

BURLINGTON RESOURCES

SAN JUAN DIVISION

*File
Case File
11042*

MAR 29

March 25, 2002

New Mexico Oil Conservation Division
Attn: Charlie Perrin
1000 Rio Brazos Road
Aztec, NM 87410

**Re: Accepting Produced Water from Conoco Inc.
Jillson Federal SWD #1
Unit Letter F, Section 8 – T24N – R 3W**

Mr. Perrin:

As discussed last week, Burlington Resources Oil & Gas Company began accepting Class II produced water from Conoco Inc. on a temporary basis at our Jillson Federal SWD #1 facility this morning (3/25/02). The temporary arrangement is expected to last 30 – 60 days at approximately 5000 barrels per month.

Attached to this letter is a copy of a note from Conoco Inc. stating the estimated time frame and volume, plus copies of two water analyses.

If you have any questions concerning this release notification please contact me at 326-9841.

Sincerely,



Ed Hasely
Environmental Specialist

Attachment: Conoco Inc. Note
Water Analyses

cc: Dave Catanach (NMOCD – Santa Fe)
Shirley Ebert (Conoco)
Darren Randall
Bruce Gantner
Correspondence

Hasely Ed

From: Ebert, Shirley L. [Shirley-L-Farmin.Ebert@conoco.com]
Sent: Friday, March 22, 2002 1:48 PM
To: Hasely Ed
Subject: FW: Jillson SWD

> -----Original Message-----

> From: Ebert, Shirley L.
> Sent: Friday, March 22, 2002 1:42 PM
> To: 'llhasely@br-inc.com'
> Subject: Jillson SWD

>
> Conoco is requesting your approval to dispose of produced waters to Burlington Resource's Class II Jillson SWD in Rio Arriba County, NM. Conoco proposes to use this facility on a temporary basis to dispose of approximately 5000 bwpm for 30 to 60 days.

>
> If you have any questions please let me know. I will fax a copy of water analysis from Conoco's Lindrith B 25 SWD and Jicarilla 30-1 facilities.

>
> Thanks for your help.

>
> Shirley Ebert
> FPS-South Area
> 505-324-5813 - office
> 505-327-8755 - pager
> 505-320-8451 - cell

>
>

CONOCO**CONOCO INC.
SAN JUAN /LOBO OU****REQUEST FOR FACSIMILE
TRANSMISSION****AT CONOCO, OUR WORK IS NEVER SO URGENT OR IMPORTANT
THAT WE CANNOT TAKE TIME TO DO IT SAFELY!!!!**

DATE

*3/22/02***FROM:****EMPLOYEE NAME****EXTENSION***Shirley Ebert***DEPARTMENT****FACSIMILE NO.****CONOCO, INC. - SAN JUAN/LOBO OU****ETN 827-5825
Or (505) 324-5825****CITY - STATE - COUNTRY****FARMINGTON, NM****TO:****EMPLOYEE NAME****EXTENSION***ED Hasely***DEPARTMENT****ROOM NUMBER***Burlington Resources***CITY - STATE - COUNTRY****FACSIMILE NO.***Engle***599-4005**NUMBER OF PAGES 7

(INCLUDING COVER SHEET)

SPECIAL INSTRUCTIONS*FYE- Any questions let me know*

UNICHEM

A Division of BJ Services Company

Lab Test No: 28527

CRAWFORD, STEVE

Conoco

01/18/2000

Water Analysis

Listed below please find water analysis report from: Jicarilla

#30-1 SWD

Specific Gravity:	1.009
TDS:	12133
pH:	8.20
Conductivity:	μ mhos
Resistivity:	ohms/M

Cations:		<u>mg/L</u>
Calcium	(Ca ⁺⁺)	45
Magnesium	(Mg ⁺⁺)	21
Sodium	(Na ⁺)	3836
Iron	(Fe ⁺⁺)	2.02
Barium	(Ba ⁺⁺)	1.53
Strontium	(Sr ⁺⁺)	8.62
Manganese	(Mn ⁺⁺)	0.51
Anions:		
Bicarbonate	(HCO ₃)	1178
Carbonate	(CO ₃)	
Hydroxide	(OH)	
Silica	(SiO ₂)	
Sulfate	(SO ₄)	500
Chloride	(Cl)	6540

Gases:		
Carbon Dioxide	(CO ₂)	0
Hydrogen Sulfide	(H ₂ S)	7.

