C-144

Permanent Pit

Permit Not Required

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

July 3, 2012

Mr. Alan Vrooman
Black Hills Exploration & Production
1515 Wynkoop Street, Suite 500
Denver, Colorado 80202

RE: Fresh Water Storage Facility Operations
Black Hills Exploration & Production
Location: Section 13, Township 30 North, Range 4 West, NMPM,
Rio Arriba County, New Mexico

Dear Mr. Vrooman:

The Oil Conservation Division (OCD) has received and reviewed WWC Engineering's assessment, dated June 28, 2012 and submitted on the behalf of Black Hills Exploration & Production (Black Hills), to determine the permitting considerations of Black Hills' future plans to operate a fresh water station utilized the Navajo River as a water source. WCC Engineering's assessment is based upon the considerations presented in an August 12, 2008 OCD Memorandum, *Clarification of Permitting Fresh Water Stations in Regards to the New "Pit Rule" 19.15.17 NMAC.*

Based upon the analytical results of the two water samples from the Navajo River to demonstrate water quality of the water source and the written commitment, dated June 28, 2012, from Black Hills to operate the fresh water station in a manner in which permitting would not be considered pursuant to the August 12, 2008 OCD Memorandum, *Clarification of Permitting Fresh Water Stations in Regards to the New "Pit Rule" 19.15.17 NMAC*, OCD has determined that a permit is not required at this time. As recognized in Black Hills' commitment letter, dated June 28, 2012, OCD should be contacted and consulted prior to the implementation of any changes to the proposed operations considered under this request to determine if permitting is required.

Please be advised that OCD's comments regarding this matter does not relieve Black Hills of their responsibility if their operations pose a threat to public health, fresh water or the environment, including complying with OCD rules or regulations, the New Mexico Water Quality Act or other applicable governmental authority's rules, regulations, or ordinances.

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

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District III Office, Aztec
Shawn Higley, WWC Engineering, 1275 Maple Street, Suite F, Helena, MT 59601

Jones, Brad A., EMNRD

From: Matt Selvig <mselvig@wwcengineering.com>
Sent: Thursday, June 28, 2012 4:45 PM
To: Jones, Brad A., EMNRD
Cc: Shawn Higley; Alan.Vrooman@blackhillscorp.com; Hurlbut, Brett; Manus, Daniel
Subject: Navajo River Water Quality Updated Letter
Attachments: Water Quality Memo 052312 updated.pdf

Brad,

Per our conversation on June 27, I have updated the contents of the letter that we sent you on May 23 regarding the quality of water within the Navajo River. This letter includes a request for your concurrence with WWC's understanding of permitting requirements for a proposed fresh water storage facility.

Thank you for your time and assistance.

--

WWC ENGINEERING
Matt Selvig, E.I.
Civil Engineer

1275 Maple Street, Suite F
Helena, Montana 59601

406-443-3962
406-449-0056 (fax)

WWC ENGINEERING
1275 Maple Street, Suite F - Helena, MT 59601 - (406) 443-3962
Fax (406) 449-0056 - Email: infohln@wwcengineering.com

June 28, 2012

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

RE: Navajo River Water Quality Assessment

Dear Mr. Jones:

On behalf of Black Hills Exploration and Production, WWC has investigated the water quality of the Navajo River located north of Dulce, NM. The purpose of this analysis was to determine whether the Navajo River water quality exceeds the allowable concentrations specified in the Water Quality Control Commission regulations found in Subsections A, B, and C of 20.6.2.3103 NMAC, a copy of which is attached. The determination of fresh water is desired to determine possible permit and design requirements for a fresh water storage facility to be supplied by water from the Navajo River. Two samples were taken directly from the Navajo River and were used to determine the current quality of water within the river.

Two water quality samples were collected directly from the Navajo River on April 11, 2012 and were analyzed for possible constituents. The location where the samples were obtained is shown on the attached location exhibit. The water was apparently clean by visual inspection, and after analysis, both samples exhibited a Total Dissolved Solids (TDS) concentration of 190 mg/L. This TDS concentration of 190 mg/L is considerably lower than the maximum limit of 1,000 mg/L specified in 20.6.2.3103 NMAC, and there are no indications that this limit will be exceeded in the future. Additionally, the water quality analysis of each sample shows that no allowable concentrations specified in 20.6.2.3103 NMAC were exceeded. A summary of the constituent limits and sample results is provided in Table 1. Laboratory analysis data is also attached.

The analysis of the two water quality samples taken from the Navajo River shows that the water within the river does not exceed the allowable concentrations specified in 20.6.2.3103 NMAC. In addition, a cursory review of water quality samples taken from nearby historical USGS National Water Information System gauging stations was performed. This review indicated that the water quality of the two samples taken from the Navajo River is representative of the river's historical water quality. This historical review further indicates that water within the Navajo River has satisfied and will continue to satisfy the requirements listed in 20.6.2.3103 NMAC.

Based on the information provided in this memorandum, the water within the Navajo River satisfies the requirements listed in 20.6.2.3103 NMAC. As specified in the attached letter from Black Hills Exploration and Production, the facility's operator will ensure the following: (1) no produced water or treated produced water will be stored at the facility; (2) no additives will be introduced, amended, combined or incorporated to

the fresh water stored at the facility; (3) no water that is not considered fresh water will be stored at the facility; (4) the water stored at the facility will be fresh water from the Navajo River and will not be detrimental to the surrounding flora and fauna, livestock, wildlife, or natural vegetation if released; and (5) the water stored at the facility will not pose a danger to property, fresh water, public health or the environment and will not be stored in a place or manner that will cause water pollution. Additionally, Black Hills Exploration and Production acknowledges that OCD must be contacted to obtain necessary permits prior to any changes in the planned operation of the facility.

Based on the quality of water within the Navajo River and the described operation of the facility, it is WWC's opinion that this proposed facility does not fall under Part 17 (19.15.17 NMAC) permit requirements and thus does not fall under New Mexico Oil Conservation Division (OCD) jurisdiction. WWC respectfully requests that you respond in writing stating whether OCD concurs with this opinion. Please do not hesitate to contact us should you have any further questions or require additional clarification.

Sincerely,

Shawn Higley, P.E.
Helena Branch Manager

SH/mh

Enc.:
- Table 1
- OCD Memorandum regarding fresh water stations
- Black Hills Exploration letter describing facility operations
- NMAC 20.6.2.3103
- Sample Location Map
- Lab Analysis Results

cc: Black Hills Exploration and Production

K:\BLACK HILLS\11063 - E. BLANCO FIELD\FRESH WATER STORAGE ALTERNATIVES\CORRE\Water Quality Navajo River 052312.doc

Table 1. Summary of Navajo River water quality test results.

