



ARKANSAS  
Department of Environmental Quality

January 7, 2009

Mr. Rusty Marvel, HS&E Coordinator  
Southwestern Energy Company  
980 Airport Road  
Ozark, AR 72949

RE: Nehus #6-10H9                      State Permit No.: 00294-WG-P

Dear Mr. Marvel:

On December 30, 2008, I performed an inspection of the above referenced drilling site in response to the report of a leaking reserve pit. This inspection was conducted in accordance with the provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder. The inspection revealed the following:

- 1. Evidence of an unauthorized discharge of drilling fluids to a nearby intermittent stream was observed, thus entering the waters of the State. This is a violation of Part I.A.5.a of your permit.**
- 2. No sediment controls were in place at the site to prevent sediment from potentially entering a nearby, intermittent watercourse, otherwise defined as waters of the State.**

Additionally, as of November 10, 2008, oil and gas operations are no longer exempt from NPDES Storm Water regulations. All oil and gas activities that disturb one acre or more of soil will be required to be covered under the NPDES Construction Storm Water Permit.

The above items require your immediate attention. Please submit a written response to these findings to the Water Division Enforcement Branch of this Department. This response should contain documentation describing the course of action taken to correct the item noted. This corrective action should be completed as soon as possible, and the written response is due by January 30, 2009.

If I can be any assistance, please contact me at 479-968-7339 ext 14.

Sincerely,

A handwritten signature in cursive script that reads "Greg Kremers".

Greg Kremers  
District 5 Field Inspector  
Water Division

cc:      Water Division Enforcement Branch  
         Water Division Permits Branch

## ADEQ O&G Pit Inspection Form

Date of Inspection : December 30, 2008

Inspector: Greg Kremers

Operator: SEECO, Inc.

Drilling Contractor:

Coordinates: N35° 12' 21.6" W93° 39' 04.0"

Drilling Pad Name & No.: Nehus #6-10H9

State Permit # 00294-WG-P

On Site Contact Person: Rusty Marvel

Phone #: 479-213-0491

DETAILS: Section , Township N, Range W

County: Logan

AFIN: 42-00000

Stage of Well Development: Construction of Pad ☐ Air Drilling ☐ Water Base Mud Drilling ☐ Oil Base Mud

Drilling ☐ Well completion ☒ Well Finished ☐

### SECTION A: Drilling Pad

- |  |  |
|--|--|
| 1. Evidence of sediment runoff from the drilling pad or well site observed in waters of the state?                   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. At the time of inspection, was evidence observed of Reg. 2 turbidity standards being exceeded?                    | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. Has the Operator implemented erosion and sediment controls in place to minimize sediment runoff from occurring?   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. Has Operator prepared a storm water erosion and sediment control plan or guidance document?                       | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. Does it appear that the erosion and sediment controls are being maintained in good operating condition?           | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. At the time of the inspection was there evidence that the site had any oil/fluid spills?                          | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. If so, were the spills properly contained, cleaned, and disposed of?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| b. Has the spill been reported to ADEQ?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. Did any rerouting, filling, or channelization of any "water of the state" occur during drilling pad construction? | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. If so, was proper authorization received?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| b. Evidence of any Reg. 2 violations due to construction of the drilling pad?  | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. Does it appear that chemicals used in the drilling process are being stored on site properly?                     | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |

### SECTION B: Pits and Drilling Fluids

- |   |  |
|---|--|
| 1. At the time of the inspection was the pit or pits covered under an active permit?  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. At the time of the inspection did it appear the pit or pits meet the construction requirements as required in the permit Part II, Section A item 1?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE |
| 3. If containers are used for circulation pits or mud pit, are they being maintained in a leak -free state?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. At the time of inspection, is there any evidence that the pit was not constructed with the appropriate liner? (i.e. 20 mil Synthetic Liner, Compacted Clay Liner, and/or Bentonite Liner)        | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE |
| 5. Are there any evidence at the time of inspection, that the reserve pit is not structurally sound? ( i.e. cracks/holes in levees and/or tears/holes in liners)                                    | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. Is there any indication that seepage is coming from pad or pit   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. At the time of the inspection was there any evidence that any pit fluids has been discharged onto the ground or into waters of the state from the pit or from drilling pad?                      | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. If so, has the discharge been reported   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| b. Has the fluid been properly contained, cleaned up, sampled, and disposed of? <b>In progress</b>  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. Is a 2 ft. minimum freeboard being maintained in the pit?  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 9. Any evidence noted at the time of inspection, that the pit contained unapproved fluids or materials? (i.e. waste oil, hydraulic or completion fluids, trash, or any Nonhazardous Oilfield Waste) | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 10. According to on site contact person how and where are fluids disposed?  |  |
| a. Carrier : <b>Quick Transport</b>   |  |
| b. Destination: <b>Henry Comer facility, Greenwood, AR (4693-WR-2)</b>  |  |
| c. Type of Disposal: <b>Land application</b>  |  |

### SECTION C : Closed out Water Based Drilling Fluids Pit

Date well was finished: **N/A**

- |  |  |
|--|--|
| 1. Have all drilling fluids and/or solids been removed from the reserve pit?                                 | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. Does it appear that the pit has been properly closed and seeded?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. Has the Operator submitted a completed Statement of Disposition and NOT within 30 days of closure of pit? | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |

**Comments:** Drilling fluids entered a nearby, intermittent stream. Some small pools of fluids observed for ~150 yards downstream to USFS boundary. Fluids contained

in emergency pit and no active leaking occurring. USFS required SEECO to sample at various locations. Those results will need to be submitted to ADEQ with

response letter. Leak was discovered on 12-29-2008 at ~ 1200 hours. Pit was being closed at time of inspection.

Erosion and sediment control document (RAPPS) provisions not in place as required by permit.

Inspector: Greg Kremers

*Greg Kremers*

Arkansas Department of Environmental Quality

Date Report: January 6, 2009

### Water Division Photographic Evidence Sheet

**Location:** Nehus #6-10H9, SEECO, Inc.

**Photographer:** Greg Kremers

**Witness:**

**Photo #**

1

**Of**

4

**Date:**

12-30-2008

**Time:**

1231

**Description:**

View of the reserve pit as it was being closed out.



**Photographer:** Greg Kremers

**Witness:**

**Photo #**

2

**Of**

4

**Date:**

12-30-2008

**Time:**

1232

**Description:**

Path of drilling fluids from the pit prior to entering nearby watercourse.





### Water Division Photographic Evidence Sheet

|                      |                            |           |   |  |                 |            |              |      |
|----------------------|----------------------------|-----------|---|--|-----------------|------------|--------------|------|
| <b>Location:</b>     | Nehus #6-10H9, SEECO, Inc. |           |   |  |                 |            |              |      |
| <b>Photographer:</b> | Greg Kremers               |           |   |  | <b>Witness:</b> |            |              |      |
| <b>Photo #</b>       | 3                          | <b>Of</b> | 4 |  | <b>Date:</b>    | 12-30-2008 | <b>Time:</b> | 1233 |
| <b>Description:</b>  | Containment pit.           |           |   |  |                 |            |              |      |



|                      |   |           |   |  |                 |            |              |      |
|----------------------|---|-----------|---|--|-----------------|------------|--------------|------|
| <b>Photographer:</b> | Greg Kremers  |           |   |  | <b>Witness:</b> |            |              |      |
| <b>Photo #</b>       | 4   | <b>Of</b> | 4 |  | <b>Date:</b>    | 12-30-2008 | <b>Time:</b> | 1240 |
| <b>Description:</b>  | View of the intermittent watercourse downstream of the containment pit. |           |   |  |                 |            |              |      |



# ADEQ

ARKANSAS  
Department of Environmental Quality

January 7, 2009

Mr. Rusty Marvel, HS&E Coordinator  
Southwestern Energy Company  
980 Airport Road  
Ozark, AR 72949

RE: Nehus #6-10H9      State Permit No.: 00294-WG-P

Dear Mr. Marvel:

On December 30, 2008, I performed an inspection of the above referenced drilling site in response to the report of a leaking reserve pit. This inspection was conducted in accordance with the provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder. The inspection revealed the following:

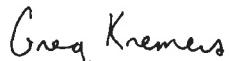
- 1. Evidence of an unauthorized discharge of drilling fluids to a nearby intermittent stream was observed, thus entering the waters of the State. This is a violation of Part I.A.5.a of your permit.**
- 2. No sediment controls were in place at the site to prevent sediment from potentially entering a nearby, intermittent watercourse, otherwise defined as waters of the State.**

Additionally, as of November 10, 2008, oil and gas operations are no longer exempt from NPDES Storm Water regulations. All oil and gas activities that disturb one acre or more of soil will be required to be covered under the NPDES Construction Storm Water Permit.

