



NOAV 200123526
Facility ID 119049
Facility ID 107649

DEPARTMENT OF NATURAL RESOURCES
Bill Ritter, Jr., Governor
1120 Lincoln St., Suite 801
Denver, CO 80203
Phone: (303) 894-2100
FAX: (303) 894-2109
www.cogcc.state.co.us

December 20, 2007

Mr. Mark Brown
Markus Production, Inc.
621 17th Street, Suite 1710
Denver, CO 80293



Re: Notice of Alleged Violation
Jolly 41X-6 Produced Water Pit
NENE Section 6, T-3-S, R-55-W, 6th PM
Washington County, Colorado

Dear Mr. Brown,

The subject facility was inspected by Colorado Oil & Gas Conservation Commission (COGCC) staff earlier this year on August 17, 2007. The unlined earthen pit is located approximately 100-feet from the channel of Plum Bush Creek. Surface water in the creek was observed approximately 300-feet to the south of the pit and several shallow groundwater wells are located as close as 700-feet to the east of the pit (refer to the enclosed figure). Although a Form 15, *Application for Permit to Use Unlined Earthen Pit*, was conditionally approved by COGCC on December 1, 1997, that application was for a pit that was constructed to the north of the tank battery.

The COGCC requests that Markus Production discontinue use of the pit at the tank battery and properly close the pit in accordance with Rules 905 and 909. An approved Form 27, *Site Investigation and Remediation Workplan* will be required prior to performing the site investigation and subsequent closure of the subject pit. Site investigation of soils and shallow groundwater will be required. Refer to the corrective actions listed in the attached Notice of Alleged Violation.

At the time of the inspection on August 17, 2007, it appeared that water was percolating through the southeast corner of the pit berm. It is likely that water is migrating in the shallow subsurface soils topographically down gradient towards Plum Bush Creek. As a result, the COGCC requests that a representative groundwater sample be collected immediately downgradient of the pit. The COGCC also requests that a water sample be collected from the closest upstream and downstream locations where surface water is present in the creek in proximity to the pit. In addition, groundwater samples shall be collected from the following two permitted water wells to the east of the pit location: #155226 and 155242. These wells are reportedly completed at depths of 40-feet below ground surface. Copies of the water well permits are enclosed for reference.

DEPARTMENT OF NATURAL RESOURCES: Harris Sherman, Executive Director

COGCC COMMISSION: Richard Alward - Thomas L. Compton - Mark Cutright - Michael Dowling - Joshua B. Epel - Kimberlee Getherit - Trisal Houpt - Jim Martin - Harris Sherman
COGCC STAFF: David Neslin, Acting Director - Dabble Baldwin, Environmental Manager - Patricia C. Beaver, Hearings Manager - David K. Dillon, Engineering Manager

Mr. Mark Brown

12/20/07

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Each water sample shall be analyzed for the following:

- Benzene, toluene, ethyl benzene and xylenes (BTEX), all major anions/cations, Total Dissolved Solids, iron and manganese, nutrients (nitrates, nitrites, selenium), pH, and specific conductance.

If analytical results indicate that soils, surface water or groundwater have been impacted, corrective action will be required.

Please provide the required remediation plan (Form 27) for COGCC review by January 31, 2008. The plan should include a scaled diagram depicting the tank battery and produced water pit. Proposed soil, groundwater and surface water sample locations should also be shown. If you have questions regarding the required site investigation and subsequent pit closure, please call me at 303-637-7178.