Constituent	Limit	Units	Test Reporting Limit	Navajo River Sample A Result	Navajo River Sample B Result
A. Human Health Standards					
Arsenic (As)	0.1	mg/L	0.005	ND	ND
Barium (Ba)	1	mg/L	0.5	ND	ND
Cadmium (Cd)	0.01	mg/L	0.002	ND	ND
Chromium (Cr)	0.05	mg/L	0.01	ND	ND
Cyanide (CN)	0.2	mg/L	0.01	ND	ND
Fluroide (F)	1.6	mg/L	0.1	0.1	0.1
Lead (Pb)	0.05	mg/L	0.02	ND	ND
Total Mercury (Hg)	0.002	mg/L	0.001	ND	ND
Nitrate (NO_3 as N)	10	mg/L	0.1	ND	ND
Selenium (Se)	0.05	mg/L	0.005	ND	ND
Silver (Ag)	0.05	mg/L	0.003	ND	ND
Uranium (U)	0.03	mg/L	0.001	ND	ND
Radioactivity: Radium-226	30	pCi/L	0.2	ND	0.2 ± 0.1
Radium-228	30	pCi/L	1	1.4 ± 1.1	ND
Benzene	0.01	mg/L	0.001	ND	ND
Polychlorinated biphenyls (PCB's)	0.001	mg/L	0.0002	ND	ND
Toluene	0.75	mg/L	0.001	ND	ND
Carbon Tetrachloride	0.01	mg/L	0.001	ND	ND
1,2-dichloroethane (EDC)	0.01	mg/L	0.001	ND	ND
1,1-dichloroethylene (1,1-DCE)	0.005	mg/L	0.001	ND	ND
1,1,2,2-tetrachloroethylene (PCE)	0.02	mg/L	0.001	ND	ND
1,1,2-trichloroethylene (TCE)	0.1	mg/L	0.001	ND	ND
ethylbenzene	0.75	mg/L	0.001	ND	ND
total xylenes	0.62	mg/L	0.001	ND	ND
methylene chloride	0.1	mg/L	0.002	ND	ND
chloroform	0.1	mg/L	0.001	ND	ND
1,1-dichloroethane	0.025	mg/L	0.001	ND	ND
ethylene dibromide (EDB)	0.0001	mg/L	0.001	ND	ND
1,1,1-trichloroethane	0.06	mg/L	0.001	ND	ND
1,1,2-trichloroethane	0.01	mg/L	0.001	ND	ND
1,1,2,2-tetrachloroethane	0.01	mg/L	0.001	ND	ND
vinyl chloride	0.001	mg/L	0.001	ND	ND
PAHs: total naphthalene + Monomethylnaphthalenes	0.03	mg/L	0.005	ND	ND
benzo-a-pyrene	0.0007	mg/L	0.005	ND	ND
B. Other Standards for Domestic Water Supply					
Chloride (Cl)	250	mg/L	1	1	2
Copper (Cu)	1	mg/L	0.01	ND	ND
Iron (Fe)	1	mg/L	0.05	ND	ND
Manganese (Mn)	0.2	mg/L	0.02	ND	ND
Phenols	0.005	mg/L	0.05	ND	ND
Sulfate (SO_4)	600	mg/L	1	63	63
Total Dissolved Solids (TDS)	1000	mg/L	10	190	190
Zinc (Zn)	10	mg/L	0.01	ND	ND
pH	6-9	-	0.1	8.3	8.1
C. Standards for Irrigation Use					
Aluminum (Al)	5	mg/L	0.1	ND	ND
Boron (B)	0.75	mg/L	0.1	ND	ND
Cobalt (Co)	0.05	mg/L	0.01	ND	ND
Molybdenum (Mo)	1	mg/L	0.02	ND	ND
Nickel (Ni)	0.2	mg/L	0.01	ND	ND

*ND - Not Detected at the Reporting Limit

NMAC 20.6.2.3103

B. Ground water standards are numbers that represent the pH range and maximum concentrations of water contaminants in the ground water which still allow for the present and future use of ground water resources.

C. The standards are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations.

[2-18-77; 20.6.2.3101 NMAC - Rn, 20 NMAC 6.2.III.3101, 1-15-01]

20.6.2.3102: [RESERVED]

[12-1-95; 20.6.2.3102 NMAC - Rn, 20 NMAC 6.2.III.3102, 1-15-01]

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. Human Health Standards-Ground water shall meet the standards of Subsection A and B of this section unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l

(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l
(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl) .....250.0 mg/l
(2) Copper (Cu) .....1.0 mg/l
(3) Iron (Fe) .....1.0 mg/l
(4) Manganese (Mn) .....0.2 mg/l
(6) Phenols.....0.005 mg/l
(7) Sulfate (SO_4) .....600.0 mg/l
(8) Total Dissolved Solids (TDS) .....1000.0 mg/l
(9) Zinc (Zn) .....10.0 mg/l
(10) pH.....between 6 and 9

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al).....5.0 mg/l
(2) Boron (B) .....0.75 mg/l
(3) Cobalt (Co) .....0.05 mg/l
(4) Molybdenum (Mo) .....1.0 mg/l
(5) Nickel (Ni) .....0.2 mg/l

[2-18-77, 1-29-82, 11-17-83, 3-3-86, 12-1-95; 20.6.2.3103 NMAC - Rn, 20 NMAC 6.2.III.3103, 1-15-01; A, 9-26-04]

[Note: For purposes of application of the amended numeric uranium standard to past and current water discharges (as of 9-26-04), the new standard will not become effective until June 1, 2007. For any new water discharges, the uranium standard is effective 9-26-04.]

20.6.2.3104 DISCHARGE PERMIT REQUIRED: Unless otherwise provided by this Part, no person shall cause or allow effluent or leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary. When a permit has been issued, discharges must be consistent with the terms and conditions of the permit. In the event of a transfer of the ownership, control, or possession of a facility for which a discharge permit is in effect, the transferee shall have authority to discharge under such permit, provided that the transferee has complied with Section 20.6.2.3111 NMAC, regarding transfers. [2-18-77, 12-24-87, 12-1-95; Rn & A, 20.6.2.3104 NMAC - 20 NMAC 6.2.III.3104, 1-15-01; A, 12-1-01]

20.6.2.3105 EXEMPTIONS FROM DISCHARGE PERMIT REQUIREMENT: Sections 20.6.2.3104 and 20.6.2.3106 NMAC do not apply to the following:

A. Effluent or leachate which conforms to all the listed numerical standards of Section 20.6.2.3103 NMAC and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply;

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day;

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system;

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result;

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry arroyos and ephemeral streams are not exempt from the discharge permit requirement, except as otherwise provided in this section;

OCD MEMORANDUM REGARDING FRESH WATER STATIONS

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

August 12, 2008

MEMORANDUM

Clarification of permitting *FRESH WATER STATIONS* in regards to the new "Pit Rule" 19.15.17 NMAC

On June 16, 2008 a new regulation regarding pits, closed-loop systems, below-grade tanks, and sumps used in the connection with oil and gas operations, *19.15.17 NMAC*, went into effect. The Oil Conservation Division (OCD) has received several inquiries regarding implementation of the new regulation in regards to ***fresh water stations***. In order to address these inquiries and to provide clarification to operators, OCD is providing guidance herein on which activities associated with *fresh water stations* may be excluded from the rule and which activities and conditions will most likely require the operator to comply with the requirements of the rule.

Fresh Water Stations May Be Generally Excluded:

- where the operator stores fresh water in a pit or below-grade tank and the water **does not exceed** *(a) the allowable concentrations specified in the Water Quality Control Commission regulations found in Subsections A, B, and C of 20.6.2.3103 NMAC, or (b) the unadulterated natural occurring ground water concentrations beneath the fresh water station, whichever is higher.*

Fresh Water Stations That Will Most Likely Require The Operator To Comply With The Rule:

- where the operator stores fresh water in a pit or below-grade tank and the water **exceeds** *(a) the allowable concentrations specified in the Water Quality Control Commission regulations found in Subsections A, B, and C of 20.6.2.3103 NMAC, or (b) the unadulterated natural occurring ground water concentrations beneath the fresh water station, whichever is higher; or*

- where the operator stores produced water or treated produced water in a pit or below-grade tank; or

- where the operator introduces, amends, combines, or incorporates additives to any stored fresh water; or

- where any stored water that generally would not be considered fresh water, or which may be detrimental to the surrounding flora and fauna, livestock, wildlife, or natural vegetation if released; or

- where if OCD determines that the stored water may pose a threat or danger to property, fresh water, public health or the environment or is stored in a place or manner that may cause water pollution.

