

State of Colorado  
Oil and Gas Conservation Commission



1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

#6362

FOR OGCC USE ONLY

RECEIVED  
9/29/2011

**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

Spill or Release Plug & Abandon Central Facility Closure Site/Facility Closure Other (describe): Drill cuttings

OGCC Operator Number: 10091  
Name of Operator: Berry Petroleum Company  
Address: 1999 Broadway, Suite 3700  
City: Denver State: CO Zip: 80202

Contact Name and Telephone:  
Chris Freeman  
No: 303-999-4400  
Fax: 303-999-4402

API Number: 05-045-10897 County: Garfield  
Facility Name: Chevron H07A 696 Facility Number: 335820 (Location ID #) ✓  
Well Name: Chevron 6-43D SENE Well Number: Chevron 6-43D  
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SE SE Sec. 7, T6S, R96W Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

CalS. **TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): \_\_\_\_\_

**Site Conditions:** Is location within a sensitive area (according to Rule 901e)? Y No If yes, attach evaluation.  
Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): rangeland and natural gas development  
Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: \_\_\_\_\_  
Potential receptors (water wells within 1/4 mi, surface waters, etc.): Garden Gulch - 800 ft

**Description of Impact** (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	<u>drill cuttings</u> ✓	<u>laboratory testing</u>
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

**REMEDIALTION WORKPLAN**

**Describe initial action taken** (if previously provided, refer to that form or document):

Drill cuttings were excavated and tested for Table 910-1 parameters. Testing showed TPH above the standard.

**Describe how source is to be removed:**

Drill cuttings were excavated from the pit.

**Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:**

Drill cuttings were passively treated on site and retested. All parameters were below the Table 910-1 standards except for arsenic and SAR. Cuttings with SAR greater than 12 will be buried in the pit to a depth of at least three feet. Three background soil samples were collected in the vicinity of the pit to characterize natural soil arsenic levels. A Sundry Form 4 is attached that shows that the maximum background arsenic concentration is higher than that in the cuttings.

FORM  
27  
Rev 6/99

State of Colorado  
Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
(303)894-2100 Fax (303)894-2109



Tracking Number: \_\_\_\_\_  
Name of Operator: \_\_\_\_\_  
OGCC Operator No: \_\_\_\_\_  
Received Date: \_\_\_\_\_  
Well Name & No: \_\_\_\_\_  
Facility Name & No: \_\_\_\_\_

### REMEDIATION WORKPLAN (Cont.)

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

There are no impacts to groundwater.

**Describe reclamation plan.** Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Drill cuttings will be placed in the reserve pit and compacted. All cuttings with SAR greater than 12 will be buried at least three feet below the reclaimed ground surface. The remainder of the pit will be backfilled using native rock and soil, regraded to conform to the surrounding ground surface, and reseeded using an approved seed mix. Noxious weeds will be controlled as necessary using approved methods.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? Y ☒ N If yes, describe:

The laboratory report for the remediated drill cuttings and subsoil beneath the pit bottom are attached. A Sundry Form 4 is also attached that provides the results for three background soil samples for arsenic.

**Final disposition of E&P waste** (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

The remediated drill cuttings will be buried in the reserve pit as described above.

### IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 6/2/11 Date Site Investigation Completed: 6/2/11 Date Remediation Plan Submitted: 9/29/2011  
Remediation Start Date: TBD Anticipated Completion Date: 11/30/11 Actual Completion Date: \_\_\_\_\_

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Chris P. Freeman

Signed: [Signature]

Title: Regional Manager Environ., Health & Safety Date: 9/29/2011

OGCC Approved: [Signature] Title: For Chris Camfield Date: 10/11/2011  
EPS NW Region



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Bryan Burns  
Berry Petroleum Company - Denver, CO  
1999 Broadway, Suite 3700  
Denver, CO 80202

## Report Summary

Wednesday June 02, 2010

Report Number: L460506

Samples Received: 05/21/10

Client Project:

Description: Picance Pit Reclamation Project

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences.  
Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

REPORT OF ANALYSIS

Mr. Bryan Burns  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

June 02, 2010

Date Received : May 21, 2010  
Description : Piceance Pit Reclamation Project  
Sample ID : H7A PIT  
Collected By :  
Collection Date : 05/19/10 10:06

ESC Sample # : L460506-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chloride	470	10.	mg/kg	9056	05/28/10	1
Sulfate	1100	50.	mg/kg	9056	05/28/10	1
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	05/28/10	1
Chromium,Trivalent	22.	0.50	mg/kg	Calc.	05/30/10	1
ORP	150		mV	2580	05/26/10	1
pH	8.1		su	9045D	05/27/10	1
Sodium Adsorption Ratio	11.			Calc.	06/02/10	1
Specific Conductance	2300		umhos/cm	9050AMod	05/26/10	1
Mercury	0.023	0.020	mg/kg	7471	05/28/10	1
Arsenic	19.	5.0	mg/kg	6010B	05/30/10	5
Barium	520	0.25	mg/kg	6010B	05/30/10	1
Cadmium	0.71	0.25	mg/kg	6010B	05/30/10	1
Chromium	22.	0.50	mg/kg	6010B	05/30/10	1
Copper	20.	1.0	mg/kg	6010B	05/30/10	1
Lead	13.	0.25	mg/kg	6010B	05/30/10	1
Nickel	25.	1.0	mg/kg	6010B	05/30/10	1
Selenium	6.8	1.0	mg/kg	6010B	05/30/10	1
Silver	BDL	0.50	mg/kg	6010B	05/30/10	1
Zinc	60.	1.5	mg/kg	6010B	05/30/10	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/26/10	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/26/10	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/26/10	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/26/10	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/26/10	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	102.		% Rec.	8021/8015	05/26/10	5
a,a,a-Trifluorotoluene(PID)	99.6		% Rec.	8021/8015	05/26/10	5
TPH (GC/FID) High Fraction	280	4.0	mg/kg	3546/DRO	05/26/10	1
Surrogate recovery(%)						
o-Terphenyl	69.4		% Rec.	3546/DRO	05/26/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.033	mg/kg	8270C	05/27/10	1
Acenaphthene	BDL	0.033	mg/kg	8270C	05/27/10	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)  
L460506-01 (CR6) - sample is reducer  
L460506-01 (PH) - 8.1@23.8c



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

Mr. Bryan Burns  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

June 02, 2010

Date Received : May 21, 2010  
Description : Piceance Pit Reclamation Project

Sample ID : H7A PIT

Collected By :  
Collection Date : 05/19/10 10:06

ESC Sample # : L460506-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Acenaphthylene	BDL	0.033	mg/kg	8270C	05/27/10	1
Benzo(a)anthracene	BDL	0.033	mg/kg	8270C	05/27/10	1
Benzo(a)pyrene	BDL	0.033	mg/kg	8270C	05/27/10	1
Benzo(b)fluoranthene	BDL	0.033	mg/kg	8270C	05/27/10	1
Benzo(g,h,i)perylene	BDL	0.033	mg/kg	8270C	05/27/10	1
Benzo(k)fluoranthene	BDL	0.033	mg/kg	8270C	05/27/10	1
Chrysene	BDL	0.033	mg/kg	8270C	05/27/10	1
Dibenz(a,h)anthracene	BDL	0.033	mg/kg	8270C	05/27/10	1
Fluoranthene	BDL	0.033	mg/kg	8270C	05/27/10	1
Fluorene	0.048	0.033	mg/kg	8270C	05/27/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.033	mg/kg	8270C	05/27/10	1
Naphthalene	0.047	0.033	mg/kg	8270C	05/27/10	1
Phenanthrene	0.074	0.033	mg/kg	8270C	05/27/10	1
Pyrene	BDL	0.033	mg/kg	8270C	05/27/10	1
Surrogate Recovery						
Nitrobenzene-d5	78.6		% Rec.	8270C	05/27/10	1
2-Fluorobiphenyl	75.3		% Rec.	8270C	05/27/10	1
p-Terphenyl-d14	70.5		% Rec.	8270C	05/27/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/02/10 15:21 Printed: 06/02/10 15:22

L460506-01 (CR6) - sample is reducer

L460506-01 (PH) - 8.1@23.8c



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Bryan Burns  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

June 02, 2010

Date Received : May 21, 2010  
Description : Piceance Pit Reclamation Project  
Sample ID : H7A PIT  
Collected By :  
Collection Date : 05/20/10 10:06

ESC Sample # : L460506-07

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
SPLP Extraction	-			1312	05/27/10	1
Boron	BDL	0.20	mg/l	6010B	05/31/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

.

Reported: 06/02/10 15:21 Printed: 06/02/10 15:22

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L460506-01	WG480750	SAMP	Chromium, Hexavalent	R1237054	J6
L460506-02	WG479809	SAMP	Dibenz(a,h)anthracene	R1232968	J3
	WG480302	SAMP	TPH (GC/FID) Low Fraction	R1234848	J6
	WG479790	SAMP	o-Terphenyl	R1233069	J7
L460506-03	WG480634	SAMP	Total Xylene	R1236691	B3
	WG480750	SAMP	Chromium, Hexavalent	R1237054	O
L460506-04	WG479809	SAMP	Anthracene	R1232968	J3
	WG479809	SAMP	Acenaphthene	R1232968	J3
	WG479809	SAMP	Acenaphthylene	R1232968	J6
	WG479809	SAMP	Benzo(b)fluoranthene	R1232968	J5
	WG479809	SAMP	Fluoranthene	R1232968	J6J3
	WG479809	SAMP	Fluorene	R1232968	J6
	WG479809	SAMP	Phenanthrene	R1232968	J6J3
	WG479790	SAMP	o-Terphenyl	R1233069	J7
L460506-05	WG479809	SAMP	Dibenz(a,h)anthracene	R1232968	J3
	WG479790	SAMP	o-Terphenyl	R1233069	J7
L460506-06	WG479790	SAMP	o-Terphenyl	R1233069	J7

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
B3	(ESC) - The indicated compound was found in the associated method blank, but all reported samples were non-detect.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



Summary of Remarks For Samples Printed  
06/02/10 at 15:22:09

TSR Signing Reports: 134  
R5 - Desired TAT

Log GW As, Cd, Cr, Cu, Pb, Ni, Se, Ag, & Zn 6020

Sample: L460506-01 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
Sample: L460506-02 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
Sample: L460506-03 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
Sample: L460506-04 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
Sample: L460506-05 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
Sample: L460506-06 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
Sample: L460506-07 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
rotate for BICP  
Sample: L460506-08 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
rotate for BICP  
Sample: L460506-09 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
rotate for BICP  
Sample: L460506-10 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
rotate for BICP  
Sample: L460506-11 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
rotate for BICP  
Sample: L460506-12 Account: BERPETDCO Received: 05/21/10 09:00 Due Date: 05/28/10 00:00 RPT Date: 06/02/10 15:21  
rotate for BICP



