Kansas, Oklahoma, Texas, Missouri, Arkansas, and Louisiana, The State of New Mexico. U.S. Geological Survey Open-File Report 2005-1351
- USGS Fault and Fold Database, GIS shapefiles downloaded November 3, 2010
- BLM Carlsbad Field Office GIS Basemap GIS dataset downloaded on May 8, 2012

#### Karst

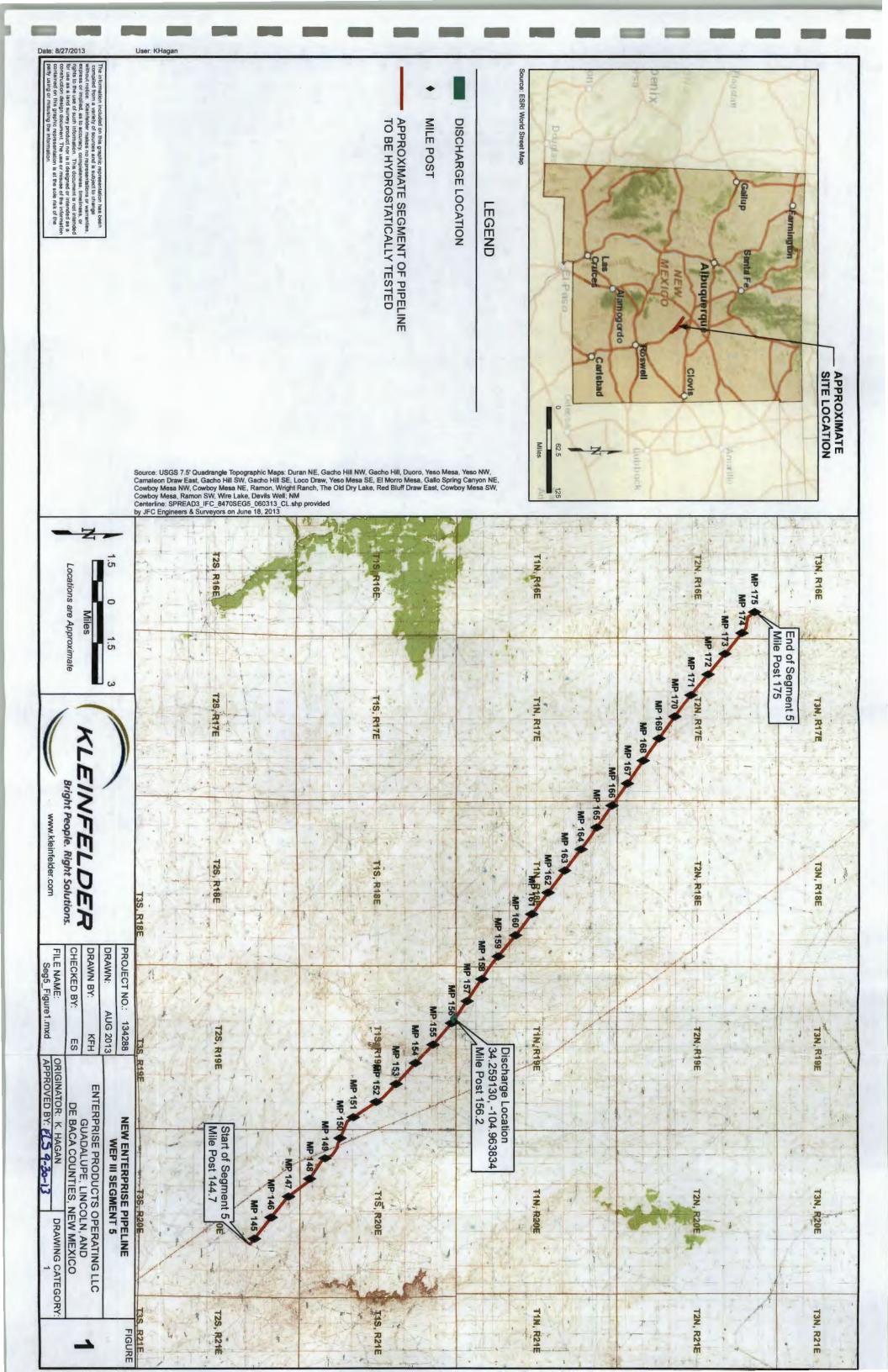
- \*USGS OF 2004-1352. Tobin, Bret D., and David J. Weary, 2004. Digital Engineering Aspects of Karst Map: A GIS version of Davies, W.E., Simpson, J.H., Ohlmacher, G.C., Kirk, W.S., and Newton, E.G., 1984, Engineering aspects of karst: U.S. Geological Survey, National Atlas of the United States of America, scale 1:7,500,000. U.S. Geological Survey Open-File Report 2004-1352
- BLM Carlsbad Field Office GIS Basemap, Caves potential GIS shapefile downloaded on May 8, 2012
- BLM NM GIS dataset, Karst potential, GIS shapefile provided by BLM on April 3, 2012

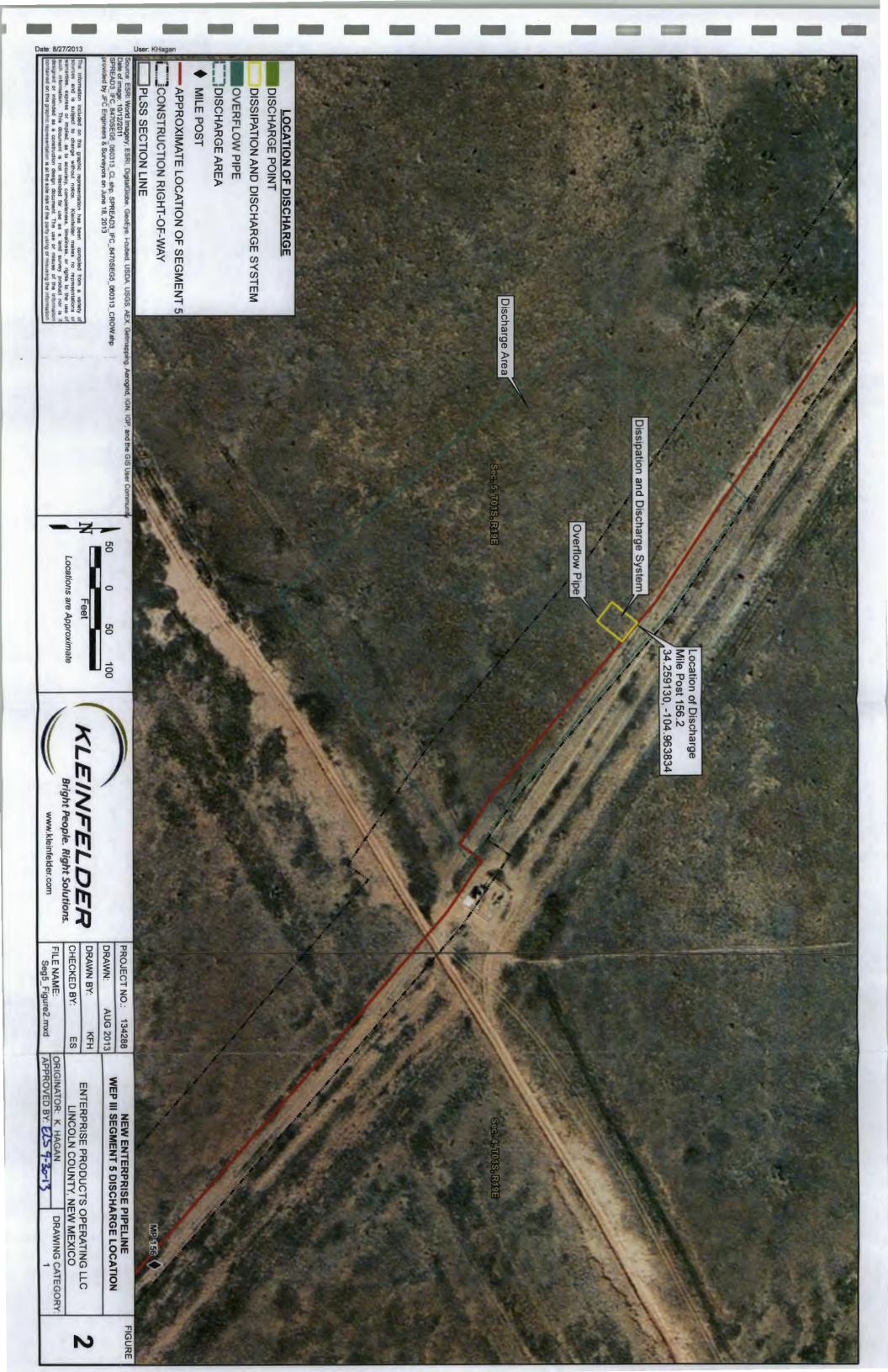
#### Land Ownership

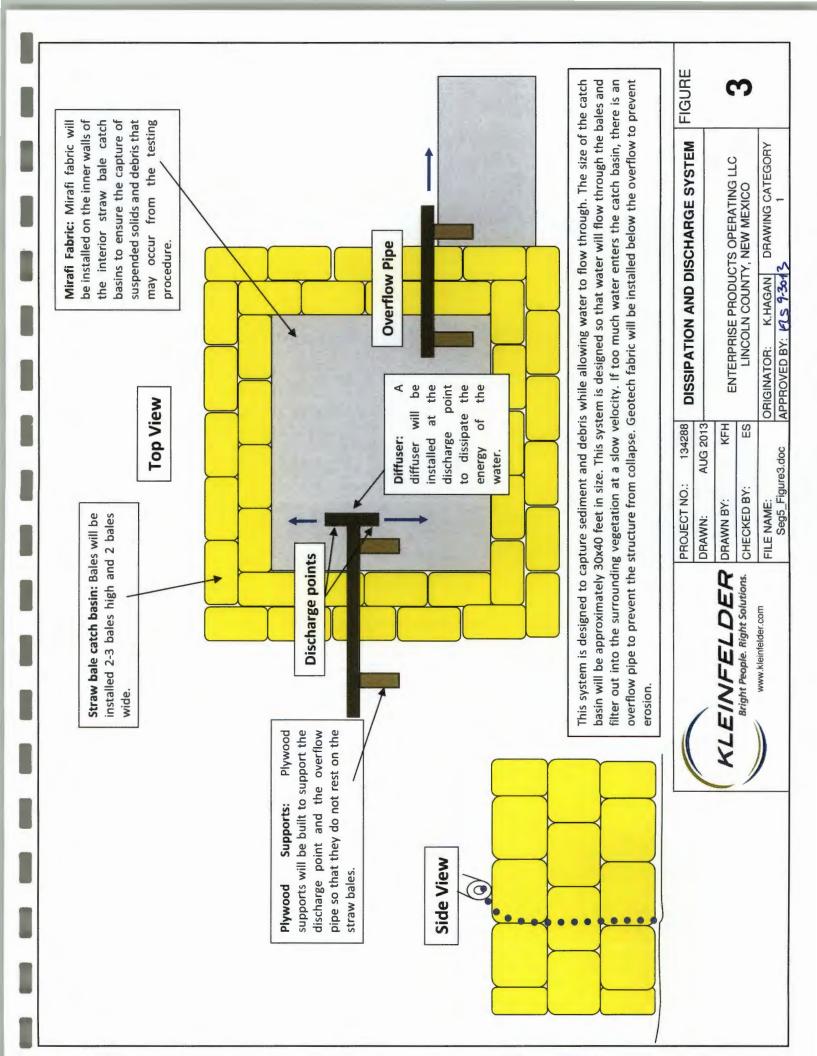
- BLM NM GIS dataset downloaded June 3, 2013

\*same source as used on Pit Rule Petroleum Recovery Research Center database (PRRC) http://ford.nmt.edu/prrc MF/index5.html

# **FIGURES**







# APPENDIX A Certification of Siting Criteria

# Certification of Siting Criteria

WEP III: Segment 5 Discharge

items describ within the sp	have performed a site visit to look for the presence of the bed below and have confirmed that evidence of these items was not observed ecified distance from the discharge location. The discharge location is in the L1 ownship 1 South, Range 19 East in Lincoln County, NM (see Figure 2).
1. \	Within 200 feet of a watercourse, lakebed, sinkhole or playa lake;
1	Within an existing wellhead protection area (200 feet from a private, domestic fresh water well or spring used by less than five households for domestic or stock watering purposes or 1,000 feet from any other fresh water well or spring);
3. \	Within a surface expression of a subsurface mining operation or karst feature;
4. \	Within, or within 500 feet of, a wetland; or
	Within 500 feet from the nearest permanent residence, school, hospital, institution or church.
	Enterprise Products, I state that the above information is complete and true to the knowledge.
	L. Dum Wisty