This memorandum is only to clarify and provide general guidance concerning whether certain *fresh water stations* in regard to 19.15.17 NMAC would be generally excluded or covered by the rule. Operators are encouraged to contact the OCD Santa Fe Office or District offices if in doubt on how the new pit rule applies to certain *fresh water stations*. Operators should be aware that this guidance does not relieve owners or operators of their responsibility if their operations pose a threat to public health, fresh water or the environment, including complying with OCD rules or regulations, the New Mexico Water Quality Act or other applicable governmental authority's rules, regulations, or ordinances. If you have any questions regarding this matter please contact Wayne Price-Environmental Bureau Chief (505) 476-3490 or E-mail wayne.price@state.nm.us.

Sincerely,

Mark E. Fesmire
Director, Oil Conservation Division

MF/wp

cc: David Brooks-OCD Legal
Daniel Sanchez, Enforcement & Compliance Manager, OCD, Santa Fe, NM
OCD District Supervisors, District I, District II, District III, and District IV, NM

BLACK HILLS EXPLORATION AND PRODUCTION LETTER

(DESCRIPTION OF FACILITY OPERATIONS)

Black Hills Exploration & Production

Alan Vrooman
Senior Permitting Coordinator
Alan.vrooman@blackhillscorp.com

1515 Wynkoop St., Suite 500
Denver, CO 80202
P: 999.999.9999

June 28, 2012

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

RE: Fresh Water Storage Facility Operations

Dear Mr. Jones:

Black Hills Exploration and Production is submitting this letter to describe the planned operation of the proposed fresh water storage facility located in Section 13, Township 30 North, Range 4 West. The purpose of this facility will be to store fresh water obtained from the Navajo River. In accordance to the Oil Conservation Division Memorandum regarding Fresh Water Stations, Black Hills Exploration and Production will commit to the following criteria during the operation of the proposed facility:

1) No water that exceeds the allowable concentrations specified in the Water Quality Control Commission regulations found in Subsections A, B, and C of 20.6.2.3103 NMAC will be stored at the facility. Black Hills has investigated the water quality of the Navajo River and has determined that this water does not exceed these allowable concentrations.

2) No produced water or treated produced water will be stored at the facility;

3) No additives will be introduced, amended, combined or incorporated to the fresh water stored at the facility;

4) Only fresh water from the Navajo River will be stored at the facility. Therefore, this water will not be detrimental to the surrounding flora and fauna, livestock, wildlife, or natural vegetation if released.

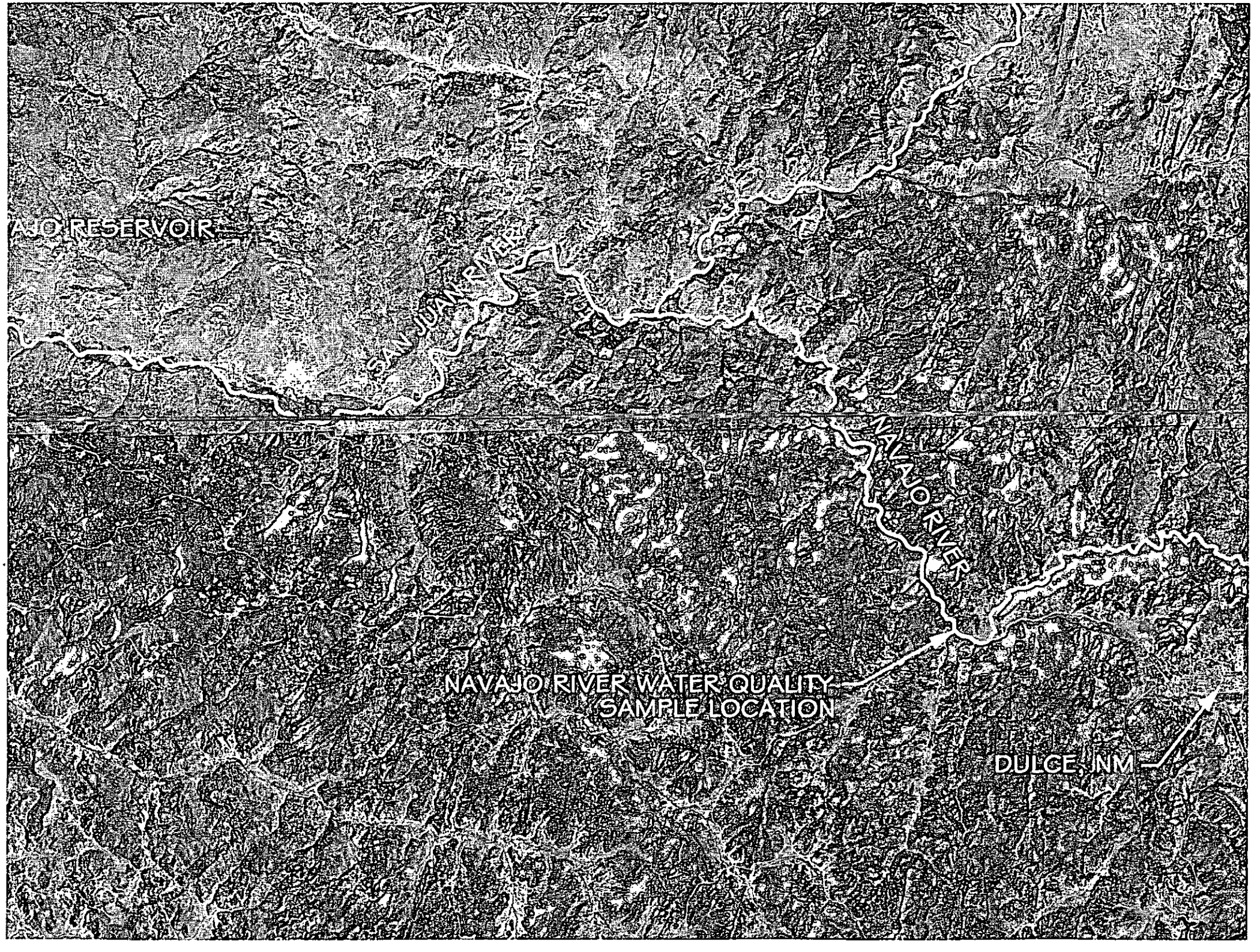
5) Only fresh water from the Navajo River will be stored at the facility. This water will not pose a danger to property, fresh water, public health or the environment and will not be stored in a place or manner that will cause water pollution.

In addition, Black Hills Exploration and Production acknowledges that prior to any changes in the planned operation of the proposed facility, the New Mexico Oil Conservation Division must be contacted to obtain any required permits. Please do not hesitate to contact us should any questions arise.