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
pH	5.60	su			WG479828	05/23/10 18:23
pH	5.20	su			WG479829	05/23/10 18:00
Acenaphthene	< .033	mg/kg			WG479809	05/24/10 09:37
Acenaphthylene	< .033	mg/kg			WG479809	05/24/10 09:37
Anthracene	< .033	mg/kg			WG479809	05/24/10 09:37
Benzo(a)anthracene	< .033	mg/kg			WG479809	05/24/10 09:37
Benzo(a)pyrene	< .033	mg/kg			WG479809	05/24/10 09:37
Benzo(b)fluoranthene	< .033	mg/kg			WG479809	05/24/10 09:37
Benzo(g,h,i)perylene	< .033	mg/kg			WG479809	05/24/10 09:37
Benzo(k)fluoranthene	< .033	mg/kg			WG479809	05/24/10 09:37
Chrysene	< .033	mg/kg			WG479809	05/24/10 09:37
Dibenz(a,h)anthracene	< .033	mg/kg			WG479809	05/24/10 09:37
Fluoranthene	< .033	mg/kg			WG479809	05/24/10 09:37
Fluorene	< .033	mg/kg			WG479809	05/24/10 09:37
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG479809	05/24/10 09:37
Naphthalene	< .033	mg/kg			WG479809	05/24/10 09:37
Phenanthrene	< .033	mg/kg			WG479809	05/24/10 09:37
Pyrene	< .033	mg/kg			WG479809	05/24/10 09:37
2-Fluorobiphenyl		% Rec.	89.73	37-123	WG479809	05/24/10 09:37
Nitrobenzene-d5		% Rec.	123.6	19-129	WG479809	05/24/10 09:37
p-Terphenyl-d14		% Rec.	106.6	34-149	WG479809	05/24/10 09:37
TPH (GC/FID) High Fraction	< 4	ppm			WG479790	05/25/10 11:21
o-Terphenyl		% Rec.	73.25	50-150	WG479790	05/25/10 11:21
TPH (GC/FID) High Fraction	< 4	ppm			WG480311	05/26/10 04:12
o-Terphenyl		% Rec.	77.56	50-150	WG480311	05/26/10 04:12
Benzene	< .0005	mg/kg			WG480302	05/26/10 14:53
Ethylbenzene	< .0005	mg/kg			WG480302	05/26/10 14:53
Toluene	< .005	mg/kg			WG480302	05/26/10 14:53
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG480302	05/26/10 14:53
Total Xylene	< .0015	mg/kg			WG480302	05/26/10 14:53
a,a,a-Trifluorotoluene(FID)		% Rec.	101.7	59-128	WG480302	05/26/10 14:53
a,a,a-Trifluorotoluene(PID)		% Rec.	101.9	54-144	WG480302	05/26/10 14:53
Specific Conductance	1.40	umhos/cm			WG480341	05/26/10 14:50
Acenaphthene	< .033	mg/kg			WG480323	05/27/10 08:21
Acenaphthylene	< .033	mg/kg			WG480323	05/27/10 08:21
Anthracene	< .033	mg/kg			WG480323	05/27/10 08:21
Benzo(a)anthracene	< .033	mg/kg			WG480323	05/27/10 08:21
Benzo(a)pyrene	< .033	mg/kg			WG480323	05/27/10 08:21
Benzo(b)fluoranthene	< .033	mg/kg			WG480323	05/27/10 08:21
Benzo(g,h,i)perylene	< .033	mg/kg			WG480323	05/27/10 08:21
Benzo(k)fluoranthene	< .033	mg/kg			WG480323	05/27/10 08:21
Chrysene	< .033	mg/kg			WG480323	05/27/10 08:21
Dibenz(a,h)anthracene	< .033	mg/kg			WG480323	05/27/10 08:21
Fluoranthene	< .033	mg/kg			WG480323	05/27/10 08:21
Fluorene	< .033	mg/kg			WG480323	05/27/10 08:21

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG480323	05/27/10 08:21
Naphthalene	< .033	mg/kg			WG480323	05/27/10 08:21
Phenanthrene	< .033	mg/kg			WG480323	05/27/10 08:21
Pyrene	< .033	mg/kg			WG480323	05/27/10 08:21
2-Fluorobiphenyl		% Rec.	71.56	37-123	WG480323	05/27/10 08:21
Nitrobenzene-d5		% Rec.	63.87	19-129	WG480323	05/27/10 08:21
p-Terphenyl-d14		% Rec.	80.94	34-149	WG480323	05/27/10 08:21
Benzene	< .0005	mg/kg			WG480457	05/26/10 18:57
Ethylbenzene	< .0005	mg/kg			WG480457	05/26/10 18:57
Toluene	< .005	mg/kg			WG480457	05/26/10 18:57
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG480457	05/26/10 18:57
Total Xylene	< .0015	mg/kg			WG480457	05/26/10 18:57
a,a,a-Trifluorotoluene(FID)		% Rec.	103.0	59-128	WG480457	05/26/10 18:57
a,a,a-Trifluorotoluene(PID)		% Rec.	100.3	54-144	WG480457	05/26/10 18:57
pH	5.50	su			WG480525	05/27/10 12:19
Chloride	< 10	mg/kg			WG480533	05/28/10 00:22
Sulfate	< 50	mg/kg			WG480533	05/28/10 00:22
Benzene	< .0005	mg/kg			WG480634	05/27/10 19:13
Ethylbenzene	< .0005	mg/kg			WG480634	05/27/10 19:13
Toluene	< .005	mg/kg			WG480634	05/27/10 19:13
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG480634	05/27/10 19:13
Total Xylene	< .0015	mg/kg			WG480634	05/27/10 19:13
a,a,a-Trifluorotoluene(FID)		% Rec.	114.3	59-128	WG480634	05/27/10 19:13
a,a,a-Trifluorotoluene(PID)		% Rec.	108.7	54-144	WG480634	05/27/10 19:13
Chromium,Hexavalent	< 2	mg/kg			WG480750	05/28/10 16:04
Mercury	< .02	mg/kg			WG480320	05/28/10 13:24
Acenaphthene	< .033	mg/kg			WG480160	05/28/10 13:47
Acenaphthylene	< .033	mg/kg			WG480160	05/28/10 13:47
Anthracene	< .033	mg/kg			WG480160	05/28/10 13:47
Benzo(a)anthracene	< .033	mg/kg			WG480160	05/28/10 13:47
Benzo(a)pyrene	< .033	mg/kg			WG480160	05/28/10 13:47
Benzo(b)fluoranthene	< .033	mg/kg			WG480160	05/28/10 13:47
Benzo(g,h,i)perylene	< .033	mg/kg			WG480160	05/28/10 13:47
Benzo(k)fluoranthene	< .033	mg/kg			WG480160	05/28/10 13:47
Chrysene	< .033	mg/kg			WG480160	05/28/10 13:47
Dibenz(a,h)anthracene	< .033	mg/kg			WG480160	05/28/10 13:47
Fluoranthene	< .033	mg/kg			WG480160	05/28/10 13:47
Fluorene	< .033	mg/kg			WG480160	05/28/10 13:47
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG480160	05/28/10 13:47
Naphthalene	< .033	mg/kg			WG480160	05/28/10 13:47
Phenanthrene	< .033	mg/kg			WG480160	05/28/10 13:47
Pyrene	< .033	mg/kg			WG480160	05/28/10 13:47
2-Fluorobiphenyl		% Rec.	82.06	37-123	WG480160	05/28/10 13:47
Nitrobenzene-d5		% Rec.	89.65	19-129	WG480160	05/28/10 13:47
p-Terphenyl-d14		% Rec.	108.0	34-149	WG480160	05/28/10 13:47

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700  
Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Arsenic	< 1	mg/kg			WG480416	05/30/10 14:10
Barium	< .25	mg/kg			WG480416	05/30/10 14:10
Cadmium	< .25	mg/kg			WG480416	05/30/10 14:10
Chromium	< .5	mg/kg			WG480416	05/30/10 14:10
Copper	< 1	mg/kg			WG480416	05/30/10 14:10
Lead	< .25	mg/kg			WG480416	05/30/10 14:10
Nickel	< 1	mg/kg			WG480416	05/30/10 14:10
Selenium	< 1	mg/kg			WG480416	05/30/10 14:10
Silver	< .5	mg/kg			WG480416	05/30/10 14:10
Zinc	< 1.5	mg/kg			WG480416	05/30/10 14:10

Boron	< .2	mg/l			WG480983	05/31/10 14:26
Total Xylene	< .0015	mg/kg			WG481244	06/02/10 04:22
a,a,a-Trifluorotoluene(PID)		% Rec.	100.1	54-144	WG481244	06/02/10 04:22

Analyte	Units	Result	Duplicate		RPD	Limit	Ref Samp	Batch
			Duplicate					
pH	su	8.70	8.90	2.27*	1		L460210-47	WG479828
pH	su	8.10	8.20	1.23*	1		L460506-02	WG479828
pH	su	6.50	6.50	0	1		L459820-01	WG479829
pH	su	9.80	9.80	0	1		L460594-01	WG479829
Specific Conductance	umhos/cm	1200	1300	3.76	20		L460853-01	WG480341
ORP	mV	140.	150.	3.39	20		L460506-01	WG480580
pH	su	8.10	8.10	0	1		L460506-01	WG480525
pH	su	12.0	12.0	0	1		L461049-02	WG480525
Chloride	mg/kg	13.0	13.0	2.33	20		L460833-01	WG480533
Sulfate	mg/kg	0	0	0	20		L460833-01	WG480533
Chloride	mg/kg	13.0	13.0	2.33	20		L460833-05	WG480533
Sulfate	mg/kg	0	0	0	20		L460833-05	WG480533
Chromium,Hexavalent	mg/kg	0	0	0	20		L460506-02	WG480750
Mercury	mg/kg	0.0360	0.0410	12.4	20		L460506-03	WG480320
Barium	mg/kg	120.	130.	4.72	20		L460894-01	WG480416
Cadmium	mg/kg	0	0	0	20		L460894-01	WG480416
Chromium	mg/kg	1.90	2.00	7.25	20		L460894-01	WG480416
Copper	mg/kg	1.10	1.14	4.48	20		L460894-01	WG480416
Lead	mg/kg	2.90	5.40	59.9*	20		L460894-01	WG480416
Nickel	mg/kg	9.70	9.58	1.35	20		L460894-01	WG480416
Selenium	mg/kg	5.90	6.10	4.01	20		L460894-01	WG480416
Silver	mg/kg	0	0	0	20		L460894-01	WG480416

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	Result	Duplicate		RPD	Limit	Ref Samp	Batch
			Duplicate					
Zinc	mg/kg	36.0	36.0		1.38	20	L460894-01	WG480416
Arsenic	mg/kg	0	0		0	20	L460894-01	WG480416
Boron	mg/l	0.450	0.405		11.4	20	L459764-07	WG480983

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
pH	su	9.63	9.60	99.7	98.4-101.3	WG479828
pH	su	9.63	9.50	98.7	98.4-101.3	WG479829
Acenaphthene	mg/kg	.167	0.128	76.7	44-117	WG479809
Acenaphthylene	mg/kg	.167	0.136	81.1	43-118	WG479809
Anthracene	mg/kg	.167	0.158	94.5	42-127	WG479809
Benzo(a)anthracene	mg/kg	.167	0.134	80.3	45-127	WG479809
Benzo(a)pyrene	mg/kg	.167	0.145	87.0	46-123	WG479809
Benzo(b)fluoranthene	mg/kg	.167	0.144	86.1	43-126	WG479809
Benzo(g,h,i)perylene	mg/kg	.167	0.151	90.5	43-128	WG479809
Benzo(k)fluoranthene	mg/kg	.167	0.132	78.8	40-126	WG479809
Chrysene	mg/kg	.167	0.132	79.3	44-129	WG479809
Dibenz(a,h)anthracene	mg/kg	.167	0.140	84.0	43-127	WG479809
Fluoranthene	mg/kg	.167	0.149	89.1	44-125	WG479809
Fluorene	mg/kg	.167	0.133	79.8	45-121	WG479809
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.141	84.4	43-127	WG479809
Naphthalene	mg/kg	.167	0.131	78.7	32-113	WG479809
Phenanthrene	mg/kg	.167	0.151	90.4	43-124	WG479809
Pyrene	mg/kg	.167	0.142	85.2	47-128	WG479809
2-Fluorobiphenyl				78.87	37-123	WG479809
Nitrobenzene-d5				100.5	19-129	WG479809
p-Terphenyl-d14				92.50	34-149	WG479809
TPH (GC/FID) High Fraction	ppm	60	52.7	87.8	50-150	WG479790
o-Terphenyl				80.71	50-150	WG479790
TPH (GC/FID) High Fraction	ppm	60	39.8	66.3	50-150	WG480311
o-Terphenyl				76.27	50-150	WG480311
Benzene	mg/kg	.05	0.0430	86.0	76-113	WG480302
Ethylbenzene	mg/kg	.05	0.0478	95.7	78-115	WG480302
Toluene	mg/kg	.05	0.0453	90.6	76-114	WG480302
Total Xylene	mg/kg	.15	0.142	94.5	81-118	WG480302
a,a,a-Trifluorotoluene(PID)				101.9	54-144	WG480302
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.77	105.	67-135	WG480302
a,a,a-Trifluorotoluene(FID)				108.5	59-128	WG480302
Specific Conductance	umhos/cm	406	410.	101.	85-115	WG480341
ORP	mV	229	230.	100.	95.6-104.37	WG480580