The above items require your immediate attention. Please submit a written response to these findings to the Water Division Enforcement Branch of this Department. This response should contain documentation describing the course of action taken to correct the item noted. This corrective action should be completed as soon as possible, and the written response is due by January 30, 2009.

If I can be any assistance, please contact me at 479-968-7339 ext 14.

Sincerely,



Greg Kremers  
District 5 Field Inspector  
Water Division

cc:      Water Division Enforcement Branch  
         Water Division Permits Branch

## ADEQ O&G Pit Inspection Form

**Date of Inspection :** December 30, 2008

**Inspector:** Greg Kremers

**Operator:** SEECO, Inc.

**Drilling Contractor:**

**Coordinates:** N35° 12' 21.6" W93° 39' 04.0"

**Drilling Pad Name & No.:** Nehus #6-10H9

**State Permit #** 00294-WG-P

**On Site Contact Person:** Rusty Marvel

**Phone #:** 479-213-0491

**DETAILS:** Section , Township N, Range W

**County:** Logan

**AFIN:** 42-00000

Stage of Well Development: **Construction of Pad** ☐ **Air Drilling** ☐ **Water Base Mud Drilling** ☐ **Oil Base Mud Drilling** ☐ **Well completion** ☒ **Well Finished** ☐

### SECTION A: Drilling Pad

- |  |  |
|--|--|
| 1. Evidence of sediment runoff from the drilling pad or well site observed in waters of the state?                   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. At the time of inspection, was evidence observed of Reg. 2 turbidity standards being exceeded?                    | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. Has the Operator implemented erosion and sediment controls in place to minimize sediment runoff from occurring?   | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. Has Operator prepared a storm water erosion and sediment control plan or guidance document?                       | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. Does it appear that the erosion and sediment controls are being maintained in good operating condition?           | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. At the time of the inspection was there evidence that the site had any oil/fluid spills?                          | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. If so, were the spills properly contained, cleaned, and disposed of?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| b. Has the spill been reported to ADEQ?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. Did any rerouting, filling, or channelization of any "water of the state" occur during drilling pad construction? | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. If so, was proper authorization received?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| b. Evidence of any Reg. 2 violations due to construction of the drilling pad?  | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. Does it appear that chemicals used in the drilling process are being stored on site properly?                     | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |

### SECTION B: Pits and Drilling Fluids

- |   |  |
|---|--|
| 1. At the time of the inspection was the pit or pits covered under an active permit?  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. At the time of the inspection did it appear the pit or pits meet the construction requirements as required in the permit Part II, Section A item 1?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE |
| 3. If containers are used for circulation pits or mud pit, are they being maintained in a leak -free state?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. At the time of inspection, is there any evidence that the pit was not constructed with the appropriate liner? (i.e. 20 mil Synthetic Liner, Compacted Clay Liner, and/or Bentonite Liner)        | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE |
| 5. Are there any evidence at the time of inspection, that the reserve pit is not structurally sound? ( i.e. cracks/holes in levees and/or tears/holes in liners)                                    | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. Is there any indication that seepage is coming from pad or pit   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. At the time of the inspection was there any evidence that any pit fluids has been discharged onto the ground or into waters of the state from the pit or from drilling pad?                      | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. If so, has the discharge been reported   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| b. Has the fluid been properly contained, cleaned up, sampled, and disposed of? <b>In progress</b>  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. Is a 2 ft. minimum freeboard being maintained in the pit?  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 9. Any evidence noted at the time of inspection, that the pit contained unapproved fluids or materials? (i.e. waste oil, hydraulic or completion fluids, trash, or any Nonhazardous Oilfield Waste) | <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 10. According to on site contact person how and where are fluids disposed?  |  |
| a. Carrier : <b>Quick Transport</b>   |  |
| b. Destination: <b>Henry Comer facility, Greenwood, AR (4693-WR-2)</b>  |  |
| c. Type of Disposal: <b>Land application</b>  |  |

### SECTION C : Closed out Water Based Drilling Fluids Pit

Date well was finished: **N/A**

- |  |  |
|--|--|
| 1. Have all drilling fluids and/or solids been removed from the reserve pit?                                 | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. Does it appear that the pit has been properly closed and seeded?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. Has the Operator submitted a completed Statement of Disposition and NOT within 30 days of closure of pit? | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |

**Comments:** Drilling fluids entered a nearby, intermittent stream. Some small pools of fluids observed for ~150 yards downstream to USFS boundary. Fluids contained in emergency pit and no active leaking occurring. USFS required SEECO to sample at various locations. Those results will need to be submitted to ADEQ with response letter. Leak was discovered on 12-29-2008 at ~ 1200 hours. Pit was being closed at time of inspection.

Erosion and sediment control document (RAPPS) provisions not in place as required by permit.

Inspector: Greg Kremers

*Greg Kremers*

Arkansas Department of Environmental Quality

Date Report: January 6, 2009



### Water Division Photographic Evidence Sheet

|                      |   |           |   |              |                 |              |      |
|----------------------|---|-----------|---|--------------|-----------------|--------------|------|
| <b>Location:</b>     | Nehus #6-10H9, SEECO, Inc.                          |           |   |              |                 |              |      |
| <b>Photographer:</b> | Greg Kremers  |           |   |              | <b>Witness:</b> |              |      |
| <b>Photo #</b>       | 1   | <b>Of</b> | 4 | <b>Date:</b> | 12-30-2008      | <b>Time:</b> | 1231 |
| <b>Description:</b>  | View of the reserve pit as it was being closed out. |           |   |              |                 |              |      |



|                      |  |           |   |              |                 |              |      |
|----------------------|--|-----------|---|--------------|-----------------|--------------|------|
| <b>Photographer:</b> | Greg Kremers   |           |   |              | <b>Witness:</b> |              |      |
| <b>Photo #</b>       | 2  | <b>Of</b> | 4 | <b>Date:</b> | 12-30-2008      | <b>Time:</b> | 1232 |
| <b>Description:</b>  | Path of drilling fluids from the pit prior to entering nearby watercourse. |           |   |              |                 |              |      |





# Water Division Photographic Evidence Sheet

|                      |                            |           |   |  |                 |            |              |      |
|----------------------|----------------------------|-----------|---|--|-----------------|------------|--------------|------|
| <b>Location:</b>     | Nehus #6-10H9, SEECO, Inc. |           |   |  |                 |            |              |      |
| <b>Photographer:</b> | Greg Kremers               |           |   |  | <b>Witness:</b> |            |              |      |
| <b>Photo #</b>       | 3                          | <b>Of</b> | 4 |  | <b>Date:</b>    | 12-30-2008 | <b>Time:</b> | 1233 |
| <b>Description:</b>  | Containment pit.           |           |   |  |                 |            |              |      |



|                      |   |           |   |  |                 |            |              |      |
|----------------------|---|-----------|---|--|-----------------|------------|--------------|------|
| <b>Photographer:</b> | Greg Kremers  |           |   |  | <b>Witness:</b> |            |              |      |
| <b>Photo #</b>       | 4   | <b>Of</b> | 4 |  | <b>Date:</b>    | 12-30-2008 | <b>Time:</b> | 1240 |
| <b>Description:</b>  | View of the intermittent watercourse downstream of the containment pit. |           |   |  |                 |            |              |      |





**From:** Garner, Cindy  
**Sent:** Tuesday, January 27, 2009 2:37 PM  
**To:** Brizzi, Mary  
**Subject:** FW: Nehus 6-10H Permit Number 00294-WG-P  
[Please save this email and attached response in Zylab and PDS.](#)

Thank you!

[Cindy](#)

-----Original Message-----

**From:** Rusty Marvel [mailto:[Rusty\\_Marvel@SWN.COM](mailto:Rusty_Marvel@SWN.COM)]  
**Sent:** Tuesday, January 27, 2009 2:13 PM  
**To:** Garner, Cindy  
**Cc:** Kremers, Greg; Dale Kardash; George Schneider  
**Subject:** FW: Nehus 6-10H Permit Number 00294-WG-P

Cindy,

After speaking with Mr. Kremers he advised that I should copy you on the attached response letter. If you need additional information I can be reached at this email address or on my cell @ 479-213-0491.

Thanks

Rusty Marvel  
Senior HSE Coordinator  
Seeco Inc.  
479-213-0491

---

**From:** Rusty Marvel  
**Sent:** Tuesday, January 27, 2009 1:51 PM  
**To:** Kremers, Greg  
**Cc:** Dale Kardash; George Schneider  
**Subject:** Nehus 6-10H Permit Number 00294-WG-P

Mr. Kremers,

Please find attached the written response requested via your inspection of the Nehus 6-10H9. If I can be of further assistance or if I should send this response to another individual in your department please advise.

