

**State of Colorado**  
**Oil and Gas Conservation Commission**

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



**DOCUMENT**  
**#2216525**

FOR OGCC USE ONLY  
Received  
10/10/2011  
Rifle

OGCC Employee:

☐ Spill ☐ Complaint  
☐ Inspection ☐ NOAV  
Tracking No: Rem# 5248

**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

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

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

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

OGCC Operator Number: 16695

Name of Operator: Chevron Midcontinent LP

Address: 1400 Smith Street

City: Houston State: TX Zip: 77002

Contact Name and Telephone:

Eric Page

No: 713-372-1022

Fax:

API Number: 05-045-06107

Facility Name: Federal 27-11

Well Name: Federal

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SE/4SW/4 SEC 27, T7S-R104W

County: Garfield County, Colorado

Facility Number: 111762 (Remediation # 5248, SPILL # 2521281)

Well Number: 23-12

Latitude: 39.421424 Longitude: -108.977162

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Condensate

**Site Conditions:** Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Non-Crop Land/Scrub Oak

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Sandy Silt w/ Gravel Lenses

Potential receptors (water wells within 1/4 mi, surface waters, etc.): West Salt Creek

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

Impacted Media (check):

☒ Soils

☐ Vegetation

☒ Groundwater

☐ Surface Water

Extent of Impact:

Refer to Phase 1/Phase II Site Assessment Documentation Report

Refer to Phase 1/Phase II Site Assessment Documentation Report

How Determined:

Soil Borings

Monitor Wells

**REMEDIALATION WORKPLAN**

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

Attached to this Form 27 is a memo titled, "Request for Access to BLM Land" dated August 15, 2011. In addition to requesting access for the purposes of conducting additional assessment related actions, this memo also serves as an updated workplan for offsite activities originally described in the "Phase II Site Assessment Workplan" submitted to the COGCC on September 21, 2010.

\*\*(Remediation # 5248, SPILL # 2521281)\*\*

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

TBD

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



Tracking Number: Rem 5248

Name of Operator: \_\_\_\_\_

OGCC Operator No: \_\_\_\_\_

Received Date: 10/10/2011 Rifle COGCC

Well Name & No: \_\_\_\_\_

Facility Name & No: \_\_\_\_\_

Page 2

**REMEDIATION WORKPLAN (Cont.)**

OGCC Employee: \_\_\_\_\_

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

Semi-annual Sampling (Refer to Phase I/Phase II Site Assessment Documentation Report dated January 13, 2011)

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

NA

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

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

Further investigation is outlined in the attached memo. For additional results refer to Phase I/Phase II Site Assessment Documentation Report dated January 13, 2011

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

Refer to "Phase II Site Assessment Workplan"

**IMPLEMENTATION SCHEDULE**

Date Site Investigation Began: 10/17/10

Date Site Investigation Completed: TBD

Date Remediation Plan Submitted: TBD

Remediation Start Date: TBD

Anticipated Completion Date: TBD

Actual Completion Date: TBD

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

Print Name: Eric Page

Signed: 

Title: Project Manager - Chevron Environmental Management Company

Date: 10/10/11

OGCC Approved: \_\_\_\_\_ Title: \_\_\_\_\_ Date: 10/10/2011



**Stantec**

**Stantec Consulting Corporation**  
2321 Club Meridian Drive Suite E  
Okemos MI 48864  
Tel: (517) 349-9499  
Fax: (517) 349-6863

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Julia Christiansen  
Bureau of Land Management  
Grand Junction Field Office  
2815 H Road, Grand Junction  
CO 81506

**RE: Request for Access to BLM Land**

Dear Ms. Christiansen

Stantec Consulting Corporation (Stantec), on behalf of Chevron Environmental Management Company (Chevron), is requesting approval and authorization to install monitoring wells located on Bureau of Land Management (BLM) property adjacent to Federal 27-11, Pit #111762. Contained in this request is specific information on the purpose of the request, monitoring well locations, drilling/sampling protocol, and justification for lack of environmental impact.

**Purpose**

The purpose of this request is to install a series of monitoring wells intended to provide additional definition of the extent of a hydrocarbon plume identified in association with Pit #111762 (Federal 27-11). A total of three monitoring wells constructed of approximately 2-inch diameter cattle-proof encased pipes with locking caps, drilled 50 to 60 below ground surface (bgs), would be installed down-gradient of Pit #111762. This project is a part of an ongoing remediation activity and is expected to yield data important to the conclusion of that activity.

