



DOCUMENT #2216583

RECEIVED 10/21/2011

SUNDRY NOTICE

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

1. OGCC Operator Number: 10128	4. Contact Name: John Suchar	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Bargath LLC	Phone: 970-623-8988	
3. Address: 4289 County Road 215 City: Parachute State: CO Zip: 81635	Fax:	
5. API Number 05- N/A	OGCC Facility ID Number 421719	Survey Plat
6. Well/Facility Name: Jangles Compressor Station	7. Well/Facility Number N/A	Directional Survey
8. Location (Qtr/Tr, Sec, Twp, Rng, Meridian): SWSE, S20, T6S, R96W, 6PM		Surface Eqpmt Diagram
9. County: Garfield	10. Field Name: N/A	Technical Info Page
11. Federal, Indian or State Lease Number: N/A		Other

General Notice

CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bottomhole location Qtr/Tr, Sec, Twp, Rng, Mer \_\_\_\_\_  
 Latitude \_\_\_\_\_ Distance to nearest property line \_\_\_\_\_ Distance to nearest bldg, public rd, utility or RR \_\_\_\_\_  
 Longitude \_\_\_\_\_ Distance to nearest lease line \_\_\_\_\_ Is location in a High Density Area (rule 603b)? Yes/No   
 Ground Elevation \_\_\_\_\_ Distance to nearest well same formation \_\_\_\_\_ Surface owner consultation date: \_\_\_\_\_

GPS DATA:  
 Date of Measurement \_\_\_\_\_ PDOP Reading \_\_\_\_\_ Instrument Operator's Name \_\_\_\_\_

CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

Remove from surface bond  
Signed surface use agreement attached

CHANGE OF OPERATOR (prior to drilling):  
 Effective Date: \_\_\_\_\_  
 Plugging Bond:  Blanket  Individual

CHANGE WELL NAME NUMBER  
 From: \_\_\_\_\_  
 To: \_\_\_\_\_  
 Effective Date: \_\_\_\_\_

ABANDONED LOCATION:  
 Was location ever built?  Yes  No  
 Is site ready for inspection?  Yes  No  
 Date Ready for Inspection: \_\_\_\_\_

NOTICE OF CONTINUED SHUT IN STATUS  
 Date well shut in or temporarily abandoned: \_\_\_\_\_  
 Has Production Equipment been removed from site?  Yes  No  
 MIT required if shut in longer than two years. Date of last MIT \_\_\_\_\_

SPUD DATE: \_\_\_\_\_

REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK \*submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.  
 Final reclamation will commence on approximately \_\_\_\_\_  Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

Notice of Intent Approximate Start Date: \_\_\_\_\_

Report of Work Done Date Work Completed: \_\_\_\_\_

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input checked="" type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases
<input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Other: _____	

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

Signed: Date: 10/18/2011 Email: John.Suchar@Williams.com  
Print Name: John Suchar Title: Environmental Specialist

COGCC Approved: Amber Peterson for Alex Fischer West Supervisor 10/21/2011

CONDITIONS OF APPROVAL, IF ANY:

**TECHNICAL INFORMATION PAGE**



FOR OGCC USE ONLY

1. OGCC Operator Number: _____	API Number: _____
2. Name of Operator: _____	OGCC Facility ID # _____
3. Well/Facility Name: _____	Well/Facility Number: _____
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): _____	

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

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

ATTACHMENT A






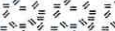

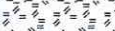

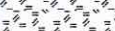

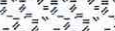

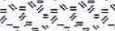

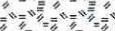

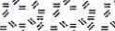







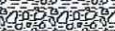

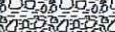

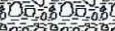

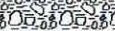





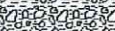





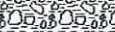







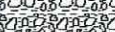
MONITORING WELL SUMMARIES

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 3/22/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** BH10/MW-1  
**Total Depth:** 95 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504388  
**Longitude:** -108.131528  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					
0					Ground Surface
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					

**Fill**  
Intermixed silt, clay, gravels and cobbles, light gray, moist.

**Gravelly Clay**  
light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at 55 to 60 feet.

PID readings collected at end of discharge line  
 PID 10 feet 0  
 PID 20 feet 0  
 PID 30 feet 0  
 PID 40 feet 2.3  
 PID 50 feet 1.7


Completion Information  
 Screened Interval 70-90 feet  
 TOS 68 feet  
 TOB 2 feet  
 Cemented from 0-2 feet

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 3/22/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** BH10/MW-1  
**Total Depth:** 95 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504388  
**Longitude:** -108.131528  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
52					<p>Static water level after completion was approximately 58 feet.</p>
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					
76					
78					
80					
82					
84					
86					
88					
90				<p><b>Shale (Bedrock)</b> Dark to very dark gray, brittle, platy, dry, (Wasatch).</p>	
92					
94					
96					
98					
100					
102					

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 6/10/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-1A  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504402  
**Longitude:** -108.131530  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					

**Fill**  
Intermixed silt, clay, gravels and cobbles, light gray, moist.

**Gravelly Clay**  
Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 47 feet. Moderate hydrocarbon odor at the discharge line from 45-50 feet.