Rusty Marvel  
Senior HSE Coordinator  
Seeco Inc.  
479-213-0491

<<0308\_001.pdf>>

**Notice: This e-mail may contain privileged and/or confidential information and is intended only for the addressee. If you are not the addressee or the person responsible for delivering it to the addressee, you may not copy or distribute this communication to anyone else. If you received this communication in error, please notify us immediately by telephone or return e-mail and promptly delete the original message from your system.**



**SEECO, Inc.**

A subsidiary of Southwestern Energy Company

1083 Sain Street  
P.O. Box 13408  
Fayetteville, Arkansas 72703-1004  
(479) 521-1141 FAX: (479) 582-8390

January 26, 2009  
Water Division Enforcement Branch  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Ar 72118-5317

RE: Nehus 6-10H9      State Permit #: 00294-WG-P

Dear Enforcement Officer,

The following is Seeco Inc. written response in reference to the inspection conducted by Mr. Greg Kremers on December 30, on the Nehus, 6-10H9 well location.

**Inspection Finding 1. Evidence of an unauthorized discharge of drilling fluids to a nearby intermittent stream was observed, thus entering the waters of the State:**

On December the 29<sup>th</sup>, 2008 a reserve pit leak developed on the Nehus 6-10H releasing drilling fluids into a natural drainage west of the location. It is suspected that hydraulic pressure exerted by heavy rainfall breached the 18 inch clay lining in the bottom of the reserve pit. When this pressure subsided (rain event ended), the drilling fluids escaped via the breach created in the floor of the reserve pit.

Remedial actions to this event included constructing a catch basin directly below the reserve pit to capture the released water removing via a vacuum truck. Straw bails and silt fences were installed in the impacted drainage to aid in filtering. The leak was controlled/eliminated via removal of remaining fluids from the reserve pit as well as the crowding of pit walls. Multi-point samples were collected on two separate dates from the impacted drainage and the results are attached.

**Inspection Finding 2. No sediment controls were in place at the site to prevent sediment from potentially entering a nearby, intermittent watercourse, otherwise defined as waters of the state.**

Seeco Inc. acknowledges that there were no sediment controls in place below the reserve pit. A RAPPS plan is in place for controlling sediment on locations but due to the absence of channeling and observable water adjacent to the location no sediment controls were constructed on this location. This was an oversight and has been corrected. However, per our visual inspection and as noted on the ADEQ O&G pit Inspection Form completed by the Mr. Greg Kremers there was no evidence of sediment runoff from the drilling pad or well site other than from the release of the drilling fluids.



Please advise if any further information is needed

Sincerely,

A handwritten signature in black ink, appearing to read "Rusty Marvel", with a long, sweeping horizontal stroke extending to the right.

Rusty Marvel  
Senior HS&E Coordinator  
Seeco Inc.  
Phone: 479-213-0491



January 12, 2009  
Control No. 125681  
Page 1 of 8

Southwestern Energy Exploration Company  
(SEECO)  
ATTN: Mr. Rusty Marvel  
980 Airport Road  
Ozark, AR 72949

Dear Mr. Rusty Marvel:

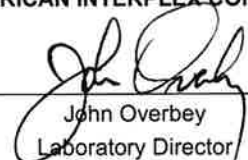
Project Description: Two (2) water sample(s) received on January 6, 2009  
Nehus #6-10 H-9

This report is the analytical results and supporting information for the samples submitted to American Interplex Corporation (AIC) on January 6, 2009. The following results are applicable only to the samples identified by the control number referenced above. Accurate assessment of the data requires access to the entire document. Each section of the report has been reviewed and approved by the laboratory director or a qualified designee.

Data has been validated using standard quality control measures performed on at least 10% of the samples analyzed. Quality Assurance, instrumentation, maintenance and calibration were performed in accordance with guidelines established by the cited methodology.

AMERICAN INTERPLEX CORPORATION

By

  
John Overbey  
Laboratory Director

Enclosure(s): Chains of Custody





Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

#### CASE NARRATIVE

#### SAMPLE RECEIPT

Received Temperature: 2°C

|                       |                                |   |
|-----------------------|--------------------------------|---|
| Receipt Verification: | Complete Chain of Custody      | N |
|                       | Sample ID on Sample Labels     | Y |
|                       | Date and Time on Sample Labels | Y |
|                       | Proper Sample Containers       | N |
|                       | Within Holding Times           | Y |
|                       | Adequate Sample Volume         | Y |
|                       | Sample Integrity               | Y |
|                       | Proper Temperature             | Y |
|                       | Proper Preservative            | Y |

#### COMMENTS

The sample container, preservation, or holding time did not meet 40 CFR Part 136.3 Table II - Required Containers, Preservation Techniques, and Holding time requirements.

American Interplex Corporation analyzes pH, Total Residual Chlorine, and Dissolved Oxygen as soon as possible after laboratory receipt. Table II-Required Containers, Preservation Techniques, and Holding Times Requirements of 40 CFR Part 136.3 indicates these parameters are to be performed on site or immediately after aqueous collection.

#### QUALIFIERS

| Qualifiers | Definition   |
|------------|--|
| H          | Analytical holding time exceeded regulatory requirements |

#### References:

"Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).

"Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.

"Standard Methods for the Examination of Water and Wastewaters", 20th edition, 1998.

"American Society for Testing and Materials" (ASTM).

"Association of Analytical Chemists" (AOAC).

"Self-Davis and Moore" (2000).



Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

ANALYTICAL RESULTS

AIC No. 125681-1

Sample Identification: W1 1-2-09 8:00am

| Analyte                       | Method           | Result   | RL     | Units   | Batch  | Qualifier |
|-------------------------------|------------------|----------|--------|---------|--------|-----------|
| pH                            | EPA 9040B        | 7.0      | -      | Units   | W27660 | H         |
| Specific Conductance          | EPA 9050A        | 49       | 2      | umho/cm | W27659 |           |
| Total Dissolved Solids        | SM 2540C         | 30       | 10     | mg/l    | W27677 |           |
| Hardness as CaCO <sub>3</sub> | EPA 3005A, 6010B | 12       | 1      | mg/l    | S24647 |           |
| Arsenic                       | EPA 3010A, 6010B | < 0.05   | 0.05   | mg/l    | S24647 |           |
| Barium                        | EPA 3010A, 6010B | 0.021    | 0.002  | mg/l    | S24647 |           |
| Chromium                      | EPA 3010A, 6010B | < 0.007  | 0.007  | mg/l    | S24647 |           |
| Lead                          | EPA 3010A, 6010B | < 0.04   | 0.04   | mg/l    | S24647 |           |
| Sodium                        | EPA 3010A, 6010B | 3.2      | 1      | mg/l    | S24647 |           |
| Zinc                          | EPA 3010A, 6010B | 0.0085   | 0.002  | mg/l    | S24647 |           |
| Mercury                       | EPA 7470A        | < 0.0002 | 0.0002 | mg/l    | S24650 |           |
| Chloride                      | EPA 9056         | 3.4      | 0.2    | mg/l    | S24641 |           |
| Nitrate as N                  | EPA 9056         | < 0.05   | 0.05   | mg/l    | S24641 | H         |
| Sulfate                       | EPA 9056         | 3.0      | 0.2    | mg/l    | S24641 |           |
| Oil and Grease                | EPA 1664A        | < 5      | 5      | mg/l    | B5493  |           |

AIC No. 125681-2

Sample Identification: W2 1-2-09 8:00am

| Analyte                       | Method           | Result   | RL     | Units   | Batch  | Qualifier |
|-------------------------------|------------------|----------|--------|---------|--------|-----------|
| pH                            | EPA 9040B        | 6.7      | -      | Units   | W27660 | H         |
| Specific Conductance          | EPA 9050A        | 42       | 2      | umho/cm | W27659 |           |
| Total Dissolved Solids        | SM 2540C         | 37       | 10     | mg/l    | W27677 |           |
| Hardness as CaCO <sub>3</sub> | EPA 3005A, 6010B | 10       | 1      | mg/l    | S24647 |           |
| Arsenic                       | EPA 3010A, 6010B | < 0.05   | 0.05   | mg/l    | S24647 |           |
| Barium                        | EPA 3010A, 6010B | 0.017    | 0.002  | mg/l    | S24647 |           |
| Chromium                      | EPA 3010A, 6010B | < 0.007  | 0.007  | mg/l    | S24647 |           |
| Lead                          | EPA 3010A, 6010B | < 0.04   | 0.04   | mg/l    | S24647 |           |
| Sodium                        | EPA 3010A, 6010B | 2.9      | 1      | mg/l    | S24647 |           |
| Zinc                          | EPA 3010A, 6010B | 0.0074   | 0.002  | mg/l    | S24647 |           |
| Mercury                       | EPA 7470A        | < 0.0002 | 0.0002 | mg/l    | S24650 |           |
| Chloride                      | EPA 9056         | 3.9      | 0.2    | mg/l    | S24641 |           |
| Nitrate as N                  | EPA 9056         | 0.087    | 0.05   | mg/l    | S24641 | H         |
| Sulfate                       | EPA 9056         | 2.7      | 0.2    | mg/l    | S24641 |           |
| Oil and Grease                | EPA 1664A        | < 5      | 5      | mg/l    | B5493  |           |