Sincerely,

Alan Vrooman
Sr. Permitting Coordinator

SAMPLE LOCATION MAP


AJO RESERVOIR
SAN JUAN RIVER
NAVAJO RIVER
NAVAJO RIVER WATER QUALITY SAMPLE LOCATION
DULCE, NM

LAB ANALYSIS RESULTS

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

Date: 4/20/2012

CLIENT: Black Hills Gas Resources
Project: Black Hills Navajo River Sampling
Lab Order: O1204012

CASE NARRATIVE

Report ID: O1204012001

This data package consists of the following:
Case Narrative - 1 page
Sample Analysis Reports - 3 pages
Quality Control Reports - 5 pages
Condition Upon Receipt form - 1 page
Copy of the Chain of Custody Record - 1 page

Samples were analyzed for organic constituents using the methods outlined in the following references:

- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition, United States Environmental Protection Agency (USEPA).

All method blanks, duplicates, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Data qualifiers are defined at the bottom of each page.

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

Sample Analysis Report

CLIENT: Black Hills Gas Resources
3200 North 1st Street
PO Box 249
Bloomfield, NM 87413

Date Reported: 4/20/2012
Report ID: O1204012001

Project: Black Hills Navajo River Sampling
Lab ID: O1204012-001
Client Sample ID: Navajo River A
Matrix: Water

Work Order: O1204012
Collection Date: 4/9/2012 10:45:00 AM
Date Received: 4/11/2012 11:57:00 AM
COC: 145083

Analyses	Result	RL	Limits	Qual	Units	Date Analyzed/Init	
8260B Volatile Compounds Appendix A						**Prep Date: 4/19/2012**	
1,1,1,2-Tetrachloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,1-Trichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,2,2-Tetrachloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,2-Trichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1-Dichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
1,2-Dibromoethane	ND	1.0			µg/L	04/19/2012	SK
1,2-Dichloroethane	ND	1.0			µg/L	04/19/2012	SK
Benzene	ND	1.0			µg/L	04/19/2012	SK
Bromochloromethane	ND	1.0			µg/L	04/19/2012	SK
Bromodichloromethane	ND	1.0			µg/L	04/19/2012	SK
Bromoform	ND	1.0			µg/L	04/19/2012	SK
Carbon tetrachloride	ND	1.0			µg/L	04/19/2012	SK
Chloroform	ND	1.0			µg/L	04/19/2012	SK
cis-1,2-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
Dibromochloromethane	ND	1.0			µg/L	04/19/2012	SK
Ethylbenzene	ND	1.0			µg/L	04/19/2012	SK
m,p-Xylenes	ND	2.0			µg/L	04/19/2012	SK
Methylene chloride	ND	2.0			µg/L	04/19/2012	SK
o-Xylene	ND	1.0			µg/L	04/19/2012	SK
Tetrachloroethene	ND	1.0			µg/L	04/19/2012	SK
Toluene	ND	1.0			µg/L	04/19/2012	SK
trans-1,2-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
Trichloroethene	ND	1.0			µg/L	04/19/2012	SK
Vinyl chloride	ND	1.0			µg/L	04/19/2012	SK
Surr: 1,2-Dichloroethane-d4	98.4		79-131		%REC	04/19/2012	SK
Surr: 4-Bromofluorobenzene	84.1		81-115		%REC	04/19/2012	SK
Surr: Dibromofluoromethane	102		80-128		%REC	04/19/2012	SK
Surr: Toluene-d8	100		92-110		%REC	04/19/2012	SK

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
D	Diluted out of recovery limit	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Matrix Effect
ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

Sample Analysis Report

CLIENT: Black Hills Gas Resources
3200 North 1st Street
PO Box 249
Bloomfield, NM 87413

Date Reported: 4/20/2012
Report ID: O1204012001

Project: Black Hills Navajo River Sampling
Lab ID: O1204012-002
Client Sample ID: Navajo River B
Matrix: Water

Work Order: O1204012
Collection Date: 4/9/2012 11:27:00 AM
Date Received: 4/11/2012 11:57:00 AM
COC: 145083

Analyses	Result	RL	Limits	Qual	Units	Date Analyzed/Init	
8260B Volatile Compounds Appendix A						**Prep Date: 4/19/2012**	
1,1,1,2-Tetrachloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,1-Trichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,2,2-Tetrachloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,2-Trichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1-Dichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
1,2-Dibromoethane	ND	1.0			µg/L	04/19/2012	SK
1,2-Dichloroethane	ND	1.0			µg/L	04/19/2012	SK
Benzene	ND	1.0			µg/L	04/19/2012	SK
Bromochloromethane	ND	1.0			µg/L	04/19/2012	SK
Bromodichloromethane	ND	1.0			µg/L	04/19/2012	SK
Bromoform	ND	1.0			µg/L	04/19/2012	SK
Carbon tetrachloride	ND	1.0			µg/L	04/19/2012	SK
Chloroform	ND	1.0			µg/L	04/19/2012	SK
cis-1,2-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
Dibromochloromethane	ND	1.0			µg/L	04/19/2012	SK
Ethylbenzene	ND	1.0			µg/L	04/19/2012	SK
m,p-Xylenes	ND	2.0			µg/L	04/19/2012	SK
Methylene chloride	ND	2.0			µg/L	04/19/2012	SK
o-Xylene	ND	1.0			µg/L	04/19/2012	SK
Tetrachloroethene	ND	1.0			µg/L	04/19/2012	SK
Toluene	ND	1.0			µg/L	04/19/2012	SK
trans-1,2-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
Trichloroethene	ND	1.0			µg/L	04/19/2012	SK
Vinyl chloride	ND	1.0			µg/L	04/19/2012	SK
Surr: 1,2-Dichloroethane-d4	96.8		79-131		%REC	04/19/2012	SK
Surr: 4-Bromofluorobenzene	79.2		81-115	S	%REC	04/19/2012	SK
Surr: Dibromofluoromethane	96.7		80-128		%REC	04/19/2012	SK
Surr: Toluene-d8	101		92-110		%REC	04/19/2012	SK

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
D	Diluted out of recovery limit	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Matrix Effect
ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson

Connie Mattson, Project Manager

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

Sample Analysis Report

CLIENT: Black Hills Gas Resources
3200 North 1st Street
PO Box 249
Bloomfield, NM 87413

Date Reported: 4/20/2012
Report ID: O1204012001

Project: Black Hills Navajo River Sampling
Lab ID: O1204012-003
Client Sample ID: tripblank
Matrix: Water

Work Order: O1204012
Collection Date:
Date Received: 4/11/2012 11:57:00 AM
COC: 145083

Analyses	Result	RL	Limits	Qual	Units	Date Analyzed/Init	
8260B Volatile Compounds Appendix A						**Prep Date: 4/19/2012**	
1,1,1,2-Tetrachloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,1-Trichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,2,2-Tetrachloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1,2-Trichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1-Dichloroethane	ND	1.0			µg/L	04/19/2012	SK
1,1-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
1,2-Dibromoethane	ND	1.0			µg/L	04/19/2012	SK
1,2-Dichloroethane	ND	1.0			µg/L	04/19/2012	SK
Benzene	ND	1.0			µg/L	04/19/2012	SK
Bromochloromethane	ND	1.0			µg/L	04/19/2012	SK
Bromodichloromethane	ND	1.0			µg/L	04/19/2012	SK
Bromoform	ND	1.0			µg/L	04/19/2012	SK
Carbon tetrachloride	ND	1.0			µg/L	04/19/2012	SK
Chloroform	ND	1.0			µg/L	04/19/2012	SK
cis-1,2-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
Dibromochloromethane	ND	1.0			µg/L	04/19/2012	SK
Ethylbenzene	ND	1.0			µg/L	04/19/2012	SK
m,p-Xylenes	ND	2.0			µg/L	04/19/2012	SK
Methylene chloride	ND	2.0			µg/L	04/19/2012	SK
o-Xylene	ND	1.0			µg/L	04/19/2012	SK
Tetrachloroethene	ND	1.0			µg/L	04/19/2012	SK
Toluene	ND	1.0			µg/L	04/19/2012	SK
trans-1,2-Dichloroethene	ND	1.0			µg/L	04/19/2012	SK
Trichloroethene	ND	1.0			µg/L	04/19/2012	SK
Vinyl chloride	ND	1.0			µg/L	04/19/2012	SK
Surr: 1,2-Dichloroethane-d4	97.2		79-131		%REC	04/19/2012	SK
Surr: 4-Bromofluorobenzene	76.7		81-115	S	%REC	04/19/2012	SK
Surr: Dibromofluoromethane	101		80-128		%REC	04/19/2012	SK
Surr: Toluene-d8	98.7		92-110		%REC	04/19/2012	SK