PID readings were collected at the end of the discharge line.  
PID 10 feet 1.2  
PID 20 feet 1  
PID 30 feet 1.3  
PID 40 feet 3.5  
PID 50 feet 97.2

**Completion Information**  
Screened Interval 35-70 feet  
TOS 32 feet  
TOB 1 foot  
Cemented from 0-1 foot

**Gravels Cobbles Sand Some Silt**  
Light yellowish brown, saturated, gravels and cobbles in a slightly silty and medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, slight hydrocarbon odor, no staining, had to add water at 50 feet to get the cuttings to the surface due to saturated conditions.

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 5/4/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-2  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504464  
**Longitude:** -108.131571  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					

**Fill**  
Intermixed silt, clay, gravels and cobbles, light gray, moist.

**Gravelly Clay**  
Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 47 feet. Slight hydrocarbon odor at the discharge line from 45-50 feet.

PID readings were collected at the end of the discharge line.  
 PID 10 feet 1.2  
 PID 20 feet 1  
 PID 30 feet 1.3  
 PID 40 feet 3.5  
 PID 45 feet 72.3

**Completion Information**  
 Screened Interval 45-70 feet  
 TOS 40 feet  
 TOB 1 foot  
 Cemented from 0-1 feet

**Gravels Cobbles Sand Some Silt**  
 Light yellowish brown, saturated, gravels and cobbles in a slightly silty and medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, had to add water at 48 feet to get the cuttings to the surface due to saturated conditions.

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 5/4/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-3  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504280  
**Longitude:** -108.131494  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					<b>Fill</b> Intermixed silt, clay, gravels and cobbles, light gray, moist.
12					
14					
16					
18					
20					<b>Gravelly Clay</b> light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 47 feet.
22					
24					
26					
28					
30					PID readings were collected at the end of the discharge line. PID 10 feet 1.2 PID 20 feet 1 PID 30 feet 1.3 PID 40 feet 1 PID 50 feet 1.4
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					<b>Completion Information</b> Screened Interval 45-70 feet TOS 43 feet TOB 1 foot Cemented from 0-1 feet
54					
56					
58					
60					
62					
64					<b>Gravels Cobbles Sand Some Silt</b> Light yellowish brown, saturated, gravels and cobbles in a slightly silty and medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, had to add water at 50 feet to get the cuttings to the surface due to saturated conditions.
66					
68					
70					
72					
74					

# Well Summary

744 Horizon Court, Ste. 140  
 Grand Junction, CO 81501  
 970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 5/3-4/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-4  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504229  
**Longitude:** -108.131639  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					

**Fill**  
 Intermixed silt, clay, gravels and cobbles, light gray, moist.

**Gravelly Clay**  
 Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 45 feet.

PID readings were collected at the end of the discharge line.  
 PID 10 feet 1.4  
 PID 20 feet 1.3  
 PID 30 feet 1.1  
 PID 40 feet 1  
 PID 50 feet 12

**Completion Information**  
 Screened Interval 45-70 feet  
 TOS 42.5 feet  
 TOB 1 foot  
 Cemented from 0-1 feet

**Gravels Cobbles Sand**  
 Light yellowish brown, saturated, gravels and cobbles in a medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, Did not have to add water as the well bore is making enough water on it's own to lift the cuttings to the surface.

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 5/3/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-5  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504091  
**Longitude:** -108.131599  
**Logged By:** M.E. Mumby

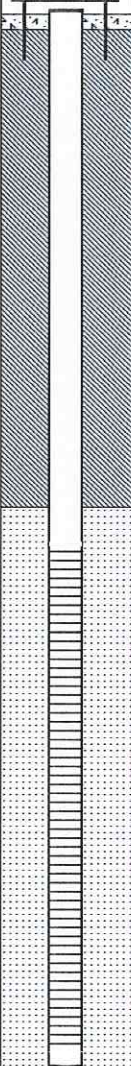
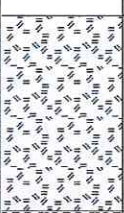
Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					<b>Fill</b> Intermixed silt, clay, gravels and cobbles, light gray, moist.
8					
10					
12					
14					<b>Gravelly Clay</b> light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 50 feet.
16					
18					
20					
22					PID readings were collected at the end of the discharge line.
24					PID 10 feet 1.2
26					PID 20 feet 1
28					PID 30 feet 1.3
30					PID 40 feet 1
32					PID 50 feet 1.4
34					
36					
38					
40					
42					
44					
46					
48					
50					<b>Completion Information</b>
52					Screened Interval 50-70 feet
54					TOS 45 feet
56					TOB 1 foot
58					Cemented from 0-1 feet
60					
62					
64					<b>Gravels Cobbles Sand Some Silt</b>
66					Light yellowish brown, saturated, gravels and cobbles in a slightly silty and medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, had to add water at 50 feet to get the cuttings to the surface due to saturated conditions.
68					
70					
72					
74					

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 6/9/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-6  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504570  
**Longitude:** -108.131635  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					<p><b>Fill</b> Intermixed silt, clay, gravels and cobbles, light gray, moist.</p>
2					<p><b>Gravelly Clay</b> Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 49 feet.</p> <p>PID readings were collected at the end of the discharge line.                      PID 10 feet 1.2                      PID 20 feet 1                      PID 30 feet 1.3                      PID 40 feet 2.7                      PID 50 feet 2.0</p> <p>Completion Information                      Screened Interval 35-70 feet                      TOS 32.7 feet                      TOB 1 foot                      Cemented from 0-1 feet</p>
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					
					<p><b>Gravels Cobbles Sand Some Silt</b> Light yellowish brown, saturated, gravels and cobbles in a slightly silty and medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, had to add water at 48 feet to get the cuttings to the surface due to saturated conditions.</p>