Southwestern Energy Exploration Company  
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980 Airport Road  
Ozark, AR 72949

SAMPLE PREPARATION REPORT

AIC No. 125681-1

| Analyte                       | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|-------------------------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| pH                            | -                        |     | 06JAN09 1506             | 93  |          | W27660 | H         |
| Specific Conductance          | -                        |     | 06JAN09 1423             | 93  |          | W27659 |           |
| Total Dissolved Solids        | 08JAN09 1321             | 285 | 10JAN09 1202             | 285 |          | W27677 |           |
| Hardness as CaCO <sub>3</sub> | 06JAN09 1508             | 282 | 06JAN09 1826             | 270 |          | S24647 |           |
| Metals                        | 06JAN09 1508             | 282 | 06JAN09 1827             | 270 |          | S24647 |           |
| Mercury                       | 07JAN09 0854             | 282 | 07JAN09 1209             | 282 |          | S24650 |           |
| Chloride                      | -                        |     | 06JAN09 1445             | 257 |          | S24641 |           |
| Nitrate as N                  | -                        |     | 06JAN09 1445             | 257 |          | S24641 | H         |
| Sulfate                       | -                        |     | 06JAN09 1445             | 257 |          | S24641 |           |
| Oil and Grease                | 06JAN09 1449             | 100 | 06JAN09 1555             | 100 |          | B5493  |           |

AIC No. 125681-2

| Analyte                       | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|-------------------------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| pH                            | -                        |     | 06JAN09 1506             | 93  |          | W27660 | H         |
| Specific Conductance          | -                        |     | 06JAN09 1423             | 93  |          | W27659 |           |
| Total Dissolved Solids        | 08JAN09 1321             | 285 | 10JAN09 1202             | 285 |          | W27677 |           |
| Hardness as CaCO <sub>3</sub> | 06JAN09 1508             | 282 | 06JAN09 1829             | 270 |          | S24647 |           |
| Metals                        | 06JAN09 1508             | 282 | 06JAN09 1830             | 270 |          | S24647 |           |
| Mercury                       | 07JAN09 0854             | 282 | 07JAN09 1213             | 282 |          | S24650 |           |
| Chloride                      | -                        |     | 06JAN09 1445             | 257 |          | S24641 |           |
| Nitrate as N                  | -                        |     | 06JAN09 1445             | 257 |          | S24641 | H         |
| Sulfate                       | -                        |     | 06JAN09 1445             | 257 |          | S24641 |           |
| Oil and Grease                | 06JAN09 1449             | 100 | 06JAN09 1555             | 100 |          | B5493  |           |



January 12, 2009  
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Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

SAMPLE DUPLICATE RESULTS

AIC No. 125681-1

| Analyte | Method    | Sample Result | Duplicate Result | Units | RPD  | RPD Limit | Batch  | Qualifier |
|---------|-----------|---------------|------------------|-------|------|-----------|--------|-----------|
| Mercury | EPA 7470A | < 0.0002      | < 0.0002         | mg/l  | 0.00 | 20        | S24650 |           |

LABORATORY CONTROL SAMPLE RESULTS

| Analyte                | Spike Amount | % Recovery | % Recovery Limits | RPD    | RPD Limit | Batch  | Qualifier |
|------------------------|--------------|------------|-------------------|--------|-----------|--------|-----------|
| pH                     | -            | 100/100    | 98-102            | 0.135  | 5         | W27660 |           |
| Specific Conductance   | 1412 umho/cm | 99.9/101   | 90-110            | 0.707  | 5         | W27659 |           |
| Total Dissolved Solids | 250 mg/l     | 101/103    | 85-115            | 1.96   | 10        | W27677 |           |
| Arsenic                | 5 mg/l       | 102/102    | 85-115            | 0.160  | 20        | S24647 |           |
| Barium                 | 0.5 mg/l     | 101/101    | 85-115            | 0.0448 | 20        | S24647 |           |
| Chromium               | 0.5 mg/l     | 99.3/98.8  | 85-115            | 0.561  | 20        | S24647 |           |
| Lead                   | 5 mg/l       | 100/100    | 85-115            | 0.0887 | 20        | S24647 |           |
| Sodium                 | 10 mg/l      | 102/102    | 85-115            | 0.280  | 20        | S24647 |           |
| Zinc                   | 0.5 mg/l     | 100/99.9   | 85-115            | 0.144  | 20        | S24647 |           |
| Mercury                | 0.0025 mg/l  | 97.6/104   | 85-115            | 5.96   | 20        | S24650 |           |
| Chloride               | 5 mg/l       | 103/101    | 90-110            | 2.08   | 10        | S24641 |           |
| Nitrate as N           | 5 mg/l       | 102/102    | 90-110            | 0.313  | 10        | S24641 |           |
| Sulfate                | 5 mg/l       | 105/101    | 90-110            | 3.76   | 10        | S24641 |           |
| Oil and Grease         | 40 mg/l      | 99.5/98.5  | 78-114            | 1.01   | 20        | B5493  |           |

MATRIX SPIKE SAMPLE RESULTS

| Analyte      | Spike Amount | % Recovery | % Recovery Limits | RPD    | RPD Limit | Batch  | Qualifier |
|--------------|--------------|------------|-------------------|--------|-----------|--------|-----------|
| Chloride     | 5 mg/l       | 80.5/87.7  | 80-120            | 3.53   | 10        | S24641 |           |
| Nitrate as N | 5 mg/l       | 101/101    | 80-120            | 0.0595 | 10        | S24641 |           |
| Sulfate      | 5 mg/l       | 82.7/82.6  | 80-120            | 0.0270 | 10        | S24641 |           |



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Southwestern Energy Exploration Company  
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980 Airport Road  
Ozark, AR 72949

LABORATORY BLANK RESULTS

| Analyte                | Method           | Result   | Units   | RL     | PQL    | QC Sample | Qual |
|------------------------|------------------|----------|---------|--------|--------|-----------|------|
| Specific Conductance   | EPA 9050A        | < 2      | umho/cm | 2      | 2      | W27659-1  |      |
| Total Dissolved Solids | SM 2540C         | < 10     | mg/l    | 10     | 10     | W27677-1  |      |
| Arsenic                | EPA 3010A, 6010B | < 0.05   | mg/l    | 0.05   | 0.05   | S24647-1  |      |
| Barium                 | EPA 3010A, 6010B | < 0.002  | mg/l    | 0.002  | 0.002  | S24647-1  |      |
| Chromium               | EPA 3010A, 6010B | < 0.007  | mg/l    | 0.007  | 0.007  | S24647-1  |      |
| Lead                   | EPA 3010A, 6010B | < 0.04   | mg/l    | 0.04   | 0.04   | S24647-1  |      |
| Sodium                 | EPA 3010A, 6010B | < 1      | mg/l    | 1      | 1      | S24647-1  |      |
| Zinc                   | EPA 3010A, 6010B | < 0.002  | mg/l    | 0.002  | 0.002  | S24647-1  |      |
| Mercury                | EPA 7470A        | < 0.0002 | mg/l    | 0.0002 | 0.0002 | S24650-1  |      |
| Chloride               | EPA 9056         | < 0.2    | mg/l    | 0.2    | 0.2    | S24641-1  |      |
| Nitrate as N           | EPA 9056         | < 0.05   | mg/l    | 0.05   | 0.05   | S24641-1  |      |
| Sulfate                | EPA 9056         | < 0.2    | mg/l    | 0.2    | 0.2    | S24641-1  |      |
| Oil and Grease         | EPA 1664A        | < 5      | mg/l    | 5      | 5      | B5493-1   |      |



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980 Airport Road  
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### QUALITY CONTROL PREPARATION REPORT

#### DUPLICATE SAMPLES

| Analyte | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | QC<br>Sample | Qualifier |
|---------|--------------------------|-----|--------------------------|-----|----------|--------------|-----------|
| Mercury | 07JAN09 0854             | 282 | 07JAN09 1205             | 282 |          | S24650-4     |           |