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
D	Diluted out of recovery limit	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	M	Matrix Effect
ND	Not Detected at the Reporting Limit	S	Spike Recovery outside accepted recovery limits

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

ANALYTICAL QC SUMMARY REPORT

Date: 4/20/2012

CLIENT: Black Hills Gas Resources
Work Order: O1204012
Project: Black Hills Navajo River Sampling

Report ID: O1204012001Q
TestCode: 8260APPA_W

Sample ID: **MB-4970** SampType: **MBLK** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **ZZZZZ** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94565**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
1,1-Dichloroethane	ND	1.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dibromoethane	ND	1.0									
1,2-Dichloroethane	ND	1.0									
Benzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Carbon tetrachloride	ND	1.0									
Chloroform	ND	1.0									
cis-1,2-Dichloroethene	ND	1.0									
Dibromochloromethane	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylenes	ND	2.0									
Methylene chloride	ND	2.0									
o-Xylene	ND	1.0									
Tetrachloroethene	ND	1.0									
Toluene	ND	1.0									
trans-1,2-Dichloroethene	ND	1.0									
Trichloroethene	ND	1.0									
Vinyl chloride	ND	1.0									
Surr: 1,2-Dichloroethane-d4					96.5	79	131				
Surr: 4-Bromofluorobenzene					76.5	81	115				S

Qualifiers:
D Diluted out of recovery limit
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
M Matrix Effect
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

ANALYTICAL QC SUMMARY REPORT

Date: 4/20/2012

CLIENT: Black Hills Gas Resources
Report ID: O1204012001Q
Work Order: O1204012
Project: *Black Hills Navajo River Sampling*
TestCode: ***8260APPA_W***

Sample ID: **MB-4970** SampType: **MBLK** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **ZZZZZ** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94565**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane					99.7	80	128				
Surr: Toluene-d8					99.7	92	110				

Sample ID: **LCS-4970** SampType: **LCS** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **ZZZZZ** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.84	1.0	20		99.2	82	126				
Benzene	20.07	1.0	20		100	75	125				
Toluene	20.29	1.0	20		101	80	122				
Trichloroethene	19.79	1.0	20		99	79	124				
Surr: 1,2-Dichloroethane-d4					100	79	131				
Surr: 4-Bromofluorobenzene					98.6	81	115				
Surr: Dibromofluoromethane					103	80	128				
Surr: Toluene-d8					101	92	110				

Qualifiers:

D	Diluted out of recovery limit	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Effect	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

ANALYTICAL QC SUMMARY REPORT

Date: 4/20/2012

CLIENT: Black Hills Gas Resources
Work Order: O1204012
Project: Black Hills Navajo River Sampling

Report ID: O1204012001Q
TestCode: 8260APPA_W

Sample ID: **O1204012-001AMS** SampType: **MS** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **Navajo River A** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94570**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20.07	1.0	20	0	100	78	131	0	0		
Benzene	19.68	1.0	20	0	98.4	75	130	0	0		
Toluene	20.11	1.0	20	0	101	78	129	0	0		
Trichloroethene	19.37	1.0	20	0	96.8	73	128	0	0		
Surr: 1,2-Dichloroethane-d4				0	101	79	131	0	0		
Surr: 4-Bromofluorobenzene				0	97.9	81	115	0	0		
Surr: Dibromofluoromethane				0	101	80	128	0	0		
Surr: Toluene-d8				0	98.4	92	110	0	0		

Sample ID: **O1204012-001AMSD** SampType: **MSD** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **Navajo River A** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94571**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20.21	1.0	20	0	101	78	131	20.07	0.695	20	
Benzene	19.60	1.0	20	0	98	75	130	19.68	0.407	20	
Toluene	19.89	1.0	20	0	99.4	78	129	20.11	1.10	20	
Trichloroethene	18.79	1.0	20	0	94	73	128	19.37	3.04	20	
Surr: 1,2-Dichloroethane-d4				0	105	79	131	0	0	20	
Surr: 4-Bromofluorobenzene				0	101	81	115	0	0	20	
Surr: Dibromofluoromethane				0	100	80	128	0	0	20	
Surr: Toluene-d8				0	101	92	110	0	0	20	

Qualifiers:

D	Diluted out of recovery limit	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Effect	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

ANALYTICAL QC SUMMARY REPORT

Date: 4/20/2012

CLIENT: Black Hills Gas Resources
Work Order: O1204012
Project: Black Hills Navajo River Sampling

Report ID: O1204012001Q
TestCode: 8260APPA_W

Sample ID: **O1204012-001ADUP** SampType: **DUP** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **Navajo River A** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94569**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1.0	0	0	0	0	0	0	0	20	
1,1,1-Trichloroethane	ND	1.0	0	0	0	0	0	0	0	20	
1,1,2,2-Tetrachloroethane	ND	1.0	0	0	0	0	0	0	0	20	
1,1,2-Trichloroethane	ND	1.0	0	0	0	0	0	0	0	20	
1,1-Dichloroethane	ND	1.0	0	0	0	0	0	0	0	20	
1,1-Dichloroethene	ND	1.0	0	0	0	0	0	0	0	20	
1,2-Dibromoethane	ND	1.0	0	0	0	0	0	0	0	20	
1,2-Dichloroethane	ND	1.0	0	0	0	0	0	0	0	20	
Benzene	ND	1.0	0	0	0	0	0	0	0	20	
Bromochloromethane	ND	1.0	0	0	0	0	0	0	0	20	
Bromodichloromethane	ND	1.0	0	0	0	0	0	0	0	20	
Bromoform	ND	1.0	0	0	0	0	0	0	0	20	
Carbon tetrachloride	ND	1.0	0	0	0	0	0	0	0	20	
Chloroform	ND	1.0	0	0	0	0	0	0	0	20	
cis-1,2-Dichloroethene	ND	1.0	0	0	0	0	0	0	0	20	
Dibromochloromethane	ND	1.0	0	0	0	0	0	0	0	20	
Ethylbenzene	ND	1.0	0	0	0	0	0	0	0	20	
m,p-Xylenes	ND	2.0	0	0	0	0	0	0	0	20	
Methylene chloride	ND	2.0	0	0	0	0	0	0	0	20	
o-Xylene	ND	1.0	0	0	0	0	0	0	0	20	
Tetrachloroethene	ND	1.0	0	0	0	0	0	0	0	20	
Toluene	ND	1.0	0	0	0	0	0	0	0	20	
trans-1,2-Dichloroethene	ND	1.0	0	0	0	0	0	0	0	20	
Trichloroethene	ND	1.0	0	0	0	0	0	0	0	20	
Vinyl chloride	ND	1.0	0	0	0	0	0	0	0	20	
Surr: 1,2-Dichloroethane-d4				0	99.2	79	131	0	0	20	
Surr: 4-Bromofluorobenzene				0	84.4	81	115	0	0	20	