5/29/2013

Date of Site Visit

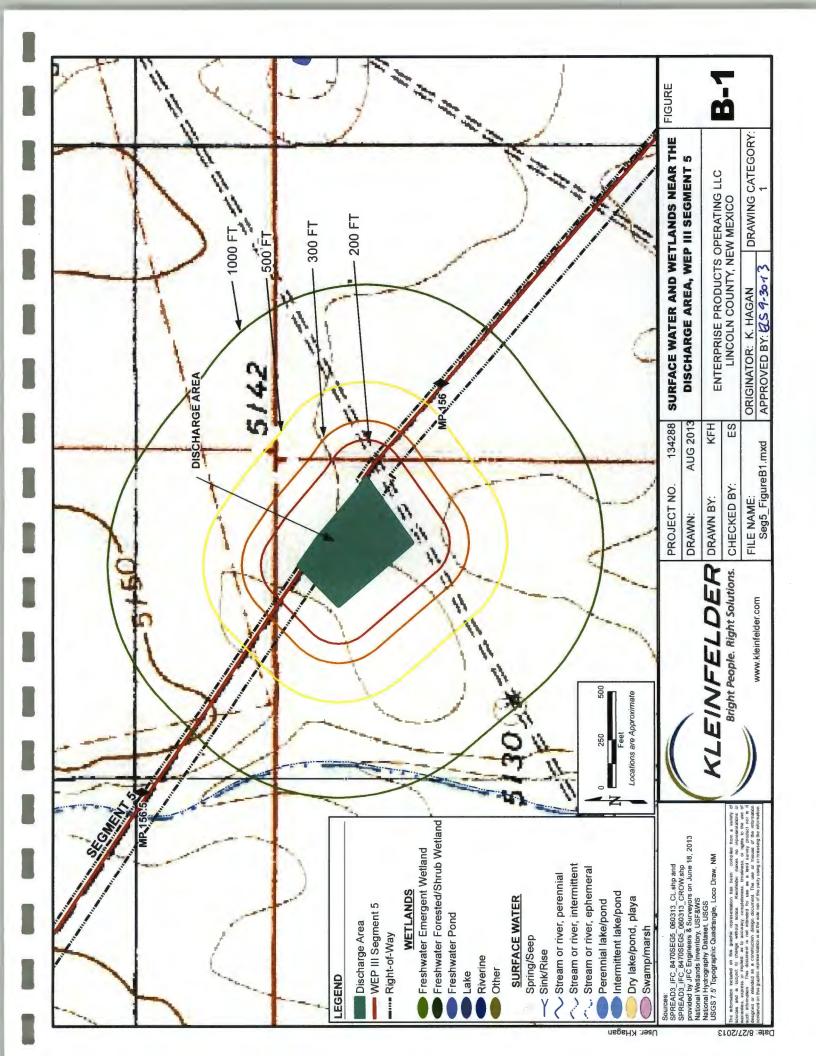
**Environmental Scientist** 

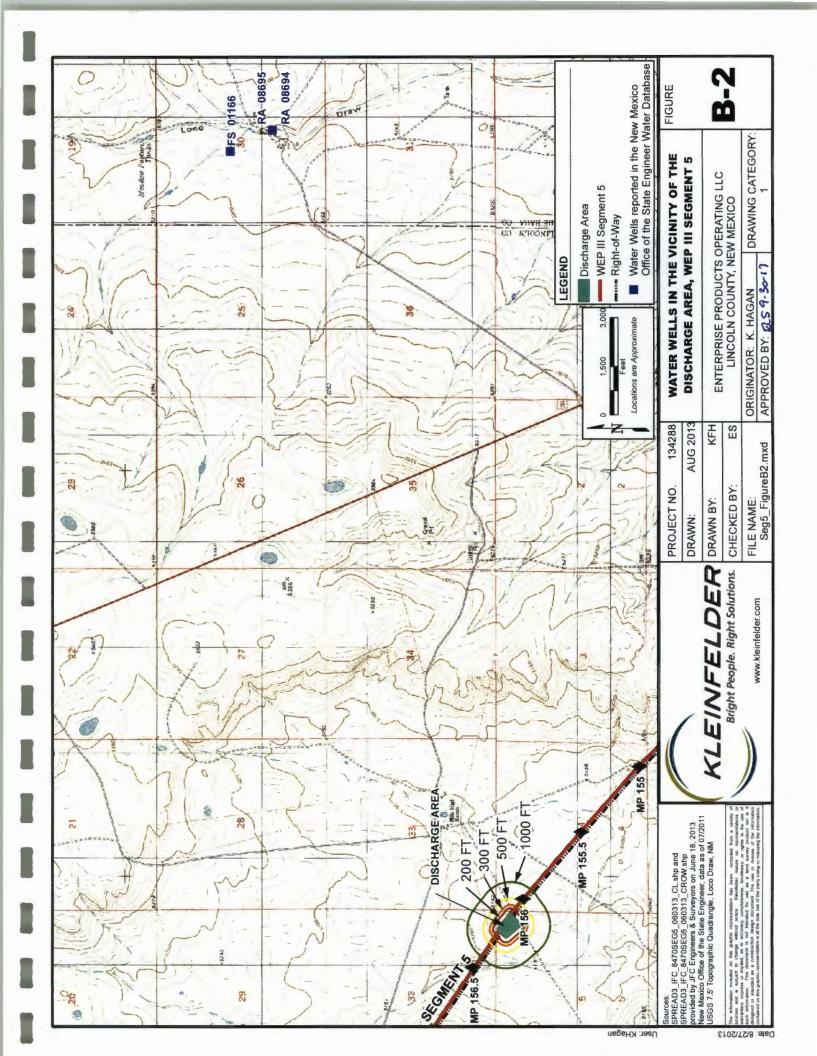
Title:

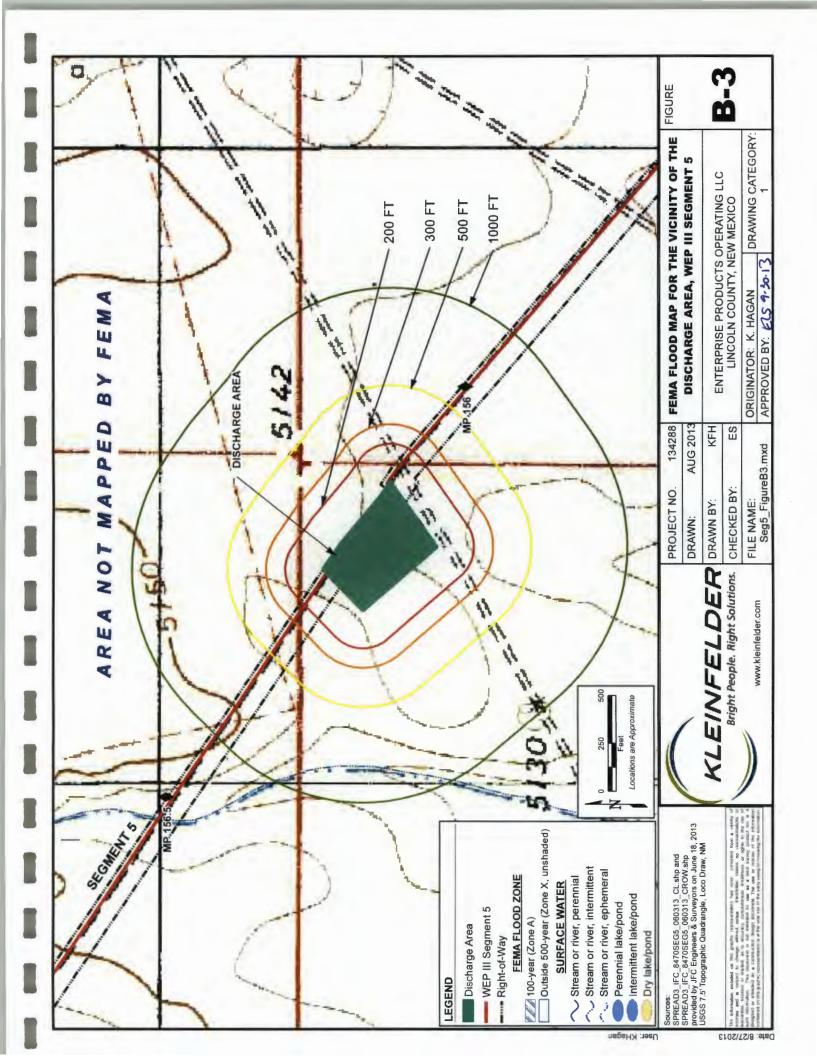
Signature

# **APPENDIX B**

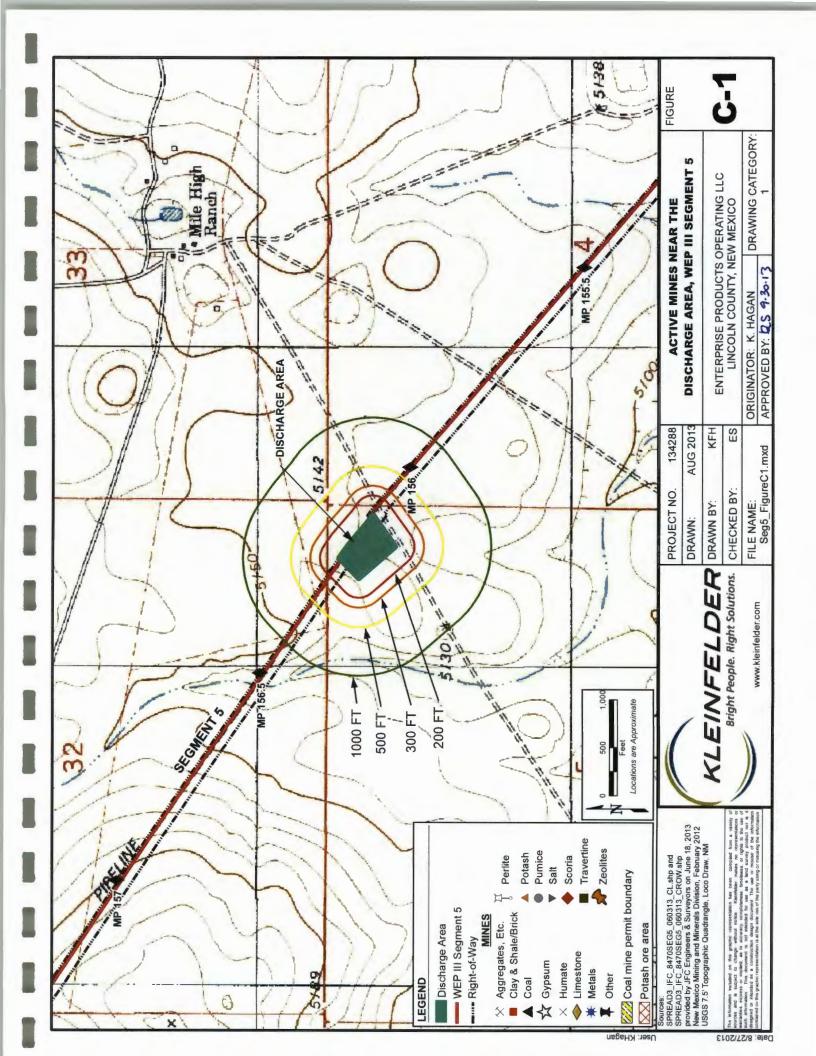
Water Feature, Water Well Information and Floodplain Information







# APPENDIX C Area Mine Information



# RE: Mines in the Vicinity of Proposed Hydrotatic Testing

DELETE

REPLY

REPLY ALL

**FORWARD** 

mark as unread

# Tompson, Mike, EMNRD < Mike.Tompson@state.nm.us>

Mor 7/22/2013 8:15 AM

To: Melissa Cote;

Cc: Kretzmann, John, EMNRD <john.kretzmann@state.nm.us>;

Hi Melissa,

The New Mexico Abandoned Mine Land Program has no record of any abandoned mines within a ½ mile of this location.

Please let me know if you need anything else.

Mike

From: Melissa Cote [mailto:MCote@kleinfelder.com]

**Sent:** Friday, July 19, 2013 2:15 PM

To: Tompson, Mike, EMNRD

Subject: Mines in the Vicinity of Proposed Hydrotatic Testing

Hi Mike,

I am working on a hydrostatic discharge plan for the fifth segment of the Enterprise pipeline. We are required to research whether there are any mines in the vicinity of the proposed discharge area.