#### LABORATORY CONTROL SAMPLES

| Analyte                | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | QC<br>Sample | Qualifier |
|------------------------|--------------------------|-----|--------------------------|-----|----------|--------------|-----------|
| pH                     | -                        |     | 06JAN09 1424             | 93  |          | W27660-1     |           |
| pH                     | -                        |     | 06JAN09 1424             | 93  |          | W27660-2     |           |
| Specific Conductance   | -                        |     | 06JAN09 1424             | 93  |          | W27659-2     |           |
| Specific Conductance   | -                        |     | 06JAN09 1424             | 93  |          | W27659-3     |           |
| Total Dissolved Solids | 08JAN09 1321             | 285 | 10JAN09 1202             | 285 |          | W27677-2     |           |
| Total Dissolved Solids | 08JAN09 1321             | 285 | 10JAN09 1202             | 285 |          | W27677-3     |           |
| Metals                 | 06JAN09 1509             | 282 | 06JAN09 1806             | 270 |          | S24647-2     |           |
| Metals                 | 06JAN09 1509             | 282 | 06JAN09 1809             | 270 |          | S24647-3     |           |
| Mercury                | 07JAN09 0854             | 282 | 07JAN09 1324             | 282 |          | S24650-2     |           |
| Mercury                | 07JAN09 0854             | 282 | 07JAN09 1328             | 282 |          | S24650-3     |           |
| Chloride               | -                        |     | 06JAN09 0957             | 257 |          | S24641-2     |           |
| Chloride               | -                        |     | 06JAN09 0957             | 257 |          | S24641-3     |           |
| Nitrate as N           | -                        |     | 06JAN09 0957             | 257 |          | S24641-2     |           |
| Nitrate as N           | -                        |     | 06JAN09 0957             | 257 |          | S24641-3     |           |
| Sulfate                | -                        |     | 06JAN09 0957             | 257 |          | S24641-2     |           |
| Sulfate                | -                        |     | 06JAN09 0957             | 257 |          | S24641-3     |           |
| Oil and Grease         | 06JAN09 0926             | 100 | 06JAN09 1009             | 100 |          | B5493-2      |           |
| Oil and Grease         | 06JAN09 0926             | 100 | 06JAN09 1009             | 100 |          | B5493-3      |           |

#### MATRIX SPIKE SAMPLES

| Analyte      | Date/Time<br>Prepared By |  | Date/Time<br>Analyzed By |     | Dilution | QC<br>Sample | Qualifier |
|--------------|--------------------------|--|--------------------------|-----|----------|--------------|-----------|
| Chloride     | -                        |  | 06JAN09 0957             | 257 |          | S24641-4     |           |
| Chloride     | -                        |  | 06JAN09 0957             | 257 |          | S24641-5     |           |
| Nitrate as N | -                        |  | 06JAN09 0957             | 257 |          | S24641-4     |           |
| Nitrate as N | -                        |  | 06JAN09 0957             | 257 |          | S24641-5     |           |
| Sulfate      | -                        |  | 06JAN09 0957             | 257 |          | S24641-4     |           |
| Sulfate      | -                        |  | 06JAN09 0957             | 257 |          | S24641-5     |           |

#### LABORATORY BLANKS

| Analyte                | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | QC<br>Sample | Qualifier |
|------------------------|--------------------------|-----|--------------------------|-----|----------|--------------|-----------|
| Specific Conductance   | -                        |     | 06JAN09 1424             | 93  |          | W27659-1     |           |
| Total Dissolved Solids | 08JAN09 1321             | 285 | 10JAN09 1202             | 285 |          | W27677-1     |           |
| Metals                 | 06JAN09 1509             | 282 | 07JAN09 1526             | 270 |          | S24647-1     |           |
| Mercury                | 07JAN09 0854             | 282 | 07JAN09 1155             | 282 |          | S24650-1     |           |





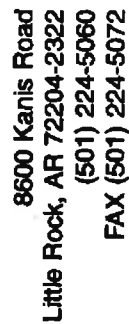
January 12, 2009  
Control No. 125681  
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Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

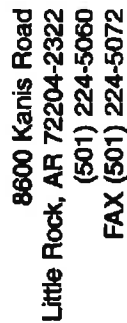
QUALITY CONTROL PREPARATION REPORT

LABORATORY BLANKS

| Analyte        | Date/Time    |     | Date/Time    |     | Dilution | QC       | Qualifier |
|----------------|--------------|-----|--------------|-----|----------|----------|-----------|
|                | Prepared By  |     | Analyzed By  |     |          | Sample   |           |
| Chloride       | -            |     | 06JAN09 0957 | 257 |          | S24641-1 |           |
| Nitrate as N   | -            |     | 06JAN09 0957 | 257 |          | S24641-1 |           |
| Sulfate        | -            |     | 06JAN09 0957 | 257 |          | S24641-1 |           |
| Oil and Grease | 06JAN09 0926 | 100 | 06JAN09 1009 | 100 |          | B5493-1  |           |



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January 6, 2009  
Control No. 125618  
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Southwestern Energy Exploration Company  
(SEECO)  
ATTN: Mr. Rusty Marvel  
980 Airport Road  
Ozark, AR 72949

Dear Mr. Rusty Marvel:

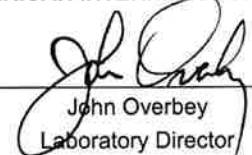
Project Description: Four (4) water sample(s) received on December 31, 2008  
Nehus 6-10 H-9

This report is the analytical results and supporting information for the samples submitted to American Interplex Corporation (AIC) on December 31, 2008. The following results are applicable only to the samples identified by the control number referenced above. Accurate assessment of the data requires access to the entire document. Each section of the report has been reviewed and approved by the laboratory director or a qualified designee.

Data has been validated using standard quality control measures performed on at least 10% of the samples analyzed. Quality Assurance, instrumentation, maintenance and calibration were performed in accordance with guidelines established by the cited methodology.

AMERICAN INTERPLEX CORPORATION

By \_\_\_\_\_

  
John Overbey  
Laboratory Director

Enclosure(s): Chains of Custody





Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

#### CASE NARRATIVE

#### SAMPLE RECEIPT

Received Temperature: 2°C

|                       |                                |   |
|-----------------------|--------------------------------|---|
| Receipt Verification: | Complete Chain of Custody      | Y |
|                       | Sample ID on Sample Labels     | Y |
|                       | Date and Time on Sample Labels | Y |
|                       | Proper Sample Containers       | Y |
|                       | Within Holding Times           | Y |
|                       | Adequate Sample Volume         | Y |
|                       | Sample Integrity               | Y |
|                       | Proper Temperature             | Y |
|                       | Proper Preservative            | Y |

#### COMMENTS

American Interplex Corporation analyzes pH, Total Residual Chlorine, and Dissolved Oxygen as soon as possible after laboratory receipt. Table II-Required Containers, Preservation Techniques, and Holding Times Requirements of 40 CFR Part 136.3 indicates these parameters are to be performed on site or immediately after aqueous collection.

#### QUALIFIERS

| Qualifiers | Definition   |
|------------|--|
| D          | Result is from a secondary dilution factor   |
| H          | Analytical holding time exceeded regulatory requirements                               |
| X          | Spiking level is invalid due to the high concentration of analyte in the spiked sample |

#### References:

"Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).

"Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.

"Standard Methods for the Examination of Water and Wastewaters", 20th edition, 1998.

"American Society for Testing and Materials" (ASTM).

"Association of Analytical Chemists" (AOAC).

"Self-Davis and Moore" (2000).

Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

### ANALYTICAL RESULTS

AIC No. 125618-1

Sample Identification: W1 12/30/08 2:00pm

| Analyte                       | Method           | Result | RL     | Units   | Batch  | Qualifier |
|-------------------------------|------------------|--------|--------|---------|--------|-----------|
| pH                            | EPA 9040B        | 6.9    | -      | Units   | W27654 | H         |
| Specific Conductance          | EPA 9050A        | 250    | 2      | umho/cm | W27638 |           |
| Total Dissolved Solids        | SM 2540C         | 200    | 10     | mg/l    | W27643 |           |
| Hardness as CaCO <sub>3</sub> | EPA 3005A, 6010B | 24     | 1      | mg/l    | S24623 |           |
| Arsenic                       | EPA 3010A, 6010B | < 0.05 | 0.05   | mg/l    | S24623 |           |
| Barium                        | EPA 3010A, 6010B | 3.8    | 0.002  | mg/l    | S24623 |           |
| Chromium                      | EPA 3010A, 6010B | 0.010  | 0.007  | mg/l    | S24623 |           |
| Lead                          | EPA 3010A, 6010B | 0.089  | 0.04   | mg/l    | S24623 |           |
| Sodium                        | EPA 3010A, 6010B | 41     | 1      | mg/l    | S24623 |           |
| Zinc                          | EPA 3010A, 6010B | 0.044  | 0.002  | mg/l    | S24623 |           |
| Mercury                       | EPA 7470A        | 0.0010 | 0.0002 | mg/l    | S24630 |           |
| Chloride                      | EPA 9056         | 27     | 2      | mg/l    | S24627 | D         |
| Nitrate as N                  | EPA 9056         | < 0.5  | 0.5    | mg/l    | S24627 | D         |
| Sulfate                       | EPA 9056         | 16     | 2      | mg/l    | S24627 | D         |
| Oil and Grease                | EPA 1664A        | < 5    | 5      | mg/l    | B5491  |           |