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Acenaphthene	mg/kg	.167	0.104	62.2	44-117	WG480323
Acenaphthylene	mg/kg	.167	0.0973	58.3	43-118	WG480323
Anthracene	mg/kg	.167	0.0979	58.6	42-127	WG480323
Benzo(a)anthracene	mg/kg	.167	0.0993	59.4	45-127	WG480323
Benzo(a)pyrene	mg/kg	.167	0.0946	56.6	46-123	WG480323
Benzo(b)fluoranthene	mg/kg	.167	0.0929	55.6	43-126	WG480323
Benzo(g,h,i)perylene	mg/kg	.167	0.106	63.3	43-128	WG480323
Benzo(k)fluoranthene	mg/kg	.167	0.0985	59.0	40-126	WG480323
Chrysene	mg/kg	.167	0.0981	58.7	44-129	WG480323
Dibenz(a,h)anthracene	mg/kg	.167	0.105	63.1	43-127	WG480323
Fluoranthene	mg/kg	.167	0.0973	58.2	44-125	WG480323
Fluorene	mg/kg	.167	0.105	63.1	45-121	WG480323
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.106	63.6	43-127	WG480323
Naphthalene	mg/kg	.167	0.0964	57.8	32-113	WG480323
Phenanthrene	mg/kg	.167	0.0978	58.5	43-124	WG480323
Pyrene	mg/kg	.167	0.0982	58.8	47-128	WG480323
2-Fluorobiphenyl				61.67	37-123	WG480323
Nitrobenzene-d5				58.53	19-129	WG480323
p-Terphenyl-d14				69.40	34-149	WG480323
Benzene	mg/kg	.05	0.0517	103.	76-113	WG480457
Ethylbenzene	mg/kg	.05	0.0513	103.	78-115	WG480457
Toluene	mg/kg	.05	0.0514	103.	76-114	WG480457
Total Xylene	mg/kg	.15	0.146	97.6	81-118	WG480457
a,a,a-Trifluorotoluene(PID)				100.8	54-144	WG480457
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.38	97.9	67-135	WG480457
a,a,a-Trifluorotoluene(FID)				97.28	59-128	WG480457
pH	su	9.63	9.70	101.	98.4-101.3	WG480525
Chloride	mg/kg	200	206.	103.	85-115	WG480533
Sulfate	mg/kg	200	205.	103.	85-115	WG480533
TPH (GC/FID) Low Fraction	mg/kg	5.5	4.93	89.6	67-135	WG480634
a,a,a-Trifluorotoluene(FID)				77.44	59-128	WG480634
Benzene	mg/kg	.05	0.0520	104.	76-113	WG480634
Ethylbenzene	mg/kg	.05	0.0559	112.	78-115	WG480634
Toluene	mg/kg	.05	0.0540	108.	76-114	WG480634
Total Xylene	mg/kg	.15	0.163	109.	81-118	WG480634
a,a,a-Trifluorotoluene(PID)				105.9	54-144	WG480634
Chromium, Hexavalent	mg/kg	100	97.4	97.4	50-143	WG480750
Mercury	mg/kg	8.77	9.77	111.	71.6-127.7	WG480320
Acenaphthene	mg/kg	.167	0.123	73.6	44-117	WG480160
Acenaphthylene	mg/kg	.167	0.138	82.7	43-118	WG480160
Anthracene	mg/kg	.167	0.134	80.0	42-127	WG480160
Benzo(a)anthracene	mg/kg	.167	0.138	82.4	45-127	WG480160
Benzo(a)pyrene	mg/kg	.167	0.140	83.9	46-123	WG480160
Benzo(b)fluoranthene	mg/kg	.167	0.145	87.1	43-126	WG480160
Benzo(g,h,i)perylene	mg/kg	.167	0.175	105.	43-128	WG480160

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzo(k)fluoranthene	mg/kg	.167	0.136	81.7	40-126	WG480160
Chrysene	mg/kg	.167	0.140	84.0	44-129	WG480160
Dibenz(a,h)anthracene	mg/kg	.167	0.175	105.	43-127	WG480160
Fluoranthene	mg/kg	.167	0.134	80.0	44-125	WG480160
Fluorene	mg/kg	.167	0.141	84.3	45-121	WG480160
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.172	103.	43-127	WG480160
Naphthalene	mg/kg	.167	0.124	74.0	32-113	WG480160
Phenanthrene	mg/kg	.167	0.134	80.2	43-124	WG480160
Pyrene	mg/kg	.167	0.135	80.6	47-128	WG480160
2-Fluorobiphenyl				85.54	37-123	WG480160
Nitrobenzene-d5				87.53	19-129	WG480160
p-Terphenyl-d14				105.2	34-149	WG480160
Arsenic	mg/kg	192	174.	90.6	78.6-120.8	WG480416
Barium	mg/kg	420	420.	100.	78.8-121.4	WG480416
Cadmium	mg/kg	70.1	65.6	93.6	78.5-121.5	WG480416
Chromium	mg/kg	168	171.	102.	80.4-120.2	WG480416
Copper	mg/kg	122	131.	107.	81.6-119.7	WG480416
Lead	mg/kg	113	108.	95.6	77.3-122.1	WG480416
Nickel	mg/kg	74.1	89.1	120.	78.8-121.2	WG480416
Selenium	mg/kg	176	175.	99.4	75.6-125.0	WG480416
Silver	mg/kg	115	112.	97.4	66-133.9	WG480416
Zinc	mg/kg	437	414.	94.7	78.5-121.7	WG480416
Boron	mg/l	1.13	1.01	89.4	85-115	WG480983
Total Xylene	mg/kg	.15	0.143	95.1	81-118	WG481244
a,a,a-Trifluorotoluene(PID)				97.83	54-144	WG481244

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
pH	su	9.60	9.60	100.	98.4-101.3	0	20	WG479828
pH	su	9.60	9.50	100.	98.4-101.3	1.05	20	WG479829
Acenaphthene	mg/kg	0.112	0.128	67.0	44-117	13.8	21	WG479809
Acenaphthylene	mg/kg	0.121	0.136	72.0	43-118	11.3	20	WG479809
Anthracene	mg/kg	0.137	0.158	82.0	42-127	14.3	21	WG479809
Benzo(a)anthracene	mg/kg	0.118	0.134	70.0	45-127	12.9	21	WG479809
Benzo(a)pyrene	mg/kg	0.130	0.145	78.0	46-123	11.5	20	WG479809
Benzo(b)fluoranthene	mg/kg	0.132	0.144	79.0	43-126	8.24	27	WG479809
Benzo(g,h,i)perylene	mg/kg	0.129	0.151	78.0	43-128	15.4	20	WG479809
Benzo(k)fluoranthene	mg/kg	0.117	0.132	70.0	40-126	11.8	32	WG479809
Chrysene	mg/kg	0.117	0.132	70.0	44-129	12.3	22	WG479809
Dibenz(a,h)anthracene	mg/kg	0.112	0.140	67.0	43-127	22.2*	20	WG479809
Fluoranthene	mg/kg	0.131	0.149	79.0	44-125	12.4	22	WG479809
Fluorene	mg/kg	0.113	0.133	68.0	45-121	16.5	20	WG479809
Indeno(1,2,3-cd)pyrene	mg/kg	0.123	0.141	73.0	43-127	13.9	21	WG479809
Naphthalene	mg/kg	0.117	0.131	70.0	32-113	11.9	26	WG479809
Phenanthrene	mg/kg	0.130	0.151	78.0	43-124	14.6	21	WG479809
Pyrene	mg/kg	0.122	0.142	73.0	47-128	15.7	20	WG479809
2-Fluorobiphenyl				70.93	37-123			WG479809
Nitrobenzene-d5				81.72	19-129			WG479809

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
p-Terphenyl-d14				79.83	34-149			
TPH (GC/FID) High Fraction	ppm	56.2	52.7	94.0	50-150	6.56	20	WG479790
o-Terphenyl				88.09	50-150			WG479790
TPH (GC/FID) High Fraction	ppm	36.9	39.8	61.0	50-150	7.62	25	WG480311
o-Terphenyl				70.75	50-150			WG480311
TPH (GC/FID) Low Fraction	mg/kg	4.90	5.77	89.0	67-135	16.3	20	WG480302
a,a,a-Trifluorotoluene(FID)				106.9	59-128			WG480302
Benzene	mg/kg	0.0512	0.0430	102.	76-113	17.4	20	WG480302
Ethylbenzene	mg/kg	0.0521	0.0478	104.	78-115	8.52	20	WG480302
Toluene	mg/kg	0.0509	0.0453	102.	76-114	11.7	20	WG480302
Total Xylene	mg/kg	0.154	0.142	102.	81-118	8.11	20	WG480302
a,a,a-Trifluorotoluene(PID)				103.4	54-144			WG480302
Specific Conductance	umhos/	410.	410.	101.	85-115	0	20	WG480341
ORP	mV	230.	230.	100.	95.6-104.37	0	20	WG480580
Acenaphthene	mg/kg	0.106	0.104	63.0	44-117	1.67	21	WG480323
Acenaphthylene	mg/kg	0.106	0.0973	63.0	43-118	8.24	20	WG480323
Anthracene	mg/kg	0.112	0.0979	67.0	42-127	13.4	21	WG480323
Benzo(a)anthracene	mg/kg	0.112	0.0993	67.0	45-127	12.0	21	WG480323
Benzo(a)pyrene	mg/kg	0.111	0.0946	67.0	46-123	16.3	20	WG480323
Benzo(b)fluoranthene	mg/kg	0.110	0.0929	66.0	43-126	16.4	27	WG480323
Benzo(g,h,i)perylene	mg/kg	0.115	0.106	69.0	43-128	8.04	20	WG480323
Benzo(k)fluoranthene	mg/kg	0.121	0.0985	73.0	40-126	20.8	32	WG480323
Chrysene	mg/kg	0.115	0.0981	69.0	44-129	16.1	22	WG480323
Dibenz(a,h)anthracene	mg/kg	0.113	0.105	68.0	43-127	7.09	20	WG480323
Fluoranthene	mg/kg	0.111	0.0973	66.0	44-125	13.2	22	WG480323
Fluorene	mg/kg	0.113	0.105	68.0	45-121	7.12	20	WG480323
Indeno(1,2,3-cd)pyrene	mg/kg	0.114	0.106	68.0	43-127	7.43	21	WG480323
Naphthalene	mg/kg	0.0971	0.0964	58.0	32-113	0.650	26	WG480323
Phenanthrene	mg/kg	0.106	0.0978	64.0	43-124	8.38	21	WG480323
Pyrene	mg/kg	0.119	0.0982	71.0	47-128	18.9	20	WG480323
2-Fluorobiphenyl				64.49	37-123			WG480323
Nitrobenzene-d5				58.74	19-129			WG480323
p-Terphenyl-d14				81.40	34-149			WG480323
Benzene	mg/kg	0.0524	0.0517	105.	76-113	1.40	20	WG480457
Ethylbenzene	mg/kg	0.0514	0.0513	103.	78-115	0.0700	20	WG480457
Toluene	mg/kg	0.0511	0.0514	102.	76-114	0.460	20	WG480457
Total Xylene	mg/kg	0.146	0.146	97.0	81-118	0.560	20	WG480457
a,a,a-Trifluorotoluene(PID)				100.3	54-144			WG480457
TPH (GC/FID) Low Fraction	mg/kg	5.41	5.38	98.0	67-135	0.470	20	WG480457
a,a,a-Trifluorotoluene(FID)				97.85	59-128			WG480457
pH	su	9.70	9.70	101.	98.4-101.3	0	20	WG480525
Chloride	mg/kg	205.	206.	102.	85-115	0.487	20	WG480533
Sulfate	mg/kg	205.	205.	102.	85-115	0	20	WG480533

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'





YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	4.87	4.93	89.0	67-135	1.10	20	WG480634
a,a,a-Trifluorotoluene(FID)				77.77	59-128			WG480634
Benzene	mg/kg	0.0508	0.0520	102.	76-113	2.26	20	WG480634
Ethylbenzene	mg/kg	0.0542	0.0559	108.	78-115	3.05	20	WG480634
Toluene	mg/kg	0.0519	0.0540	104.	76-114	3.98	20	WG480634
Total Xylene	mg/kg	0.157	0.163	105.	81-118	3.49	20	WG480634
a,a,a-Trifluorotoluene(PID)				105.7	54-144			WG480634
Chromium,Hexavalent	mg/kg	104.	97.4	104.	50-143	6.55	20	WG480750
Acenaphthene	mg/kg	0.121	0.123	73.0	44-117	1.28	21	WG480160
Acenaphthylene	mg/kg	0.133	0.138	79.0	43-118	4.07	20	WG480160
Anthracene	mg/kg	0.125	0.134	74.0	42-127	7.03	21	WG480160
Benzo(a)anthracene	mg/kg	0.126	0.138	75.0	45-127	8.92	21	WG480160
Benzo(a)pyrene	mg/kg	0.119	0.140	72.0	46-123	15.9	20	WG480160
Benzo(b)fluoranthene	mg/kg	0.123	0.145	73.0	43-126	16.9	27	WG480160
Benzo(g,h,i)perylene	mg/kg	0.156	0.175	93.0	43-128	11.8	20	WG480160
Benzo(k)fluoranthene	mg/kg	0.125	0.136	75.0	40-126	9.04	32	WG480160
Chrysene	mg/kg	0.132	0.140	79.0	44-129	6.27	22	WG480160
Dibenz(a,h)anthracene	mg/kg	0.152	0.175	91.0	43-127	14.0	20	WG480160
Fluoranthene	mg/kg	0.128	0.134	77.0	44-125	4.03	22	WG480160
Fluorene	mg/kg	0.132	0.141	79.0	45-121	6.59	20	WG480160
Indeno(1,2,3-cd)pyrene	mg/kg	0.149	0.172	89.0	43-127	14.0	21	WG480160
Naphthalene	mg/kg	0.111	0.124	66.0	32-113	10.9	26	WG480160
Phenanthrene	mg/kg	0.129	0.134	77.0	43-124	3.86	21	WG480160
Pyrene	mg/kg	0.126	0.135	75.0	47-128	6.76	20	WG480160
2-Fluorobiphenyl				81.63	37-123			WG480160
Nitrobenzene-d5				80.17	19-129			WG480160
p-Terphenyl-d14				86.56	34-149			WG480160
Total Xylene	mg/kg	0.145	0.143	97.0	81-118	1.79	20	WG481244
a,a,a-Trifluorotoluene(PID)				98.56	54-144			WG481244

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Acenaphthene	mg/kg	0.128	0	.167	76.5	38-121	L460506-04	WG479809
Acenaphthylene	mg/kg	0.0411	0.140	.167	0*	39-120	L460506-04	WG479809
Anthracene	mg/kg	0.200	0	.167	120.	35-133	L460506-04	WG479809
Fluoranthene	mg/kg	0.0668	0.0350	.167	19.1*	34-132	L460506-04	WG479809
Fluorene	mg/kg	0.341	0.250	.167	54.5	38-126	L460506-04	WG479809
Naphthalene	mg/kg	0.263	0.110	.167	91.6	24-122	L460506-04	WG479809
Phenanthrene	mg/kg	0.649	0.460	.167	113.	38-128	L460506-04	WG479809
2-Fluorobiphenyl					52.19	37-123		WG479809
Nitrobenzene-d5					107.8	19-129		WG479809
TPH (GC/FID) High Fraction	ppm	51.8	0	60	86.3	50-150	L459919-01	WG479790
o-Terphenyl					67.77	50-150		WG479790
TPH (GC/FID) High Fraction	ppm	32.4	0	60	53.9	50-150	L460863-01	WG480311
o-Terphenyl					64.06	50-150		WG480311
Benzene	mg/kg	0.230	0	.05	91.8	32-137	L460506-02	WG480302

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Ethylbenzene	mg/kg	0.173	0	.05	69.2	10-150	L460506-02	WG480302
Toluene	mg/kg	0.205	0	.05	82.1	20-142	L460506-02	WG480302
Total Xylene	mg/kg	0.494	0	.15	65.9	16-141	L460506-02	WG480302
a,a,a-Trifluorotoluene(PID)					100.0	54-144		WG480302
TPH (GC/FID) Low Fraction	mg/kg	12.4	0	5.5	45.0*	55-109	L460506-02	WG480302
a,a,a-Trifluorotoluene(FID)					102.2	59-128		WG480302
Benzo(a)anthracene	mg/kg	0.159	0	.167	95.2	35-136	L460506-04	WG479809
Benzo(a)pyrene	mg/kg	0.155	0	.167	92.6	37-131	L460506-04	WG479809
Benzo(b)fluoranthene	mg/kg	0.270	0	.167	162.*	29-145	L460506-04	WG479809
Benzo(g,h,i)perylene	mg/kg	0.0884	0	.167	53.0	10-139	L460506-04	WG479809
Benzo(k)fluoranthene	mg/kg	0.196	0	.167	118.	31-140	L460506-04	WG479809
Chrysene	mg/kg	0.174	0	.167	104.	34-137	L460506-04	WG479809
Dibenz(a,h)anthracene	mg/kg	0.0890	0	.167	53.3	21-132	L460506-04	WG479809
Indeno(1,2,3-cd)pyrene	mg/kg	0.0885	0	.167	53.0	17-134	L460506-04	WG479809
Pyrene	mg/kg	0.187	0	.167	112.	35-141	L460506-04	WG479809
p-Terphenyl-d14					73.60	34-149		WG479809
Benzene	mg/kg	0.242	0	.05	96.8	32-137	L460506-01	WG480457
Ethylbenzene	mg/kg	0.218	0	.05	87.2	10-150	L460506-01	WG480457
Toluene	mg/kg	0.224	0	.05	89.8	20-142	L460506-01	WG480457
Total Xylene	mg/kg	0.638	0	.15	85.1	16-141	L460506-01	WG480457
a,a,a-Trifluorotoluene(PID)					100.1	54-144		WG480457
TPH (GC/FID) Low Fraction	mg/kg	21.1	0	5.5	76.7	55-109	L460506-01	WG480457
a,a,a-Trifluorotoluene(FID)					98.22	59-128		WG480457
Acenaphthene	mg/kg	0.164	0	.167	98.2	38-121	L460863-03	WG480323
Acenaphthylene	mg/kg	0.162	0	.167	97.2	39-120	L460863-03	WG480323
Anthracene	mg/kg	0.166	0	.167	99.5	35-133	L460863-03	WG480323
Benzo(a)anthracene	mg/kg	0.161	0	.167	96.3	35-136	L460863-03	WG480323
Benzo(a)pyrene	mg/kg	0.160	0	.167	95.6	37-131	L460863-03	WG480323
Benzo(b)fluoranthene	mg/kg	0.145	0	.167	87.1	29-145	L460863-03	WG480323
Benzo(g,h,i)perylene	mg/kg	0.175	0	.167	105.	10-139	L460863-03	WG480323
Benzo(k)fluoranthene	mg/kg	0.153	0	.167	91.4	31-140	L460863-03	WG480323
Chrysene	mg/kg	0.155	0	.167	92.7	34-137	L460863-03	WG480323
Dibenz(a,h)anthracene	mg/kg	0.175	0	.167	105.	21-132	L460863-03	WG480323
Fluoranthene	mg/kg	0.165	0	.167	98.7	34-132	L460863-03	WG480323
Fluorene	mg/kg	0.170	0	.167	102.	38-126	L460863-03	WG480323
Indeno(1,2,3-cd)pyrene	mg/kg	0.172	0	.167	103.	17-134	L460863-03	WG480323
Naphthalene	mg/kg	0.171	0	.167	102.	24-122	L460863-03	WG480323
Phenanthrene	mg/kg	0.166	0	.167	99.4	38-128	L460863-03	WG480323
Pyrene	mg/kg	0.155	0	.167	93.0	35-141	L460863-03	WG480323
2-Fluorobiphenyl					102.2	37-123		WG480323
Nitrobenzene-d5					96.55	19-129		WG480323
p-Terphenyl-d14					105.0	34-149		WG480323
Chloride	mg/kg	545.	28.0	500	103.	80-120	L460833-02	WG480533
Sulfate	mg/kg	532.	0	500	106.	80-120	L460833-02	WG480533
Benzene	mg/kg	0.246	0.00603	.05	96.2	32-137	L460506-04	WG480634
Ethylbenzene	mg/kg	0.208	0.00410	.05	81.6	10-150	L460506-04	WG480634
Toluene	mg/kg	0.235	0.0220	.05	85.2	20-142	L460506-04	WG480634
Total Xylene	mg/kg	0.604	0.0250	.15	77.3	16-141	L460506-04	WG480634
a,a,a-Trifluorotoluene(PID)					104.5	54-144		WG480634

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
TPH (GC/FID) Low Fraction	mg/kg	16.5	0.114	5.5	59.7	55-109	L460506-04	WG480634
a,a,a-Trifluorotoluene(FID)					101.8	59-128		WG480634
Chromium,Hexavalent	mg/kg	0.184	0	20	0.920*	50-150	L460506-01	WG480750
Mercury	mg/kg	0.285	0.0410	.25	97.6	70-130	L460506-03	WG480320
Barium	mg/kg	186.	130.	50	112.	75-125	L460894-01	WG480416
Cadmium	mg/kg	43.3	0	50	86.6	75-125	L460894-01	WG480416
Chromium	mg/kg	48.2	2.00	50	92.4	75-125	L460894-01	WG480416
Copper	mg/kg	50.4	1.14	50	98.5	75-125	L460894-01	WG480416
Lead	mg/kg	57.9	5.40	50	105.	75-125	L460894-01	WG480416
Nickel	mg/kg	57.5	9.58	50	95.8	75-125	L460894-01	WG480416
Selenium	mg/kg	46.2	6.10	50	80.2	75-125	L460894-01	WG480416
Silver	mg/kg	45.0	0	50	90.0	75-125	L460894-01	WG480416
Zinc	mg/kg	81.9	36.0	50	91.8	75-125	L460894-01	WG480416
Arsenic	mg/kg	43.4	0	10	86.8	75-125	L460894-01	WG480416
Acenaphthene	mg/kg	0.120	0	.167	72.1	38-121	L460704-01	WG480160
Acenaphthylene	mg/kg	0.124	0	.167	74.2	39-120	L460704-01	WG480160
Anthracene	mg/kg	0.115	0	.167	68.6	35-133	L460704-01	WG480160
Benzo(a)anthracene	mg/kg	0.107	0	.167	64.0	35-136	L460704-01	WG480160
Benzo(a)pyrene	mg/kg	0.0993	0	.167	59.4	37-131	L460704-01	WG480160
Benzo(b)fluoranthene	mg/kg	0.0989	0	.167	59.2	29-145	L460704-01	WG480160
Benzo(g,h,i)perylene	mg/kg	0.109	0	.167	65.5	10-139	L460704-01	WG480160
Benzo(k)fluoranthene	mg/kg	0.0972	0	.167	58.2	31-140	L460704-01	WG480160
Chrysene	mg/kg	0.109	0	.167	65.1	34-137	L460704-01	WG480160
Dibenz(a,h)anthracene	mg/kg	0.112	0	.167	66.8	21-132	L460704-01	WG480160
Fluoranthene	mg/kg	0.112	0	.167	66.9	34-132	L460704-01	WG480160
Fluorene	mg/kg	0.123	0	.167	73.7	38-126	L460704-01	WG480160
Indeno(1,2,3-cd)pyrene	mg/kg	0.111	0	.167	66.5	17-134	L460704-01	WG480160
Naphthalene	mg/kg	0.120	0	.167	71.7	24-122	L460704-01	WG480160
Phenanthrene	mg/kg	0.118	0	.167	70.6	38-128	L460704-01	WG480160
Pyrene	mg/kg	0.107	0	.167	63.8	35-141	L460704-01	WG480160
2-Fluorobiphenyl					75.53	37-123		WG480160
Nitrobenzene-d5					73.68	19-129		WG480160
p-Terphenyl-d14					70.19	34-149		WG480160
Boron	mg/l	1.56	0.405	1.13	102.	75-125	L459764-07	WG480983
Total Xylene	mg/kg	0.605	0.0130	.15	78.9	16-141	L461126-07	WG481244
a,a,a-Trifluorotoluene(PID)					96.86	54-144		WG481244