The discharge area is located at:

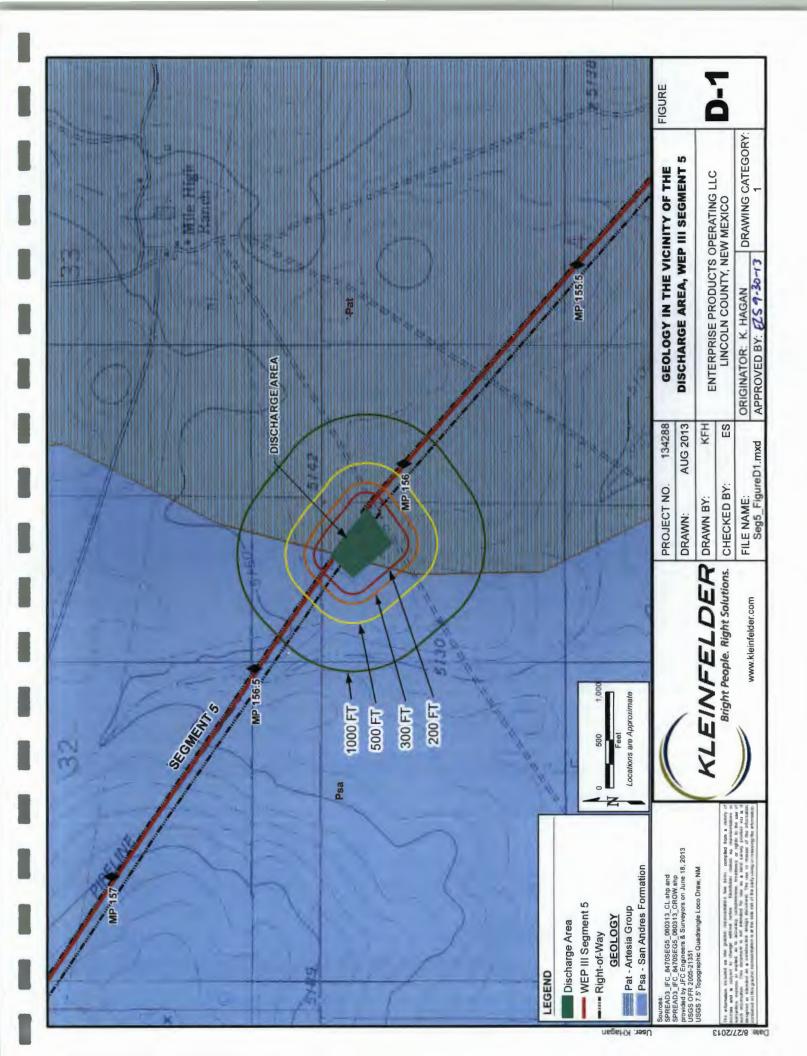
- L1; Section 5, T 1S, R 19E
- Latitude 34.259130°; Longitude -104.963834°

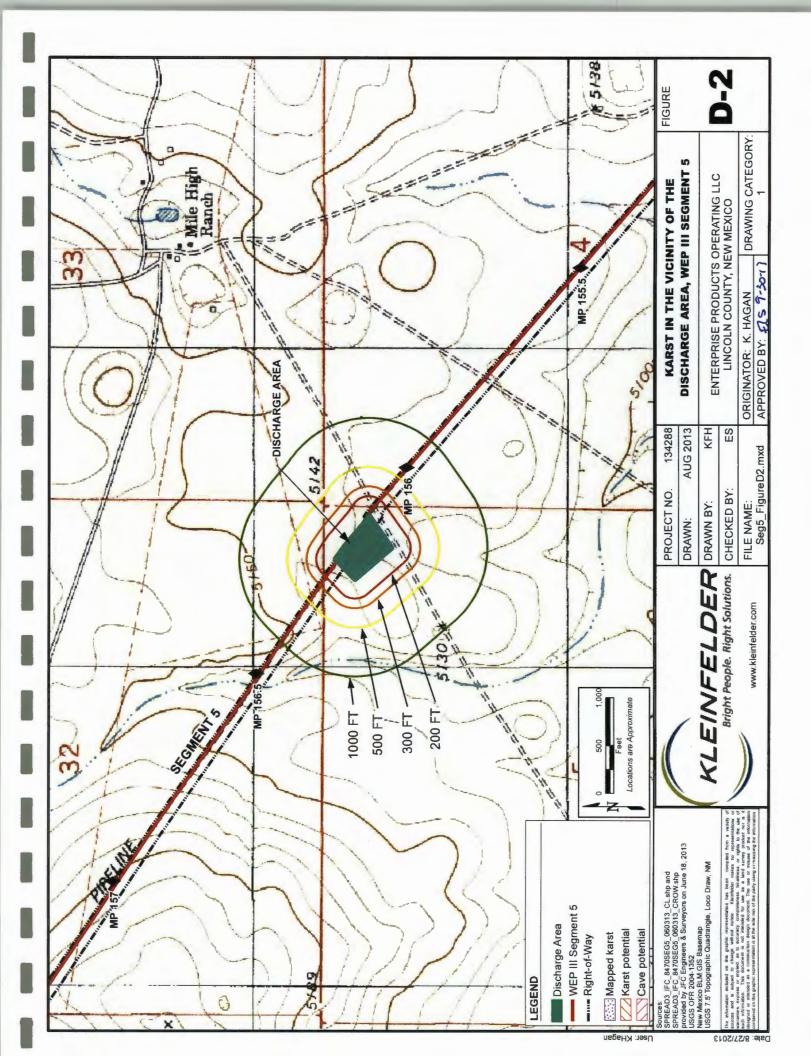
Would you be able to tell us whether there are any mines within a 1/2 mile radius of this area?

Thank you, Melissa

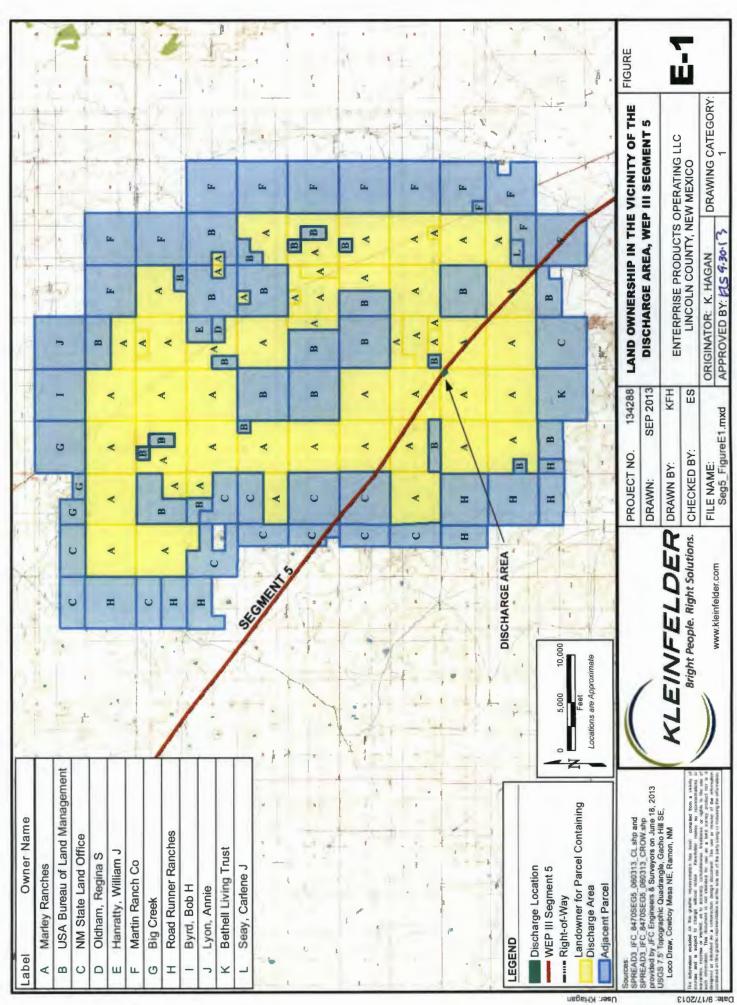
Melissa Cote

# APPENDIX D Geology





# APPENDIX E Area Landownership





August 21, 2013

### VIA HAND DELIVERY or CERTIFIED MAIL

Marley Ranches 4901 Whitney Lane Roswell, NM 88203

RE: Proposed Hydrostatic Water Discharge Site

MAPL – WEP III Project, 16 Inch Line

Tract Number: NM-LI-04 Lincoln County, New Mexico

Dear Mr. Marley,

Mid-America Pipeline Company, LLC, a Delaware limited liability company ("MAPL"), operated by Enterprise Products Operating LLC, a Texas limited liability company (collectively referred to as "Enterprise") proposes to hydrostatically test approximately 30 miles (consisting of 5 sections – the longest is approximately 34,786 feet) of its new 16-inch pipeline in Guadalupe, Lincoln and De Baca Counties, New Mexico. Enterprise proposes to use approximately 340,000 gallons (total) obtained from The Vaughn Duran Water System.

Upon completion of the test, Enterprise plans to discharge approximately 340,000 gallons of test water onto the pipeline Easements and onto the adjacent land located on the property of Marley Ranches, LTD (hereinafter referred to as "Landowner"). Landowner understands that the water will not be contained within the Easements and will flow out to adjoining land and hereby grants permission to Enterprise for such activity. The water will be discharged through a hay bale filtering structure at a rate of approximately 1,500 gallons per minute. All test water will be discharged and tested in compliance with the guidelines of the New Mexico Oil Conservation Division (NMOCD) Hydrostatic Discharge Permit. The discharge is currently scheduled to begin on or about October 9, 2013 and will take approximately 3 hours to complete.

A hydrostatic water discharge permit from the NMOCD is required to discharge hydrostatic test water. The NMOCD application requires permission from the landowner to discharge the test water onto private property. Landowner permission must be included with the application submitted to NMOCD. Acquisition of the permit takes approximately 90 days.

Enterprise shall defend, protect, indemnify and hold Marley Ranches, LTD harmless from and against any and all loss, damage, liability and expense of every nature and kind, including attorney's fees and costs, contamination and erosion of land, arising from the activities of Enterprise hereunder. Grantee shall repair or pay Grantor for any damages promptly as they may occur related to the water discharge on the property.



Should you have questions or require additional information, please feel free to contact me in writing at Mid-America Pipeline Company, LLC 4815 Hawkins NE Suite C-3, Albuquerque, New Mexico 87109 or by telephone at 505-345-0721.

Sincerely,

**Enterprise Products Operating LLC** 

Name: RICK J. Thiboudeaux

Title: Agent- Attorney-in-Fact

Your signature indicates your approval to allow for discharge onto your property.

Landowner(s):

Harry Dated: 23 day of A06 2013

Witness:

Clorin Russing Dated: 23 day of 44942t , 2013

# APPENDIX F Public Notice

#### **PUBLIC NOTICE**

The United States Department of Transportation (USDOT) requires periodic pressurized tests on all USDOT-regulated pipelines. Enterprise Products Operating LLC (Enterprise) hereby gives notice that the following discharge permit application has been submitted to the New Mexico Oil Conservation Division (NMOCD) in accordance with Subsection B, C, E, and F of 20.6.2.3108 New Mexico Administrative Code. The local Enterprise mailing address is: Enterprise Products Operating LLC, 614 Reilly Ave., Farmington, NM 87401.

The purpose of hydrostatic (testing with water) pipeline testing is to determine the extent to which potential defects might threaten the pipeline's ability to sustain maximum allowable operation pressure. The pipeline will be filled with water, and then pressurized to a pressure higher than the standard operating pressure for a specified duration of time.

Enterprise has submitted an application for hydrostatic test water discharge that will occur on the pipeline right-of-way and on adjacent private property. The location of the discharge is at latitude 34.259130°, longitude -104.963834° in the NE/4 of the NE/4 of Section 5, T 1S, R19E in Lincoln County, New Mexico.

The location of the hydrostatic discharge area is located approximately 27 miles southeast of Vaughn, New Mexico. To reach the discharge site from Vaughn, New Mexico, from the intersection of US-285 (8<sup>th</sup> Street) and Magnolia St., New Mexico, head east on US-285 S (8<sup>th</sup> Street) and continue to follow US-285 S for 29.1 miles; turn right for 2.3 miles; turn left for 0.2 miles; and turn right for 0.6 miles (all unnamed roads). The discharge area will be on the right. The hydrostatic test is scheduled to start on approximately November 4, 2013 with discharge of the test water scheduled for approximately November 15, 2013.

The new piping, called the Western Expansion Pipeline (WEP) III, Segment 5, will be hydrostatically tested. Up to 340,000 gallons of unused municipal water obtained from the Vaughn Duran Water System and will be hauled to the site and pumped via hose into the pipeline. Once the test has been completed, and prior to discharge, Enterprise will collect and analyze a sample of the water obtained from the end section of the pipeline. The sample will be analyzed for water quality. Once the results have been received, the results will be forwarded to the NMOCD. Upon NMOCD concurrence that the discharge water meets the water quality standards of NMAC 20.6.2.3103, Enterprise will discharge the water in accordance with the approved discharge permit. If discharge to the ground surface is approved, the water will be released from a pipeline and the test water will be discharged to the dissipation and discharge system and allowed to flow onto ground surface within the ROW and adjacent property (landowner approved).