AIC No. 125618-2

Sample Identification: W2 12/30/08 2:00pm

| Analyte                       | Method           | Result   | RL     | Units   | Batch  | Qualifier |
|-------------------------------|------------------|----------|--------|---------|--------|-----------|
| pH                            | EPA 9040B        | 6.9      | -      | Units   | W27654 | H         |
| Specific Conductance          | EPA 9050A        | 210      | 2      | umho/cm | W27638 |           |
| Total Dissolved Solids        | SM 2540C         | 220      | 10     | mg/l    | W27643 |           |
| Hardness as CaCO <sub>3</sub> | EPA 3005A, 6010B | 5.3      | 1      | mg/l    | S24623 |           |
| Arsenic                       | EPA 3010A, 6010B | < 0.05   | 0.05   | mg/l    | S24623 |           |
| Barium                        | EPA 3010A, 6010B | 1.2      | 0.002  | mg/l    | S24623 |           |
| Chromium                      | EPA 3010A, 6010B | < 0.007  | 0.007  | mg/l    | S24623 |           |
| Lead                          | EPA 3010A, 6010B | 0.059    | 0.04   | mg/l    | S24623 |           |
| Sodium                        | EPA 3010A, 6010B | 36       | 1      | mg/l    | S24623 |           |
| Zinc                          | EPA 3010A, 6010B | 0.026    | 0.002  | mg/l    | S24623 |           |
| Mercury                       | EPA 7470A        | < 0.0002 | 0.0002 | mg/l    | S24630 |           |
| Chloride                      | EPA 9056         | 20       | 2      | mg/l    | S24627 | D         |
| Nitrate as N                  | EPA 9056         | < 0.5    | 0.5    | mg/l    | S24627 | D         |
| Sulfate                       | EPA 9056         | 14       | 2      | mg/l    | S24627 | D         |
| Oil and Grease                | EPA 1664A        | < 5      | 5      | mg/l    | B5491  |           |

AIC No. 125618-3

Sample Identification: W3 12/30/08 2:00pm

| Analyte                       | Method           | Result  | RL    | Units   | Batch  | Qualifier |
|-------------------------------|------------------|---------|-------|---------|--------|-----------|
| pH                            | EPA 9040B        | 6.7     | -     | Units   | W27654 | H         |
| Specific Conductance          | EPA 9050A        | 40      | 2     | umho/cm | W27638 |           |
| Total Dissolved Solids        | SM 2540C         | 55      | 10    | mg/l    | W27643 |           |
| Hardness as CaCO <sub>3</sub> | EPA 3005A, 6010B | 10      | 1     | mg/l    | S24623 |           |
| Arsenic                       | EPA 3010A, 6010B | < 0.05  | 0.05  | mg/l    | S24623 |           |
| Barium                        | EPA 3010A, 6010B | 0.024   | 0.002 | mg/l    | S24623 |           |
| Chromium                      | EPA 3010A, 6010B | < 0.007 | 0.007 | mg/l    | S24623 |           |

Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

ANALYTICAL RESULTS

AIC No. 125618-3 (Continued)

Sample Identification: W3 12/30/08 2:00pm

| Analyte        | Method           | Result   | RL     | Units | Batch  | Qualifier |
|----------------|------------------|----------|--------|-------|--------|-----------|
| Lead           | EPA 3010A, 6010B | < 0.04   | 0.04   | mg/l  | S24623 |           |
| Sodium         | EPA 3010A, 6010B | 2.8      | 1      | mg/l  | S24623 |           |
| Zinc           | EPA 3010A, 6010B | 0.0029   | 0.002  | mg/l  | S24623 |           |
| Mercury        | EPA 7470A        | < 0.0002 | 0.0002 | mg/l  | S24630 |           |
| Chloride       | EPA 9056         | 6.2      | 2      | mg/l  | S24627 | D         |
| Nitrate as N   | EPA 9056         | < 0.5    | 0.5    | mg/l  | S24627 | D         |
| Sulfate        | EPA 9056         | 7.4      | 2      | mg/l  | S24627 | D         |
| Oil and Grease | EPA 1664A        | < 5      | 5      | mg/l  | B5491  |           |

AIC No. 125618-4

Sample Identification: W4 12/30/08 2:00pm

| Analyte                       | Method           | Result   | RL     | Units   | Batch  | Qualifier |
|-------------------------------|------------------|----------|--------|---------|--------|-----------|
| pH                            | EPA 9040B        | 7.0      | -      | Units   | W27654 | H         |
| Specific Conductance          | EPA 9050A        | 36       | 2      | umho/cm | W27638 |           |
| Total Dissolved Solids        | SM 2540C         | 38       | 10     | mg/l    | W27643 |           |
| Hardness as CaCO <sub>3</sub> | EPA 3005A, 6010B | 9.3      | 1      | mg/l    | S24623 |           |
| Arsenic                       | EPA 3010A, 6010B | < 0.05   | 0.05   | mg/l    | S24623 |           |
| Barium                        | EPA 3010A, 6010B | 0.021    | 0.002  | mg/l    | S24623 |           |
| Chromium                      | EPA 3010A, 6010B | < 0.007  | 0.007  | mg/l    | S24623 |           |
| Lead                          | EPA 3010A, 6010B | < 0.04   | 0.04   | mg/l    | S24623 |           |
| Sodium                        | EPA 3010A, 6010B | 2.5      | 1      | mg/l    | S24623 |           |
| Zinc                          | EPA 3010A, 6010B | 0.0041   | 0.002  | mg/l    | S24623 |           |
| Mercury                       | EPA 7470A        | < 0.0002 | 0.0002 | mg/l    | S24630 |           |
| Chloride                      | EPA 9056         | 5.5      | 2      | mg/l    | S24627 | D         |
| Nitrate as N                  | EPA 9056         | < 0.5    | 0.5    | mg/l    | S24627 | D         |
| Sulfate                       | EPA 9056         | 6.7      | 2      | mg/l    | S24627 | D         |
| Oil and Grease                | EPA 1664A        | < 5      | 5      | mg/l    | B5491  |           |



Southwestern Energy Exploration Company  
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980 Airport Road  
Ozark, AR 72949

### SAMPLE PREPARATION REPORT

AIC No. 125618-1

| Analyte                       | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|-------------------------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| pH                            | -                        |     | 05JAN09 1406             | 93  |          | W27654 | H         |
| Specific Conductance          | -                        |     | 31DEC08 1550             | 93  |          | W27638 |           |
| Total Dissolved Solids        | 02JAN09 0909             | 285 | 06JAN09 0827             | 285 |          | W27643 |           |
| Hardness as CaCO <sub>3</sub> | 31DEC08 1324             | 270 | 31DEC08 1818             | 270 |          | S24623 |           |
| Metals                        | 31DEC08 1324             | 270 | 31DEC08 1820             | 270 |          | S24623 |           |
| Mercury                       | 02JAN09 0943             | 270 | 02JAN09 1405             | 282 |          | S24630 |           |
| Chloride                      | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Nitrate as N                  | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Sulfate                       | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Oil and Grease                | 05JAN09 1346             | 100 | 05JAN09 1533             | 100 |          | B5491  |           |

AIC No. 125618-2

| Analyte                       | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|-------------------------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| pH                            | -                        |     | 05JAN09 1406             | 93  |          | W27654 | H         |
| Specific Conductance          | -                        |     | 31DEC08 1550             | 93  |          | W27638 |           |
| Total Dissolved Solids        | 02JAN09 0909             | 285 | 06JAN09 0827             | 285 |          | W27643 |           |
| Hardness as CaCO <sub>3</sub> | 31DEC08 1324             | 270 | 31DEC08 1821             | 270 |          | S24623 |           |
| Metals                        | 31DEC08 1324             | 270 | 31DEC08 1823             | 270 |          | S24623 |           |
| Mercury                       | 02JAN09 0943             | 270 | 02JAN09 1408             | 282 |          | S24630 |           |
| Chloride                      | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Nitrate as N                  | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Sulfate                       | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Oil and Grease                | 05JAN09 1346             | 100 | 05JAN09 1533             | 100 |          | B5491  |           |