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Acenaphthene	mg/kg	0.0819	0.128	49.0	38-121	43.8*	23	L460506-04	WG479809
Acenaphthylene	mg/kg	0.0350	0.0411	0*	39-120	15.9	22	L460506-04	WG479809
Anthracene	mg/kg	0.152	0.200	91.3	35-133	26.9*	23	L460506-04	WG479809
Fluoranthene	mg/kg	0.169	0.0668	80.5	34-132	86.9*	24	L460506-04	WG479809
Fluorene	mg/kg	0.309	0.341	35.5*	38-126	9.77	23	L460506-04	WG479809
Naphthalene	mg/kg	0.199	0.263	53.5	24-122	27.5	29	L460506-04	WG479809
Phenanthrene	mg/kg	0.497	0.649	22.4*	38-128	26.4*	25	L460506-04	WG479809

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
2-Fluorobiphenyl				43.55	37-123				
Nitrobenzene-d5				89.72	19-129				
TPH (GC/FID) High Fraction	ppm	47.8	51.8	79.6	50-150	8.03	20	L459919-01	WG479790
o-Terphenyl				73.06	50-150				WG479790
TPH (GC/FID) High Fraction	ppm	41.1	32.4	68.5	50-150	23.8	25	L460863-01	WG480311
o-Terphenyl				80.41	50-150				WG480311
Benzene	mg/kg	0.209	0.230	83.7	32-137	9.28	39	L460506-02	WG480302
Ethylbenzene	mg/kg	0.148	0.173	59.0	10-150	15.9	44	L460506-02	WG480302
Toluene	mg/kg	0.181	0.205	72.2	20-142	12.8	42	L460506-02	WG480302
Total Xylene	mg/kg	0.422	0.494	56.2	16-141	15.8	46	L460506-02	WG480302
a,a,a-Trifluorotoluene(PID)				101.4	54-144				WG480302
TPH (GC/FID) Low Fraction	mg/kg	13.6	12.4	49.6*	55-109	9.76	20	L460506-02	WG480302
a,a,a-Trifluorotoluene(FID)				102.7	59-128				WG480302
Benzo(a)anthracene	mg/kg	0.187	0.159	112.	35-136	16.3	23	L460506-04	WG479809
Benzo(a)pyrene	mg/kg	0.155	0.155	92.9	37-131	0.358	22	L460506-04	WG479809
Benzo(b)fluoranthene	mg/kg	0.318	0.270	190.*	29-145	16.2	33	L460506-04	WG479809
Benzo(g,h,i)perylene	mg/kg	0.107	0.0884	64.3	10-139	19.4	26	L460506-04	WG479809
Benzo(k)fluoranthene	mg/kg	0.201	0.196	120.	31-140	2.40	34	L460506-04	WG479809
Chrysene	mg/kg	0.174	0.174	104.	34-137	0.00988	23	L460506-04	WG479809
Dibenz(a,h)anthracene	mg/kg	0.0740	0.0890	44.3	21-132	18.4	25	L460506-04	WG479809
Indeno(1,2,3-cd)pyrene	mg/kg	0.0870	0.0885	52.1	17-134	1.64	25	L460506-04	WG479809
Pyrene	mg/kg	0.237	0.187	142.*	35-141	23.5	25	L460506-04	WG479809
p-Terphenyl-d14				79.70	34-149				WG479809
Benzene	mg/kg	0.224	0.242	89.8	32-137	7.60	39	L460506-01	WG480457
Ethylbenzene	mg/kg	0.195	0.218	78.1	10-150	11.0	44	L460506-01	WG480457
Toluene	mg/kg	0.202	0.224	80.8	20-142	10.5	42	L460506-01	WG480457
Total Xylene	mg/kg	0.581	0.638	77.5	16-141	9.37	46	L460506-01	WG480457
a,a,a-Trifluorotoluene(PID)				96.91	54-144				WG480457
TPH (GC/FID) Low Fraction	mg/kg	19.4	21.1	70.6	55-109	8.36	20	L460506-01	WG480457
a,a,a-Trifluorotoluene(FID)				96.64	59-128				WG480457
Acenaphthene	mg/kg	0.144	0.164	86.4	38-121	12.7	23	L460863-03	WG480323
Acenaphthylene	mg/kg	0.139	0.162	83.3	39-120	15.4	22	L460863-03	WG480323
Anthracene	mg/kg	0.146	0.166	87.6	35-133	12.7	23	L460863-03	WG480323
Benzo(a)anthracene	mg/kg	0.130	0.161	77.8	35-136	21.2	23	L460863-03	WG480323
Benzo(a)pyrene	mg/kg	0.122	0.160	72.8	37-131	27.1*	22	L460863-03	WG480323
Benzo(b)fluoranthene	mg/kg	0.117	0.145	70.0	29-145	21.8	33	L460863-03	WG480323
Benzo(g,h,i)perylene	mg/kg	0.135	0.175	81.1	10-139	25.6	26	L460863-03	WG480323
Benzo(k)fluoranthene	mg/kg	0.128	0.153	76.8	31-140	17.3	34	L460863-03	WG480323
Chrysene	mg/kg	0.130	0.155	77.6	34-137	17.8	23	L460863-03	WG480323
Dibenz(a,h)anthracene	mg/kg	0.137	0.175	82.0	21-132	24.5	25	L460863-03	WG480323
Fluoranthene	mg/kg	0.137	0.165	81.9	34-132	18.5	24	L460863-03	WG480323
Fluorene	mg/kg	0.153	0.170	91.6	38-126	10.4	23	L460863-03	WG480323
Indeno(1,2,3-cd)pyrene	mg/kg	0.135	0.172	81.0	17-134	24.1	25	L460863-03	WG480323
Naphthalene	mg/kg	0.139	0.171	83.2	24-122	20.7	29	L460863-03	WG480323
Phenanthrene	mg/kg	0.144	0.166	86.1	38-128	14.3	25	L460863-03	WG480323
Pyrene	mg/kg	0.132	0.155	79.1	35-141	16.2	25	L460863-03	WG480323
2-Fluorobiphenyl				89.58	37-123				WG480323
Nitrobenzene-d5				76.81	19-129				WG480323
p-Terphenyl-d14				98.35	34-149				WG480323

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Chloride	mg/kg	547.	545.	104.	80-120	0.366	20	L460833-02	WG480533
Sulfate	mg/kg	533.	532.	107.	80-120	0.188	20	L460833-02	WG480533
Benzene	mg/kg	0.240	0.246	93.5	32-137	2.74	39	L460506-04	WG480634
Ethylbenzene	mg/kg	0.217	0.208	85.2	10-150	4.24	44	L460506-04	WG480634
Toluene	mg/kg	0.233	0.235	84.2	20-142	1.01	42	L460506-04	WG480634
Total Xylene	mg/kg	0.626	0.604	80.1	16-141	3.47	46	L460506-04	WG480634
a,a,a-Trifluorotoluene(PID)				104.9	54-144				WG480634
TPH (GC/FID) Low Fraction	mg/kg	17.6	16.5	63.6	55-109	6.29	20	L460506-04	WG480634
a,a,a-Trifluorotoluene(FID)				100.6	59-128				WG480634
Chromium,Hexavalent	mg/kg	0.176	0.184	0.880*	50-150	4.44	20	L460506-01	WG480750
Mercury	mg/kg	0.290	0.285	99.6	70-130	1.74	20	L460506-03	WG480320
Barium	mg/kg	158.	186.	56.0*	75-125	16.3	20	L460894-01	WG480416
Cadmium	mg/kg	42.7	43.3	85.4	75-125	1.40	20	L460894-01	WG480416
Chromium	mg/kg	47.3	48.2	90.6	75-125	1.88	20	L460894-01	WG480416
Copper	mg/kg	50.0	50.4	97.7	75-125	0.797	20	L460894-01	WG480416
Lead	mg/kg	46.6	57.9	82.4	75-125	21.6*	20	L460894-01	WG480416
Nickel	mg/kg	54.2	57.5	89.2	75-125	5.91	20	L460894-01	WG480416
Selenium	mg/kg	45.7	46.2	79.2	75-125	1.09	20	L460894-01	WG480416
Silver	mg/kg	44.8	45.0	89.6	75-125	0.445	20	L460894-01	WG480416
Zinc	mg/kg	75.4	81.9	78.8	75-125	8.26	20	L460894-01	WG480416
Arsenic	mg/kg	42.8	43.4	85.6	75-125	1.39	20	L460894-01	WG480416
Acenaphthene	mg/kg	0.131	0.120	78.6	38-121	8.61	23	L460704-01	WG480160
Acenaphthylene	mg/kg	0.129	0.124	77.4	39-120	4.19	22	L460704-01	WG480160
Anthracene	mg/kg	0.121	0.115	72.5	35-133	5.54	23	L460704-01	WG480160
Benzo(a)anthracene	mg/kg	0.118	0.107	70.4	35-136	9.54	23	L460704-01	WG480160
Benzo(a)pyrene	mg/kg	0.115	0.0993	69.0	37-131	14.9	22	L460704-01	WG480160
Benzo(b)fluoranthene	mg/kg	0.114	0.0989	68.0	29-145	13.8	33	L460704-01	WG480160
Benzo(g,h,i)perylene	mg/kg	0.122	0.109	72.8	10-139	10.6	26	L460704-01	WG480160
Benzo(k)fluoranthene	mg/kg	0.103	0.0972	61.4	31-140	5.42	34	L460704-01	WG480160
Chrysene	mg/kg	0.115	0.109	69.0	34-137	5.91	23	L460704-01	WG480160
Dibenz(a,h)anthracene	mg/kg	0.120	0.112	71.8	21-132	7.20	25	L460704-01	WG480160
Fluoranthene	mg/kg	0.117	0.112	69.9	34-132	4.35	24	L460704-01	WG480160
Fluorene	mg/kg	0.136	0.123	81.3	38-126	9.86	23	L460704-01	WG480160
Indeno(1,2,3-cd)pyrene	mg/kg	0.121	0.111	72.2	17-134	8.30	25	L460704-01	WG480160
Naphthalene	mg/kg	0.132	0.120	79.2	24-122	9.92	29	L460704-01	WG480160
Phenanthrene	mg/kg	0.124	0.118	74.4	38-128	5.25	25	L460704-01	WG480160
Pyrene	mg/kg	0.121	0.107	72.7	35-141	13.0	25	L460704-01	WG480160
2-Fluorobiphenyl				79.47	37-123				WG480160
Nitrobenzene-d5				78.13	19-129				WG480160
p-Terphenyl-d14				78.81	34-149				WG480160
Boron	mg/l	1.49	1.56	96.0	75-125	4.59	20	L459764-07	WG480983
Total Xylene	mg/kg	0.589	0.605	76.8	16-141	2.64	46	L461126-07	WG481244
a,a,a-Trifluorotoluene(PID)				98.12	54-144				WG481244

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Mr. Bryan Burns  
1999 Broadway, Suite 3700  
Denver, CO 80202

Quality Assurance Report  
Level II

L460506

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 02, 2010

Batch number /Run number / Sample number cross reference

WG479828: R1231928: L460506-02  
WG479829: R1231948: L460506-03 04 05 06  
WG479809: R1232968: L460506-02 04 05  
WG479790: R1233069: L460506-02 03 04 05 06  
WG480311: R1233871: L460506-01  
WG480302: R1234848: L460506-02 06  
WG480341: R1235112: L460506-01 02 03 04 05 06  
WG480580: R1235114: L460506-01 02 03 04 05 06  
WG480323: R1235554: L460506-01  
WG480457: R1235689: L460506-01  
WG480525: R1235828: L460506-01  
WG480533: R1236590: L460506-01 02 03 04 05 06  
WG480634: R1236691: L460506-03 04 05  
WG480466: R1236830: L460506-07 08 09 10 11 12  
WG480750: R1237054: L460506-01 02 03 04 05 06  
WG480320: R1237056: L460506-01 02 03 04 05 06  
WG480160: R1237069: L460506-03 06  
WG480416: R1238330: L460506-01 02 03 04 05 06  
WG480983: R1238852: L460506-07 08 09 10 11 12  
WG480328: R1239898: L460506-01 02 03 04 05 06  
WG481244: R1240749: L460506-04 05

\* \* Calculations are performed prior to rounding of reported values .

