

NEW NEXICO ENERGY, MIDERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

45-31371

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

Certified Receipt #7002 2410 0006 6466 5229

April 21, 2004

R. A. Wirtanen ConocoPhillips Company 5525 Hwy.64 Farmington, NM 87401

RE:

Use of Fruitland Coal Produced Water for Reseeding

Dear Mr. Wirtanen:

The New Mexico Oil Conservation Division (OCD) has reviewed proposals for utilizing Fruitland Coal seam water to germinate and kick-start a special seed mixture at the ConcoPhillips 32-7 Unit #242A, A-33-32N-07W, API#30-045-31371. These proposals were included in letters dated April 12 and April 14, 2004 from the ConocoPhillips Company (COPC) and the Bureau of Land Management (BLM). COPC is authorized to use produced water not to exceed 6,000 ppm TDS to enchance revegatation at the 32-7 Unit #242A. This produced water may be used in one-inch applications to the reseeded site through June 1, 2004. No ponding, pooling or run off of applied produced water is allowed. Patsy Clugston of COPC and Dale Wirth of BLM have received verbal approval of these conditions previously. The operation is entered into with the full knowledge and cooperation of the BLM but COPC remains the responsible party.

Please be advised COPC approval does not relieve COPC of liability should contamination pose a future threat to ground water, surface water, human health and the environment. OCD approval does not relieve COPC of compliance with other federal, state, tribal or local laws and regulations.

If you have questions please contact me at 505-334-6178 ext 15.

Yours truly,

Denny G. Foust

Environmental Geologist

Deny & Fourt

dfoust@state.mm.us

DGF/mk

XC:

Dave Mankiewiez, BLM Farmington

Richard Arnold, New Mexico Agricultural Science Center, Farmington

DGF File

Environmental File



United States Department of the Interior

BUREAU OF LAND MANAGEMENT



Farmington Field Office 1235 La Plata Highway, Suite A Farmington, New Mexico 87401

IN REPLY REFER TO: 1703 (07200)

April 14, 2004

APR 2004

OIL DEST STATE OF THE DEST STATE OF TH

Mr. Denny Foust New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410

Dear Mr. Foust:

The Bureau of Land Management (BLM), Farmington Field Office, intends to conduct a produced water test site in the vicinity of Middle Mesa, San Juan 32-7 Unit, on the Conoco/Phillips 242A well pad. The well pad is located in T. 32 N, R. 7 W., Section 33, 810 FNL & 1095 FEL.

Reclamation efforts associated with oil and gas operations have not met with much success in the San Juan Basin. The continued drought conditions have only compounded the problem. Produced water could be used initially to aid in germination and root establishment of seeded well pads and pipeline rights of way. When root systems become established, produced water applications would be discontinued allowing vegetation to exist under ambient conditions.

Produced water is readily available in the San Juan Basin. The produced water TDS value chosen for this test site is in the range of 2,500 to 5,000 ppm. Application is scheduled to begin as soon as approval from the OCD is granted. Plot sizes would be 200ft.x 50ft. using 16 different grass seed varieties. Water would be applied by sprinkler pipe with special nozzles to calibrate application amounts. Approximately, 2 to 4 applications will be applied with the total amount of produced water not to exceed six inches. Water will not be allowed to pool, drift or runoff the test plots. Produced water will be stored in a 400 barrel water tank at the test location and pumped on the test plots via sprinkler pipe. Water sampling and testing will be conducted on each 400 barrel of produced water to ensure consistency in chemical composition. Baseline soil tests will be conducted prior to commencement. Test sites will be fenced by BLM to prevent livestock entrance. Soils will be tested for salt retention. Salt buildup may require soil amendments to correct problems if they occur. All testing will be conducted by New Mexico State University Agricultural Science Center with a written report upon completion.

Sincerely,

Dave Mankiewicz

Assistant Field Manager, Minerals

cc:

Patsy Clugston, Conoco/Phillips Company, 5525 Highway 64, Farmington, NM 87401 Richard Arnold, New Mexico Agricultural Science Center, P.O. Box 1018, Farmington, NM 87499



5525 Hwy. 64 Farmington, NM 87401

April 12, 2004

NMOCD

Attn: Denny Foust

Aztec, NM 87410



Re:

e: Regulatory/Environmental Project

Dear Mr. Foust:

Mr. Rick Arnold with NM State Ag Science Center and the Dale Wirth with the BLM have approached ConocoPhillips about working on a special project with them. They want to use produced CS water to germinate a special seed mixture they have developed that they are hoping will be conducive to NW New Mexico's climate. The criteria they were looking for was a location in Middle Mesa that needs seeded and having enough water to fill a 400 bbl tank twice with water that has a TDS level of around 5000. They will be using one of COPC's well sites for the project and our produced water to germinate their seed.