Qualifiers:
D Diluted out of recovery limit
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
M Matrix Effect
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Inter-Mountain Laboratories, Inc
555 Absaraka Street, Sheridan, Wyoming 82801
(307) 674-7506

ANALYTICAL QC SUMMARY REPORT

Date: 4/20/2012

CLIENT: Black Hills Gas Resources
Report ID: O1204012001Q
Work Order: O1204012
Project: Black Hills Navajo River Sampling
TestCode: 8260APPA_W

Sample ID: **O1204012-001ADUP** SampType: **DUP** TestCode: **8260APPA_W** Units: **µg/L** Prep Date: **4/19/2012** RunNo: **6427**
Client ID: **Navajo River A** Batch ID: **4970** Analysis Date: **4/19/2012** SeqNo: **94569**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane				0	100	80	128	0	0	20	
Surr: Toluene-d8				0	100	92	110	0	0	20	

Qualifiers:

D	Diluted out of recovery limit	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	M	Matrix Effect	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

Condition Upon Receipt (Attach to COC)

Sample Receipt

1 Number of ice chests/packages received: 1

Note as "OTC" if samples are received over the counter, unpackaged

2 Temperature of cooler/samples. Temps (°C): 3.3

Acceptable is 0.1 to 6°C. Also acceptable is "Received on Ice" (ROI) for samples received on the same day as sampled or "Received at Room Temperature" (RRT) for samples received within one hour of sampling.

Client contact for temperature failures must be documented below.

3 Emission rate of samples for radiochemical analyses < 0.5mR/hr?	(Yes)	No	N/A
4 COC Number (If applicable): 145083			
5 Do the number of bottles agree with the COC?	Yes	No	(N/A)
6 Were the samples received intact? *(no broken bottles, leaks, etc.)*	(Yes)	No	N/A
7 Were the sample custody seals intact?	Yes	No	(N/A)
8 Is the COC properly completed, legible, and signed?	(Yes)	No	

Sample Verification, Labeling & Distribution

1 Were all requested analyses understood and appropriate?	Yes	(No)		
2 Did the bottle labels correspond with the COC information?	(Yes)	No		
3 Samples collected in proper containers?	Yes	No		
4 Were all containers properly preserved?	(Yes)	No	N/A	(Added at Lab)

Client contact for preservation failures must be documented below.

For Total Metals samples preserved at Lab, record date and time of preservation: _____

pH of each WY STP (LAUST) sample must be checked and recorded. _____

12 ~~Diss Met~~, Nut, Phenol ~1, CN ~12 * Pres Met @ Lab

5 VOA vials have <6mm headspace?	(Yes)	No	N/A
6 Were all analyses within holding time at the time of receipt?	(Yes)	No	
7 Have rush or project due dates been checked and accepted?	(Yes)	No	~~N/A~~

Attach Lab ID labels to the containers and deliver to appropriate lab section. Set ID: 1204162

Sample Receipt, Verification, Login, Labeling & Distribution completed by *(initials)*: _____

Discrepancy Documentation *(use back of sheet for notes on discrepancies)*

Any items listed above with a response of "No" or do not meet specifications must be resolved.

Person Contacted: _____ Telephone Number: _____

Initiated By: _____ Date/Time: 4.11.12

Problem: Rec'd 2 unfilt'd Pres for each set

Resolution: Sub Sampled for Diss Met @ Lab

Person Contacted: _____ Telephone Number: _____

Initiated By: _____ Date/Time: _____

Problem:

Resolution:

Inter-Mountain Labs

Sheridan, WY and Gillette, WY

CHAIN OF CUSTODY RECORD

Page 1 of 1

145083

All shaded fields must be completed.
This is a legal document: any misrepresentation may be construed as fraud.

Client Name	Project Identification	Sampler (Signature/Attestation of Authenticity)	Telephone #
Black Hills Gas	Black Hills Navajo River Sampling	[signature]	970-619-0936

Report Address	Contact Name	Email	Phone
3200 N. 1st St Bloomfield, NM 87413	Daniel Manus	Daniel.Manus@blackhillscorp.com	

Invoice Address	Purchase Order #	Quote #
Same as Report Address		

ITEM	LAB ID (Lab Use Only)	DATE SAMPLED	TIME SAMPLED	SAMPLE IDENTIFICATION	Matrix	# of Containers	VOCs 601/602	Radiochem 900 series	PCB's 608	PAH 610	Dissolved Metals CWA meth.	Gen Chem CWA meth.	*see attached sheet Cations/Anions		REMARKS
1	1204111002	4/9/2012	10:45	Navajo River A	WT	3	X	X	X	X	X	X	X		NOT FIELD FILTERED
2	002	4/9/2012	11:27	Navajo River B	WT	3	X	X	X	X	X	X	X		NOT FIELD FILTERED
3	003			Trip Blank		3									
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															

LAB COMMENTS	Relinquished By (Signature/Printed)	DATE	TIME	Received By (Signature/Printed)	DATE	TIME
3.3	[signature] / Samuel R. LaRue	4/9/2012	14:50	Kathy Poole	4.11.12	11:57
				DKasa	4/12/12	11:30

SHIPPING INFO	MATRIX CODES		TURNAROUND TIMES	COMPLIANCE INFORMATION	ADDITIONAL REMARKS
☐ UPS	Water	WT	Check desired service	Compliance Monitoring? Y (N)	Use CWA methods for Gen Chem, PAH, BTEX, Metals
☐ Fed Express	Soil	SL	☒ Standard turnaround	Program (SDWA, NPDES,...) CWA	Please verify all parameters on attached
☐ US Mail	Solid	SD	☐ RUSH - 5 Working Days	PWSID / Permit # N/A	Sheet are analyzed
☐ Hand Carried	Filter	FT	☐ URGENT - < 2 Working Days	Chlorinated? Y (N)	Please CC results to agger@itenv.com
☐ Other _____	Other	OT	*Rush & Urgent Surcharges will be applied*	Sample Disposal: Lab X Client	

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

CLIENT: Black Hills Gas Resources
3200 North 1st Street; P.O. Box 249
Bloomfield, NM 87413

Date Reported: 4/20/2012
Report ID: S1204162001

Project: Black Hills Navajo River Sampling
Lab ID: S1204162-001
Client Sample ID: Navajo River A
COC: 145083