On March 16, 2011, Stantec personnel visited the BLM Grand Junction Field Office to identify if prior permits and/or any environmental studies had been conducted on or adjacent to the area of proposed monitoring well locations. During the office visit, the BLM indicated that depending on the actual locations of the wells, drilling/sampling protocols, and subsequent cultural/archaeological and rare plant surveys available, the BLM may be able to approve through a proposal letter. If not, a right-of-way (ROW) permit with Categorical Exclusion could be required. Due to the amount of time it takes for a ROW permit review, Stantec is seeking approval via a proposal letter. The following documentation below supports this approach.

**Monitoring Well Locations**

Federal 27-11, Pit #111762 is located within the SE  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of Section 27 of T7S, R104W. The Site is in close proximity to HRM Resources (HRM) existing lease roads, Baxter Pass Road (Garfield County Road), and Mid America's pipeline ROWs (see Figure 1).

Three locations have been selected for monitoring well installation. These locations were selected based on project goals and were located in areas that would limit impact to non-

August 15, 2011

Ref: Request for Access to BLM Land

Page 2 of 4

disturbed ground surfaces. A copy of the agreement for access to the HRM ROW can be found in Appendix A. The northing and easting coordinates for monitoring well locations, numbered PMW-5 through PMW-7, are as follows:

PMW-5: 2017686.82, 1597142.36 (HRM lease road)

PMW-6: 2017844.52, 1596957.24 (HRM lease road)

PMW-7: 2017889.46, 1596483.48 (HRM lease road)

The proposed monitoring well locations are also shown on Figure 1 and Figure 2.

### **Borehole Advancement and Monitoring Well Installation**

All boreholes will be advanced in the currently disturbed areas associated with HRM's ROW using a truck-mounted hollow stem auger (HSA) drill rig equipped with a split-spoon sampler for soil collection.

Drilling activities will be performed under the supervision of a State of Colorado professional geologist. To minimize the risk of disturbance to potentially undetectable subsurface utilities, the first 8 feet of each borehole will be advanced using a hydro-knife. Due to water injection and vacuum recovery during hydro-knifing, the first 8 feet will not be logged by Stantec field staff during advancement.

A total of three soil boreholes will be advanced during the off-site assessment activities. Stantec will contract a Colorado-licensed driller (Dakota Drilling) to advance the proposed boreholes beyond 8 feet bgs to the total depth in order to collect undisturbed, discrete soil columns. The HSA diameter will not exceed 10.5 inches.

All traffic to and from the proposed monitoring well locations will be within the current disturbed ROW. A maximum of four people will be on-site throughout the drilling activities (two Stantec, two Dakota Drilling).

### **Monitoring Plan**

Each monitoring well will be developed prior to sampling. At a minimum, groundwater samples will be collected from each well following development. Following installation and completion of the proposed monitoring wells, the location of the monitoring wells will be surveyed horizontally to the nearest  $\pm 0.1$ -foot, the ground elevation will be surveyed to the nearest  $\pm 0.01$ -foot, and relative casing elevations will be surveyed to the nearest  $\pm 0.01$ -foot.

If there is sufficient data obtained from the sampling event, no additional monitoring will be required related to this activity and the monitoring wells will be properly abandoned per Water Well Construction Rules (2 CCR 402-2).

For additional information on monitoring well installation and sampling procedures, please refer to the Phase II Site Assessment Workplan, submitted to the BLM on September 21, 2010.



August 15, 2011

Ref: Request for Access to BLM Land

Page 3 of 4

## **Rationale and Basis for Lack of Environmental Impact**

During the March 16, 2011 meeting, the following ROW and environmental documentation was identified adjacent to Site:

- **Categorical Exclusion (CE), CO-130-2005-006 CE (COC68413)** – Consolidation and Renewal of existing natural gas pipeline ROWs in the Baxter Pass/Prairie Canyon area. This was a Public Service Company of Colorado/Excel Energy application to consolidate ROWs, and was approved in January 2005. The ROW parallel to and northwest of Baxter Pass Road in Section 27 appears to be 50 feet wide. The CE identifies cultural resources in the area and confirms that there would be no effect on threatened or endangered species in the area.
- **Environmental Assessment (EA), CO-110-2006-068-EA (COC 69548)** – Enterprise Meeker Lateral NGL Pipeline Project. This EA was signed in February 2007 and includes general environmental information on Section 27 that could be useful should further National Environmental Policy Act (NEPA) action be required for the South Canyon monitoring well permitting. The Uintah Railway Segment site number is identified in this report as 5GF 642.
- Other NEPA or ROW documents were older files from the 1980s including Baxter Pass Road (1982) and the Mid America Rocky Mountain Loop Project (COC062466), a 1988 EA/FONSI for a 412-mile pipeline. Data from these files would not support current NEPA and related permitting standards.

In addition, Stantec met with BLM archaeologist, Aline LaForge, and BLM ecologist, Anna Lincoln. Ms. LaForge compared Stantec's general area location map with BLM's Geographic Information System (GIS) data on surveys that have been conducted to current standards. This yielded the following information/recommendations.