If test water exceeds discharge requirements, it will be treated using an electro-coagulation process to remove constituents that exceed the discharge requirements. 400-barrel storage tanks will temporarily hold the treated water while a post-treatment sample is collected and submitted for laboratory analysis. The analytical results will be sent to the NMOCD for approval and upon NMOCD concurrence that the treated water meets water quality standards of NMAC 20.6.2.3103; Enterprise will discharge the water in accordance with the approved discharge permit.

If after this treatment process, water still exceeds discharge requirements, it will be transported from the project site in DOT-approved tanker trucks to an approved waste water disposal facility.

Limited data on shallow groundwater conditions was available from wells located near the discharge site. Based on a literature review, and in comparison with the closest wells to the site, the regional shallow groundwater likely to be affected by a leak or accidental discharge is estimated to be at depths of 95 to 107 feet deep. Total dissolved solids concentrations in groundwater in the region range from 2,100 to 2,300 parts per million.

The notice of intent and discharge plan outlines how produced water and waste will be properly managed, including handling, storage, and final disposition. The plan also includes procedures for the proper management of leaks, accidental discharges, and spills to protect the waters of the State of New Mexico.

For additional information, to be placed on a facility-specific mailing list for future notices, or to submit comments please contact:

Brad Jones, Environmental Engineer
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
Phone: 505.476.3487

The NM Energy, Minerals and Natural Resources Department will accept comments and statements of interest regarding this hydrostatic test and will provide future notices for this pipeline upon request.

#### **AVISO PUBLICO**

El Departamento de Transporte de los Estados Unidos (United States Department of Transportation, USDOT) requiere hacer pruebas (presurizadas) periódicamente en toda tubería regulada por USDOT. La compañía Enterprise Products Operating, LLC (Enterprise) da aviso por este medio que la siguiente aplicación de permiso de descarga ha sido sometida al New Mexico Oil Conservation Division (NMOCD) de acuerdo con las Sub-Sección B, C, E, y F del Código Administrativo de Nuevo México (New Mexico Administrative Code, NMAC, 20.6.2.3108). La dirección de correo local de la compañía Enterprise es: Enterprise Products Operating LLC, 614 Reilly Ave., Farmington, NM 87401.

El propósito de la prueba hidro-estática (prueba con agua) en la tubería es para evaluar el potencial de defectos que puedan afectar la habilidad de la tubería de sostener la máxima presión de operación permisible. La tubería será llenada con agua, y luego presurizada a una presión mayor a la presión de operación estándar por periodo de tiempo especificado.

Enterprise ha sometido una aplicación para descargar agua de pruebas hidro-estática que ocurrirá en el área de la servidumbre de paso y sobre la propiedad adyacente. El lugar esta a una latitud de 34.259130°, y una longitud de -104.963834° en el NE/4 del NE/4 de la Seccion 5, T1S, R19E en el Condado de Lincoln, Nuevo México.

El lugar de la descarga está aproximadamente a 27 millas al sureste de Vaughn, Nuevo México. Para llegar al lugar de la descarga desde Vaughn, New Mexico, desde la intersección de US-285 (8th Street) y Magnolia St., New Mexico: viajar sobre US-285 S (8th Street) y continuar a seguir US-285 S por 29.1 millas; dar vuelta a la derecha por 2.3 millas; dar vuelta a la izquierda por 0.2 millas; y dar vuelta a la derecha por 0.6 millas (todas son calles sin nombre). El área de descarga estará sobre la derecha. La prueba hidro-estática está programada para Noviembre 4, 2013 con la descarga del agua de prueba programada para aproximadamente Noviembre 15, 2013.

La nueva tubería, llamada Western Expansion Pipeline (WEP) III, Segmento 5, será probada hidro-estáticamente. Hasta 340,000 galones de agua municipal (sin previo uso) obtenida del Sistema de Agua Vaughn Duran y serán transportados al sitio y bombeados con manguera a la tubería. Una vez que la prueba se haya completado, y antes de la descarga, Enterprise obtendrá y analizara una muestra de agua obtenida del extremo de la sección de tubería. La muestra será analizada para evaluar la calidad del agua. Una vez que se reciban los resultados, los resultados serán mandados a NMOCD. Al NMOCD concurrir que el agua de descarga cumple con los estándares de calidad de agua de NMAC 20.6.2.3103, Enterprise descargara el agua de acuerdo con el permiso de descarga aprobado. Si descarga en la superficie del suelo es aprobado, el agua será desalojada de una tubería y el agua de prueba será descargada al sistema de descarga y permitida fluir sobre la superficie del suelo en el área de la servidumbre de paso de la tubería y sobre propiedad adyacente hacia el norte (aprobado por el dueño de la propiedad).

Si el agua de prueba excede los requisitos de descarga, será primero tratada usando electrocoagulación para remover componentes que excedan los requisitos de descarga. 400-barriles usados como tanques de almacén temporalmente guardaran el agua tratada hasta que las muestras de después de tratamiento sean obtenidas y sometidas para análisis de laboratorio. Los resultados analíticos serán enviados a NMOCD para ser aprobados y cuando NMOCD concurra que el agua de descarga tiene los estándares de calidad de agua de NMAC 20.6.2.3103, Enterprise descargara el agua de acuerdo con el permiso de descarga aprobado. Si después de este proceso de tratamiento, agua todavía excede los requisitos de descarga, será transportada del sitio del proyecto en camiones-pipa aprobados por el departamento de transporte por un transportista aprobado por NMOCD a un lugar aprobado por NMOCD para deshacerse del agua de prueba.

Datos limitados acerca del nivel freático más cercano a la superficie del suelo estaban disponibles de pozos localizados cerca del sitio de descarga. En base a una revisión de literatura, y en una comparación a los pozos más cercanos al sitio, el nivel freático regional que posiblemente pueda ser afectado por una fuga o descarga accidental se cree estar a profundidades de 95 a 107 pies debajo de la superficie. Concentración total de solidos disueltos en el nivel freático en la región varían de 2,100 a 2,300 partes por millón.

El aviso del plan de intención de descarga resume como el agua que se produzca será manejada, incluyendo su guardado y el proceso final para deshacerse del agua. El plan también incluye procesos para el manejo apropiado de fugas, descargas accidentales, y derrames para proteger las aguas del estado de Nuevo México (New Mexico).

Para información adicional, ser puesto en una lista de correo de particular a este proyecto, o para someter comentarios, favor de contactar:

Brad Jones, Environmental Engineer
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
Teléfono: (505) 476-3487

El Departamento de NM de Energia, Minerales y Recursos Naturales (NM Energy, Minerales and Natural Resources Department) aceptará comentarios al respecto de esta prueba hidroestática y proporcionará avisos futuros para esta tubería en base a petición.

# APPENDIX G Electro-Coagulation Process Information

## Post-Hydrostatic Test Water On-Site Electrocoagulation Treatment

#### Introduction

The electro-coagulation (EC) process is one that uses an electrical current to coagulate organic constituents and suspended solids in water. The coagulated organics have the ability to adsorb ionic constituents which makes it possible to separate out a flocculent with the majority of suspended organics and some of the ionic constituents removed. (ITRC, 2013).

At this site, it will be used to treat hydrostatic test water after the completion of testing and prior to discharge onto the ground surface.

#### **EC Process**

Water will be transferred from the pipeline with a pump and hose into two 21,000-gallon holding tanks to allow for consistent volumes to feed supply pumps. The water will be pumped from the holding tanks to the water treatment system tank. The hydrostatic test water will be treated with a zero toxicity bio-polymer and will be run through a quad filtration vessel containing 80, 5-micron filtration socks. Material Data Safety Sheets for any chemical or additives used are attached. The water will then be pumped through a series of holding tanks and filtering systems, and then pumped with hoses and pipes into the water storage tanks. An illustration of the areas of secondary containment, EC treatment system, and the storage tanks is shown in Figure G-1. A detailed schematic of the EC treatment and filtration system setup is shown in Figure G-2.

As the water is processed through the treatment vessel, the system is continuously monitored for water pressure, pH, nephelometric turbidity units (NTU), flow rate and residual bio-fouling to ensure system is operating within specifications. As filtration sacks are expended, the system is transferred to the secondary filtration system while maintenance is performed on the primary system. Treated water will be discharged by hose into approximately 21 interconnected, 400 barrel storage tanks. The water will be held in the storage tanks until analytical testing is conducted. Processing of the water through the EC system is anticipated to take approximately 3 days. All processing will occur within secondary containment and will occur in the pipeline ROW.

#### **Post-treatment Sampling**

One composite water sample will be collected from the end of the EC treatment process for purposes of discharge approval. The sample will be a composite sample collected from the following intervals/tanks: 1,000 gallons (1st tank); 100,800 gallons (6th tank); 184,800 gallons (11th tank); 268,800 gallons (16th tank); and 340,000 gallons (21st tank). The sample will be submitted for laboratory analysis, as described in item j. Analytical testing is anticipated to take approximately 4 days to receive the results.

Once the results have been received, they will be forwarded to the NMOCD. Upon NMOCD concurrence that the discharge water meets the water quality standards of NMAC 20.6.2.3103, Enterprise will discharge the water as described in *item h*.

If the results do not meet the required water quality standards, the water will pumped from the storage tanks into water trucks, using a hose or temporary piping. Transportation and disposal of the water is described in *item k*.

Any solids generated during the EC process will be managed as described in item k.

#### Best management practices

Secondary containment will be designed to hold 1 1/3 of the total volume of the 21 water storage tanks. It will be comprised of hay or dirt berms approximately 4 feet high with plastic lining the bottom of the containment area and draped over the sides of the containment. The approximate dimensions of the containment are 122feet long by 125 feet wide.

Each individual vessel of the EC treatment system will have its own secondary containment. The storage tanks and EC treatment system will be contained within a single containment area located in the ROW.

If the test water needs to be transferred to water trucks for disposal, drip pans will be placed under hose connections and valves to prevent leaks from reaching the ground surface. Valves will be present on the water tanks and at various transfer areas to stop the flow of water if needed. Personnel will be present during transfer operations to close valves in case of leaks. Personnel will be located in the surrounding area to conduct pipeline construction and maintenance activities and can help prevent vandalism to the water tanks. Visual inspections will be conducted while the hydrostatic test water is stored in the storage tanks to ensure the absence of leaks and damage due to vandalism.

Approximately five 42-gallon drums will be used to store the spent filtration socks. The drums will be sealed and will be left inside the secondary containment area, until the EC process is complete and the solids are transported off site for disposal.

**Timeline**The anticipated timeline if post treated water is approved for discharge to the ground surface:

	Activity	Duration	Cumulative Days
1	Tested water in pipeline does not meet standards for discharge to the ground surface	0	0
2	Secondary containment constructed and tanks placed inside. IDW mobilizes to site and sets up system	7	7
3	Treatment of water through EC system	3	10
4	Collection and analysis of post – treatment water samples	4	14
5	EC system removed	1	15
6	Discharge approved by NMOCD	1	16
7	Test water discharged to ground surface and drummed solids removed from disposal area	2	18
8	Empty storage tanks removed and secondary containment dismantled	7	25

The anticipated timeline if post treated water needs to be hauled off for disposal:

	Activity	Duration	Cumulative Days
1	Tested water in pipeline does not meet standards for discharge to the ground surface	0	0
2	Secondary containment constructed and tanks placed inside. IDW mobilizes to site and sets up system	7	7
3	Treatment of water through EC system	3	10
4	Collection and analysis of post – treatment water samples	4	14

5	EC system removed	1	15
6	Test water cannot be discharged	0	15
7	Test water is transferred into water trucks and hauled offsite for disposal. Drummed solids removed for disposal		18
8	Empty storage tanks removed and secondary containment	7	25
	dismantled		

#### Closure Plan

Upon completion of the treatment, the EC system will be removed from the site. Once the water in the storage tanks has been removed, the storage tanks will be dismantled and removed from the site. The drummed solids will be removed for disposal and the secondary containment will be dismantled. The site will be returned to preconstruction contours, as was present prior to hydrostatic test discharge.

#### References

Interstate Technology Regulatory Council (ITRC), 2013, Technology Overview as Part of a Web-based Technical and Regulatory Guidance, Electrocoagulation, http://www.itrcweb.org/miningwaste-guidance/to\_electrocoagulation.htm.



Date: 7/24/2012 Revision: 00

# **Material Safety Data Sheet**

HaloKlear: DBP-2100

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's Name:

HaloSource, Inc.

**Corporate Address:** 

1631 220<sup>th</sup> St. SE, Suite 100, Bothell, WA 98021

Manufacturer's Telephone:

(425) 881-6464 (Monday-Friday, 8AM-5PM PDT)

**Emergency Telephone (24 Hours):** 

800-424-9300 CHEMTREC (Domestic, North America)

703-527-3887 CHEMTREC (International, collect calls accepted)

Material/Trade/Product Name:

HaloKlear: DBP-2100 Poly X Socks

Synonyms: Chemical Name:

Proprietary

Chemical Formula:

Proprietary

CAS No.:

Proprietary

**EPA Registration #:** 

Not applicable

Product Use:

Flocculant

## **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

CAS NO.	COMPONENT	%	OSHA HAZARDOUS?
Trade Secret	Trade Secret	Trade Secret	YES

NOTE: See Section 8 for permissible exposure limits.