# Well Summary

744 Horizon Court, Ste. 140  
 Grand Junction, CO 81501  
 970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 6/9/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-7  
**Total Depth:** 70 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504545  
**Longitude:** -108.131970  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					<b>Fill</b> Intermixed silt, clay, gravels and cobbles, light gray, moist.
4					
6					
8					
10					<b>Gravelly Clay</b> Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 49 feet.
12					
14					
16					
18					
20					PID readings were collected at the end of the discharge line. PID 10 feet 0.8 PID 20 feet 1 PID 30 feet 1.2 PID 40 feet 1.0 PID 50 feet 1.3
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					Completion Information Screened Interval 35-70 feet TOS 33 feet TOB 1 foot Cemented from 0-1 feet
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					<b>Gravels Cobbles Sand Some Silt</b> Light yellowish brown, saturated, gravels and cobbles in a slightly silty and medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, had to add water at 48 feet to get the cuttings to the surface due to saturated conditions.
64					
66					
68					
70					
72					<b>Bedrock</b> Medium gray siltstone with interbedded shale (Wasatch)
74					
76					

# Well Summary

744 Horizon Court, Ste. 140  
 Grand Junction, CO 81501  
 970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 6/9/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-8  
**Total Depth:** 58 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504117  
**Longitude:** -108.132131  
**Logged By:** M.E. Mumby

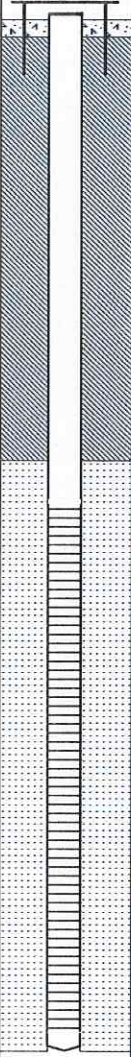

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					<b>Fill</b> Intermixed silt, clay, gravels and cobbles, light gray, moist.
8					
10					
12					
14					<b>Gravelly Clay</b> Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 43 feet.  PID readings were collected at the end of the discharge line. PID 10 feet 1.4 PID 20 feet 1.3 PID 30 feet 1.1 PID 40 feet 1
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					Completion Information Screened Interval 33-58 feet TOS 32.5 feet TOB 1 foot Cemented from 0-1 feet
44					
46					
48					
50					
52					
54					<b>Gravels Cobbles Sand</b> Light yellowish brown, saturated, gravels and cobbles in a medium to fine grained sand matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining, becomes very sandy from 56 to 58 feet. Only had to add a very small amount of water as the well bore is making quite a bit of water in order to lift the cuttings to the surface.
56					
58					
60					
62					
64					

## Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 6/10/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-9  
**Total Depth:** 56 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504522  
**Longitude:** -108.131290  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					<p><b>Gravelly Clay</b> Light yellowish brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 43 feet.</p> <p>PID readings were collected at the end of the discharge line. PID 10 feet 1.2 PID 20 feet 1.0 PID 30 feet 8.7</p> <p>Completion Information Screened Interval 26-56 feet TOS 24 feet TOB 1 foot Cemented from 0-1 feet</p>
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					<p><b>Gravels Cobbles Sand Silt</b> Light yellowish brown, saturated, gravels and cobbles in a medium to fine grained sand/silt matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining. Had to add water at approximately 33 feet due to saturated conditions and in order to lift the cuttings to the surface.</p>
46					
48					
50					
52					
54					
56					
58					
60					

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 9/9/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-10 (Dry)  
**Total Depth:** 80 feet  
**Elevation TOC:**  
**Elevation Ground:**  
**Latitude:** 39.504662  
**Longitude:** -108.130945  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					
76					
78					
80					

**Clay**  
 Light yellowish brown to brown, dry, occasional small cobbles (< 1 foot in dia.), starting to see an increase in the size and number of cobbles at approximately 15 feet, grading to a gravelly clay by 20 feet.

**Gravelly Clay**  
 Light yellowish brown to brown, dry, becoming slightly moist at approximately 45 feet, scattered to abundant large cobbles consisting primarily of siltstone and sandstone.

PID readings were collected at the end of the discharge line.  
 PID 10 feet 1.0  
 PID 20 feet 1.1  
 PID 30 feet 1.0  
 PID 40 feet 1.1  
 PID 50 feet 1.0

Completion Information:  
 Well was not completed (Dry Hole)  
 Hole plugged with bentonite chips hydrated every 5 feet to surface.

**Silty Sand**  
 Light brown becoming increasingly light gray, moist, sands are fine grained, occasional gravels or rock fragments consisting primarily of sandstone, Weathered bedrock?

**Siltstone**  
 Light gray, dry, appears to be some interbedded sandstone based on the cuttings returns to surface.

**Shale**  
 Light to medium gray, firm, silty, blocky texture, dry.

**Siltstone**  
 Color as above, dry, scattered interbedded shale, sandy in some zones, dry.

# Well Summary

744 Horizon Court, Ste. 140  
 Grand Junction, CO 81501  
 970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 9/10/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-11  
**Total Depth:** 70 feet  
**Elevation TOC:** 5538.05 feet  
**Elevation Ground:**  
**Latitude:** 39.504509  
**Longitude:** -108.130701  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					

**Gravelly Clay**

Light yellowish brown to brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 48 feet, moderate hydrocarbon odor from 50 to 55 feet, no odors below 55 feet.