- The areas for which cultural resources/archaeological clearance has already been obtained to BLM satisfaction is illustrated in Figure 2. In summary, PMW-5, PMW-6, and PMW-7 are located in HRM's lease road. Per Ms. LaForge, the areas within the roadway or graded shoulders of HRM's lease road are clear for cultural resources. Ms. LaForge stated that she will want to verify this information based on the exact monitoring well locations proposed.
- Ms. Lincoln also confirmed that rare/protected plants are not likely to be an issue in the general area. She also suggested working in areas where cheat grass is prevalent.

As noted above, this project is part of an ongoing remediation activity. No social-economic human resources/impacts are located in this area. Proposed monitoring wells are all to be located in previously disturbed areas for which cultural resource surveys have been completed to current BLM standards and no threatened or endangered species occurrence has been identified. No additional studies are anticipated as these are generally disturbed areas.

Stantec is seeking approval to proceed and will be requesting written communication of approval or comments regarding this request. We look forward to continuing our positive

August 15, 2011

Ref: Request for Access to BLM Land

Page 4 of 4

working relationship with the Grand Junction Field Office and anticipate a rapid turn-around for this request. Should you have any general questions or comments, you may contact me at (517) 349-9499 extension 222.

Sincerely,

**STANTEC CONSULTING CORPORATION**

**Brent Lucyk**

Associate Geologist

Stantec

2321 Club Meridian Drive Suite E

Okemos MI 48864

Ph: (517) 349-9499 Ext. 222

Fx: (517) 349-6863

Cell: (517) 749-9405

[brent.lucyk@stantec.com](mailto:brent.lucyk@stantec.com)

[stantec.com](http://stantec.com)

