



SEP 14 2015

dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Conoco Phillips-Farmington  
3401 30th Street  
Farmington NM, 87401

Project: Braden Head  
Project Name / Number: [none]  
Project Manager: David Bounds

Reported:  
09/08/15 14:53

API - 30-045-06319

Navajo B 6 (Bradenhead A21)

1508243-01 (Water)

| Analyte | Result | RL | MDL | Units | Dilution | Analyzed | Method | Notes | Analyst |
|---------|--------|----|-----|-------|----------|----------|--------|-------|---------|
|---------|--------|----|-----|-------|----------|----------|--------|-------|---------|

**General Chemistry**

|           |      |      |      |          |   |          |              |    |     |
|-----------|------|------|------|----------|---|----------|--------------|----|-----|
| Chloride* | 21.0 | 10.0 | 5.00 | mg/L     | 1 | 09/02/15 | 4500-Cl- C   |    | LLG |
| pH*       | 11.8 |      |      | pH Units | 1 | 08/19/15 | EPA150.1     | H4 | MAJ |
| Sulfate   | 134  | 20.0 | 3.36 | mg/L     | 2 | 09/04/15 | 4500-SO42- E |    | ABP |
| TDS*      | 880  | 10.0 |      | mg/L     | 1 | 08/21/15 | EPA160.1     |    | ABP |

Navajo B 6M(Bradenhead A21)

1508243-02 (Water)

| Analyte | Result | RL | MDL | Units | Dilution | Analyzed | Method | Notes | Analyst |
|---------|--------|----|-----|-------|----------|----------|--------|-------|---------|
|---------|--------|----|-----|-------|----------|----------|--------|-------|---------|

**General Chemistry**

|           |      |      |      |          |   |          |              |    |     |
|-----------|------|------|------|----------|---|----------|--------------|----|-----|
| Chloride* | 164  | 20.0 | 10.0 | mg/L     | 2 | 09/02/15 | 4500-Cl- C   |    | LLG |
| pH*       | 10.1 |      |      | pH Units | 1 | 08/19/15 | EPA150.1     | H4 | MAJ |
| Sulfate   | 12.7 | 10.0 | 1.68 | mg/L     | 1 | 09/04/15 | 4500-SO42- E |    | ABP |
| TDS*      | 3780 | 10.0 |      | mg/L     | 1 | 08/21/15 | EPA160.1     |    | ABP |

Navajo Indian B 3 (Bradenhead A21)

1508243-03 (Water)

| Analyte | Result | RL | MDL | Units | Dilution | Analyzed | Method | Notes | Analyst |
|---------|--------|----|-----|-------|----------|----------|--------|-------|---------|
|---------|--------|----|-----|-------|----------|----------|--------|-------|---------|

**General Chemistry**

|           |       |      |      |          |   |          |              |  |     |
|-----------|-------|------|------|----------|---|----------|--------------|--|-----|
| Chloride* | <10.0 | 10.0 | 5.00 | mg/L     | 1 | 09/02/15 | 4500-Cl- C   |  | LLG |
| pH*       | 9.53  |      |      | pH Units | 1 | 08/19/15 | EPA150.1     |  | MAJ |
| Sulfate   | 162   | 20.0 | 3.36 | mg/L     | 2 | 09/04/15 | 4500-SO42- E |  | ABP |
| TDS*      | 800   | 10.0 |      | mg/L     | 1 | 08/21/15 | EPA160.1     |  | ABP |

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Conoco Phillips-Farmington  
3401 30th Street  
Farmington NM, 87401

Project: Formation Comparison  
Project Name / Number: [none]  
Project Manager: Kevin Fredrickson

Reported:  
09/08/15 14:57

API - 30-045-06319

Navajo Indian B 3 (tubing, Area 21)

1508244-03 (Water)

| Analyte                                    | Result | RL    | MDL   | Units | Dilution | Analyzed | Method       | Notes | Analyst |
|--|--------|-------|-------|-------|----------|----------|--------------|-------|---------|
| <b>General Chemistry</b>                   |        |       |       |       |          |          |              |       |         |
| Alkalinity, Bicarbonate*                   | 430    | 10.0  |       | mg/L  | 5        | 08/28/15 | 2320 B       |       | LLG     |
| Alkalinity, Carbonate*                     | <10.0  | 10.0  |       | mg/L  | 5        | 08/28/15 | 2320 B       |       | LLG     |
| Chloride*                                  | 16400  | 500   | 250   | mg/L  | 50       | 09/02/15 | 4500-Cl- C   |       | LLG     |
| TDS*                                       | 25600  | 10.0  |       | mg/L  | 1        | 08/21/15 | EPA160.1     |       | ABP     |
| Sulfate                                    | <1.68  | 10.0  | 1.68  | mg/L  | 1        | 09/04/15 | 4500-SO42- E |       | ABP     |
| <b>Potentially Dissolved Metals by ICP</b> |        |       |       |       |          |          |              |       |         |
| Calcium*                                   | 161    | 0.200 | 0.028 | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |
| Iron*                                      | 24.6   | 0.500 | 0.035 | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |
| Magnesium*                                 | 56.8   | 1.00  | 0.324 | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |
| Sodium*                                    | 8760   | 10.0  | 3.05  | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |

Green Analytical Laboratories

*Debbie Zufelt*

Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



SEP 14 2015



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Conoco Phillips-Farmington  
3401 30th Street  
Farmington NM, 87401

Project: Braden Head  
Project Name / Number: [none]  
Project Manager: David Bounds

Reported:  
09/08/15 14:53

API - 30-045-11706

Navajo B 6 (Bradenhead A21)

1508243-01 (Water)

| Analyte                  | Result | RL   | MDL  | Units    | Dilution | Analyzed | Method       | Notes | Analyst |
|--------------------------|--------|------|------|----------|----------|----------|--------------|-------|---------|
| <b>General Chemistry</b> |        |      |      |          |          |          |              |       |         |
| Chloride*                | 21.0   | 10.0 | 5.00 | mg/L     | 1        | 09/02/15 | 4500-Cl- C   |       | LLG     |
| pH*                      | 11.8   |      |      | pH Units | 1        | 08/19/15 | EPA150.1     | H4    | MAJ     |
| Sulfate                  | 134    | 20.0 | 3.36 | mg/L     | 2        | 09/04/15 | 4500-SO42- E |       | ABP     |
| TDS*                     | 880    | 10.0 |      | mg/L     | 1        | 08/21/15 | EPA160.1     |       | ABP     |

OIL CONS. DIV DIST. 3

Navajo B 6M(Bradenhead A21)

1508243-02 (Water)

SEP 14 2015

| Analyte                  | Result | RL   | MDL  | Units    | Dilution | Analyzed | Method       | Notes | Analyst |
|--------------------------|--------|------|------|----------|----------|----------|--------------|-------|---------|
| <b>General Chemistry</b> |        |      |      |          |          |          |              |       |         |
| Chloride*                | 164    | 20.0 | 10.0 | mg/L     | 2        | 09/02/15 | 4500-Cl- C   |       | LLG     |
| pH*                      | 10.1   |      |      | pH Units | 1        | 08/19/15 | EPA150.1     | H4    | MAJ     |
| Sulfate                  | 12.7   | 10.0 | 1.68 | mg/L     | 1        | 09/04/15 | 4500-SO42- E |       | ABP     |
| TDS*                     | 3780   | 10.0 |      | mg/L     | 1        | 08/21/15 | EPA160.1     |       | ABP     |

Navajo Indian B 3 (Bradenhead A21)

1508243-03 (Water)

| Analyte                  | Result | RL   | MDL  | Units    | Dilution | Analyzed | Method       | Notes | Analyst |
|--------------------------|--------|------|------|----------|----------|----------|--------------|-------|---------|
| <b>General Chemistry</b> |        |      |      |          |          |          |              |       |         |
| Chloride*                | <10.0  | 10.0 | 5.00 | mg/L     | 1        | 09/02/15 | 4500-Cl- C   |       | LLG     |
| pH*                      | 9.53   |      |      | pH Units | 1        | 08/19/15 | EPA150.1     |       | MAJ     |
| Sulfate                  | 162    | 20.0 | 3.36 | mg/L     | 2        | 09/04/15 | 4500-SO42- E |       | ABP     |
| TDS*                     | 800    | 10.0 |      | mg/L     | 1        | 08/21/15 | EPA160.1     |       | ABP     |

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303

www.GreenAnalytical.com

Conoco Phillips-Farmington  
3401 30th Street  
Farmington NM, 87401

Project: Formation Comparison  
Project Name / Number: [none]  
Project Manager: Kevin Fredrickson

Reported:  
09/08/15 14:57

API - 30-045-11706

Navajo B 6 (tubing, Area 21)

1508244-02 (Water)

| Analyte                                    | Result | RL    | MDL   | Units | Dilution | Analyzed | Method       | Notes | Analyst |
|--|--------|-------|-------|-------|----------|----------|--------------|-------|---------|
| <b>General Chemistry</b>                   |        |       |       |       |          |          |              |       |         |
| Alkalinity, Bicarbonate*                   | 285    | 10.0  |       | mg/L  | 5        | 08/28/15 | 2320 B       |       | LLG     |
| Alkalinity, Carbonate*                     | <10.0  | 10.0  |       | mg/L  | 5        | 08/28/15 | 2320 B       |       | LLG     |
| Chloride*                                  | 7300   | 500   | 250   | mg/L  | 50       | 09/02/15 | 4500-Cl- C   |       | LLG     |
| TDS*                                       | 14000  | 10.0  |       | mg/L  | 1        | 08/21/15 | EPA160.1     |       | ABP     |
| Sulfate                                    | 786    | 200   | 33.6  | mg/L  | 20       | 09/04/15 | 4500-SO42- E |       | ABP     |
| <b>Potentially Dissolved Metals by ICP</b> |        |       |       |       |          |          |              |       |         |
| Calcium*                                   | 224    | 0.200 | 0.028 | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |
| Iron*                                      | 48.7   | 0.500 | 0.035 | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |
| Magnesium*                                 | 18.1   | 1.00  | 0.324 | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |
| Sodium*                                    | 4800   | 10.0  | 3.05  | mg/L  | 10       | 08/31/15 | EPA200.7     |       | JGS     |

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.

Page 4 of 10