### **SECTION 3: HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

Off-white to tan, odorless powder.

May cause irritation to eyes and respiratory tract. May cause drying or chapping or skin.

WARNING! Can contain sufficient fines to cause a combustible dust explosion. Product will burn when in contact with a flame. See Section 5 Fire Fighting Measures for more information.

#### POTENTIAL HEALTH EFFECTS

**EYE:** Dry powder may cause foreign body irritation in some individuals.

**SKIN**: Prolonged contact with the dry powder may cause drying or chapping.

HaloKlear: DBP-2100 Page Number: 2 of 6

**INHALATION:** Hygroscopic properties of the product can form a paste or gel in the airway. Inhalation of dust may cause respiratory tract irritation. Excessive inhalation of dust may cause coughing and sneezing.

**INGESTION:** Not toxic if swallowed (less than a mouthful) based on available information.

**CHRONIC EXPOSURE/CARCINOGENICITY:** None of the components present in this material at concentrations of equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

AGGRAVATION OF PRE-EXISTING CONDITIONS: None known.

POTENTIAL ENVIRONMENTAL EFFECTS: Contains no substances known to be hazardous to the environment.

#### **SECTION 4: FIRST AID MEASURES**

#### **FIRST AID PROCEDURES**

EYE CONTACT: Remove contact lenses (if applicable), flush with water for 15 minutes. Call a physician.

**SKIN CONTACT:** Cleansing the skin after exposure is advisable.

**INHALATION:** If large amounts are inhaled, remove to fresh air and consult a physician.

**INGESTION:** Consult a physician if necessary.

NOTE TO PHYSICIANS: None.

#### SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

**UPPER FLAMMABLE LIMIT:** Not available

FLAMMABLITY CLASS (OSHA): Not applicable

**AUTOIGNITION TEMPERATURE:** Not available **LOWER FLAMMABLE LIMIT:** Not available

FLAME PROPAGATION/BURNING RATE: Not available

UNIQUE FIRE PROPERTIES: Combustible dust which can contain sufficient fines to cause a combustible dust

explosion.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide.

**EXTINGUISHING MEDIA:** Water, dry chemical, carbon dioxide.

**PROTECTION OF FIREFIGHTERS:** Treat as a "Class A" fire. Product will burn when in contact with a flame. Self extinguishers when ignition source is removed. Tends to smolder. As in any fire, wear self-contained breathing apparatus pressure-demand, and full protective gear.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

PERSONAL PROTECTIVE EQUIPMENT: See Section 8 (Personal Protective Equipment).

**ENVIRONMENTAL PRECAUTIONS:** None known.

**METHODS FOR CLEANING UP:** Wet material on walking surfaces will be extremely slipper. Avoid dust formation. Use equipment designed specifically for combustible dust. Take precautionary measures against static discharges.

HaloKlear: DBP-2100 Page Number: 3 of 6

# **SECTION 7: HANDLING AND STORAGE**

#### SAFE HANDLING RECOMMENDATIONS

**VENTILATION:** Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed.

**FIRE PREVENTION:** Product may form combustible dust-air mixtures. Keep away from heat, flames, sparks, and other ignition sources. Avoid emptying package in or near flammable vapors. Static charges may cause flash fire.

SPECIAL HANDLING REQUIREMENTS: Remove material from eyes, skin and clothing.

#### SAFE STORAGE RECOMMENDATIONS

**CONTAINMENT:** No special containment needed.

STORAGE ROOM RECOMMENDATIONS: Store in a cool, dry, well-ventilated area away from direct heat.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents.

**STORAGE CONDITIONS:** Store in cool, dry place. Keep container closed when not in use; keep out of the reach of children.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits in this section.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**EYE/FACE PROTECTION:** This product does not cause significant eye irritation or eye toxicity requiring special protection. Where there is significant potential for eye contact, wear chemical goggles and have eye flushing equipment available.

**SKIN PROTECTION:** Although this product does not present a significant skin concern, minimizes skin contamination by following good industrial practice.

**HAND PROTECTION**: Chemical resistant gloves are recommended to minimize potential irritation from handling.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Respirator use is not required for this product.

**GOOD HYGEIENE/WORK PRACTICES:** Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

#### **EXPOSURE GUIDELINES**

PERMISSIBLE EXPOSURE LIMITS				
INGREDIENT	OSHA	WISHA	ACGIH (TLV)	

HaloKlear: DBP-2100 Page Number: 4 of 6

CAS NO.	TWA	STEL	TWA	STEL	TWA	STEL
Not Applicable	Not	Not	Not	Not	Not	Not
Not Applicable	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**COLOR:** Off white to tan

PHYSICAL FORM: Solid, powder

**pH:** Approximately neutral (1% solution) **VAPOR DENSITY:** Not known

MELTING POINT: Not known

**SOLUBILITY IN WATER:** Fully soluble

SHAPE: Powder ODOR: Odorless

VAPOR PRESSURE: Not known BOILING POINT: Not known FREEZING POINT: Not known

SPECIFIC GRAVITY OR DENSITY: Not known

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

### **SECTION 10: STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under recommended storage conditions

**CONDITIONS TO AVOID:** Avoid dust formation

MATERIALS TO AVOID (INCOMPATIBILITY): Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

HAZARDOUS POLYMERIZATION: Will not occur

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

ORAL LD<sub>50</sub> (rat): >5,000 mg/kg

DERMAL LD<sub>50</sub> (rabbit): Not available

DERMAL LD<sub>50</sub> (rat): Not available

**SKIN IRRITATION:** Non-irritating (rabbit)

**EYE IRRITATION:** Non-irritating (rabbit)

SKIN SENSITIZATION: No skin allergy observed in gui8nea pig following repeated skin exposure

**ADDITIONAL INFORMATION:** The dry powder may cause foreign body irritation in some individuals. Prolonged contact with the dry powder may cause drying or chapping of the skin. Excessive inhalation of dust may be annoying and can mechanically impede respiration. Due to the hygroscopic properties, they can form a paste or gel in the airway.

#### SECTION 12: ECOLOGICAL INFORMATION

HaloKlear: DBP-2100 Page Number: 5 of 6

ECOTOXICITY: Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**MOBILITY:** Not available

**PERSISTENCE AND DEGRADABILITY:** This product is biodegradable.

**BIOACCUMULATIVE POTENTIAL:** Inherently biodegradable.

#### **ADDITIONAL INFORMATION:**

- 96 Hour Acute Survival
  - Rainbow Trout: LC<sub>50</sub> 491 mg/L, LC<sub>25</sub> 347 mg/L
  - Fathead Minnow: LC<sub>50</sub> 1110 mg/L, LC<sub>25</sub> 678 mg/L
- 7-Day Chronic Survival and Growth
  - o Rainbow Trout: LC<sub>50</sub> 510 mg/L, LC<sub>25</sub> 390 mg/L
  - Fathead Minnow: LC<sub>50</sub> 605 mg/L, LC<sub>25</sub> 443 mg/L
  - Ceriodaphnia Dubia: LC<sub>50</sub> 352 mg/L, LC<sub>25</sub> 289 mg/L
- Rainbow Trout (Biomass): LC<sub>50</sub> 386 mg/L, LC<sub>25</sub> 262 mg/L
- Fathead Minnow (Biomass): LC<sub>50</sub> 505 mg/L, LC<sub>25</sub> 256 mg/L

#### SECTION 13: DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

#### SECTION 14: TRANSPORT INFORMATION

#### **U.S. DEPARTMENT OF TRANSPORTATION (DOT):**

**Proper Shipping Name:** 

Not Regulated

**Hazard Class:** 

Not Regulated

Identification Number (UN Number): Not Regulated

Packing Group (PG):

Not Regulated

#### SECTION 15: REGULATORY INFORMATION

TSCA STATUS: Component(s) listed

#### **CERCLA REPORTABLE QUANTITY (RQ):**

CHEMICAL NAME	RQ
Not applicable	Not applicable

#### SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):

HaloKlear: DBP-2100 Page Number: 6 of 6

CHEMICAL NAME	TPQ	RQ
Not applicable	Not applicable	Not applicable

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIES:** Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH HAZARD	CHRONIC HEALTH HAZARD	FIRE HAZARD	REACTIVE HAZARD	SUDDEN RELEASE OF PRESSURE
YES	NO	YES	NO	NO

#### SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

**CALIFORNIA PROPOSITION 65:** The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

# SECTION 16: OTHER INFORMATION

#### **REVISION INFORMATION:**

MSDS sections(s) changed since last revision of document:

None, this is a new MSDS.

#### DISCLAIMER:

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MSDS PREPARED BY: Jeremy Heath, EH&S Manager



Date: 9/27/2011 Revision: 00

### **Material Safety Data Sheet**

HaloKlear: Gel-Floc

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's Name:

HaloSource, Inc.

**Corporate Address:** 

1631 220<sup>th</sup> St. SE, Suite 100, Bothell, WA 98021

Manufacturer's Telephone:

(425) 881-6464 (Monday-Friday, 8AM-5PM PDT)

**Emergency Telephone (24 Hours):** 

800-424-9300 CHEMTREC (Domestic, North America) 703-527-3887 CHEMTREC (International, collect calls accepted)

Material/Trade/Product Name:

HaloKlear: Gel-Floc MB

Synonyms:

Chitosan Lactate

**Chemical Name:** 

Chitosan, 2-hydroxypropanoate (salt)

**Chemical Formula:** 

Not available

CAS No.: Product Use: 66267-50-3 Flocculates soil contamination in storm water.

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	HAZARDOUS INGREDIENT (S)	%	OSHA HAZARDOUS?
Trade Secret	Trade Secret	85 – 95	YES
Trade Secret	Trade Secret	15 – 5	YES

NOTE: See Section 8 for permissible exposure limits.

### **SECTION 3: HAZARDS IDENTIFICATION**

### **EMERGENCY OVERVIEW**

A fine, off-white powder with no odor.

This material/product may cause eye or skin irritation.

### **POTENTIAL HEALTH EFFECTS**

EYE: May cause mechanical irritation. Will tend to form film on the surface of the eye causing blurred vision.

**SKIN:** Possible skin irritation or rash.

**INHALATION:** May aggravate pre-existing respiratory conditions or allergies. It may accumulate on linings of the nose and lungs resulting in dryness & coughing.

**INGESTION:** While it is not likely to be hazardous by ingestion, it may start dissolving and form a film on mucous membranes.

HaloKlear: Gel-Floc Page Number: 2 of 6

CHRONIC EXPOSURE/CARCINOGENICITY: Not known.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** May cause mechanical irritation. Will tend to form film on the surface of the eye causing blurred vision. Skin irritation. It may accumulate on linings of the nose and lungs resulting in dryness & coughing. May start dissolving and form a film on mucous membranes.

**AGGRAVATION OF PRE-EXISTING CONDITIONS:** May aggravate pre-existing respiratory conditions or allergies.

**POTENTIAL ENVIRONMENTAL EFFECTS:** Avoid water if material is spilled; water will dissolve chitosan lactate forming a thick viscous solution or gelatinous mass.

### **SECTION 4: FIRST AID MEASURES**

#### FIRST AID PROCEDURES

**EYE CONTACT:** Remove contact lenses (when applicable) and flush eyes with water for 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

**INHALATION:** If exposed to excessive levels of dust, remove to fresh air and get medical attention if cough or other symptoms develop.

**INGESTION:** Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. If available give several glasses of milk. Call a physician or poison control center immediately.

NOTE TO PHYSICIANS: None.

#### **SECTION 5: FIRE FIGHTING MEASURES**

FLASH POINT: Not available UPPER FLAMMABLE LIMIT: Not available

FLAMMABLITY CLASS (OSHA): Not applicable

AUTOIGNITION TEMPERATURE: Not available LOWER FLAMMABLE LIMIT: Not available

FLAME PROPAGATION/BURNING RATE: Not available

**UNIQUE FIRE PROPERTIES:** Keep away from oxidizing agents and avoid open flames. Product may ignite at temperatures in excess of 400°F. Depending on moisture content and particle size, airborne dust of Chitosan lactate might explode in the presence of an ignition source. It is comparable to flour and wood dust.

HAZARDOUS COMBUSTION PRODUCTS: None known

**EXTINGUISHING MEDIA:** Water spray, CO<sub>2</sub> (carbon dioxide), foam or dry chemical.

**PROTECTION OF FIREFIGHTERS:** Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coat, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Water may be used to keep fire-exposed containers cool until fire is out.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

PERSONAL PROTECTIVE EQUIPMENT: See Section 8 (Personal Protective Equipment).