Work Order: S1204162
Collection Date: 4/9/2012 10:45:00 AM
Date Received: 4/11/2012 11:57:00 AM
Sampler: SL
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	8.3	0.1		s.u.	04/12/2012 1415 MZ	SM 4500 H B
Total Dissolved Solids (180)	190	10		mg/L	04/11/2012 925 ARF	SM 2540
Cyanide, Total	ND	0.01		mg/L	04/16/2012 1139 MEL	EPA 335.4
Phenolics, Total Recoverable	ND	0.05		mg/L	04/17/2012 1038 MB	EPA 420.4
Anions						
Chloride	1	1		mg/L	04/13/2012 2221 AMB	EPA 300.0
Fluoride	0.1	0.1		mg/L	04/16/2012 1629 MZ	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/16/2012 1041 MB	EPA 353.2
Sulfate	63	1		mg/L	04/13/2012 2221 AMB	EPA 300.0
Radiochemistry						
Radium 226	ND	0.2		pCi/L	04/18/2012 1159 SH	SM 7500-Ra B
Total Radium 228	1.4 ± 1.1	1		pCi/L	04/19/2012 1741 SH	Ra-05
Dissolved Metals						
Aluminum	ND	0.1		mg/L	04/12/2012 1409 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	04/12/2012 1651 MS	EPA 200.8
Barium	ND	0.5		mg/L	04/12/2012 1651 MS	EPA 200.8
Boron	ND	0.1		mg/L	04/12/2012 1409 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	04/12/2012 1651 MS	EPA 200.8
Chromium	ND	0.01		mg/L	04/12/2012 1409 DG	EPA 200.7
Cobalt	ND	0.01		mg/L	04/12/2012 1651 MS	EPA 200.8
Copper	ND	0.01		mg/L	04/12/2012 1651 MS	EPA 200.8
Iron	ND	0.05		mg/L	04/12/2012 1409 DG	EPA 200.7
Lead	ND	0.02		mg/L	04/12/2012 1651 MS	EPA 200.8
Manganese	ND	0.02		mg/L	04/12/2012 1409 DG	EPA 200.7
Mercury	ND	0.001		mg/L	04/17/2012 1142 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	04/12/2012 1651 MS	EPA 200.8
Nickel	ND	0.01		mg/L	04/12/2012 1409 DG	EPA 200.7
Selenium	ND	0.005		mg/L	04/12/2012 1651 MS	EPA 200.8
Silver	ND	0.003		mg/L	04/12/2012 1651 MS	EPA 200.8
Uranium	ND	0.001		mg/L	04/12/2012 1651 MS	EPA 200.8
Zinc	ND	0.01		mg/L	04/12/2012 1409 DG	EPA 200.7
Total Metals						
Mercury	ND	0.001		mg/L	04/17/2012 1326 BK	EPA 245.1

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: Connie J Mattson
Connie Mattson, Project Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

CLIENT: Black Hills Gas Resources
3200 North 1st Street; P.O. Box 249
Bloomfield, NM 87413

Date Reported: 4/20/2012
Report ID: S1204162001

Project: Black Hills Navajo River Sampling
Lab ID: S1204162-002
Client Sample ID: Navajo River B
COC: 145083

Work Order: S1204162
Collection Date: 4/9/2012 11:27:00 AM
Date Received: 4/11/2012 11:57:00 AM
Sampler: SL
Matrix: Water

Analyses	Result	RL	Qual	Units	Date Analyzed/Init	Method
General Parameters						
pH	8.1	0.1		s.u.	04/12/2012 1422 MZ	SM 4500 H B
Total Dissolved Solids (180)	190	10		mg/L	04/11/2012 926 ARF	SM 2540
Cyanide, Total	ND	0.01		mg/L	04/16/2012 1140 MEL	EPA 335.4
Phenolics, Total Recoverable	ND	0.05		mg/L	04/17/2012 1039 MB	EPA 420.4
Anions						
Chloride	2	1		mg/L	04/13/2012 2233 AMB	EPA 300.0
Fluoride	0.1	0.1		mg/L	04/16/2012 1632 MZ	SM 4500FC
Nitrogen, Nitrate-Nitrite (as N)	ND	0.1		mg/L	04/16/2012 1047 MB	EPA 353.2
Sulfate	63	1		mg/L	04/13/2012 2233 AMB	EPA 300.0
Radiochemistry						
Radium 226	0.2 ± 0.1	0.2		pCi/L	04/18/2012 1159 SH	SM 7500-Ra B
Total Radium 228	ND	1		pCi/L	04/19/2012 1741 SH	Ra-05
Dissolved Metals						
Aluminum	ND	0.1		mg/L	04/12/2012 1411 DG	EPA 200.7
Arsenic	ND	0.005		mg/L	04/12/2012 1656 MS	EPA 200.8
Barium	ND	0.5		mg/L	04/12/2012 1656 MS	EPA 200.8
Boron	ND	0.1		mg/L	04/12/2012 1411 DG	EPA 200.7
Cadmium	ND	0.002		mg/L	04/12/2012 1656 MS	EPA 200.8
Chromium	ND	0.01		mg/L	04/12/2012 1411 DG	EPA 200.7
Cobalt	ND	0.01		mg/L	04/12/2012 1656 MS	EPA 200.8
Copper	ND	0.01		mg/L	04/12/2012 1656 MS	EPA 200.8
Iron	ND	0.05		mg/L	04/12/2012 1411 DG	EPA 200.7
Lead	ND	0.02		mg/L	04/12/2012 1656 MS	EPA 200.8
Manganese	ND	0.02		mg/L	04/12/2012 1411 DG	EPA 200.7
Mercury	ND	0.001		mg/L	04/17/2012 1144 BK	EPA 245.1
Molybdenum	ND	0.02		mg/L	04/12/2012 1656 MS	EPA 200.8
Nickel	ND	0.01		mg/L	04/12/2012 1411 DG	EPA 200.7
Selenium	ND	0.005		mg/L	04/12/2012 1656 MS	EPA 200.8
Silver	ND	0.003		mg/L	04/12/2012 1656 MS	EPA 200.8
Uranium	ND	0.001		mg/L	04/12/2012 1656 MS	EPA 200.8
Zinc	ND	0.01		mg/L	04/12/2012 1411 DG	EPA 200.7
Total Metals						
Mercury	ND	0.001		mg/L	04/17/2012 1333 BK	EPA 245.1

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
C	Calculated Value	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	M	Value exceeds Monthly Ave or MCL
ND	Not Detected at the Reporting Limit	O	Outside the Range of Dilutions
S	Spike Recovery outside accepted recovery limits		

Reviewed by: Connie Mattson
Connie Mattson, Project Manager

CHAIN OF CUSTODY RECORD

Order ID: 1208368 **COC**

Inter-Mountain Laboratories, Inc.
1673 Terra Ave., Sheridan, WY 82801
Phone 800-828-1097
FAX 307-672-6053

Relinquished by: Kathy Boyd
Date/Time: 4.12.12 12:43
Received by Lab: Jackie Rash
Date/Time: 4-13-12/0950

Sent to: Summit Env. Tech. Akron, OH 44310

Phone: 800-278-0140

P.O. 239769

Sample No.	Client ID	Sample Date	Sample Time	Number of Containers	Sample Matrix	Analyses/ Parameters	Remarks
S1204162-001	Navajo River A	4/9/2012	10:45	1	water	PCB's, PAH attached	
S1204162-002	Navajo River B	4/9/2012	1:2700 AM	1	water	PCB's, PAH attached 608 6.10	
							Call if you have any questions.
							Please e-mail Results by:
							4/25/2012
							Thank you
							e-mail: cmattson@imlinc.com + lketron@imlinc.com

1208369-01-02

9

C. The standards are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations.
[2-18-77; 20.6.2.3101 NMAC - Rn, 20 NMAC 6.2.III.3101, 1-15-01]

20.6.2.3102: [RESERVED]
[12-1-95; 20.6.2.3102 NMAC - Rn, 20 NMAC 6.2.III.3102, 1-15-01]

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. **Human Health Standards**-Ground water shall meet the standards of Subsection A and B of this section unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l = 10 µg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l = 750 µg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l = 750 µg/l
(23) total xylenes.....0.62 mg/l = 620 µg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l
(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l = 1 µg/l