Sincerely,



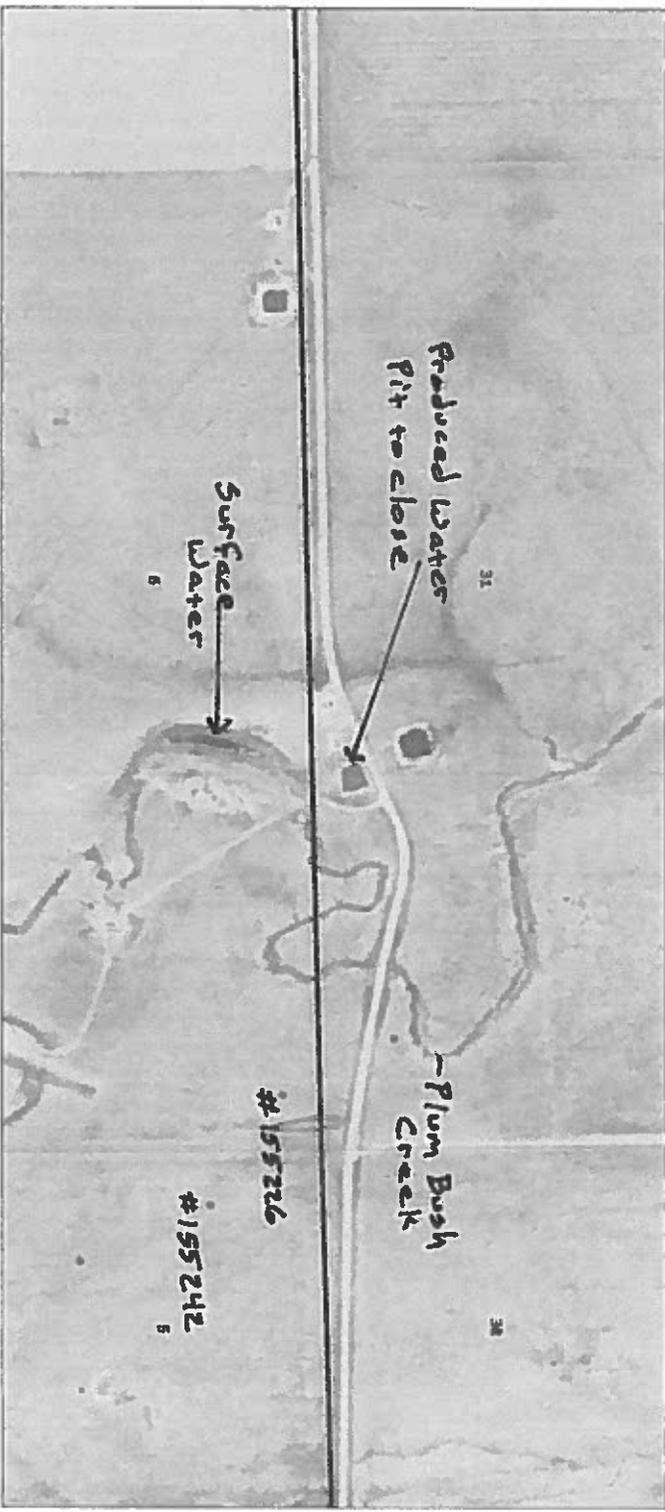
John Axelson, P.G.
Environmental Protection Specialist

Enclosures

Cc: David Neslin – COGCC Acting Director
Debbie Baldwin – COGCC Environmental Manager
Randall Ferguson – COGCC Environmental Supervisor
Kevin Lively – COGCC Field Inspector

COGCC GIS Online

- OIL AND GAS WELLS**
 - Oil and Gas Wells
 - ◆ COGCC ALERT
 - ONSITE INSPECTION
- CITIES TOWNS PLACES**
 - Towns and Places
- ROADS AND RRS**
 - Major Highways
 - Local Roads
- WATER RESOURCES**
 - Water Wells
 - Lakes
 - Major Rivers
 - Streams



SCALE 1 : 6,117



COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St.
Denver, Colorado 80203

TYPE OR PRINT IN BLACK INK. COPY OF ACCEPTED STATEMENT MAILED ON REQUEST.

STATE OF COLORADO

COUNTY OF DENVER

SS.

AFFIDAVIT

RECEIVED

JUL 28 1989

WATER RESOURCES
STATE ENGINEER
CWA

STATEMENT OF BENEFICIAL USE OF GROUND WATER
AMENDMENT OF EXISTING RECORD
X LATE REGISTRATION

155226

PERMIT NUMBER 155226

37-00-07 140' x
33 0 50-00
37-07-01 1980, 0-01
37-07-01 1980, 0-01

LOCATION OF WELL

THE AFFIANT(S) Jolly Land Co.
whose mailing address is Box 243

County Washington
NE 1/4 of the NE 1/4, Section 6

City Woodrow CO 80757 Twp. 3 S Rng. 55 W 6 P.M.