HaloKlear: Gel-Floc Page Number: 3 of 6

**ENVIRONMENTAL PRECAUTIONS:** AVOID WATER; water will dissolve chitosan lactate forming a thick viscous solution or gelatinous mass.

METHODS FOR CLEANING UP: The material may be vacuumed or collected for recovery or disposal.

### SECTION 7: HANDLING AND STORAGE

### SAFE HANDLING RECOMMENDATIONS

**VENTILATION:** Use with adequate ventilation.

FIRE PREVENTION: No special requirements.

SPECIAL HANDLING REQUIREMENTS: None.

#### SAFE STORAGE RECOMMENDATIONS

**CONTAINMENT:** Keep container closed when not in use.

STORAGE ROOM RECOMMENDATIONS: Store in cool, dry areas and away from incompatible substances.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents.

STORAGE CONDITIONS: Store in cool, dry areas and away from incompatible substances.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** No special ventilation is required. None required under normal conditions of use.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE/FACE PROTECTION: For operations where eye contact can occur, wear safety glasses.

**SKIN PROTECTION:** For operations where skin contact can occur, wear impervious rubber or neoprene apron.

**HAND PROTECTION**: For operations where hand contact can occur, wear impervious rubber or neoprene gloves.

**RESPIRATORY PROTECTION:** If dust is generated, a dust mask may be needed. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**GOOD HYGEIENE/WORK PRACTICES:** Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

#### **EXPOSURE GUIDELINES**

PERMISSIBLE EXPOSURE LIMITS								
INGREDIENT	OS	HA	WIS	SHA	ACGIH (TLV)			
CAS NO.	AS NO. TWA STEL		TWA	STEL	TWA	STEL		

Page Number: 4 of 6 HaloKlear: Gel-Floc

Not Applicable	Not	Not Not		Not	Not	Not
	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Off-white.

**SHAPE:** Fine powder.

PHYSICAL FORM: Fine powder.

ODOR: None

pH: Not available

VAPOR PRESSURE: Not available **BOILING POINT:** Not available

VAPOR DENSITY: Not available **MELTING POINT:** Not available

FREEZING POINT: Not available

**SOLUBILITY IN WATER:** Soluble

SPECIFIC GRAVITY OR DENSITY: Not available

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

### **SECTION 10: STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable.

**CONDITIONS TO AVOID:** None known.

**MATERIALS TO AVOID (INCOMPATIBILITY):** Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

**HAZARDOUS POLYMERIZATION:** Not known.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

ORAL LD<sub>50</sub> (mice): >10g/kg

**DERMAL LD**<sub>50</sub> (rabbit): Not available.

**SKIN IRRITATION:** Not available.

EYE IRRITATION: Not available.

SKIN SENSITIZATION: Not available.

ADDITIONAL INFORMATION: Not available.

### SECTION 12: ECOLOGICAL INFORMATION

### **ECOTOXICITY** (in water):

### Acute Toxicity

- Daphnia: LC50 135 mg/L
- Daphnia: LC25 Not Calculable
- Fathead Minnows: LC50 22.8 mg/L
- Fathead Minnows: LC25 16.9 mg/L

Page Number: 5 of 6 HaloKlear: Gel-Floc

Rainbow Trout: LC50 - 6.4 mg/L

Rainbow Trout: LC25 - 4.4 mg/L

#### Chronic Toxicity

- Rainbow Trout: LC50 (survival) 5.3 mg/L, 7 days
- Rainbow Trout: LC25 (survival) 4.8 mg/L, 7 days
- Rainbow Trout: EC25 (biomass) 3.5 mg/L, 7 days
- Fathead Minnows: LC50 (survival) 25.4 mg/L, 7 days
- Fathead Minnows: LC25 (survival) Not Calculable
- Fathead Minnows: EC25 (biomass) 13.9 mg/L, 7 days

**MOBILITY:** Not available.

**PERSISTENCE AND DEGRADABILITY:** Not available.

**BIOACCUMULATIVE POTENTIAL:** Not available.

**ADDITIONAL INFORMATION:** Not available.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

### **SECTION 14: TRANSPORT INFORMATION**

#### **U.S. DEPARTMENT OF TRANSPORTATION (DOT):**

**Proper Shipping Name:** 

Not Regulated

**Hazard Class:** 

Not Regulated

Identification Number (UN Number): Not Regulated

Packing Group (PG):

Not Regulated

### **SECTION 15: REGULATORY INFORMATION**

**TSCA STATUS:** Listed

### **CERCLA REPORTABLE QUANTITY (RQ):**

CHEMICAL NAME	RQ
Not applicable	Not applicable

### SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):

	·	
CHEMICAL NAME	TPQ	RQ

HaloKlear: Gel-Floc

Page Number: 6 of 6

Not applicable	Not applicable	Not applicable
----------------	----------------	----------------

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIES:** Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH	CHRONIC HEALTH	FIRE HAZARI)		SUDDEN RELEASE	
HAZARD	HAZARD			OF PRESSURE	
YES	NO	NO	NO	NO	

#### SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)	
Not applicable	Not applicable	Not applicable	

**CALIFORNIA PROPOSITION 65:** The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

### **SECTION 16: OTHER INFORMATION**

### **REVISION INFORMATION:**

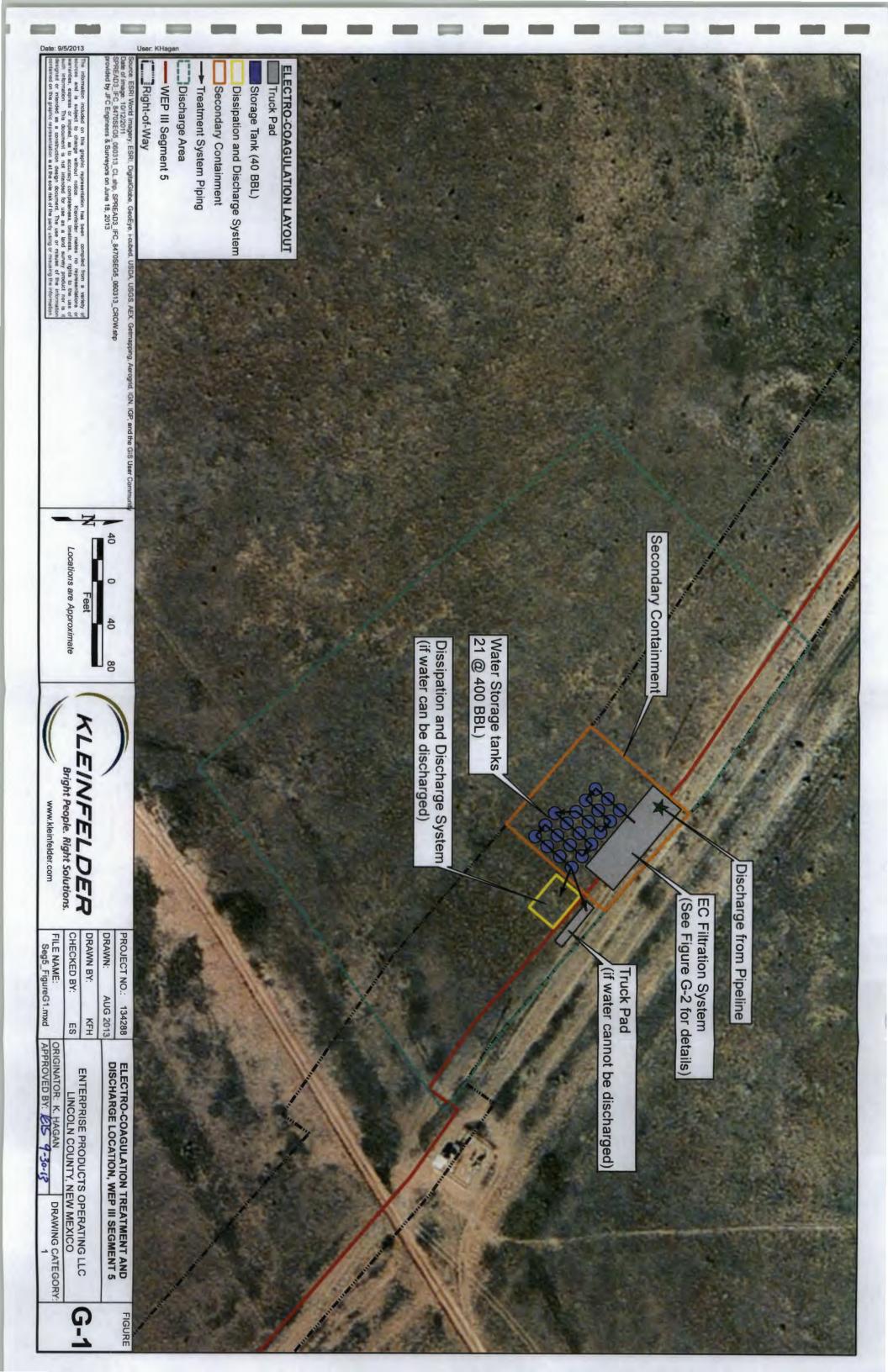
MSDS sections(s) changed since last revision of document:

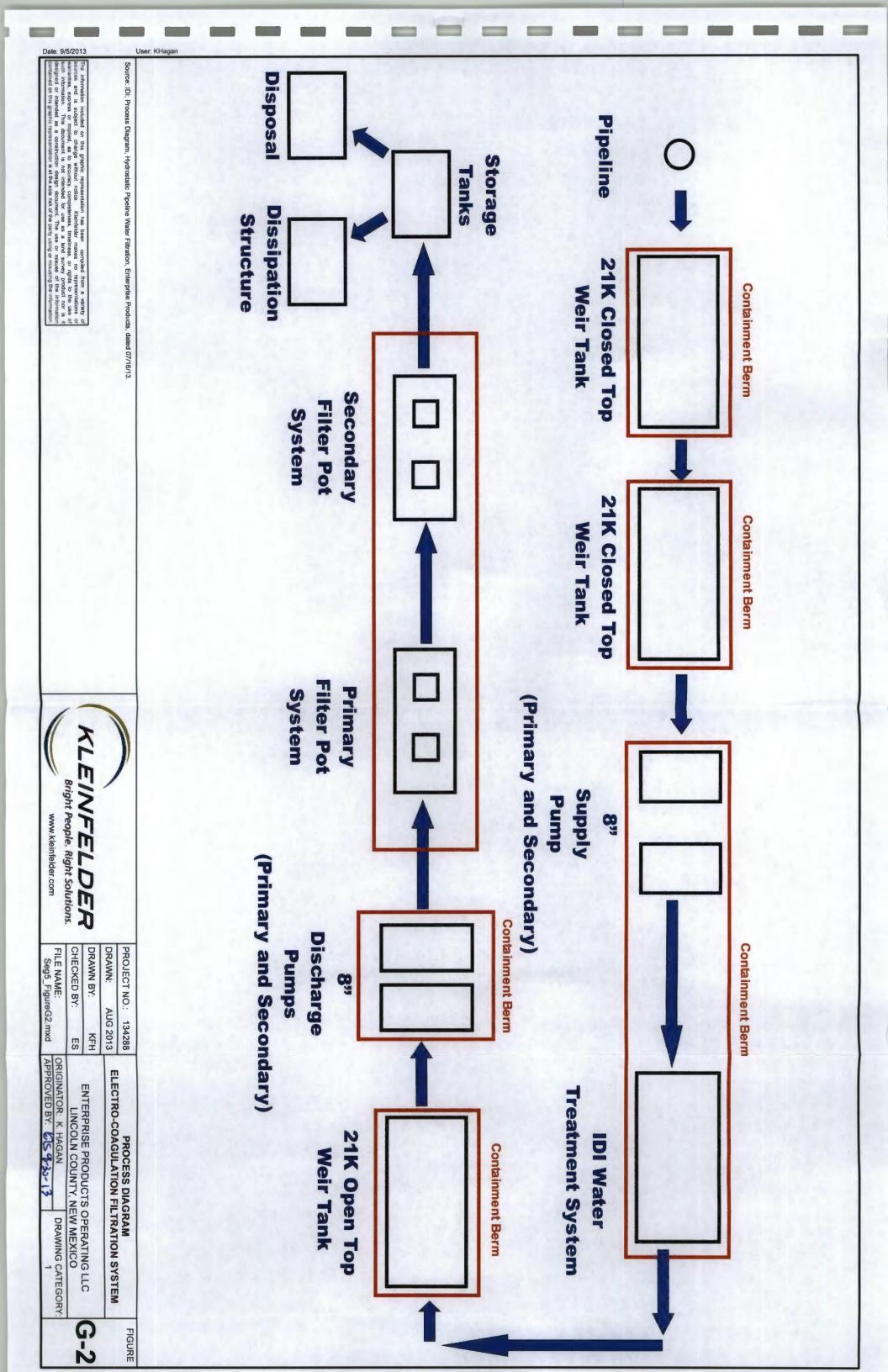
None, this is a new MSDS.