PID readings were collected at the end of the discharge line.  
 PID 10 feet 1.2  
 PID 20 feet 1.0  
 PID 30 feet 2.0  
 PID 40 feet 2.0  
 PID 50 feet prior to injection 28.7

Completion Information  
 Screened Interval 30 to 70 feet  
 TOS 28 feet  
 TOB 1 foot  
 Cemented from 0-1 feet

**Gravels Cobbles Sand Silt**

Light yellowish brown, saturated, gravels and cobbles in a medium to fine grained sand/silt matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining. Had to add water at approximately 50 feet due to saturated conditions and in order to lift the cuttings to the surface.

# Well Summary

744 Horizon Court, Ste. 140  
Grand Junction, CO 81501  
970-243-3271

**Project:** Bargath, LLC  
**Location:** Jangles Compressor Station  
**Date(s):** 9/10/2011  
**Contractor:** Himes Drilling Company, Inc.  
**Rig Type:** Schramm T-300  
**Drilling Method:** Air Rotary  
**Sample Type:** Cuttings

**Well Name:** MW-12  
**Total Depth:** 75 feet  
**Elevation TOC:** 5532.76 feet  
**Elevation Ground:**  
**Latitude:** 39.504339  
**Longitude:** -108.130508  
**Logged By:** M.E. Mumby

Depth	Sample Interval	Recovery	Well Construction	Graphic Log	Material Description
-2					Ground Surface
0					
2					
4					
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					
40					
42					
44					
46					
48					
50					
52					
54					
56					
58					
60					
62					
64					
66					
68					
70					
72					
74					
76					

**Gravelly Clay**  
 Light yellowish brown to brown, dry, scattered large cobbles consisting of sandstone and shale, cobbles are increasing in number and size with depth, starting to see an increase in moisture content at approximately 50 feet, no hydrocarbon odor was noted.

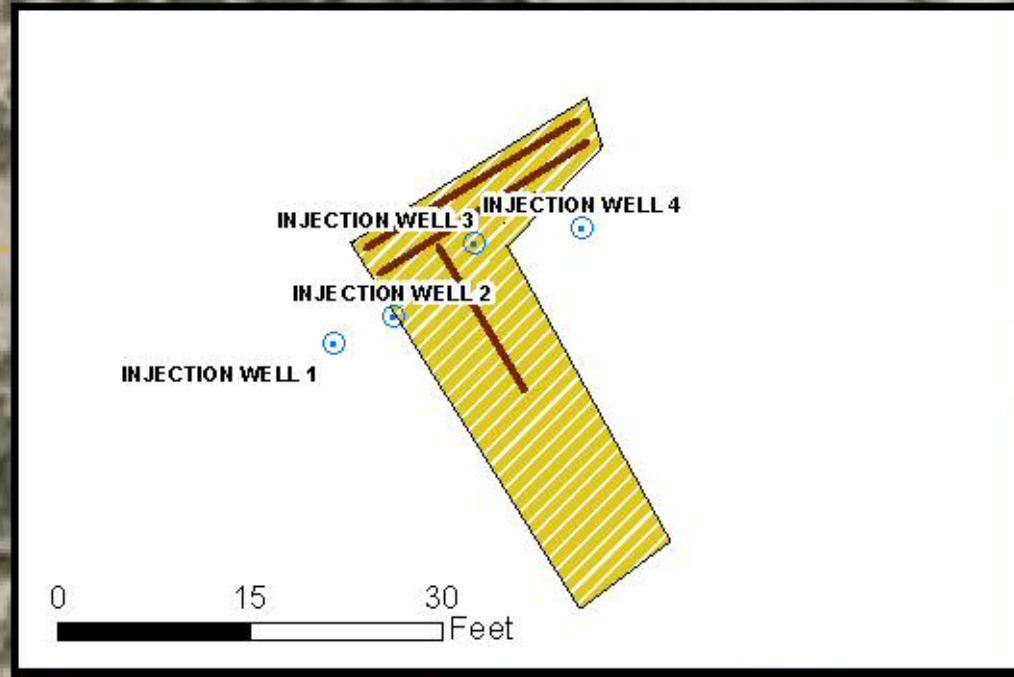
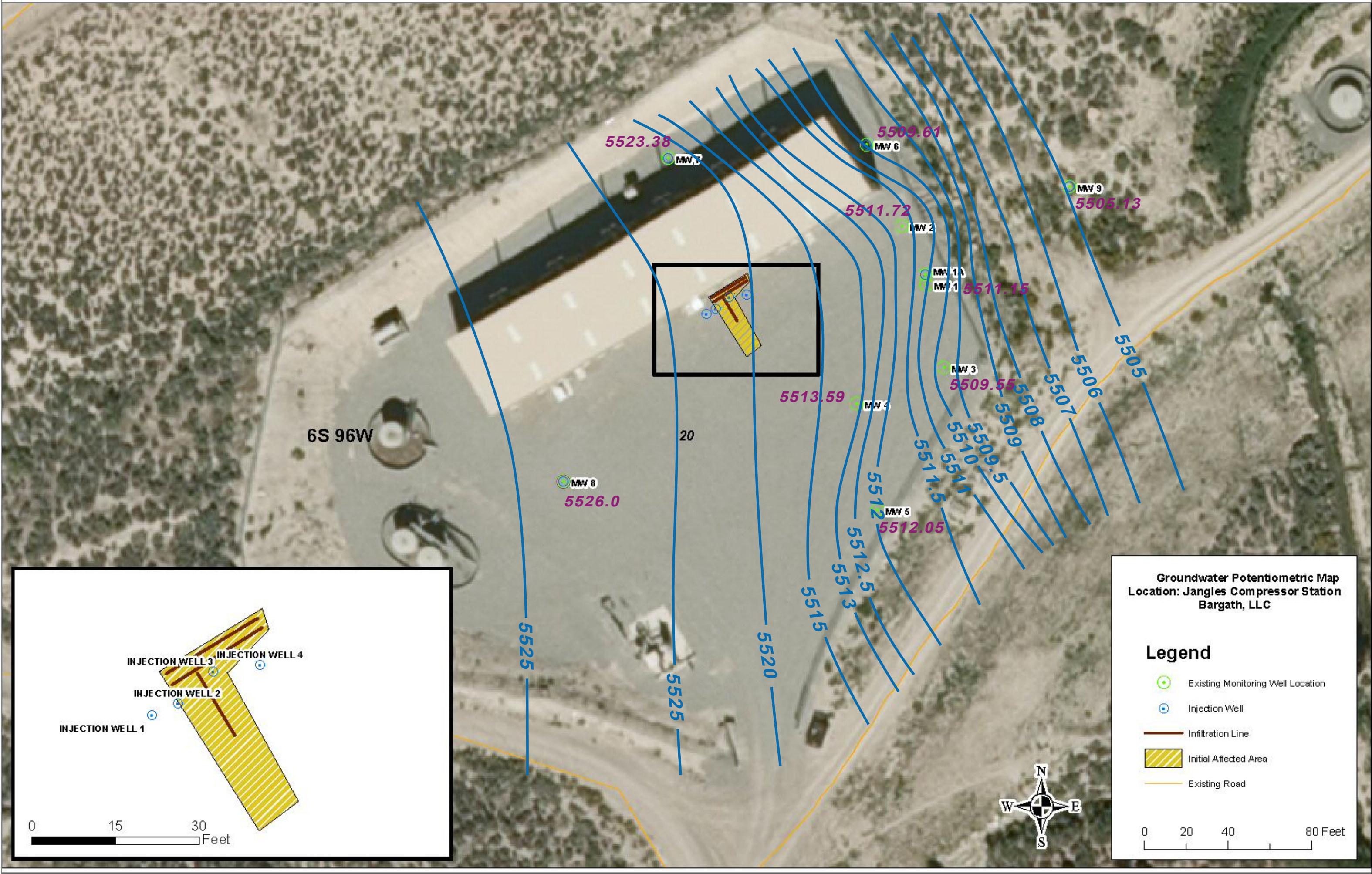
PID readings were collected at the end of the discharge line.  
 PID 10 feet 1.2  
 PID 20 feet 1.3  
 PID 30 feet 2.0  
 PID 40 feet 2.0  
 PID 50 feet prior to injection 5.2