(32) PAHs: total naphthalene plus monomethylnaphthalenes ..... 0.03 mg/l
(33) benzo-a-pyrene ..... 0.0007 mg/l

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl) ..... 250.0 mg/l
(2) Copper (Cu) ..... 1.0 mg/l
(3) Iron (Fe) ..... 1.0 mg/l
(4) Manganese (Mn) ..... 0.2 mg/l
(6) Phenols ..... 0.005 mg/l
(7) Sulfate (SO_4) ..... 600.0 mg/l
(8) Total Dissolved Solids (TDS) ..... 1000.0 mg/l
(9) Zinc (Zn) ..... 10.0 mg/l
(10) pH ..... between 6 and 9

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al) ..... 5.0 mg/l
(2) Boron (B) ..... 0.75 mg/l
(3) Cobalt (Co) ..... 0.05 mg/l
(4) Molybdenum (Mo) ..... 1.0 mg/l
(5) Nickel (Ni) ..... 0.2 mg/l

[2-18-77, 1-29-82, 11-17-83, 3-3-86, 12-1-95; 20.6.2.3103 NMAC - Rn, 20 NMAC 6.2.III.3103, 1-15-01; A, 9-26-04]

[Note: For purposes of application of the amended numeric uranium standard to past and current water discharges (as of 9-26-04), the new standard will not become effective until June 1, 2007. For any new water discharges, the uranium standard is effective 9-26-04.]

20.6.2.3104 DISCHARGE PERMIT REQUIRED: Unless otherwise provided by this Part, no person shall cause or allow effluent or leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary. When a permit has been issued, discharges must be consistent with the terms and conditions of the permit. In the event of a transfer of the ownership, control, or possession of a facility for which a discharge permit is in effect, the transferee shall have authority to discharge under such permit, provided that the transferee has complied with Section 20.6.2.3111 NMAC, regarding transfers. [2-18-77, 12-24-87, 12-1-95; Rn & A, 20.6.2.3104 NMAC - 20 NMAC 6.2.III.3104, 1-15-01; A, 12-1-01]

20.6.2.3105 EXEMPTIONS FROM DISCHARGE PERMIT REQUIREMENT: Sections 20.6.2.3104 and 20.6.2.3106 NMAC do not apply to the following:

A. Effluent or leachate which conforms to all the listed numerical standards of Section 20.6.2.3103 NMAC and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply;

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day;

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system;

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result;

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry arroyos and ephemeral streams are not exempt from the discharge permit requirement, except as otherwise provided in this section;

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall

Summit Environmental Technologies, Inc
Cooler R

Order ID: 1208368 **COOLER**

Client: Inter Mtn

Order ID: _____

Log in Initials: _____

Date Received: 4-13-12 Time Received: 0950 Date opened: 4-13-12

Number of Coolers/Boxes: 1 N/A Unpacked by: _____

Shipper: FED EX UPS DHL Airborne US Postal Walk-in Pickup Other: _____

Packaging: Peanuts Bubble Wrap Paper Foam None Other: _____

Tape on cooler/box:	Y	N	N/A
Custody Seals intact	Y	N	N/A
C-O-C in plastic	Y	N	N/A
Coolant: Ice Melted Ice ___ Blue ice ___ Water ___ None ___		Sample Temperature 4 °C	
C-O-C filled out properly	Y	N	N/A
Samples in separate bags	Y	N	N/A
Sample containers intact	Y	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	Y	N	N/A
Label(s) agree with C-O-C	Y	N	N/A
Correct containers used	Y	N	N/A
Sufficient sample received	Y	N	N/A
Samples at correct pH? (list below)	Y	N	N/A
Bubbles absent from 40 mL vials**	Y	N	N/A

** Samples with bubbles less than the size of a pea are acceptable.

Client contact: _____ Date/Time: _____

Comments: _____

Sample ID	pH	Sample ID	pH

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

Client
Inter-Mountain Laboratories, Inc
1673 Terra Ave
Sheridan, WY 82801

Order Number
1208368

Project Number
239769

Issued
Friday, April 20, 2012

Total Number of Pages
5 (excluding C.O.C. and cooler receipt form)

Approved By : _____
QA Manager

NELAC Accreditation #E87688

Sample Summary

Client: Inter-Mountain Laboratories, Inc
Order Number: 1208368

Laboratory ID	Client ID	Matrix	Sampling Date
1208368-01	S1204162-001	Liquid	4/9/2012
1208368-02	S1204162-002	Liquid	4/9/2012

Report Narrative

Client: Inter-Mountain Laboratories, Inc

Order Number: 1208368

No problems were encountered during analysis of this order number, except as noted.

Data Qualifiers:
B = Analyte found in the method blank
J = Estimated concentration of analyte between MDL (LOD) and Reporting Limit (LOQ)
C = Analyte has been confirmed by another instrument or method
E = Analyte exceeds the upper limit of the calibration curve.
D = Sample or extract was analyzed at a higher dilution
X = User defined data qualifier.
S = Surrogate out of control limits
U = Undetected
a = Not Accredited by NELAC

ND = Non Detected at LOQ
DF = Dilution Factor

Limit Of Quantitation (LOQ) = Laboratory Reporting Limit (not adjusted for dilution factor)
Limit Of Detection (LOD) = Laboratory Detection Limit

Matrices:
A = Air
C = Cream
DW = Drinking Water
L = Liquid
O = Oil
SL = Sludge
SO = Soil
S = Solid
T = Tablet
TC = TCLP Extract
WW = Waste Water
W = Wipe

Estimated uncertainty values are available upon request.

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

April 20, 2012
Client: Inter-Mountain Laboratories, Inc
Address: 1673 Terra Ave
Sheridan, WY 82801
Received: 4/13/2012
Project #: 239769

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
S1204162-001	1208368-01	09-Apr-12	Acenaphthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Acenaphthylene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Anthracene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Benzo(a)anthracene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Benzo(a) pyrene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Benzo(b)fluoranthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Benzo(k)fluoranthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Benzo(ghi)perylene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Chrysene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Dibenzo(a,h)anthracene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Fluoranthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Fluorene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Indeno(1,2,3-cd)pyrene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Naphthalene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Phenanthrene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Pyrene	ND	ug/L	L	625	1	5	18-Apr-12	AE

PCB (608) Arochlors

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1016	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1221	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1232	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1242	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1248	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1254	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-001	1208368-01	09-Apr-12	Aroclor - 1260	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

April 20, 2012
Client: Inter-Mountain Laboratories, Inc
Address: 1673 Terra Ave
Sheridan, WY 82801
Received: 4/13/2012
Project #: 239769

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
S1204162-002	1208368-02	09-Apr-12	Acenaphthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Acenaphthylene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Anthracene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Benzo(a)anthracene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Benzo(a) pyrene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Benzo(b)fluoranthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Benzo(k)fluoranthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Benzo(ghi)perylene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Chrysene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Dibenzo(a,h)anthracene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Fluoranthene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Fluorene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Indeno(1,2,3-cd)pyrene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Naphthalene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Phenanthrene	ND	ug/L	L	625	1	5	18-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Pyrene	ND	ug/L	L	625	1	5	18-Apr-12	AE

PCB (608) Arochlors

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1016	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1221	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1232	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1242	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1248	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1254	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE
S1204162-002	1208368-02	09-Apr-12	Aroclor - 1260	ND	mg/L	L	608	1	0.0002	20-Apr-12	AE