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MSDS PREPARED BY: Jeremy Heath, EH&S Manager





# APPENDIX H Vaughn Duran Water System Analytical Data

## **Chem/Rad Sample Results**

Return Links

Chem/Rad Samples

Analyte List

Water System Detail

Water System No. :

NM3515310

Federal Type:

Water System Name

VAUGHN DURAN WATER SYSTEM

State Type:

 $\mathbf{C}$ 

**Principal County** Served:

Lab Sample No.:

Status:

**GUADALUPE** 

**Primary Source:** GW

**Activity Date:** 06-01-1977 Collection Date: 10-14-2011

This list displays sample/results of all non-microbial analytes

1110C28-01A

(TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results

for Microbial Analytes are not included.

Water Systems

Water System Search

		Analyte Name		than	Level Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
1.1	1(17)	COPPER, FREE	200.8	N	MRL	.001 MG/L	0.0083 MG/L		
	1030	LEAD	200.8	Y	MRL	.001 MG/L			

County Map

Glossary

### **Chem/Rad Sample Results**

 $\mathbf{C}$ 

Return Links

Chem/Rad Samples

Analyte

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No.: NM3515310 Federal Type:

VAUGHN DURAN WATER Water System Name: State Type:  $\mathbf{C}$ **SYSTEM** 

**Principal County GUADALUPE** Primary Source: GW

Served: Status: Activity Date : 06-01-1977 0905229-02A Lab Sample No. : Collection Date: 05-11-2009

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results for

Microbial Analytes are not included.

Analyte Code	Analyte Name	Method Code	Less than Indicator	Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
1005	ARSENIC	200.8	N	MRL	.001 MG/L	0.0046 MG/L	01-01-2008	12-31-2010
1010	BARIUM	200.7	N	MRL	.002 MG/L	0.0077 MG/L	01-01-2008	12-31-2010
1015	CADMIUM	200.7	Y	MRL	.002 MG/L		01-01-2008	12-31-2010
1020	CHROMIUM	200.7	Y	MRL	.006 MG/L		01-01-2008	12-31-2010
1035	MERCURY	245.1	Y	MRL	.0002 MG/L		01-01-2008	12-31-2010
1036	NICKEL	200.7	Y	MRL	.01 MG/L		01-01-2008	12-31-2010
1045	SELENIUM	200.8	N	MRL	.001 MG/L	0.0051 MG/L	01-01-2008	12-31-2010
1052	SODIUM	200.7	N	MRL	1 MG/L	44.00 MG/L		
1074	ANTIMONY, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2008	12-31-2010
111/5	BERYLLIUM, TOTAL	200.7	Y	MRL	.002 MG/L		01-01-2008	12-31-2010
1085	THALLIUM, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2008	12-31-2010
1095	ZINC	200.7	Y	MRL	.01 MG/L			

### **Chem/Rad Sample Results**

Return Links

Water System No. :

NM3515310

Federal Type:

Water System Name:

VAUGHN DURAN WATER

State Type:

 $\mathbf{C}$ 

**Principal County Served: GUADALUPE** 

SYSTEM

**Primary Source:** 

GW

Status: Chem/Rad

Samples

Lab Sample No.:

A 1109053-01A **Activity Date: Collection Date:**  06-01-1977 08-25-2011

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Analyte

List

Water

System Detail

Water Systems

Water System

Search

County

Map

Glossary

Analyte Code	Analyte Name	Method Code	Less than Indicator	Type	Reporting Level	Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
2941	CHLOROFORM	524.2	Y	MRL	5 UG/L			
2942	BROMOFORM	524.2	Y	MRL	5 UG/L			
2943	BROMODICHLOROMETHANE	524.2	Y	MRL	5 UG/L			
2944	DIBROMOCHLOROMETHANE	524.2	Y	MRL	5 UG/L			
2950	TTHM	524.2	Y	MRL	0 UG/L		01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

Return Links

Chem/Rad Samples

Analyte List

Water System Detail Water System No. :

NM3515310

Federal Type:

C

VAUGHN DURAN WATER Water System Name SYSTEM

State Type:

**Principal County** Served:

Status:

**Primary Source:** GW **Activity Date:** 

06-01-1977

Lab Sample No. :

1304238-001A

**GUADALUPE** 

Collection Date: 04-02-2013

This list displays sample/results of all non-microbial analytes

(TSAANLYT.TYPE CODE <> MOR) associated to the selected sample. Results

for Microbial Analytes are not included.

Water Systems Water

System Search

	Analyte Name	Method Code	rnan	Level Type	* ***	Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
7055	XYLENES, TOTAL	524.2	Y	MRL	1 UG/L		01-01-2013	12-31-2013

County Map

Glossary

### **Chem/Rad Sample Results**

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Chem/Rad Samples

Analyte List

Water System Detail Water System No. :

**Principal County** 

Lab Sample No. :

Served:

Status:

Water System Name

NM3515310

Federal Type:

VAUGHN DURAN WATER

State Type:

C

C

SYSTEM

**GUADALUPE** 

1301824-001A

**Primary Source:** GW

**Activity Date:** 

06-01-1977

Collection Date: 01-22-2013

This list displays sample/results of all non-microbial analytes

(TSAANLYT.TYPE CODE <> MOR) associated to the selected sample. Results

for Microbial Analytes are not included.

Water Systems Water System Search

Analyte Code	Analyte Name	Codo	tnan	Level Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
1014X	NITRATE- NITRITE	300.0	Y	MRL	1 MG/L		01-01-2013	12-31-2013

County Map

Glossary

### **Chem/Rad Sample Results**

 $\mathbf{C}$ 

Return Links

Chem/Rad Samples

Analyte List

Water System Detail Water System No.: NM3515310 Federal Type:

Water System Name: VAUGHN DURAN WATER State Type: C

Principal County
GUADALUPE
Primary Source : GW

Served:
Status:
A
Activity Date: 06-01-1977

This list displays sample/results of all non-microbial analytes

(TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results

for Microbial Analytes are not included.

Water Systems Water System	Code	Analyte Name	Code	than	Level Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
Search System		CYANIDE	10-204- 00-1X	Y	MRL	.005 MG/L		01-01-2011	12-31-2013

County Map

Glossary

### **Chem/Rad Sample Results**

Return Links

Chem/Rad Samples

Analyte List

Water System Detail Water System No.: NM3515310

**Principal County** 

Lab Sample No. :

Served:

Status:

NM3515310 F

VAUGHN DURAN WATER

Water System Name : SYSTEM

GUADALUPE

Δ

A 2012003213

Federal Type :

State Type : C

Primary Source : GW

**Activity Date :** 06-01-1977 **Collection Date :** 01-24-2012

This list displays sample/results of all non-microbial analytes

(TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results

for Microbial Analytes are not included.

Water Systems Water	Analyte Code	Analyte Name	Code	than	Tyne	4	Concentration level		Monitoring Period End Date
System Search	1025	FLUORIDE	4500F-C	N	MRL	.1 MG/L	3.58 MG/L	01-01-2011	12-31-2013

County Map

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### **Chem/Rad Sample Results**

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Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System No. : NM3515310

VAUGHN DURAN WATER Water System Name:

**SYSTEM** 

**Principal County** 

Served:

Status: Lab Sample No. : **GUADALUPE** 

A

2012003214

Federal Type:

State Type:

C

C

Primary Source: GW

**Activity Date:** 06-01-1977 01-24-2012 Collection Date :

This list displays sample/results of all non-microbial analytes

(TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results for

Microbial Analytes are not included.

Analyte Code	Analyte Name	Method Code	Less than Indicator	Level Type	Reporting Level	Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
1005	ARSENIC	200.8	N	MRL	.001 MG/L	0.007 MG/L	01-01-2011	12-31-2013
1010	BARIUM	200.8	Y	MRL	.1 MG/L		01-01-2011	12-31-2013
1015	CADMIUM	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1020	CHROMIUM	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1035	MERCURY	245.1	Y	MRL	.0002 MG/L		01-01-2011	12-31-2013
1036	NICKEL	200.8	Y	MRL	.01 MG/L		01-01-2011	12-31-2013
1045	SELENIUM	200.9	Y	MRL	.005 MG/L		01-01-2011	12-31-2013
1052	SODIUM	200.7	N	MRL	1 MG/L	50.00 MG/L		
1074	ANTIMONY, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1075	BERYLLIUM, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013
1085	THALLIUM, TOTAL	200.8	Y	MRL	.001 MG/L		01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

Return Links

Water System No.: NM3515310

Federal Type :

C C

VAUGHN DURAN WATER SYSTEM State Type: C
GUADALUPE Primary Source: GW

Status:

Water System Name:

Lab Sample No. :

Principal County Served: GUADALUPE

Primary Source : Activity Date :

06-01-1977

Chem/Rad Samples A 2012003215

Collection Date :

01-24-2012

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE \$\infty\$ MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Analyte

List

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Detail

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Glossarv

Analyte Code	Analyte Name	Method Code	Less than Indicator	Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
2005	ENDRIN	525.2	Y	MRL	.021 UG/L		01-01-2011	12-31-2013
2010	BHC-GAMMA	525.2	Y	MRL	.052 UG/L		01-01-2011	12-31-2013
2015	METHOXYCHLOR	525.2	Y	MRL	.041 UG/L		01-01-2011	12-31-2013
2020	TOXAPHENE	508.1	Y	MRL	.0299 UG/L		01-01-2011	12-31-2013
2031	DALAPON	515.4	Y	MRL	.93 UG/L		01-01-2011	12-31-2013
2032	DIQUAT	549.2	Y	MRL	.46 UG/L		01-01-2011	12-31-2013
2033	ENDOTHALL	548.1	Y	MRL	101.6 UG/L		01-01-2011	12-31-2013
2034	GLYPHOSATE	547	Y	MRL	6.4 UG/L		01-01-2011	12-31-2013
2035	DI(2-ETHYLHEXYL) ADIPATE	525.2	Y	MRL	.124 UG/L		01-01-2011	12-31-2013
2036	OXAMYL	531.2	Y	MRL	.58 UG/L		01-01-2011	12-31-2013
2037	SIMAZINE	525.2	Y	MRL	.072 UG/L		01-01-2011	12-31-2013
2039	DI(2-ETHYLHEXYL) PHTHALATE	525.2	Y	MRL	.093 UG/L		01-01-2011	12-31-2013
	PICLORAM	515.4	Y	MRL	.04 UG/L		01-01-2011	12-31-2013
2041	DINOSEB	515.4	Y	MRL	.34 UG/L		01-01-2011	12-31-2013
2042	HEXACHLOROCYCLOPENTA DIENE	525.2	Y	MRL	.01 UG/L		01-01-2011	12-31-2013
2046	CARBOFURAN	531.2	Y	MRL	.65 UG/L		01-01-2011	12-31-2013
2050	ATRAZINE	525.2	Y	MRL	.041 UG/L		01-01-2011	12-31-2013
2051	LASSO	525.2	Y	MRL	.062 UG/L		01-01-2011	12-31-2013
2065	HEPTACHLOR	525.2	Y	MRL	.041 UG/L		01-01-2011	12-31-2013
2067	HEPTACHLOR EPOXIDE	525.2	Y	MRL	.041 UG/L		01-01-2011	12-31-2013
2105	2,4-D	515.4	Y	MRL	.17 UG/L		01-01-2011	12-31-2013
2110	2,4,5-TP	515.4	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
2274	HEXACHLOROBENZENE	525.2	Y	MRL	.041 UG/L		01-01-2011	12-31-2013
2306	BENZO(A)PYRENE	525.2	Y	MRL	.021 UG/L		01-01-2011	12-31-2013
2326	PENTACHLOROPHENOL	515.4	Y	MRL	.02 UG/L		01-01-2011	12-31-2013
	TOTAL POLYCHLORINA TED BIPHENYLS (PCB)	508.1	Y	MRL	.0041 UG/L		01-01-2011	12-31-2013
2931	1,2-DIBROMO-3-CHLOROPROPANE	504.1	Y	MRL	.004 UG/L		01-01-2011	12-31-2013
2946	ETHYLENE DIBROMIDE	504.1	Y	MRL	.003 UG/L		01-01-2011	12-31-2013
2959	CHLORDANE	508.1	Y	MRL	.0072 UG/L		01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

Return Links

Chem/Rad Samples

Analyte List

Water System Detail Water System No. :

NM3515310

Federal Type:

Water System Name:

VAUGHN DURAN WATER **SYSTEM** 

State Type:

 $\mathbf{C}$ 

**Principal County** 

**GUADALUPE** 

**Primary Source:** GW

Served: Status:

**Activity Date:** 

06-01-1977

Lab Sample No. :

2012003216

Collection Date: 01-24-2012

This list displays sample/results of all non-microbial analytes

(TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results for

Microbial Analytes are not included.