Completion Information  
 Screened Interval 35 to 70 feet  
 TOS 32 feet  
 TOB 1 foot  
 Cemented from 0-1 feet

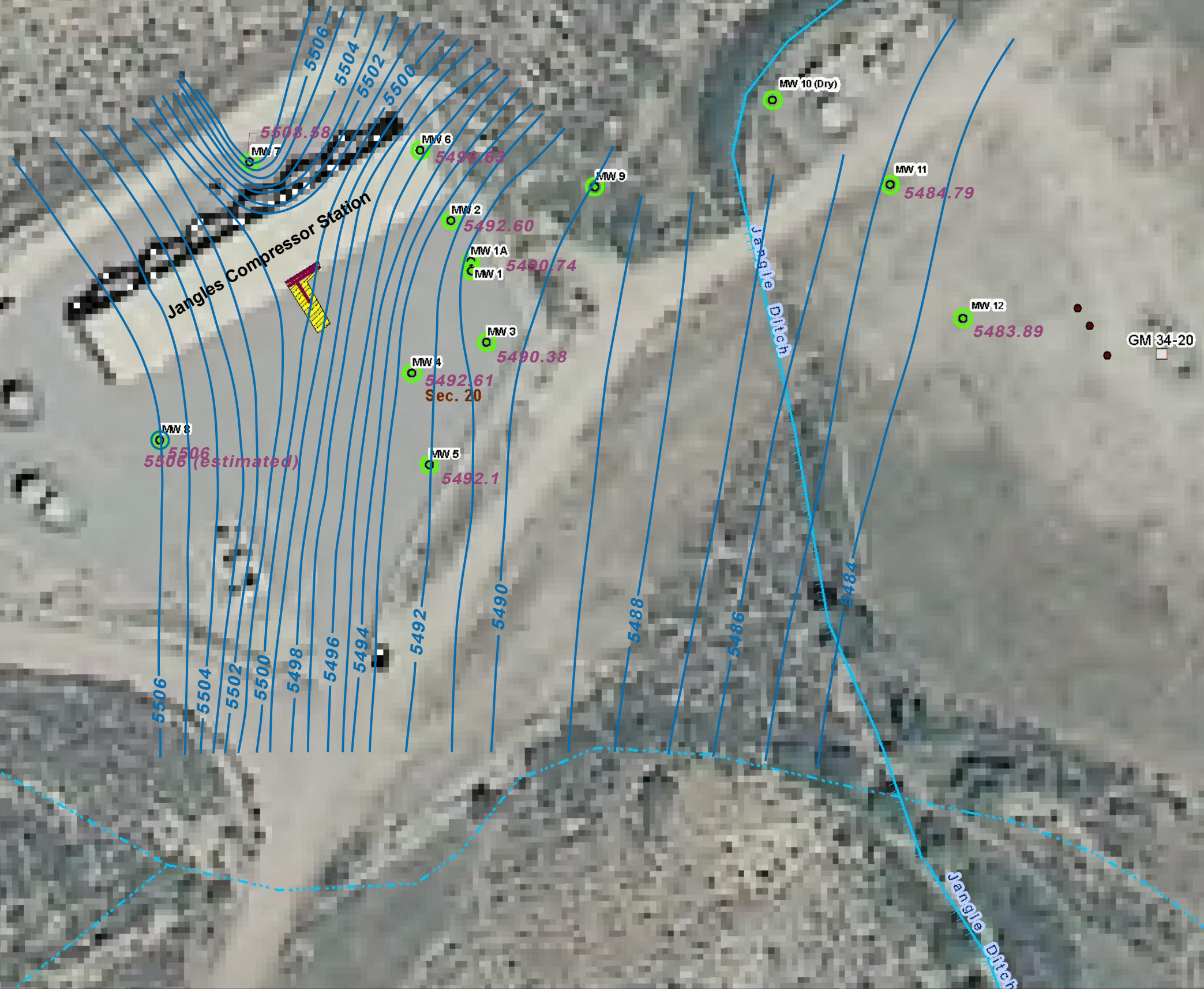
**Gravels Cobbles Sand Silt**  
 Light yellowish brown, saturated, gravels and cobbles in a medium to fine grained sand/silt matrix, gravels consists of both sandstone and shales while the cobbles tend to be composed primarily of sandstone, no visible odors or staining. Had to add water at approximately 50 feet due to saturated conditions and in order to lift the cuttings to the surface.