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Dave Nicholson  
Berry Petroleum Company - Denver, CO  
1999 Broadway, Suite 3700  
Denver, CO 80202

## Report Summary

Monday June 13, 2011

Report Number: L518791

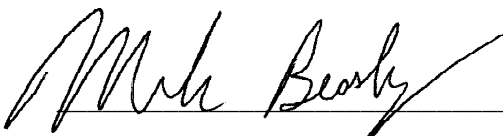
Samples Received: 06/02/11

Client Project:

Description: Berry Pit Permitting

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:



Mark W. Beasley , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

Dave Nicholson  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

June 13, 2011

Date Received : June 02, 2011  
Description : Berry Pit Permitting

Sample ID : H-7A PILE

Collected By : DK Nicholson  
Collection Date : 05/28/11 11:40

ESC Sample # : L518791-06

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/09/11	1
ORP	87.		mV	2580	06/03/11	1
pH	8.6		su	9045D	06/04/11	1
Sodium Adsorption Ratio	7.5			Calc.	06/05/11	1
Specific Conductance	500		umhos/cm	9050AMod	06/08/11	1
Mercury	0.025	0.020	mg/kg	7471	06/04/11	1
Arsenic	14.	5.0	mg/kg	6010B	06/03/11	5
Barium	2200	0.25	mg/kg	6010B	06/03/11	1
Boron	18.	10.	mg/kg	6010B	06/03/11	1
Cadmium	0.76	0.25	mg/kg	6010B	06/03/11	1
Chromium	19.	0.50	mg/kg	6010B	06/03/11	1
Copper	20.	1.0	mg/kg	6010B	06/03/11	1
Lead	14.	0.25	mg/kg	6010B	06/03/11	1
Nickel	18.	5.0	mg/kg	6010B	06/03/11	5
Selenium	10.	1.0	mg/kg	6010B	06/03/11	1
Silver	BDL	0.50	mg/kg	6010B	06/03/11	1
Zinc	54.	1.5	mg/kg	6010B	06/03/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	06/03/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	06/03/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	06/03/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	06/03/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	06/03/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	106.		% Rec.	8021/8015	06/03/11	5
a,a,a-Trifluorotoluene(PID)	110.		% Rec.	8021/8015	06/03/11	5
TPH (GC/FID) High Fraction	46.	4.0	mg/kg	3546/DRO	06/09/11	1
Surrogate recovery(%)						
o-Terphenyl	74.0		% Rec.	3546/DRO	06/09/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Acenaphthene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Acenaphthylene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Benzo(a)anthracene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Benzo(a)pyrene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Benzo(b)fluoranthene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)  
L518791-06 (PH) - 8.6@21.5c





12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

Dave Nicholson  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

June 13, 2011

Date Received : June 02, 2011  
Description : Berry Pit Permitting

Sample ID : H-7A PILE

Collected By : DK Nicholson  
Collection Date : 05/28/11 11:40

ESC Sample # : L518791-06

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(g,h,i)perylene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Benzo(k)fluoranthene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Chrysene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Dibenz(a,h)anthracene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Fluoranthene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Fluorene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Indeno(1,2,3-cd)pyrene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Naphthalene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Phenanthrene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Pyrene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
1-Methylnaphthalene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
2-Methylnaphthalene	0.098	0.060	mg/kg	8270C-SIM	06/11/11	10
2-Chloronaphthalene	BDL	0.060	mg/kg	8270C-SIM	06/11/11	10
Surrogate Recovery						
Nitrobenzene-d5	107.		% Rec.	8270C-SIM	06/11/11	10
2-Fluorobiphenyl	101.		% Rec.	8270C-SIM	06/11/11	10
p-Terphenyl-d14	108.		% Rec.	8270C-SIM	06/11/11	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/13/11 15:28 Printed: 06/13/11 15:29  
L518791-06 (PH) - 8.6@21.5c

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L518791-01	WG538687	SAMP	Nitrobenzene-d5	R1715729	J1
	WG538685	SAMP	o-Terphenyl	R1716949	J7
L518791-03	WG538687	SAMP	Nitrobenzene-d5	R1715729	J7
	WG538685	SAMP	o-Terphenyl	R1716949	J7
L518791-06	WG538796	SAMP	pH	R1712289	J3
L518791-07	WG538687	SAMP	Nitrobenzene-d5	R1715729	J1
	WG538687	SAMP	2-Fluorobiphenyl	R1715729	J1

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed  
06/13/11 at 15:29:23

TSR Signing Reports: 134  
R5 - Desired TAT

Sample: L518791-01 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28  
Sample: L518791-02 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28  
Sample: L518791-03 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28  
Sample: L518791-04 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28  
Sample: L518791-05 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28  
Sample: L518791-06 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28  
Sample: L518791-07 Account: BERPETDCO Received: 06/02/11 09:00 Due Date: 06/09/11 00:00 RPT Date: 06/13/11 15:28



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
pH	4.70	su			WG538584	06/03/11 12:25
Arsenic	< 1	mg/kg			WG538575	06/03/11 10:13
Barium	< .25	mg/kg			WG538575	06/03/11 10:13
Boron	< 10	mg/kg			WG538575	06/03/11 10:13
Cadmium	< .25	mg/kg			WG538575	06/03/11 10:13
Chromium	< .5	mg/kg			WG538575	06/03/11 10:13
Copper	< 1	mg/kg			WG538575	06/03/11 10:13
Lead	< .25	mg/kg			WG538575	06/03/11 10:13
Nickel	< 1	mg/kg			WG538575	06/03/11 10:13
Selenium	< 1	mg/kg			WG538575	06/03/11 10:13
Silver	< .5	mg/kg			WG538575	06/03/11 10:13
Zinc	< 1.5	mg/kg			WG538575	06/03/11 10:13
Mercury	< .02	mg/kg			WG538643	06/04/11 06:51
Benzene	< .0005	mg/kg			WG538574	06/02/11 16:50
Ethylbenzene	< .0005	mg/kg			WG538574	06/02/11 16:50
Toluene	< .005	mg/kg			WG538574	06/02/11 16:50
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG538574	06/02/11 16:50
Total Xylene	< .0015	mg/kg			WG538574	06/02/11 16:50
a,a,a-Trifluorotoluene(FID)		% Rec.	106.3	59-128	WG538574	06/02/11 16:50
a,a,a-Trifluorotoluene(PID)		% Rec.	110.0	54-144	WG538574	06/02/11 16:50
pH	4.90	su			WG538796	06/04/11 13:05
1-Methylnaphthalene	< .006	mg/kg			WG538687	06/08/11 10:15
2-Chloronaphthalene	< .006	mg/kg			WG538687	06/08/11 10:15
2-Methylnaphthalene	< .006	mg/kg			WG538687	06/08/11 10:15
Acenaphthene	< .006	mg/kg			WG538687	06/08/11 10:15
Acenaphthylene	< .006	mg/kg			WG538687	06/08/11 10:15
Anthracene	< .006	mg/kg			WG538687	06/08/11 10:15
Benzo(a)anthracene	< .006	mg/kg			WG538687	06/08/11 10:15
Benzo(a)pyrene	< .006	mg/kg			WG538687	06/08/11 10:15
Benzo(b)fluoranthene	< .006	mg/kg			WG538687	06/08/11 10:15
Benzo(g,h,i)perylene	< .006	mg/kg			WG538687	06/08/11 10:15
Benzo(k)fluoranthene	< .006	mg/kg			WG538687	06/08/11 10:15
Chrysene	< .006	mg/kg			WG538687	06/08/11 10:15
Dibenz(a,h)anthracene	< .006	mg/kg			WG538687	06/08/11 10:15
Fluoranthene	< .006	mg/kg			WG538687	06/08/11 10:15
Fluorene	< .006	mg/kg			WG538687	06/08/11 10:15
Indeno(1,2,3-cd)pyrene	< .006	mg/kg			WG538687	06/08/11 10:15
Naphthalene	< .006	mg/kg			WG538687	06/08/11 10:15
Phenanthrene	< .006	mg/kg			WG538687	06/08/11 10:15
Pyrene	< .006	mg/kg			WG538687	06/08/11 10:15
2-Fluorobiphenyl		% Rec.	74.57	21-120	WG538687	06/08/11 10:15
Nitrobenzene-d5		% Rec.	62.49	33-114	WG538687	06/08/11 10:15
p-Terphenyl-d14		% Rec.	76.69	18-142	WG538687	06/08/11 10:15
Specific Conductance	0.800	umhos/cm			WG539344	06/08/11 18:13
TPH (GC/FID) High Fraction	< 4	ppm			WG538685	06/08/11 22:09
* Performance of this Analyte is outside of established criteria.						
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'						



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
o-Terphenyl		% Rec.	70.85	50-150		06/08/11 22:09
TPH (GC/FID) High Fraction	< 4	ppm			WG538986	06/09/11 03:34
o-Terphenyl		% Rec.	65.95	50-150	WG538986	06/09/11 03:34
Chromium, Hexavalent	< 2	mg/kg			WG538897	06/09/11 14:30

Analyte	Units	Result	Duplicate		Limit	Ref Samp	Batch
			Duplicate	RPD			
pH	su	7.20	7.20	0	1	L518641-03	WG538584
pH	su	8.70	8.70	0	1	L518791-05	WG538584
Arsenic	mg/kg	2.80	2.70	4.35	20	L518815-02	WG538575
Barium	mg/kg	15.0	13.0	11.6	20	L518815-02	WG538575
Boron	mg/kg	0	0.565	NA	20	L518815-02	WG538575
Cadmium	mg/kg	0	0.160	NA	20	L518815-02	WG538575
Chromium	mg/kg	11.0	10.0	11.3	20	L518815-02	WG538575
Copper	mg/kg	2.80	2.56	8.60	20	L518815-02	WG538575
Lead	mg/kg	6.00	5.60	6.23	20	L518815-02	WG538575
Nickel	mg/kg	3.50	3.12	12.0	20	L518815-02	WG538575
Selenium	mg/kg	11.0	10.0	9.52	20	L518815-02	WG538575
Silver	mg/kg	0	0	0	20	L518815-02	WG538575
Zinc	mg/kg	4.60	4.22	7.96	20	L518815-02	WG538575
ORP	mV	120.	110.	7.02	20	L518641-04	WG538621
ORP	mV	91.0	89.0	2.22	20	L518791-04	WG538621
Mercury	mg/kg	0	0	0	20	L518706-03	WG538643
pH	su	8.70	8.60	1.16*	1	L518791-06	WG538796
pH	su	8.10	8.20	1.23*	1	L518925-13	WG538796
Specific Conductance	umhos/cm	1500	1400	5.15	20	L518791-03	WG539344
Specific Conductance	umhos/cm	140.	140.	0.499	20	L519132-02	WG539344
Chromium, Hexavalent	mg/kg	0	0	0	20	L518791-06	WG538897
Chromium, Hexavalent	mg/kg	0	0	0	20	L519125-01	WG538897

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
pH	su	6.3	6.30	100.	97.98-102.02	WG538584
Arsenic	mg/kg	192	175.	91.1	78.6-120.8	WG538575
Barium	mg/kg	420	402.	95.7	78.8-121.4	WG538575
Boron	mg/kg	140	140.	100.	74.3-125.7	WG538575
Cadmium	mg/kg	70.1	64.4	91.9	78.5-121.5	WG538575
Chromium	mg/kg	168	165.	98.2	80.4-120.2	WG538575
Copper	mg/kg	122	125.	102.	81.6-119.7	WG538575
Lead	mg/kg	113	113.	100.	77.3-122.1	WG538575
Nickel	mg/kg	74.1	75.8	102.	78.8-121.2	WG538575