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Water
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Glossary

Analyte Code	Analyte Name	Method Code	Less than Indicator	Leve Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
4000	GROSS ALPHA, EXCL. RADON & U	null	null	MRL	null null	31.9 PCI/L	01-01-2011	12-31-2013
4002	GROSS ALPHA, INCL. RADON & U	SM 7110 B	N	MRL	.8 PCI/L	52.0 PCI/L		
4006	COMBINED URANIUM	200.8	N	MRL	1 UG/L	30.00 UG/L	01-01-2012	03-31-2012
4007	URANIUM- 234	HASL- 300	N	MRL	.09 PCI/L	43.84 PCI/L		
4009	URANIUM- 238	HASL- 300	N	MRL	.06 PCI/L	7.92 PCI/L		
4010	COMBINED RADIUM (-226 & -228)	null	null	MRL	null null	0.13 PCI/L	01-01-2011	12-31-2013
4020	RADIUM- 226	903.1	N	MRL	.01 PCI/L	0.09 PCI/L		
4030	RADIUM- 228	904.0	N	MRL	.14 PCI/L	0.04 PCI/L		
4100	GROSS BETA PARTICLE ACTIVITY	SM 7110 B	N	MRL	1.2 PCI/L	13.7 PCI/L		

### **Chem/Rad Sample Results**

Return Links

Chem/Rad Samples

Analyte

 $\mathbf{C}$ Federal Type: Water System No. : NM3515310

VAUGHN DURAN WATER C Water System Name: State Type: **SYSTEM** 

**Principal County Served GUADALUPE** GW **Primary Source:** 

06-01-1977 **Activity Date:** Status: 2012012912 04-10-2012 Lab Sample No. : **Collection Date:** 

This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE\_CODE ♦ MOR) associated to the selected sample. Results for Microbial Analytes are not included.

Water System Detail	Analyte Code	Analyte Name	Method Code	than Indicator	Type	Level	Concentration level	Begin Date	Monitoring Period End Date
XX/-4	2378	1,2,4-TRICHLOROBENZENE	524.2	Y	MRL	.11 UG/L		01-01-2011	12-31-2013
Water Systems	2380	CIS-1,2- DICHLOROETHYLENE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
	2955	XYLENES, TOTAL	524.2	Y	MRL	.07 UG/L		01-01-2012	12-31-2012
Water	2964	DICHLOROMETHANE	524.2	Y	MRL	.11 UG/L		01-01-2011	12-31-2013
System	2968	O-DICHLOROBENZENE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
Search	2969	P-DICHLOROBENZENE	524.2	Y	MRL	.06 UG/L		01-01-2011	12-31-2013
Oction	2976	VINYL CHLORIDE	524.2	Y	MRL	.22 UG/L		01-01-2011	12-31-2013
<b>C</b>	2977	1,1-DICHLOROETHYLENE	524.2	Y	MRL	.11 UG/L		01-01-2011	12-31-2013
County Map	2979	TRANS-1,2- DICHLOROETHYLENE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
	2980	1,2-DICHLOROETHANE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
Glossary	2981	1,1,1-TRICHLOROETHANE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
	2982	CARBON TETRACHLORIDE	524.2	Y	MRL	.06 UG/L		01-01-2011	12-31-2013
	2983	1,2-DICHLOROPROPANE	524.2	Y	MRL	.08 UG/L		01-01-2011	12-31-2013
	2984	TRICHLOROETHYLENE	524.2	Y	MRL	.06 UG/L		01-01-2011	12-31-2013
	2985	1,1,2-TRICHLOROETHANE	524.2	Y	MRL	.08 UG/L		01-01-2011	12-31-2013
	2987	TETRACHLOROETHYLENE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
	2989	CHLOROBENZENE	524.2	Y	MRL	.06 UG/L		01-01-2011	12-31-2013
	2990	BENZENE	524.2	Y	MRL	.07 UG/L		01-01-2011	12-31-2013
	2991	TOLUENE	524.2	Y	MRL	.06 UG/L		01-01-2011	12-31-2013
	2992	ETHYLBENZENE	524.2	Y	MRL	.06 UG/L		01-01-2011	12-31-2013
	2996	STYRENE	524.2	Y	MRL	.08 UG/L		01-01-2011	12-31-2013

### **Chem/Rad Sample Results**

C

Return Links

NM3515310 Water System No. : Federal Type:

VAUGHN DURAN WATER SYSTEM State Type: C Water System Name: **GW Principal County Served: GUADALUPE Primary Source:** 

06-01-1977 Status: **Activity Date:** 

OR200600814 04-26-2006 **Collection Date:** Lab Sample No. : Chem/Rad This list displays sample/results of all non-microbial analytes (TSAANLYT.TYPE CODE \$\infty\$ MOR)

associated to the selected sample. Results for Microbial Analytes are not included.

Samples

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Water Systems

Water System Search

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Analyte Code	Analyte Name	Method Code	Less than Indicator	Type		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
2030	P-ISOPROPYLTOLUENE	524.2	Y	MRL	.071 UG/L	null		
2210	CHLOROMETHANE	524.2	Y	MRL	.351 UG/L	null		
2212	DICHLORODIFLUOROMETHANE	524.2	Y	MRL	.269 UG/L	null		
2214	BROMOMETHANE	524.2	Y	MRL	.494 UG/L	null		
2216	CHLOROETHANE	524.2	Y	MRL	.342 UG/L	null		
2218	TRICHLOROFLUOROMETHANE	524.2	Y	MRL	.126 UG/L	null		
2224	TRANS-1,3-DICHLOROPROPENE	null	Y	MRL	.096 UG/L	null		
2246	HEXACHLOROBUTADIENE	524.2	Y	MRL	.129 UG/L	null		
2247	METHYL ETHYL KETONE	null	N		0 null	3.94 UG/L		
2248	NAPHTHALENE	524.2	Y	MRL	.162 UG/L	null		
2251	METHYL TERT-BUTYL ETHER	null	Y	MRL	.102 UG/L	null		
2254	NITROBENZENE	null	Y	MRL	3.299 UG/L	null		
2263	TETRAHYDROFURAN	null	Y	MRL	1.153 UG/L	null		
2378	1,2,4-TRICHLOROBENZENE	524.2	Y	MRL	.133 UG/L	null	01-01-2005	12-31-2007
2380	CIS-1,2-DICHLOROETHYLENE	524.2	Y	MRL	.103 UG/L	null	01-01-2005	12-31-2007
2408	DIBROMOMETHANE	524.2	Y	MRL	.111 UG/L	null		
2410	1,1-DICHLOROPROPENE	524.2	Y	MRL	.108 UG/L	null		
2412	1,3-DICHLOROPROPANE	524.2	Y	MRL	.054 UG/L	null		
2413	1,3-DICHLOROPROPENE	524.2	Y	MRL	.079 UG/L	null		
2414	1,2,3-TRICHLOROPROPANE	524.2	Y	MRL	.085 UG/L	null		
2416	2,2-DICHLOROPROPANE	524.2	Y	MRL	.332 UG/L	null		
2418	1,2,4-TRIMETHYLBENZENE	524.2	Y	MRL	.06 UG/L	null		
2420	1,2,3-TRICHLOROBENZENE	524.2	Y	MRL	.117 UG/L	null		
2422	N-BUTYLBENZENE	524.2	Y	MRL	.122 UG/L	null		
2424	1,3,5-TRIMETHYLBENZENE	524.2	Y	MRL	.058 UG/L	null		
2426	TERT-BUTYLBENZENE	524.2	Y	MRL	.056 UG/L	null		
2428	SEC-BUTYLBENZENE	524.2	Y	MRL	.073 UG/L	null		
2430	BROMOCHLOROMETHANE	524.2	Y	MRL	.118 UG/L	null		
2931	1,2-DIBROMO-3- CHLOROPROPANE	null	Y	MRL	.143 UG/L	null		
2941	CHLOROFORM	524.2	Y	MRL	.119 UG/L	null		
2942	BROMOFORM	524.2	N		0 null	2.3 UG/L		
2943	BROMODICHLOROMETHANE	524.2	N		0 null	0.44 UG/L		
2944	DIBROMOCHLOROMETHANE	524.2	N		0 null	1.35 UG/L		
2946	ETHYLENE DIBROMIDE	null	Y	MRL	.054 UG/L	null		
2950	ТТНМ	524.2	N		0 null	4.09 UG/L		
2955	XYLENES, TOTAL	524.2	N		0 null	0 UG/L	01-01-2005	12-31-2007
2964	DICHLOROMETHANE	524.2	Y	MRL	.405 UG/L	null	01-01-2005	12-31-2007

https://eidea.nmenv.state.nm.us/DWW/JSP/NonTcrSampleResults.isp?sample number=OR200600814&collection date=04-26-2006&tirwsys is number=1783&...

### Chem/Rad Sample Results

2965	O-CHLOROTOLUENE	524.2	Y	MRL	.054 UG/L	null	1	
2966	P-CHLOROTOLUENE	524.2	Y	MRL	.138 UG/L	null		
2967	M-DICHLOROBENZENE	524.2	Y	MRL	.079 UG/L	null		
2968	O-DICHLOROBENZENE	524.2	Y	MRL	.071 UG/L	null	01-01-2005	12-31-2007
2969	P-DICHLOROBENZENE	524.2	Y	MRL	.077 UG/L	null	01-01-2005	12-31-2007
2976	VINYL CHLORIDE	524.2	Y	MRL	.221 UG/L	null	01-01-2005	12-31-2007
2977	1,1-DICHLOROETHYLENE	524.2	Y	MRL	.121 UG/L	null	01-01-2005	12-31-2007
2978	1,1-DICHLOROETHANE	524.2	Y	MRL	.119 UG/L	null		
2979	TRANS-1,2- DICHLOROETHYLENE	524.2	Y	MRL	.095 UG/L	null	01-01-2005	12-31-2007
2980	1,2-DICHLOROETHANE	524.2	Y	MRL	.093 UG/L	null	01-01-2005	12-31-2007
2981	1,1,1-TRICHLOROETHANE	524.2	Y	MRL	.115 UG/L	null	01-01-2005	12-31-2007
2982	CARBON TETRACHLORIDE	524.2	Y	MRL	.143 UG/L	null	01-01-2005	12-31-2007
2983	1,2-DICHLOROPROPANE	524.2	Y	MRL	.098 UG/L	null	01-01-2005	12-31-2007
2984	TRICHLOROETHYLENE	524.2	Y	MRL	.113 UG/L	null	01-01-2005	12-31-2007
2985	1,1,2-TRICHLOROETHANE	524.2	Y	MRL	.056 UG/L	null	01-01-2005	12-31-2007
2986	1,1,1,2-TETRACHLOROETHANE	524.2	Y	MRL	.057 UG/L	null		
2987	TETRACHLOROETHYLENE	524.2	Y	MRL	.073 UG/L	null	01-01-2005	12-31-2007
2988	1,1,2,2-TETRACHLOROETHANE	524.2	Y	MRL	.069 UG/L	null		
2989	CHLOROBENZENE	524.2	Y	MRL	.05 UG/L	null	01-01-2005	12-31-2007
2990	BENZENE	524.2	Y	MRL	.098 UG/L	null	01-01-2005	12-31-2007
2991	TOLUENE	524.2	Y	MRL	.055 UG/L	null	01-01-2005	12-31-2007
2992	ETHYLBENZENE	524.2	Y	MRL	.052 UG/L	null	01-01-2005	12-31-2007
2993	BROMOBENZENE	524.2	Y	MRL	.067 UG/L	null		
2994	ISOPROPYLBENZENE	524.2	Y	MRL	.059 UG/L	null		
2995	M-XYLENE	524.2	Y	MRL	.112 UG/L	null		
2996	STYRENE	524.2	Y	MRL	.056 UG/L	null	01-01-2005	12-31-2007
2997	O-XYLENE	524.2	Y	MRL	.052 UG/L	null		
2998	N-PROPYLBENZENE	524.2	Y	MRL	.08 UG/L	null		

### **Chem/Rad Sample Results**

Return Links

Chem/Rad Samples

Analyte List

Water System Detail

Water System No. : NM3515310 Federal Type:

VAUGHN DURAN WATER

Water System Name : SYSTEM

**GUADALUPE** 

State Type:

Primary Source : GW

06-01-1977 **Activity Date:** Collection Date: 05-06-1996

C

This list displays sample/results of all non-microbial analytes

WC962674

(TSAANLYT.TYPE\_CODE <> MOR) associated to the selected sample. Results

for Microbial Analytes are not included.

**Principal County** 

Lab Sample No. :

Served:

Status:

Water Systems Water System	Code	Analyte Name	Code	Less than Indicator	Tyne		Concentration level	Monitoring Period Begin Date	Monitoring Period End Date
Search	1055	SULFATE	300.0	N		0 null	125 MG/L		

County Map

Glossary