

**FORM
INSP**Rev
X/15**State of Colorado
Oil and Gas Conservation Commission**1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Inspection Date:

05/01/2017

Submitted Date:

05/12/2017

Document Number:

682501975**FIELD INSPECTION FORM**Loc ID 406198 Inspector Name: Trujillo, Aaron On-Site Inspection ☐ 2A Doc Num: _____**Operator Information:**OGCC Operator Number: 53790Name of Operator: MARKUS PRODUCTION, INCAddress: 39 FAIRWAY LANECity: LITTLETON State: CO Zip: 80123**Status Summary:**

- ☒
- THIS IS A FOLLOW UP INSPECTION
-
- ☒
- FOLLOW UP INSPECTION REQUIRED
-
- ☐
- NO FOLLOW UP INSPECTION REQUIRED

Findings:3 Number of Comments1 Number of Corrective Actions

- ☒
- Corrective Action Response Requested

Contact Information:

Contact Name	Phone	Email	Comment
Brown, Mark	(720) 350-8858	mark@markusproduction.com	
Arthur, Denise		denise.arthur@state.co.us	

Inspected Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status
240189	WELL	PA	07/15/1998	GW	123-07977	STATE PWEC 2-36	RI

General Comment:

This is a follow-up final reclamation and stormwater inspection document #682501133 and #682501476. Any corrective actions from previous inspections that have not been addressed are still applicable.

Reclamation - Storm Water - Pit**Interim Reclamation:**

Date Interim Reclamation Started: _____ Date Interim Reclamation Completed: _____

Land Use: _____

Comment: _____

1002 SITE PREPARATION AND STABILIZATION

1002a. FENCING _____

Comment _____

Corrective Action _____

Date _____

1002b. SOIL REMOVAL AND
SEGREGATION _____

Comment _____

Corrective Action _____

Date _____

1002c. PROTECTION OF SOILS _____

Comment _____

Corrective Action _____

Date _____

1002E. SURFACE DISTURBANCE MINIMIZATION _____

Comment _____

Corrective Action _____

Date _____

1003a. Waste and Debris removed? _____

Comment _____

Corrective Action _____

Date _____

Unused or unneeded equipment onsite? _____

Comment _____

Corrective Action _____

Date _____

Pit, cellars, rat holes and other bores closed? _____

Comment _____

Corrective Action _____

Date _____

Guy line anchors marked? _____

Comment _____

Corrective Action _____

Date _____

- 1003b. Area no longer in use? _____ Production areas stabilized ? _____
- 1003c. Compacted areas have been cross ripped? _____
- 1003d. Drilling pit closed? _____ Subsidence over on drill pit? _____
- Cuttings management: _____
- 1003e. Areas no longer needed for drilling or subsequent operations for have been re-vegetated to 80% of pre-existing? _____
- Production areas have been stabilized? _____ Segregated soils have been replaced? _____

RESTORATION AND REVEGETATIONCropland

Top soil replaced _____ Recontoured _____ Perennial forage re-established _____

Non-Cropland

Top soil replaced _____ Recontoured _____ 80% Revegetation _____

1003e. INTERIM VEGETATION TRANSECT

TRANSECT RESULTS OF DISTURBED AREA% _____

TRANSECT RESULTS OF REFERENCE AREA% _____

TOTAL % OF DESIRABLE VEGETATION COVER _____

VEGETATIVE COVER _____

1003 f. Weeds Noxious weeds? _____

Comment _____

Corrective Action _____ Date _____

Overall Interim Reclamation**Final Reclamation/ Abandoned Location:**

Date Final Reclamation Started: _____ Date Final Reclamation Completed: _____

Final Land Use: _____

Reminder: _____

Comment: _____

Well plugged _____ Pit mouse/rat holes, cellars backfilled _____

Debris removed **Fail** _____ No disturbance /Location never built _____

Access Roads Regraded _____ Contoured _____ Culverts removed _____

Gravel removed _____

Location and associated production facilities reclaimed _____ Locations, facilities, roads, recontoured _____

Compaction alleviation _____ Dust and erosion control **Fail** _____

Non cropland: Revegetated 80% **Fail** _____ Cropland: perennial forage _____

Weeds present _____ Subsidence _____

1004.d. FINAL VEGETATION TRANSECT

TRANSECT RESULTS OF DISTURBED AREA% _____

TRANSECT RESULTS OF REFERENCE AREA% _____

TOTAL % OF DESIRABLE VEGETATION COVER _____

VEGETATIVE COVER _____

Comment: [Inspection Doc. #682501476](#) required operator to submit a detailed schedule and timeline of all anticipated reclamation activities (i.e. soil sampling, reclamation/remediation planning, contractor work, etc...) for the pit, battery and well locations by 12/30/2016. Reclamation specialist has not received a form 4 from Markus Production regarding the State PWEC well. This corrective action is still applicable, and the corrective action date remains in place. See "COGCC Comments" for additional corrective actions and corrective action dates.

Corrective Action:	Provide a detailed schedule and timeline of all anticipated reclamation activities (i.e. soil sampling, reclamation/remediation planning, contractor work, etc...) for the pit, battery and well locations. Submit this schedule attached to a form 4 by 12/30/2016.	Date	12/30/2016
Overall Final Reclamation	Fail	Well Release on Active Location	<input type="checkbox"/>
		Multi-Well Location	<input type="checkbox"/>

COGCC Comments

Comment	User	Date
<p>COMMENT: After verbal communication with Markus Production towards the end of 2016, inspection Doc. 682501476 extended the corrective action date to perform reclamation on the well, battery and pit location from 11/15/2016 to 4/30/2017. Operator was required to repair and stabilize erosion, and establish vegetation with total perennial, non-invasive uniform plant cover of at least eighty (80) percent of pre-disturbance or reference area levels. Use a seed mixture that matches the adjacent pastureland or a seed mixture requested by the landowner. Ensure erosion controls are implemented to stabilize the seeded soil, and continue to monitor and manage this site until Final Reclamation has passed.</p> <p>The well location appears to have had reclamation work conducted as there is evidence showing location was re-contoured, seeded and mulched. There are areas of the well location where germination does not appear evident. See photos 4-6 in the attached photo document. Advise monitoring well pad location.</p> <p>Unable to find evidence that reclamation activities have been conducted on the pit and battery location. Trash debris, gravel and large bare areas without evidence of germination remain. See photos. These areas need to be reclaimed.</p> <p>CORRECTIVE ACTION: Original corrective action and corrective action date remains in place: Repair and stabilize erosion. Establish vegetation with total perennial, non-invasive uniform plant cover of at least eighty (80) percent of pre-disturbance or reference area levels. Use a seed mixture that matches the adjacent pastureland or a seed mixture requested by the landowner. Ensure erosion controls are implemented to stabilize the seeded soil, and continue to monitor and manage this site until Final Reclamation has passed. Revegetation activities shall be complete no later than 4/30/2017.</p>	trujilloam	05/10/2017