AIC No. 125618-3

| Analyte                       | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|-------------------------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| pH                            | -                        |     | 05JAN09 1406             | 93  |          | W27654 | H         |
| Specific Conductance          | -                        |     | 31DEC08 1550             | 93  |          | W27638 |           |
| Total Dissolved Solids        | 02JAN09 0909             | 285 | 06JAN09 0827             | 285 |          | W27643 |           |
| Hardness as CaCO <sub>3</sub> | 31DEC08 1324             | 270 | 31DEC08 1815             | 270 |          | S24623 |           |
| Metals                        | 31DEC08 1324             | 270 | 31DEC08 1817             | 270 |          | S24623 |           |
| Metals                        | 31DEC08 1324             | 270 | 02JAN09 1238             | 270 |          | S24623 |           |
| Mercury                       | 02JAN09 0943             | 270 | 02JAN09 1412             | 282 |          | S24630 |           |
| Chloride                      | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Nitrate as N                  | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Sulfate                       | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Oil and Grease                | 05JAN09 1346             | 100 | 05JAN09 1533             | 100 |          | B5491  |           |

AIC No. 125618-4

| Analyte                       | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|-------------------------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| pH                            | -                        |     | 05JAN09 1406             | 93  |          | W27654 | H         |
| Specific Conductance          | -                        |     | 31DEC08 1550             | 93  |          | W27638 |           |
| Total Dissolved Solids        | 02JAN09 0909             | 285 | 06JAN09 0827             | 285 |          | W27643 |           |
| Hardness as CaCO <sub>3</sub> | 31DEC08 1324             | 270 | 31DEC08 1824             | 270 |          | S24623 |           |





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Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

SAMPLE PREPARATION REPORT

AIC No. 125618-4 (Continued)

| Analyte        | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | Batch  | Qualifier |
|----------------|--------------------------|-----|--------------------------|-----|----------|--------|-----------|
| Metals         | 31DEC08 1324             | 270 | 31DEC08 1826             | 270 |          | S24623 |           |
| Metals         | 31DEC08 1324             | 270 | 02JAN09 1241             | 270 |          | S24623 |           |
| Mercury        | 02JAN09 0943             | 270 | 02JAN09 1416             | 282 |          | S24630 |           |
| Chloride       | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Nitrate as N   | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Sulfate        | -                        |     | 31DEC08 1537             | 257 | 10       | S24627 | D         |
| Oil and Grease | 05JAN09 1346             | 100 | 05JAN09 1533             | 100 |          | B5491  |           |



Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
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SAMPLE DUPLICATE RESULTS

AIC No. 125618-1

| Analyte              | Method    | Sample Result | Duplicate Result | Units   | RPD   | RPD Limit | Batch  | Qualifier |
|----------------------|-----------|---------------|------------------|---------|-------|-----------|--------|-----------|
| Specific Conductance | EPA 9050A | 250           | 250              | umho/cm | 0.402 | 10        | W27638 |           |
| pH                   | EPA 9040B | 6.9           | 6.8              | Units   | 0.585 | 5         | W27654 |           |

LABORATORY CONTROL SAMPLE RESULTS

| Analyte                | Spike Amount | % Recovery | % Recovery Limits | RPD   | RPD Limit | Batch  | Qualifier |
|------------------------|--------------|------------|-------------------|-------|-----------|--------|-----------|
| pH                     | -            | 100/100    | 98-102            | 0.00  | 5         | W27654 |           |
| Specific Conductance   | 1412 umho/cm | 97.7/95.6  | 90-110            | 2.20  | 2.86      | W27638 |           |
| Total Dissolved Solids | 250 mg/l     | 103/101    | 85-115            | 1.96  | 10        | W27643 |           |
| Arsenic                | 5 mg/l       | 99.5/98.9  | 85-115            | 0.578 | 20        | S24623 |           |
| Barium                 | 0.5 mg/l     | 98.2/98.0  | 85-115            | 0.175 | 20        | S24623 |           |
| Chromium               | 0.5 mg/l     | 97.3/97.0  | 85-115            | 0.324 | 20        | S24623 |           |
| Lead                   | 5 mg/l       | 98.3/98.1  | 85-115            | 0.214 | 20        | S24623 |           |
| Sodium                 | 10 mg/l      | 97.5/98.6  | 85-115            | 1.12  | 20        | S24623 |           |
| Zinc                   | 0.5 mg/l     | 98.1/97.5  | 85-115            | 0.679 | 20        | S24623 |           |
| Mercury                | 0.0025 mg/l  | 100/99.2   | 85-115            | 1.20  | 20        | S24630 |           |
| Chloride               | 5 mg/l       | 91.0/92.6  | 90-110            | 1.74  | 10        | S24627 |           |
| Nitrate as N           | 5 mg/l       | 104/105    | 90-110            | 0.575 | 10        | S24627 |           |
| Sulfate                | 5 mg/l       | 102/105    | 90-110            | 3.28  | 10        | S24627 |           |
| Oil and Grease         | 40 mg/l      | 96.0/97.5  | 78-114            | 1.55  | 20        | B5491  |           |

MATRIX SPIKE SAMPLE RESULTS

| Analyte      | Spike Amount | % Recovery | % Recovery Limits | RPD    | RPD Limit | Batch  | Qualifier |
|--------------|--------------|------------|-------------------|--------|-----------|--------|-----------|
| Arsenic      | 5 mg/l       | 99.3/99.5  | 75-125            | 0.210  | 20        | S24623 |           |
| Barium       | 0.5 mg/l     | 98.5/98.7  | 75-125            | 0.220  | 20        | S24623 |           |
| Chromium     | 0.5 mg/l     | 97.8/97.5  | 75-125            | 0.304  | 20        | S24623 |           |
| Lead         | 5 mg/l       | 98.1/98.5  | 75-125            | 0.364  | 20        | S24623 |           |
| Sodium       | 10 mg/l      | 101/101    | 75-125            | 0.0791 | 20        | S24623 |           |
| Zinc         | 0.5 mg/l     | 96.9/97.6  | 75-125            | 0.772  | 20        | S24623 |           |
| Chloride     | 5 mg/l       | - / -      | 80-120            | 8.97   | 10        | S24627 | X         |
| Nitrate as N | 5 mg/l       | 95.4/94.0  | 80-120            | 1.48   | 10        | S24627 |           |
| Sulfate      | 5 mg/l       | 87.8/85.4  | 80-120            | 2.04   | 10        | S24627 |           |



Southwestern Energy Exploration Company  
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980 Airport Road  
Ozark, AR 72949

LABORATORY BLANK RESULTS

| Analyte                | Method           | Result   | Units   | RL     | PQL    | QC       |      |
|------------------------|------------------|----------|---------|--------|--------|----------|------|
|                        |                  |          |         |        |        | Sample   | Qual |
| Specific Conductance   | EPA 9050A        | < 2      | umho/cm | 2      | 2      | W27638-1 |      |
| Total Dissolved Solids | SM 2540C         | < 10     | mg/l    | 10     | 10     | W27643-1 |      |
| Arsenic                | EPA 3010A, 6010B | < 0.05   | mg/l    | 0.05   | 0.05   | S24623-1 |      |
| Barium                 | EPA 3010A, 6010B | < 0.002  | mg/l    | 0.002  | 0.002  | S24623-1 |      |
| Chromium               | EPA 3010A, 6010B | < 0.007  | mg/l    | 0.007  | 0.007  | S24623-1 |      |
| Lead                   | EPA 3010A, 6010B | < 0.04   | mg/l    | 0.04   | 0.04   | S24623-1 |      |
| Sodium                 | EPA 3010A, 6010B | < 1      | mg/l    | 1      | 1      | S24623-1 |      |
| Zinc                   | EPA 3010A, 6010B | < 0.002  | mg/l    | 0.002  | 0.002  | S24623-1 |      |
| Mercury                | EPA 7470A        | < 0.0002 | mg/l    | 0.0002 | 0.0002 | S24630-1 |      |
| Chloride               | EPA 9056         | < 0.2    | mg/l    | 0.2    | 0.2    | S24627-1 |      |
| Nitrate as N           | EPA 9056         | < 0.05   | mg/l    | 0.05   | 0.05   | S24627-1 |      |
| Sulfate                | EPA 9056         | < 0.2    | mg/l    | 0.2    | 0.2    | S24627-1 |      |
| Oil and Grease         | EPA 1664A        | < 5      | mg/l    | 5      | 5      | B5491-1  |      |



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Southwestern Energy Exploration Company  
(SEECO)  
980 Airport Road  
Ozark, AR 72949

### QUALITY CONTROL PREPARATION REPORT

#### DUPLICATE SAMPLES

| Analyte              | Date/Time<br>Prepared By | Date/Time<br>Analyzed By | Dilution | QC<br>Sample | Qualifier |
|----------------------|--------------------------|--------------------------|----------|--------------|-----------|
| pH                   | -                        | 05JAN09 1406             | 93       | W27654-3     |           |
| Specific Conductance | -                        | 31DEC08 1551             | 93       | W27638-4     |           |