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon; the well is located as described above, at distances of 100 feet from the N section line and 150 feet from the E section line; water from this well was first applied to a beneficial use for the purpose(s) described herein on the day of 19 40; the maximum sustained pumping rate of the well is 10 gallons per minute, the pumping rate claimed hereby is 10 gallons per minute; the total depth of the well is 40 feet; the average annual amount of water to be diverted is 1 acre-feet; for which claim is hereby made for stock watering purpose(s); the legal description of the land on which the water from this well is used is same as above of which

acres are irrigated and which is illustrated on the map on the reverse side of this form; that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon; knows the content thereof; and that the same are true of his (their) knowledge.

(COMPLETE REVERSE SIDE OF THIS FORM)

Signature(s) Jolly Land Co. Mary Jolly
Subscribed and sworn to before me on this July day of July, 1989

303295-X

My Commission expires: 12/24/89

NOTARY PUBLIC

ACCEPTED FOR FILING BY THE STATE ENGINEER OF COLORADO PURSUANT TO THE FOLLOWING CONDITIONS:

ISSUANCE OF THIS PERMIT DOES NOT CONFER A DECREED WATER RIGHT

1) IN ACCORDANCE WITH CRS 37-92-602(5) FOR HISTORIC USE AS INDICATED BELOW AND DESCRIBED IN CRS 37-92-602(1)(b).

2) A WELL PRODUCING 10 GALLONS PER MINUTE AND USED FOR THE WATERING OF LIVESTOCK ON A FARM OR RANCH.

79.77.9-2-89

FOR OFFICE USE ONLY
Court Case No.
Prior. Mo. Day Yr.
Div. 1 City 61
Sec. k. k. k.
Well Use
Dist. 01 Basin Man. Dis.

SEP 08 1989

DATE

STATE ENGINEER

BY

M.B. Malley

COLORADO DIVISION OF WATER RESOURCES

B-5-1

818 Centennial Bldg., 1313 Sherman St.

Denver, Colorado 80203

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STATE OF COLORADO

COUNTY OF DENVER

SS.

AFFIDAVIT

RECEIVED

JUL 28 1989

WATER RESOURCES DIVISION ENGINEER

STATEMENT OF BENEFICIAL USE OF GROUND WATER

AMENDMENT OF EXISTING RECORD

X LATE REGISTRATION

155242

PERMIT NUMBER 155242

LOCATION OF WELL

THE AFFIANT(S) Jolly Land Co.

County Washington

whose mailing address is Box 243

NW 1/4 of the NW 1/4, Section 5

City Woodrow CO 80757

Twp. 3 S Rng. 55 W 6 P M

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon; the well is located as described above, at distances of 300 feet from the N section line and 150 feet from the W section line;

water from this well was first applied to a beneficial use for the purpose(s) described herein on the day of 19 70

; the maximum sustained pumping rate of the well is 10 gallons per minute, the pumping rate claimed hereby is 10 gallons per minute; the total depth of the well is 40 feet; the average annual amount of water to be diverted is 1 acre-feet; for which claim is hereby made for stock watering

purpose(s); the legal description of the land on which the water from this well is used is same as above

of which

of which

No acres are irrigated and which is illustrated on the map on the reverse side of this form; that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon; knows the content thereof; and that the same are true of his (their) knowledge.

(COMPLETE REVERSE SIDE OF THIS FORM)

15234-E 303295

Signature(s) Jolly Land Co. Mary Jolly

Subscribed and sworn to before me on this July 19 89

My Commission expires: 12/24/89

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2) A WELL PRODUCING 10 GALLONS PER MINUTE AND USED FOR THE WATERING OF LIVESTOCK ON A FARM OR RANCH.

M.M. 9-7-89

FOR OFFICE USE ONLY

Court Case No.

Prior Mo. Day Yr.

Div. 1 Cty. 61

Sec. W. W. W.

Well Use

Dist. 01 Basin Man. Dis.

SEP 08 1989

DATE

STATE ENGINEER

BY