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Selenium	mg/kg	176	184.	105.	75.6-125.0	WG538575
Silver	mg/kg	115	115.	100.	66-133.9	WG538575
Zinc	mg/kg	437	410.	93.8	78.5-121.7	WG538575
ORP	mV	229	220.	96.1	95.6-104.37	WG538621
Mercury	mg/kg	8.77	7.98	91.0	71.6-127.7	WG538643
Benzene	mg/kg	.05	0.0542	108.	76-113	WG538574
Ethylbenzene	mg/kg	.05	0.0567	113.	78-115	WG538574
Toluene	mg/kg	.05	0.0545	109.	76-114	WG538574
Total Xylene	mg/kg	.15	0.169	113.	81-118	WG538574
a,a,a-Trifluorotoluene(PID)				107.2	54-144	WG538574
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.92	108.	67-135	WG538574
a,a,a-Trifluorotoluene(FID)				102.2	59-128	WG538574
pH	su	6.3	6.30	100.	97.98-102.02	WG538796
1-Methylnaphthalene	mg/kg	.033	0.0235	71.1	41-110	WG538687
2-Chloronaphthalene	mg/kg	.033	0.0240	72.6	43-109	WG538687
2-Methylnaphthalene	mg/kg	.033	0.0235	71.1	38-104	WG538687
Acenaphthene	mg/kg	.033	0.0259	78.5	48-103	WG538687
Acenaphthylene	mg/kg	.033	0.0257	77.9	43-106	WG538687
Anthracene	mg/kg	.033	0.0267	80.8	51-110	WG538687
Benzo(a)anthracene	mg/kg	.033	0.0300	90.8	38-126	WG538687
Benzo(a)pyrene	mg/kg	.033	0.0304	92.0	47-118	WG538687
Benzo(b)fluoranthene	mg/kg	.033	0.0303	91.8	47-118	WG538687
Benzo(g,h,i)perylene	mg/kg	.033	0.0335	102.	40-125	WG538687
Benzo(k)fluoranthene	mg/kg	.033	0.0296	89.7	45-121	WG538687
Chrysene	mg/kg	.033	0.0267	80.8	35-135	WG538687
Dibenz(a,h)anthracene	mg/kg	.033	0.0310	94.1	41-124	WG538687
Fluoranthene	mg/kg	.033	0.0275	83.3	50-114	WG538687
Fluorene	mg/kg	.033	0.0267	80.8	49-109	WG538687
Indeno(1,2,3-cd)pyrene	mg/kg	.033	0.0308	93.3	40-126	WG538687
Naphthalene	mg/kg	.033	0.0250	75.8	36-100	WG538687
Phenanthrene	mg/kg	.033	0.0290	87.8	46-108	WG538687
Pyrene	mg/kg	.033	0.0291	88.2	30-136	WG538687
2-Fluorobiphenyl				71.15	33-114	WG538687
Nitrobenzene-d5				67.81	21-120	WG538687
p-Terphenyl-d14				85.12	18-142	WG538687
Specific Conductance	umhos/cm	556	560.	101.	85-115	WG539344
TPH (GC/FID) High Fraction	ppm	60	46.1	76.9	50-150	WG538685
o-Terphenyl				69.65	50-150	WG538685
TPH (GC/FID) High Fraction	ppm	60	44.3	73.9	50-150	WG538986
o-Terphenyl				68.10	50-150	WG538986
Chromium,Hexavalent	mg/kg	132	110.	83.3	50-150	WG538897

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
pH	su	6.30	6.30	100.	97.98-102.02	0	20	WG538584
ORP	mV	220.	220.	96.0	95.6-104.37	0	20	WG538621
Benzene	mg/kg	0.0521	0.0542	104.	76-113	3.98	20	WG538574
Ethylbenzene	mg/kg	0.0533	0.0567	106.	78-115	6.30	20	WG538574
Toluene	mg/kg	0.0515	0.0545	103.	76-114	5.65	20	WG538574
Total Xylene	mg/kg	0.159	0.169	106.	81-118	6.47	20	WG538574
a,a,a-Trifluorotoluene(PID)				106.7	54-144			WG538574
TPH (GC/FID) Low Fraction	mg/kg	6.10	5.92	111.	67-135	2.85	20	WG538574
a,a,a-Trifluorotoluene(FID)				101.9	59-128			WG538574
pH	su	6.30	6.30	100.	97.98-102.02	0	20	WG538796
1-Methylnaphthalene	mg/kg	0.0256	0.0235	78.0	41-110	8.77	24	WG538687
2-Chloronaphthalene	mg/kg	0.0277	0.0240	84.0	43-109	14.3	21	WG538687
2-Methylnaphthalene	mg/kg	0.0267	0.0235	81.0	38-104	12.9	24	WG538687
Acenaphthene	mg/kg	0.0292	0.0259	88.0	48-103	12.0	20	WG538687
Acenaphthylene	mg/kg	0.0289	0.0257	88.0	43-106	11.7	20	WG538687
Anthracene	mg/kg	0.0305	0.0267	92.0	51-110	13.4	22	WG538687
Benzo(a)anthracene	mg/kg	0.0308	0.0300	93.0	38-126	2.62	20	WG538687
Benzo(a)pyrene	mg/kg	0.0286	0.0304	87.0	47-118	5.93	20	WG538687
Benzo(b)fluoranthene	mg/kg	0.0310	0.0303	94.0	47-118	2.43	29	WG538687
Benzo(g,h,i)perylene	mg/kg	0.0324	0.0335	98.0	40-125	3.37	20	WG538687
Benzo(k)fluoranthene	mg/kg	0.0321	0.0296	97.0	45-121	8.11	31	WG538687
Chrysene	mg/kg	0.0294	0.0267	89.0	35-135	9.66	20	WG538687
Dibenz(a,h)anthracene	mg/kg	0.0306	0.0310	93.0	41-124	1.38	20	WG538687
Fluoranthene	mg/kg	0.0300	0.0275	91.0	50-114	8.75	20	WG538687
Fluorene	mg/kg	0.0307	0.0267	93.0	49-109	13.9	19	WG538687
Indeno(1,2,3-cd)pyrene	mg/kg	0.0306	0.0308	92.0	40-126	0.771	20	WG538687
Naphthalene	mg/kg	0.0280	0.0250	85.0	36-100	11.1	24	WG538687
Phenanthrene	mg/kg	0.0309	0.0290	94.0	46-108	6.36	21	WG538687
Pyrene	mg/kg	0.0302	0.0291	91.0	30-136	3.50	20	WG538687
2-Fluorobiphenyl				80.73	33-114			WG538687
Nitrobenzene-d5				72.58	21-120			WG538687
p-Terphenyl-d14				91.95	18-142			WG538687
Specific Conductance	umhos/	560.	560.	101.	85-115	0	20	WG539344
TPH (GC/FID) High Fraction	ppm	44.0	46.1	73.0	50-150	4.78	25	WG538685
o-Terphenyl				63.80	50-150			WG538685
TPH (GC/FID) High Fraction	ppm	42.5	44.3	71.0	50-150	4.16	25	WG538986
o-Terphenyl				63.77	50-150			WG538986
Chromium,Hexavalent	mg/kg	100.	110.	76.0	50-150	9.52	20	WG538897

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Arsenic	mg/kg	48.4	2.70	50	91.4	75-125	L518815-02	WG538575

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'





**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Barium	mg/kg	63.4	13.0	50	101.	75-125	L518815-02	WG538575
Boron	mg/kg	43.1	0.565	50	85.1	75-125	L518815-02	WG538575
Cadmium	mg/kg	47.4	0.160	50	94.5	75-125	L518815-02	WG538575
Chromium	mg/kg	62.6	10.0	50	105.	75-125	L518815-02	WG538575
Copper	mg/kg	55.2	2.56	50	105.	75-125	L518815-02	WG538575
Lead	mg/kg	56.8	5.60	50	102.	75-125	L518815-02	WG538575
Nickel	mg/kg	53.6	3.12	50	101.	75-125	L518815-02	WG538575
Selenium	mg/kg	56.3	10.0	50	92.6	75-125	L518815-02	WG538575
Silver	mg/kg	49.4	0	50	98.8	75-125	L518815-02	WG538575
Zinc	mg/kg	52.4	4.22	50	96.4	75-125	L518815-02	WG538575
Mercury	mg/kg	0.249	0	.25	99.6	70-130	L518706-03	WG538643
TPH (GC/FID) Low Fraction	mg/kg	22.0	0	5.5	79.8	55-109	L518752-01	WG538574
a,a,a-Trifluorotoluene(FID)	mg/kg	0.180	0	.05	101.2	59-128	L518752-01	WG538574
Benzene	mg/kg	0.138	0	.05	71.9	32-137	L518752-01	WG538574
Ethylbenzene	mg/kg	0.159	0	.05	55.3	10-150	L518752-01	WG538574
Toluene	mg/kg	0.395	0	.05	63.4	20-142	L518752-01	WG538574
Total Xylene	mg/kg			.15	52.6	16-141	L518752-01	WG538574
TPH (GC/FID) High Fraction	ppm	37.5	0	60	62.5	50-150	L518754-09	WG538685
o-Terphenyl					61.14	50-150		WG538685
TPH (GC/FID) High Fraction	ppm	80.4	36.0	60	74.0	50-150	L518805-01	WG538986
o-Terphenyl					60.93	50-150		WG538986
1-Methylnaphthalene	mg/kg	0.135	0.0920	.033	132.*	19-131	L518304-01	WG538687
2-Chloronaphthalene	mg/kg	0.0324	0	.033	98.3	38-117	L518304-01	WG538687
2-Methylnaphthalene	mg/kg	0.261	0.170	.033	275.*	18-125	L518304-01	WG538687
Acenaphthene	mg/kg	0.0401	0.00650	.033	102.	31-120	L518304-01	WG538687
Acenaphthylene	mg/kg	0.0311	0	.033	94.4	34-116	L518304-01	WG538687
Anthracene	mg/kg	0.0372	0	.033	113.	32-131	L518304-01	WG538687
Benzo(a)anthracene	mg/kg	0.0261	0	.033	79.0	32-131	L518304-01	WG538687
Benzo(a)pyrene	mg/kg	0.0264	0	.033	80.0	28-130	L518304-01	WG538687
Benzo(b)fluoranthene	mg/kg	0.0285	0	.033	86.4	37-130	L518304-01	WG538687
Benzo(g,h,i)perylene	mg/kg	0.0253	0	.033	76.6	10-134	L518304-01	WG538687
Benzo(k)fluoranthene	mg/kg	0.0221	0	.033	67.1	31-129	L518304-01	WG538687
Chrysene	mg/kg	0.0235	0	.033	71.4	25-137	L518304-01	WG538687
Dibenz(a,h)anthracene	mg/kg	0.0253	0	.033	76.5	20-134	L518304-01	WG538687
Fluoranthene	mg/kg	0.0318	0	.033	96.4	27-138	L518304-01	WG538687
Fluorene	mg/kg	0.0551	0.0150	.033	121.	26-136	L518304-01	WG538687
Indeno(1,2,3-cd)pyrene	mg/kg	0.0252	0	.033	76.5	16-135	L518304-01	WG538687
Naphthalene	mg/kg	0.0545	0.0400	.033	43.8	22-121	L518304-01	WG538687
Phenanthrene	mg/kg	0.0905	0.0330	.033	174.*	27-133	L518304-01	WG538687
Pyrene	mg/kg	0.0291	0.00120	.033	84.6	22-133	L518304-01	WG538687
2-Fluorobiphenyl					78.34	33-114		WG538687
Nitrobenzene-d5					78.02	21-120		WG538687
p-Terphenyl-d14					56.89	18-142		WG538687
Chromium,Hexavalent	mg/kg	13.0	0	20	65.0	50-150	L518854-07	WG538897