## ATTACHMENT B

July, 2011 & September, 2011 Potentiometric Maps



# September 2011 Potentiometric Map



# ATTACHMENT C

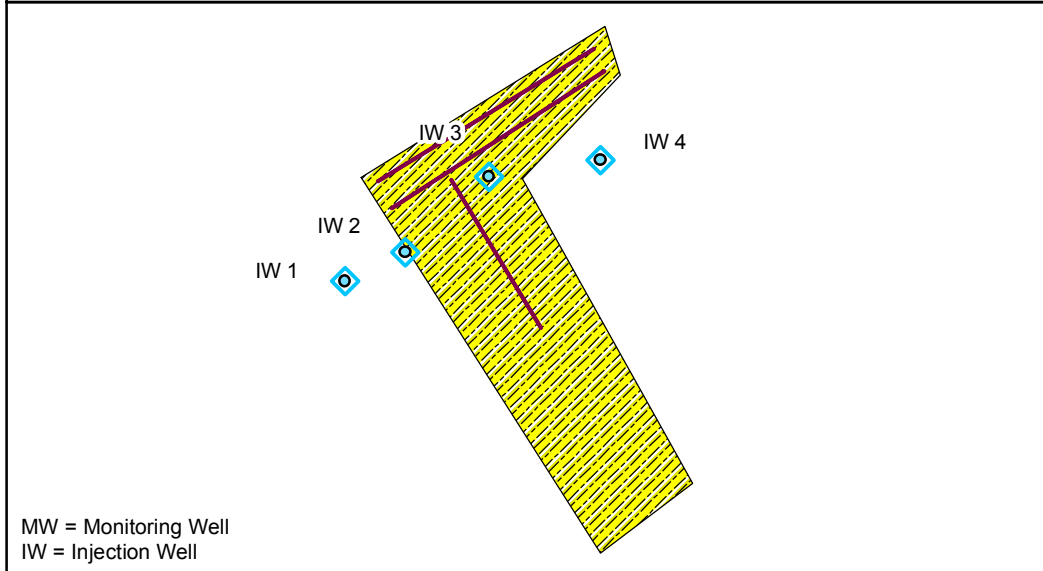
## Site Map



**SITE MAP AS OF 9/20/2011 FOR WATER MONITORING AND INJECTION POINT WELLS**

Location: Jangles Compressor Station  
Bargath, LLC.

Revised: 10/18/2011 4:25:54 PM



MW = Monitoring Well  
IW = Injection Well

Location Name	TOC Elevation (Feet)	Latitude (DD)	Longitude (DD)	Well Depth (Feet)
IW1	5562.660	39.504343	-108.131884	45
IW2	5561.770	39.504344	-108.131869	45
IW3	5562.800	39.504359	-108.131845	45
IW4	5562.790	39.504373	-108.131844	45
MW 1	5558.012	39.504388	-108.131528	95
MW 1A	5557.070	39.504402	-108.131530	70
MW 2	5558.714	39.504464	-108.131571	70
MW 3	5557.797	39.504280	-108.131494	70
MW 4	5558.264	39.504229	-108.131639	70
MW 5	5558.288	39.504091	-108.131599	70
MW 6	5559.891	39.504570	-108.131635	70
MW 7	5562.044	39.504545	-108.131970	70
MW 8	5558.712	39.504117	-108.132131	58
MW 9	5544.114	39.504522	-108.131290	56
MW 10	Not Installed (Dry)			
MW 11	5538.050	39.504538	-108.130709	70
MW 12	5532.760	39.504337	-108.130558	75