We located a group of wells that had recently been drilled that were within a close proximity of each other in our SJ 32-7 Unit. We had the water analyzed on six wells and found five of them met the criteria of around 5000 to 6000 TDS. If you will give your blessing on the project we will begin as soon a possible first be choosing a site best suitable for the equipment NM State will be using from the wells below. We will then set a tank on that location, fill the tank with produced water from the locations indicated below. Key Energy will be trucking this water to the tank, since normally water from these locations is piped from the wells to the COPC's 32-7 SWD. Then NM State will plant the seed and water the site using a special sprinkler system developed using the first 400 bbls. We will fill the tank a second time and the seed will be watered two weeks later. Supposedly this is all that is needed to germinate the seed. The project is to see if the new seed mixture will germinate using the produced water in this area and to verify that the use of the produced water doesn't cause any adverse affects.

The legal description of the locations where the water will be trucked from as follows:

32-7 Unit #208A, 1425 FSL & 990 FEL, Sec. 34, T32N, R7W; 30-045-31372; SF-078998

32-7 Unit #215A, 2358 FNL & 1990 FWL, Sec. 32 T32N 7 W; 30-045-31402; E-501-13

32-7 Unit #234A, 690 FSL & 1315 FEL Sec. 32, 32N 7W; 30-045-31316; E-501-13

32-7 Unit #238A, 475 FSL & 1140 FEL, Sec. 29, T32N, R7W; 30-045-31617; SF0967462

32-7 Unit #242A, 810 FNL & 1095 FEL, Sec. 33, T32N, R7W; 30-045-313711; SF-078543

coal

ConocoPhillips has agreed to pay for water analysis conducted on the six sites, the charge to haul the tank to and from the location as well as the tank rental fees. We will also be paying Key Trucking to haul the water to the seeding site. Any remediation encountered if the project has an adverse affect on the soils will be managed by the BLM and NM State.

We have attached the copies of the Water Analyses from Envirotech Labs on the sites listed above. We would appreciate your approval of this project as early as the end of the week, since NMSU wants to plant as early as next week. Please call Patsy Clugston at 599-3454 if you have questions.

Sincerely,

CONOCOPHILLIPS COMPANY

Bob Wirtanen

Sr. Safety & Environmental Specialist

Client:

ConocoPhillips

96052-026-000

Sample ID:

32-7 #208 A

04-08-04

Laboratory Number:

28316

Date Reported: Date Sampled:

04-06-04

Sample Matrix:

-Water-

Date Received:

04-07-04

Preservative:

Date Analyzed:

Project #:

Condition:

Cool & Intact

Chain of Custody:

11988

Analytical

Parameter

Result

Units

Total Dissolved Solids @ 180°C

5,230

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 32-7 Produced Water.

Analyst

Client:

ConocoPhillips

Project #:

96052-026-000

Sample ID:

32-7 #238 A 28320

Date Reported:

04-08-04

Laboratory Number: Sample Matrix:

Water

Date Sampled:

04-06-04 - 04-07-04-

Preservative:

Cool

Date Received: Date Analyzed:

04-07-04

Condition:

Cool & Intact

Chain of Custody:

11988

Analytical

Result

Units

Total Dissolved Solids @ 180°C

6,470

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 32-7 Produced Water.

Analyst

6/ 8

ENVIROTECH LABS

RACTICAL SOLUTIONS FOR A BLATER TOMORROW

Water Analysis

Client: Sample ID: ConocoPhillips 32-7 #234 A Project #:
Date Reported:

96052-026-000

Laboratory Number:

28319

Date Sampled:

04-08-04 04-06-04

Sample Matrix:

Water

Date Sampled:

04-06-04 -04**-**07**-**04---

Preservative:

Cool

Date Analyzed:

04-07-04

11988

Condition:

Cool & Intact

Chain of Custody:

Analytical

Parameter Result

Units

Total Dissolved Solids @ 180°C

5,930

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 32-7 Produced Water.

Analyst

Review C. Ceffin

Client:

Laboratory Number:

28318

Sample Matrix:

Sample ID:

Cool Preservative:

Condition:

ConocoPhillips

32-7 #215 A

Water

Cool & intact

Project #:

Date Reported:

Date Sampled:

Date Received:

Date Analyzed:

Chain of Custody:

96052-026-000

04-08-04

04-06-04

04-07-04

11988

Analytical

Result

Units

Total Dissolved Solids @ 180°C

4,160

mg/L

Reference:

U.S.E.P.A.; 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 32-7 Produced Water.

Analyst

NIM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865



Client:

ConocoPhillips

Project #:

96052-026-000

Sample ID:

32-7 #242 A

Date Reported:

Laboratory Number:

04-08-04

28321

Date Sampled:

04-06-04

Sample Matrix:

Water

Date Received:

04-07-04

Preservative:

Cool

Date-Analyzed:

04-07-04

Condition:

Cool & intact

Chain of Custody:

Analytical

Result

Units

Total Dissolved Solids @ 180°C

3,120

mg/L

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 32-7 Produced Water.

Analyst

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865