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Arsenic	mg/kg	47.1	48.4	88.8	75-125	2.72	20	L518815-02	WG538575
Barium	mg/kg	63.8	63.4	102.	75-125	0.629	20	L518815-02	WG538575
Boron	mg/kg	44.0	43.1	86.9	75-125	2.07	20	L518815-02	WG538575
Cadmium	mg/kg	46.9	47.4	93.5	75-125	1.06	20	L518815-02	WG538575
Chromium	mg/kg	61.5	62.6	103.	75-125	1.77	20	L518815-02	WG538575
Copper	mg/kg	55.2	55.2	105.	75-125	0	20	L518815-02	WG538575
Lead	mg/kg	55.2	56.8	99.2	75-125	2.86	20	L518815-02	WG538575
Nickel	mg/kg	51.8	53.6	97.4	75-125	3.42	20	L518815-02	WG538575
Selenium	mg/kg	54.9	56.3	89.8	75-125	2.52	20	L518815-02	WG538575
Silver	mg/kg	49.4	49.4	98.8	75-125	0	20	L518815-02	WG538575
Zinc	mg/kg	52.1	52.4	95.8	75-125	0.574	20	L518815-02	WG538575
Mercury	mg/kg	0.260	0.249	104.	70-130	4.32	20	L518706-03	WG538643
TPH (GC/FID) Low Fraction	mg/kg	19.5	22.0	71.0	55-109	11.8	20	L518752-01	WG538574
a,a,a-Trifluorotoluene(FID)				105.2	59-128				WG538574
Benzene	mg/kg	0.180	0.180	71.9	32-137	0	39	L518752-01	WG538574
Ethylbenzene	mg/kg	0.140	0.138	55.9	10-150	1.08	44	L518752-01	WG538574
Toluene	mg/kg	0.158	0.159	63.0	20-142	0.650	42	L518752-01	WG538574
Total Xylene	mg/kg	0.398	0.395	53.1	16-141	0.840	46	L518752-01	WG538574
TPH (GC/FID) High Fraction	ppm	37.7	37.5	62.8	50-150	0.574	25	L518754-09	WG538685
o-Terphenyl				58.98	50-150				WG538685
TPH (GC/FID) High Fraction	ppm	79.9	80.4	73.2	50-150	0.581	25	L518805-01	WG538986
o-Terphenyl				50.20	50-150				WG538986
1-Methylnaphthalene	mg/kg	0.105	0.135	38.7	19-131	25.5	30	L518304-01	WG538687
2-Chloronaphthalene	mg/kg	0.0332	0.0324	101.	38-117	2.32	26	L518304-01	WG538687
2-Methylnaphthalene	mg/kg	0.191	0.261	64.8	18-125	30.7*	29	L518304-01	WG538687
Acenaphthene	mg/kg	0.0298	0.0401	70.7	31-120	29.3	30	L518304-01	WG538687
Acenaphthylene	mg/kg	0.0307	0.0311	93.1	34-116	1.32	29	L518304-01	WG538687
Anthracene	mg/kg	0.0348	0.0372	105.	32-131	6.86	26	L518304-01	WG538687
Benzo(a)anthracene	mg/kg	0.0290	0.0261	87.9	32-131	10.6	31	L518304-01	WG538687
Benzo(a)pyrene	mg/kg	0.0286	0.0264	86.7	28-130	8.05	28	L518304-01	WG538687
Benzo(b)fluoranthene	mg/kg	0.0283	0.0285	85.9	37-130	0.665	41	L518304-01	WG538687
Benzo(g,h,i)perylene	mg/kg	0.0275	0.0253	83.3	10-134	8.37	26	L518304-01	WG538687
Benzo(k)fluoranthene	mg/kg	0.0253	0.0221	76.8	31-129	13.5	42	L518304-01	WG538687
Chrysene	mg/kg	0.0258	0.0235	78.0	25-137	8.96	22	L518304-01	WG538687
Dibenz(a,h)anthracene	mg/kg	0.0295	0.0253	89.3	20-134	15.4	25	L518304-01	WG538687
Fluoranthene	mg/kg	0.0266	0.0318	80.5	27-138	17.9	35	L518304-01	WG538687
Fluorene	mg/kg	0.0404	0.0551	76.9	26-136	30.8*	30	L518304-01	WG538687
Indeno(1,2,3-cd)pyrene	mg/kg	0.0299	0.0252	90.6	16-135	16.9	26	L518304-01	WG538687
Naphthalene	mg/kg	0.0531	0.0545	39.7	22-121	2.49	30	L518304-01	WG538687
Phenanthrene	mg/kg	0.0611	0.0905	85.2	27-133	38.8*	36	L518304-01	WG538687
Pyrene	mg/kg	0.0303	0.0291	88.2	22-133	4.09	33	L518304-01	WG538687
2-Fluorobiphenyl				73.64	33-114				WG538687
Nitrobenzene-d5				108.4	21-120				WG538687
p-Terphenyl-d14				69.79	18-142				WG538687
Chromium,Hexavalent	mg/kg	8.60	13.0	43.0*	50-150	40.7*	20	L518854-07	WG538897

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700  
Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

---

Batch number /Run number / Sample number cross reference

WG538584: R1710009: L518791-01 02 03 04 05  
WG538575: R1710153: L518791-01 02 03 04 05 06 07  
WG538621: R1710349: L518791-01 02 03 04 05 06 07  
WG538643: R1711372: L518791-01 02 03 04 05 06 07  
WG538574: R1711849: L518791-01 02 03 04 05 06 07  
WG538796: R1712289: L518791-06 07  
WG538899: R1712470: L518791-01 02 03 04 05 06 07  
WG538687: R1715729: L518791-01 02 03 04 05 06 07  
WG539344: R1716669: L518791-01 02 03 04 05 06 07  
WG538685: R1716949: L518791-01 02 03  
WG538986: R1716950: L518791-04 05 06 07  
WG538897: R1717609: L518791-01 02 03 04 05 06 07

\* \* Calculations are performed prior to rounding of reported values.

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L518791

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 13, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form) identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b)

1. OGCC Operator Number: 10091	4. Contact Name: Chris Freeman	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Berry Petroleum Company	Phone: 303-999-4400	
3. Address: 1999 Broadway, Suite 3700 City: Denver State: CO Zip: 80202	Fax: 303-999-4402	
5. API Number: 05-045-10897	OGCC Facility ID Number: 335820	
6. Well/Facility Name: Chevron H07A 696	Well/Facility Number: Chevron 6-43D	Survey Plat
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): SE NE Sec. 7, T6S, R96W		Directional Survey
9. County: Garfield	10. Field Name:	Surface Eqmpt Diagram
11. Federal, Indian or State Lease Number:		Technical Info Page
		Other

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNL/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No
	Surface owner consultation date:
GPS DATA:	
Date of Measurement	PDOP Reading
	Instrument Operator's Name
<input type="checkbox"/> CHANGE SPACING UNIT	<input type="checkbox"/> Remove from surface bond
Formation Formation Code Spacing order number Unit Acreage Unit configuration	Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	<input type="checkbox"/> CHANGE WELL NAME
Effective Date:	From:
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	To:
	Effective Date:
<input type="checkbox"/> ABANDONED LOCATION:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date well shut in or temporarily abandoned:
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Ready for Inspection:	MIT required if shut in longer than two years. Date of last MIT
<input type="checkbox"/> SPUD DATE:	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK	
Method used	*submit cbl and cement job summaries
Cementing tool setting/perf depth	Cement volume
Cement top	Cement bottom
	Date
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004	
Final reclamation will commence on approximately	<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Report of Work Done
Approximate Start Date:	Date Work Completed:
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)	
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: background arsenic values
	<input type="checkbox"/> E&P Waste Disposal
	<input type="checkbox"/> Beneficial Reuse of E&P Waste
	<input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Chris P. Freeman Date: 9/29/11 Email: CPF@bry.com  
Print Name: Chris P. Freeman Title: Regional Manager of Environmental, Health, and Safety

COGCC Approved: Chris Canfield Title: FOR Date: 10/13/2011

CONDITIONS OF APPROVAL, IF ANY:

Chris Canfield  
EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 10091 API Number: 05-045-10897
2. Name of Operator: Berry Petroleum Company OGCC Facility ID # 335820
3. Well/Facility Name: Chevron H07A 696 Well/Facility Number: Chevron 6-43D
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SW NW Sec. 4, T6S, R96W

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

The operator requests a variance from the Table 910-1 standard for arsenic in soil based on the following:

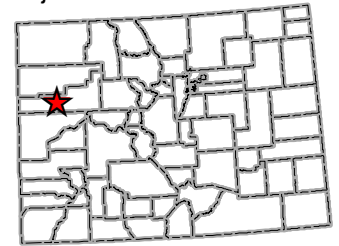
Samples collected from the pit bottom subsoils and stockpiled cuttings had arsenic concentrations of 19 mg/kg and 14 mg/kg, respectively. Three background grab soil samples were collected from undisturbed areas near the H-07A well pad on August 13, 2011 had arsenic concentrations of 20 mg/kg, 27 mg/kg, and 24 mg/kg, respectively, well above the table 910-1 standard of 0.39mg/kg. Based on these results, and the methodology recommended by COGCC staff for establishing background arsenic levels, the allowable concentration of arsenic at this site is 29.7 mg/kg (maximum plus 10%).

Since the arsenic concentrations in the remediated cuttings pile are below the allowable background arsenic level, the operator proposes to bury this material in the reserve pit and proceed with interim reclamation of this site.





#### Project Location

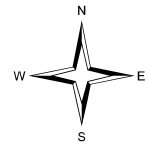


COLORADO

#### Legend

● Sample Location

— Existing Road



0 50 100 200 300  
Feet

**Berry Petroleum Company**

### **H-7A Well Pad Sample Locations for Background Arsenic Concentrations**

*Garfield County, Colorado*

August 2011

Figure 1

Nicholson GeoSolutions, LLC



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Dave Nicholson  
Berry Petroleum Company - Denver, CO  
1999 Broadway, Suite 3700  
Denver, CO 80202

## Report Summary

Thursday August 18, 2011

Report Number: L531307

Samples Received: 08/16/11

Client Project:

Description: Berry Pit Reclamation

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dave Nicholson  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

August 18, 2011

Date Received : August 16, 2011  
Description : Berry Pit Reclamation

Sample ID : H7A-1 0-4IN

Collected By :  
Collection Date : 08/13/11 13:00

ESC Sample # : L531307-37

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	20.	5.0	mg/kg	6010B	08/17/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

.

Reported: 08/18/11 11:10 Printed: 08/18/11 11:11



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dave Nicholson  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

August 18, 2011

Date Received : August 16, 2011  
Description : Berry Pit Reclamation

Sample ID : H7A-2 2-6IN

Collected By :  
Collection Date : 08/13/11 13:05

ESC Sample # : L531307-38

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	27.	5.0	mg/kg	6010B	08/17/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

.

Reported: 08/18/11 11:10 Printed: 08/18/11 11:11



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dave Nicholson  
Berry Petroleum Company - Denver, C  
1999 Broadway, Suite 3700  
Denver, CO 80202

August 18, 2011

Date Received : August 16, 2011  
Description : Berry Pit Reclamation

Sample ID : H7A-3 4-8IN

Collected By :  
Collection Date : 08/13/11 13:10

ESC Sample # : L531307-39

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	24.	5.0	mg/kg	6010B	08/17/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

.

Reported: 08/18/11 11:10 Printed: 08/18/11 11:11

[illegible]



YOUR LAB OF CHOICE

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L531307

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

August 18, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed					
		Units	% Rec								
Arsenic	< 1	mg/kg			WG550835	08/17/11	22:40				
Arsenic	< 1	mg/kg			WG550843	08/17/11	20:19				
Arsenic	< 1	mg/kg			WG550738	08/17/11	23:07				
Analyte	Units	Result	Duplicate		Limit	Ref Samp	Batch				
			Duplicate	RPD							
Arsenic	mg/kg	9.70	11.0	12.4	20	L531307-25	WG550835				
Arsenic	mg/kg	25.0	24.0	3.28	20	L531307-39	WG550843				
Arsenic	mg/kg	3.30	3.90	15.8	20	L531273-04	WG550738				
Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch					
		Known Val	Result								
Arsenic	mg/kg	192	188.	97.9	78.6-120.8	WG550835					
Arsenic	mg/kg	92.6	93.6	101.	82.9-117	WG550843					
Arsenic	mg/kg	192	202.	105.	78.6-120.8	WG550738					
Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch			
			Ref Res	TV							
Arsenic	mg/kg	51.6	11.0	50	81.2	75-125	L531307-25	WG550835			
Arsenic	mg/kg	84.0	24.0	10	120.	75-125	L531307-39	WG550843			
Arsenic	mg/kg	52.8	3.90	50	97.8	75-125	L531273-04	WG550738			
Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch		
			Ref	%Rec							
Arsenic	mg/kg	49.2	51.6	76.4	75-125	4.76	20	L531307-25	WG550835		
Arsenic	mg/kg	79.2	84.0	110.	75-125	5.88	20	L531307-39	WG550843		
Arsenic	mg/kg	51.2	52.8	94.6	75-125	3.08	20	L531273-04	WG550738		

Batch number /Run number / Sample number cross reference

WG550835: R1818292: L531307-07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

WG550843: R1818293: L531307-26 27 28 29 30 31 32 33 34 35 36 37 38 39

WG550738: R1818474: L531307-01 02 03 04 05 06

\* \* Calculations are performed prior to rounding of reported values.

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Berry Petroleum Company - Denver, CO  
Dave Nicholson  
1999 Broadway, Suite 3700

Denver, CO 80202

Quality Assurance Report  
Level II

L531307

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

August 18, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.