**Legend**

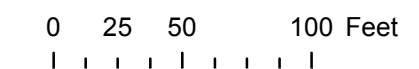
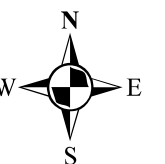
- Existing Monitoring Well
- Injection Well

Infiltration Line

Initial Affected Area

**Hydrography**

- Perennial Stream
- Intermittent/Ephemeral Stream
- Ditch/Canal/Aqueduct



# ATTACHMENT D

## Tabulated Data

Bargath Jangles Compressor Station Condensate Release Water Analytical Data

		COGCC Allowable Concentrations in →→	5 µg/L	560 to 1000 µg/L	700 µg/L	Total Xylenes 1,400 - 10,000 µg/L	GRO No Standard for Water Reported in mg/L	Field Parameters →→	Temperature	Conductivity	Conductivity	Resistivity	TDS	Salinity	Dissolved Oxygen (DO)	Dissolved Oxygen (DO)	pH	pH	ORP	Water Levels		
Sample Location	Media	Sampling Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	GRO		°C	mS/cm²	mS/cm	Ω/cm	g/L		%	mg/L		m/V		TOC (ft)		
MW-1	Groundwater	4/5/2011	36.7	121	ND	75.7	0.543		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
		4/26/2011	0.58 J	1.9 J	0.79 J	1.1 J	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
		5/13/2011	0.55 J	3.4	ND	2.6J	0.0463 J		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	48.30
		6/16/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
		8/13/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
		9/15/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-1A	Groundwater	6/16/2011	387	2,110	112	1,810	13.6		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	48.62	
		8/13/2011	400	220	160	1,900	15		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	62.60	
		9/15/2011	77	85	25	270	3.2		11.85	2.659	1.991	502.3	1.728	1.38	29.7	3.18	7.79	-58.7	45.8	69.03		
MW-2	Groundwater	5/13/2011	8,550	15,500	259	3,530	54.3		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	48.55	
		6/16/2011	6080	17,800	354	4,730	45.3		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	48.57	
		8/13/2011	3400	540	320	1700	21		13.8	2.396	1.886	530.0	1.557	1.2	6.0	0.63	8.24	-81.4	-228.0	62.89		
		9/15/2011	1,800	370	51	320	9.4		12.4	4.005	3.038	329.2	2.603	2.1	4.1	0.43	8.60	-99.6	-102.3	67.69		
MW-3	Groundwater	5/13/2011	ND	ND	ND	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	49.15	
		6/16/2011	ND	ND	ND	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	49.71	
		8/13/2011	ND	ND	ND	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	62.73	
		9/14/2011	ND	1.2	ND	ND	ND		16.7	2.164	1.820	549.5	1.406	1.1	20.5	1.98	7.28	-32.7	109.4	68.88		
MW-4	Groundwater	5/13/2011	ND	ND	ND	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	46.29	
		6/16/2011	ND	ND	ND	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	46.50	
		8/13/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	61.70	
		9/14/2011	ND	1	ND	ND	ND		12.57	2.399	1.829	546.67	1.559	1.24	109.4	11.55	7.27	-32.3	101.2	67.48		
MW-5	Groundwater	5/13/2011	ND	1.2 J	0.75 J	ND	0.0449 J		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	46.66	
		6/16/2011	ND	ND	0.55 J	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	47.26	
		8/13/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	61.72	
		9/14/2011	ND	ND	ND	ND	ND		12.86	2.429	1.866	535.9	1.579	1.26	44.2	4.64	7.33	-35.4	88.8	67.21		
MW-6	Groundwater	6/18/2011	ND	ND	0.57 J	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	50.79	
		8/13/2011	ND	1.6	1.1	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	61.21	
		9/14/2011	ND	ND	ND	ND	ND		16.7	25.210	21.220	47.1	16.390	15.4	41.5	3.67	7.49	-43.5	112.2	63.77		
MW-7	Groundwater	6/18/2011	ND	ND	ND	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	37.57	
		8/13/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	48.63	
		8/18/2011	ND	ND	ND	ND	ND		14.9	4.097	3.308	302.3	2.661	2.2	24.7	2.45	7.05	NT	66.4	NT		
		9/14/2011	ND	ND	ND	ND	ND		16.7	9.251	7.599	131.6	6.013	5.2	41.2	3.97	7.42	-40.0	100.5	52.36		
MW-8	Groundwater	6/18/2011	0.30 J	1.0 J	0.77 J	ND	ND		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	34.79	
		8/13/2011	NS	NS	NS	NS	NS		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	52.99	
		9/14/2011	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)	NS (Dry)		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	Dry	