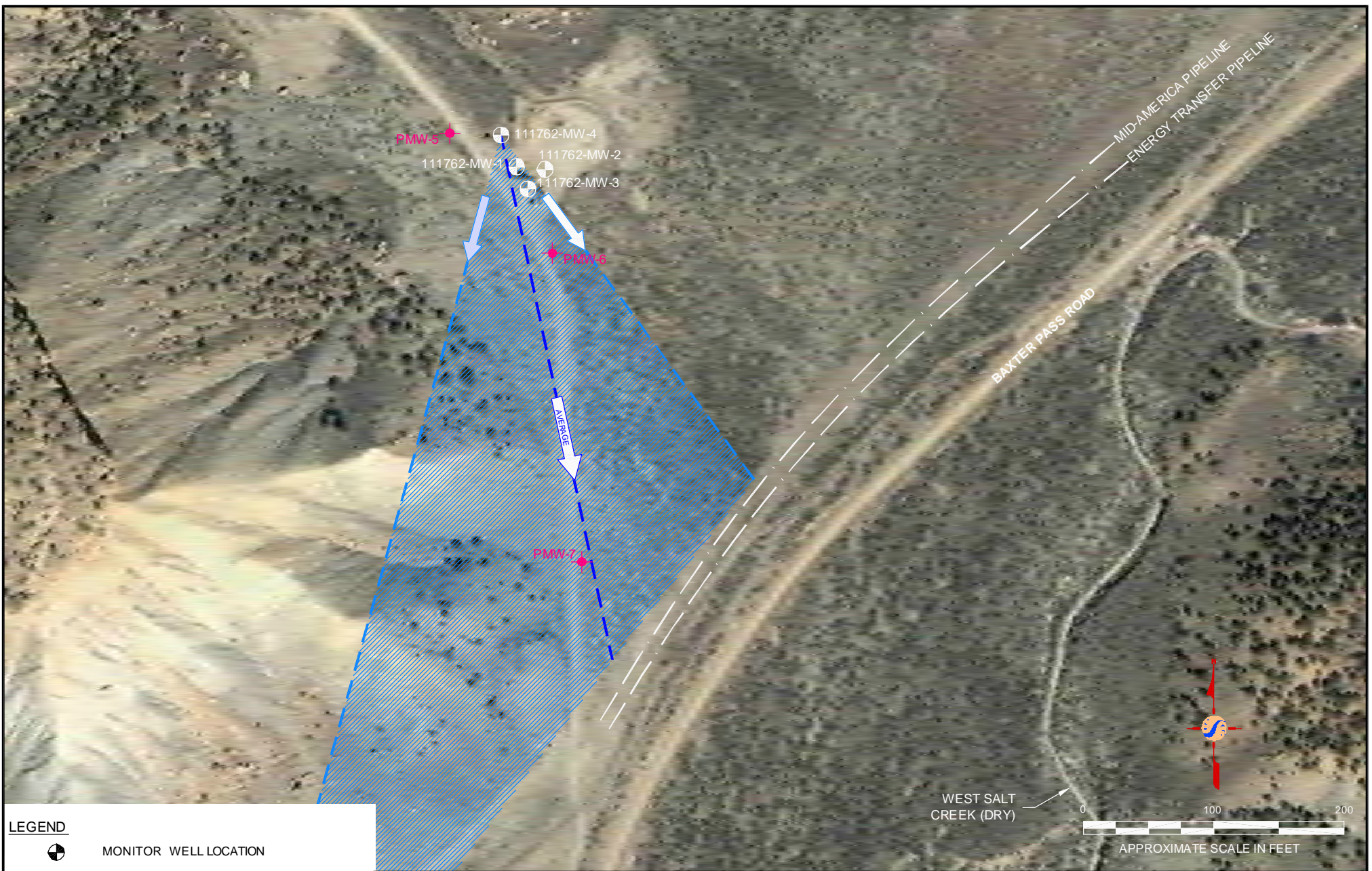
cc: Eric Page, CEMC

**Attachments:**





Figure 1 – Site Map with Proposed Monitoring Well Locations

Figure 2 – Overlay showing Cultural Resources Clearance

Appendix A – Addendum to HRM Access Agreement



#### LEGEND

-  MONITOR WELL LOCATION
-  PROPOSED MONITORING WELL LOCATION
-  RANGE OF APPROXIMATE DIRECTION OF GROUNDWATER FLOW (NOVEMBER 2010 - MARCH 2011)
-  APPROXIMATE LOCATION OF BURIED UTILITIES



**Stantec**

2321 CLUB MERDIAN DRIVE SUITE E  
OKEMOS, MI 48864  
PHONE: (517)349-9499 FAX: (517)349-6863

FOR:

CHEVRON  
SOUTH CANYON FIELD

JOB NUMBER:  
213201183

DRAWN BY:  
JRO

CHECKED BY:  
BAL

APPROVED BY:  
BAL

DATE:  
8/2/11

PIT #111762 SITE PLAN SHOWING  
NOVEMBER 2010 - MARCH 2011  
GROUNDWATER FLOW DIRECTION




FIGURE:

1





# LEGEND

-  MONITOR WELL LOCATION
-  PROPOSED MONITORING WELL LOCATION
-  NO CULTURAL/ARCHAEOLOGICAL CONCERNS



**Sinterac**

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OKE MOS, MI 48864  
PHONE: (517) 349-9499 FAX: (517) 349-6863

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SOUTH CANYON FIELD

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JRO

CHECKED BY:

BAL

APPROVED BY:

BAL

PIT #111762  
SITE PLAN SHOWING POTENTIAL  
SURFACE DISTURBANCE AREAS

FIGURE:

2

DATE:

08/2/11



## **AMENDMENT TO ACCESS FOR PIT REMEDIATION AGREEMENT**

This AMENDMENT TO ACCESS FOR PIT REMEDIATION AGREEMENT ("Amendment") dated June 30, 2011 is made between HRM RESOURCES, LLC, a Delaware limited liability company with its principal offices at 410 17<sup>th</sup> Street, Suite 1200, Denver, Colorado 80202 ("Grantor") and CHEVRON MIDCONTINENT, L.P., a Texas limited partnership, with an address at 1400 Smith, Houston, Texas 77002 ("Grantee").

### **RECITALS**

- A. Under Access For Pit Remediation Agreement dated effective January 1, 2009 between Grantor and Grantee ("Access Agreement"), Grantor granted access to Grantee to certain "Pit Sites" (as that term is defined in the Access Agreement) located in Garfield County, Colorado for pit remediation activities to be performed by Grantee.
- B. Grantee desires to have additional access rights for ongoing environmental assessment and remediation activities associated with the Pit Sites.
- C. In consideration of the mutual promises set out in this agreement, and other good and valuable consideration, the receipt and sufficiency of which is acknowledged, Grantee and Grantor have executed this Amendment and agree to be bound by the terms herein.

### **AGREEMENT**

The following subpart is added to Paragraph 1 of the Access Agreement:

- (G) Subject to approval from the United States Bureau of Land Management, locating and operating monitoring wells at the approximate locations depicted in the attached Exhibit "A-1", all of which are located within the boundaries of the existing United States Bureau of Land Management road right-of-way.

All other terms and conditions of the Access Agreement remain unchanged and in full force and effect.

Agreed to and accepted this 30 day of June, 2011.

**GRANTOR:**

HRM Resources, LLC

By: 

L. Roger Hutson, President/CEO

**GRANTEE:**

Chevron Midcontinent, L.P.

By Chevron Midcontinent Operations, LLC

Its General Partner

By: 

David A. Singer, Assistant Secretary