#### LABORATORY CONTROL SAMPLES

| Analyte                | Date/Time<br>Prepared By | Date/Time<br>Analyzed By | Dilution | QC<br>Sample | Qualifier |
|------------------------|--------------------------|--------------------------|----------|--------------|-----------|
| pH                     | -                        | 05JAN09 1406             | 93       | W27654-1     |           |
| pH                     | -                        | 05JAN09 1406             | 93       | W27654-2     |           |
| Specific Conductance   | -                        | 31DEC08 1551             | 93       | W27638-2     |           |
| Specific Conductance   | -                        | 31DEC08 1551             | 93       | W27638-3     |           |
| Total Dissolved Solids | 02JAN09 0909 285         | 06JAN09 0827 285         | 285      | W27643-2     |           |
| Total Dissolved Solids | 02JAN09 0909 285         | 06JAN09 0827 285         | 285      | W27643-3     |           |
| Metals                 | 31DEC08 1325 270         | 31DEC08 1805 270         | 270      | S24623-2     |           |
| Metals                 | 31DEC08 1325 270         | 31DEC08 1808 270         | 270      | S24623-3     |           |
| Mercury                | 02JAN09 0944 270         | 02JAN09 1350 282         | 282      | S24630-2     |           |
| Mercury                | 02JAN09 0944 270         | 02JAN09 1354 282         | 282      | S24630-3     |           |
| Chloride               | -                        | 31DEC08 1538 257         | 257      | S24627-2     |           |
| Chloride               | -                        | 31DEC08 1538 257         | 257      | S24627-3     |           |
| Nitrate as N           | -                        | 31DEC08 1538 257         | 257      | S24627-2     |           |
| Nitrate as N           | -                        | 31DEC08 1538 257         | 257      | S24627-3     |           |
| Sulfate                | -                        | 31DEC08 1538 257         | 257      | S24627-2     |           |
| Sulfate                | -                        | 31DEC08 1538 257         | 257      | S24627-3     |           |
| Oil and Grease         | 05JAN09 1347 100         | 05JAN09 1533 100         | 100      | B5491-2      |           |
| Oil and Grease         | 05JAN09 1347 100         | 05JAN09 1533 100         | 100      | B5491-3      |           |

#### MATRIX SPIKE SAMPLES

| Analyte      | Date/Time<br>Prepared By | Date/Time<br>Analyzed By | Dilution | QC<br>Sample | Qualifier |
|--------------|--------------------------|--------------------------|----------|--------------|-----------|
| Metals       | 31DEC08 1325 270         | 31DEC08 1811 270         | 270      | S24623-4     |           |
| Metals       | 31DEC08 1325 270         | 31DEC08 1814 270         | 270      | S24623-5     |           |
| Chloride     | -                        | 31DEC08 1538 257         | 257      | S24627-4     | X         |
| Chloride     | -                        | 31DEC08 1538 257         | 257      | S24627-5     | X         |
| Nitrate as N | -                        | 31DEC08 1538 257         | 257      | S24627-4     |           |
| Nitrate as N | -                        | 31DEC08 1538 257         | 257      | S24627-5     |           |
| Sulfate      | -                        | 31DEC08 1538 257         | 257      | S24627-4     |           |
| Sulfate      | -                        | 31DEC08 1538 257         | 257      | S24627-5     |           |

#### LABORATORY BLANKS

| Analyte              | Date/Time<br>Prepared By | Date/Time<br>Analyzed By | Dilution | QC<br>Sample | Qualifier |
|----------------------|--------------------------|--------------------------|----------|--------------|-----------|
| Specific Conductance | -                        | 31DEC08 1551             | 93       | W27638-1     |           |





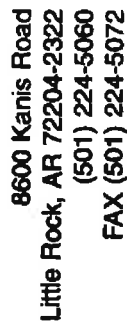
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980 Airport Road  
Ozark, AR 72949

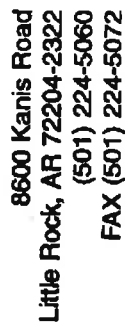
QUALITY CONTROL PREPARATION REPORT

LABORATORY BLANKS

| Analyte                | Date/Time<br>Prepared By |     | Date/Time<br>Analyzed By |     | Dilution | QC<br>Sample | Qualifier |
|------------------------|--------------------------|-----|--------------------------|-----|----------|--------------|-----------|
| Total Dissolved Solids | 02JAN09 0909             | 285 | 06JAN09 0827             | 285 |          | W27643-1     |           |
| Metals                 | 31DEC08 1325             | 270 | 31DEC08 1802             | 270 |          | S24623-1     |           |
| Metals                 | 31DEC08 1325             | 270 | 02JAN09 1335             | 270 |          | S24623-1     |           |
| Mercury                | 02JAN09 0944             | 270 | 02JAN09 1347             | 282 |          | S24630-1     |           |
| Chloride               | -                        |     | 31DEC08 1538             | 257 |          | S24627-1     |           |
| Nitrate as N           | -                        |     | 31DEC08 1538             | 257 |          | S24627-1     |           |
| Sulfate                | -                        |     | 31DEC08 1538             | 257 |          | S24627-1     |           |
| Oil and Grease         | 05JAN09 1347             | 100 | 05JAN09 1533             | 100 |          | B5491-1      |           |



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May 28, 2009

Mr. George Sheffer  
SEECO, Inc.  
P.O. Box 789  
Conway, SR. 72033

RE: Violations at Various Locations

Dear Mr. Sheffer:

Listed below are the violations that have been documented through inspections conducted by our Field Services Inspectors. These violations are in addition to the violations listed in the CAO we will be meeting on soon.

|          |  |   |
|----------|--|---|
| 12-30-08 | Nehus #6-10H9<br>00294-WG-P                      | -Unauthorized discharge to waters of the State<br>-No sediment controls were in place   |
| 2-23-09  | Desoto Rig 30                                    | -Discharge to waters of the State<br>-Water discharged exceeded Water Quality Stds.   |
| 3-19-09  | McCoy, Kenneth 8-15 #1, 2, 3, 4-07<br>00447-WG-P | -Sediment controls not maintained   |
| 4-3-09   | Gordon 10-06 #2-11H & #3-11H<br>Auth. 08896      | -Holes in liner   |
| 4-16-09  | Reynolds 8-11 1-09<br>00368-WG-P                 | -Unauthorized discharge to waters of the State<br>-Land applying without a permit<br>-Sediment runoff to waters of the State<br>-Sediment controls not installed in accordance with RAPPs document<br>-Trash in reserve pit |
| 4-23-09  | Jacobs 4-23H<br>00180-WG-LA                      | -Application of fluids more than one time and from different location.<br>-No data for Henderson 1014 reserve pit   |
| 4-23-09  | Henderson 1-14<br>2008110                        | -Reserve pit contents transported to Jacobs reserve pit<br>-Land application without proper permit  |

-No analyses of soils or reserve pit fluid  
characterization

4-23-09      Jacobs 4-23 Reserve  
Pit #2008929      -Reserve pit was leaking causing unpermitted  
discharge  
-Leak not reported to ADEQ

When we meet, we will discuss the above listed violations and how you plan to address them. In the meantime, if you have any questions and/or comments, please free to contact me at 501-682-0640 or email [garner@adeq.state.ar.us](mailto:garner@adeq.state.ar.us).

Sincerely,

A handwritten signature in cursive script that reads "Cindy Garner".

Cindy Garner  
Technical Assistance Manager  
Water Enforcement Branch Manager





ARKANSAS  
Department of Environmental Quality

September 9, 2009

Rusty Marvel  
Senior HS&E Coordinator  
Seeco, Inc.  
P.O Box 13408  
Fayetteville, AR 72703

RE: State Permit No. 00294-WG-P, Response to Inspection, Nehus 6-10H9

Dear Mr. Marvel:

The Department has received your response dated January 26, 2009 to the December 30, 2008 inspection of the Nehus 6-10H9 well location by District Field Inspector Greg Kremers.

Your letter appears to adequately address the discrepancies identified during the inspection. The Department assumes the corrective actions taken will be maintained to ensure consistent compliance with the requirements of the permit. Acceptance of this response by the Department does not preclude any future enforcement action deemed necessary at this site or any other site.

The Department will keep the inspection and response on file. If future violations occur that require enforcement action, the Department will consider the inspection and response as required by the Pollution Control and Ecology Commission Regulation No. 7, Civil Penalties. This regulation requires the Department to consider the past history of your company and how expeditiously the violations were addressed in determining any civil penalty that may be necessary for any future violations.

If we need further information concerning this matter, we will contact you. Thank you for your attention to this matter. Should you have any questions, feel free to contact me at 501-682-0635 or you may e-mail me at [anderson@adeq.state.ar.us](mailto:anderson@adeq.state.ar.us).

Sincerely,

A handwritten signature in cursive script that reads "Alan Anderson".

Alan Anderson  
Enforcement Analyst  
Water Division Enforcement Branch