Bargath Jangles Compressor Station Condensate Release Water Analytical Data

		COGCC Allowable Concentrations in →→	5 µg/L	560 to 1000 µg/L	700 µg/L	Total Xylenes 1,400 - 10,000 µg/L	GRO No Standard for Water Reported in mg/L	Field Parameters →→	Temperature	Conductivity	Conductivity	Resistivity	TDS	Salinity	Dissolved Oxygen (DO)	Dissolved Oxygen (DO)	pH	pH	ORP	Water Levels	
Sample Location	Media	Sampling Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	GRO		°C	mS/cm <sup>2</sup>	mS/cm	Ω/cm	g/L		%	mg/L		m/V		TOC (ft)	
MW-9	Groundwater	6/18/2011	4,360	670	18.3	141	8.11		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	43.87
		8/13/2011	210	2	1.6	4.6	0.52		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	56.59
		9/15/2011	36	1.4	ND	ND	ND		13.5	3.394	2.648	377.6	2.201	1.8	19.2	1.98	7.35	-36.6	95.7	59.53	
MW-10	Dry Hole																				
MW-11	Groundwater	9/15/2011	730	150	430	5000	27		13.55	1.310	1.023	977.07	0.851	0.66	9.1	0.94	8.13	-75.9	-1.2	53.26	
MW-12	Groundwater	9/15/2011	170	1.4	ND	ND	ND		12.6	2.268	1.731	77.5	1.474	1.2	9.8	1.03	7.59	-48.4	103.9	48.87	

**Note:**

J Indicates an estimated value Constituent may not be present

NS Not Sampled

NT Not Taken

# ATTACHMENT E

## Events Chronology

**Bargath LLC**  
**Jangles Compressor Station Release #2524424**  
**COGCC Update Meeting 10/14/2011**

Chronology of Events to Date

- February 13, 2011
  - Found what was believed to be a small release of condensate visible on ground surface near compressor building
- February 14 – 15, 2011
  - Further investigation & excavation of impacted soils led to determination that a reportable quantity threshold was exceeded
    - COGCC and landowner notified verbally on February 15, 2011
  - Additional excavation was determined unfeasible due to trench safety and building integrity concerns
    - Daylighting service on site to expose remaining dump line “T” connectors
    - Sample collection verified contamination only surrounding immediate area where pipe connection had leaked
- February 16, 2011
  - Soil borings collected as shown in Form 27
  - Hydro-daylighting performed on other dump line “T” connections
- February 22, 2011
  - Form 19 submitted to COGCC
- February 28, 2011
  - COGCC verbally requested Form 27 submittal for further investigation and remediation
- March 1, 2011
  - Bargath LLC was issued Operator Number 10128 by COGCC
  - Jangles Compressor Station was issued Facility ID #421719
  - Jangles Condensate Release is given tracking #2524424
  - Analytical Data received from February 16 sampling efforts
    - Data indicated contamination at depth in immediate vicinity of point of release
- March 15, 2011
  - Another drilling contractor scheduled to perform deeper soil borings (initial contractor retained had reached depth limit capability of their equipment)
- March 22, 2011
  - Additional/deeper soil borings performed
  - MW1 installed to evaluate groundwater impacts
- April 6, 2011
  - Form 27 submitted to COGCC

- April 12, 2011
  - Received approved Form 27 from COGCC
- April 20, 2011
  - Analytical results from MW1 indicated groundwater impacts
- April 21, 2011
  - Verbal notifications made to CDPHE and NRC based on analytical results indicating impact to groundwater
- April 22, 2011
  - Surface water samples collected at Jangles Ditch and Piceance Creek
    - Non detect on all parameters
- May 12, 2011
  - Building gutter and French drain system installed to divert stormwater away from impacted area
- May 12-May 25, 2011
  - Installation and development of initial 5x groundwater monitoring wells
  - Analytical data indicate contamination in MW1 and MW2
  - Lateral infiltration treatment lines installed
  - Scheduled drilling contractor for installation of 4x additional wells, to include MW9 (offsite)
- May 31, 2011
  - Pressure test conducted on entire fluid dump line system
  - Pressure held at 250 psi for 2 hrs demonstrating dump line integrity
- June 8-13, 2011
  - Installation/development/sampling of 4x additional monitoring wells
- June 28, 2011
  - Received analytical data indicating elevated benzene levels in MW9
- June 29, 2011
  - Scheduled meeting with COGCC to review project proposed remediation efforts
- August 13, 2011
  - Sampled the down gradient wells; MW-1A, MW-2, MW-3, MW-6, MW-7, and MW-9. Contaminant levels are dropping. Water levels had also dropped a substantial amount. Not sure quite yet if this is a result of the gutter installation or seasonal fluctuations in the water table. A nearly 20 foot drop is pretty substantial.
- August 18, 2011-Present
  - Commenced bio-remediation treatments and maintenance on the infiltration lines and injection ports. This is ongoing for eight weeks.

- September 9, 2011-Present
  - Installed two additional off site wells further downgradient of MW-9 as requested by the COGCC. Of the three drilled MW-10 was dry. Not surprising since it was located fairly close to the hillside and bedrock was shallow. MW 11 and 12 did encounter groundwater. There was a faint hydrocarbon odor in MW-11 just above the water table.
- September 14-15, 2011
  - A complete round of water sampling was conducted on all of the wells both on-site and off-site. Water quality parameters were also collected. All of the wells again showed decreases in contaminant levels. However the water table has now dropped up to 21 feet and some of the wells may be dry in a month or so. That is something we'll need to monitor.
- Week of October 10<sup>th</sup>, 2011
  - The last product application will occur this week. This is the completion of the Phase I treatment and maintenance. Although maintenance will be on-going we are at the point in some additional soils data will need to be collected to evaluate the effectiveness of the treatments to the impacted area.
- October 14, 2011
  - A meeting will be conducted with Alex Fisher of the COGCC to update him on the current and planned activities that will be ongoing at the Jangles Compressor station through the remainder of the year.