Comments:

DownHole SAT Rx
DEPOSITION POTENTIAL INDICATORS

Conoco
Jicarilla

#30-1 SWD

Report Date: 03-01-2000 Sampled: 01-18-2000
Sample #: 28527 at 0000

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO3)	12.41	Calcite (CaCO3)	13.46
Witherite (BaCO3)	0.164	Witherite (BaCO3)	-3.44
Strontianite (SrCO3)	4.05	Strontianite (SrCO3)	3.59
Anhydrite (CaSO4)	0.0231	Anhydrite (CaSO4)	-465.94
Gypsum (CaSO4*2H2O)	0.0181	Gypsum (CaSO4*2H2O)	-606.88
Barite (BaSO4)	7.10	Barite (BaSO4)	0.778
Celestite (SrSO4)	0.0846	Celestite (SrSO4)	-55.91
Silica (SiO2)	0.00	Silica (SiO2)	-89.81
Magnesium silicate	0.00	Magnesium silicate	-127.94
Iron hydroxide (Fe(OH)3)	< 0.001	Iron hydroxide (Fe(OH)3)	< 0.001
Strengite (FePO4*2H2O)	0.00	Strengite (FePO4*2H2O)	>-0.001
Iron sulfide (FeS)	298.74	Iron sulfide (FeS)	0.796
SIMPLE INDICES		BOUND IONS	
Langelier	1.38	Calcium	45.00
Ryznar	5.45	Barium	1.53
Puckorius	4.29	Carbonate	180.28
Larson-Skold Index	9.09	Phosphate	0.00
Stiff Davis Index	1.57	Sulfate	500.00
Oddo-Tomson	1.26		426.60

UNICHEM, A Division of B.J. Services
14505 Torrey Chase Blvd., Houston, TX 77014-1024

DownHole SAT Rx
WATER CHEMISTRY

Conoco
Jicarilla

#30-1 SWD

Report Date: 03-01-2000 Sampled: 01-18-2000
Sample #: 28527 at 0000

CATIONS

Calcium (as Ca)	45.00
Magnesium (as Mg)	21.00
Barium (as Ba)	1.53
Strontium (as Sr)	8.62
Sodium (as Na)	4827
Aluminum (as Al)	0.00
Manganese (as Mn)	0.510

ANIONS

Chloride (as Cl)	6540
Sulfate (as SO4)	500.00
Dissolved CO2 (as CO2)	13.08
Bicarbonate (as HCO3)	1082
Carbonate (as CO3)	41.76
Silica (as SiO2)	0.00
Phosphate (as PO4)	0.00

PARAMETERS

pH	8.20
Temperature (°F)	140.00
Density(mg/L)	1.01
Pressure(atm)	1.00
Calculated T.D.S.	13087

COMMENTS

UNICHEM, A Division of B.J. Services
14505 Torrey Chase Blvd., Houston, TX 77014-1024

Analytical Laboratory Report for:

UNICHEM

A Division of BJ Services Company

Conoco

UNICHEM Representative: Steve Crawford

Production Water Analysis

Listed below please find water analysis report from: B, 25 SWD

Lab Test No: 2001105126 Sample Date: 01/30/2001
Specific Gravity: 1.006
TDS: 7065
pH: 6.47

Cations:	mg/L	as:
Calcium	214	(Ca ⁺⁺)
Magnesium	10	(Mg ⁺⁺)
Sodium	2709	(Na ⁺)
Iron	629.72	(Fe ⁺⁺)
Barium	1.73	(Ba ⁺⁺)
Strontium	5.03	(Sr ⁺⁺)
Manganese	10.73	(Mn ⁺⁺)
Anions:	mg/L	as:
Bicarbonate	360	(HCO ₃ ⁻)
Sulfate	45	(SO ₄ ⁼)
Chloride	3080	(Cl ⁻)
Gases:		
Carbon Dioxide	167	(CO ₂)
Hydrogen Sulfide	23	(H ₂ S)

Just Jimmy 2/11

Comments:

DownHole SAT (tm)
DEPOSITION POTENTIAL INDICATORS

Conoco
B

25 SWD

Report Date: 02-26-2001 Sampled: 01-30-2001
Sample #: 5126 at 0000

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)		
Calcite (CaCO3)	0.319	Calcite (CaCO3)	-0.151	
Aragonite ((CaCO3)	0.270	Aragonite (CaCO3)	-0.191	
Witherite ((BaCO3)	< 0.001	Witherite (BaCO3)	-10.87	
Strontianite (SrCO3)	0.0175	Strontianite (SrCO3)	-2.91	
Magnesite (MgCO3)	0.0148	Magnesite (MgCO3)	-3.12	
Anhydrite (CaSO4)	0.00970	Anhydrite (CaSO4)	-512.42	
Gypsum (CaSO4*2H2O)	0.0118	Gypsum (CaSO4*2H2O)	-511.43	
Barite (BaSO4)	1.56	Barite (BaSO4)	0.357	
Celestite (SrSO4)	0.00440	Celestite (SrSO4)	-122.13	
Fluorite (CaF2)	0.00	Fluorite (CaF2)	-13.97	
Calcium phosphate	0.00	Calcium phosphate	>-0.001	
Hydroxyapatite	0.00	Hydroxyapatite	-281.61	
Silica (SiO2)	0.00	Silica (SiO2)	-56.42	
Brucite (Mg(OH)2)	< 0.001	Brucite (Mg(OH)2)	-2.68	
Magnesium silicate	0.00	Magnesium silicate	-102.48	
Iron hydroxide (Fe(OH)3)	< 0.001	Iron hydroxide (Fe(OH)3)	< 0.001	
Strengite ((FePO4*2H2O)	0.00	Strengite (FePO4*2H2O)	>-0.001	
Siderite (FeCO3)	1952	Siderite (FeCO3)	0.0819	
Halite (NaCl)	< 0.001	Halite (NaCl)	-173880	
Thenardite (Na2SO4)	< 0.001	Thenardite (Na2SO4)	-49441	
Iron sulfide (FeS)	4324	Iron sulfide (FeS)	8.34	
SIMPLE INDICES		BOUND IONS	TOTAL	FREE
Langelier	-0.439	Calcium	214.00	203.03
Ryznar	7.35	Barium	1.73	1.73
Puckorius	5.27	Carbonate	0.422	0.122
Larson-Skold Index	26.82	Phosphate	0.00	0.00
Stiff Davis Index	-0.521	Sulfate	45.00	32.50
Oddo-Tomson	-0.655			

UNICHEM - Midland Analytical Laboratory
P.O. Box 61427, Midland, Texas 79711

DownHole SAT(tm)
WATER CHEMISTRY

Conoco
B

25 SWD

Report Date: 02-26-2001 Sampled: 01-30-2001
Sample #: 5126 at 0000

CATIONS

Calcium (as Ca)	214.00
Magnesium (as Mg)	10.00
Barium (as Ba)	1.73
Strontium (as Sr)	5.03
Sodium (as Na)	2709
Potassium (as K)	0.00
Lithium (as Li)	0.00
Ammonia (as NH3)	0.00
Aluminum (as Al)	0.00
Iron (as Fe)	629.72
Boron (as B)	0.00
Manganese (as Mn)	10.73
Zinc (as Zn)	0.00
Lead (as Pb)	0.00

ANIONS

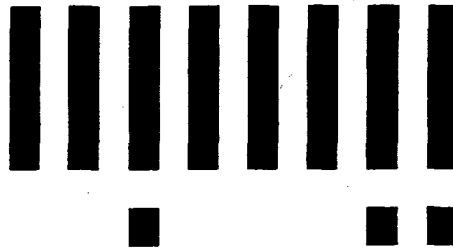
Chloride (as Cl)	3080
Sulfate (as SO4)	45.00
Bromine (as Br)	0.00
Dissolved CO2 (as CO2)	167.00
Bicarbonate (as HCO3)	360.00
Carbonate (as CO3)	0.00
Silica (as SiO2)	0.00
H2S (as H2S)	23.30
Phosphate (as PO4)	0.00
Nitrate (as NO3)	0.00
Fluoride (as F)	0.00

PARAMETERS

pH	6.47
Temperature (°F)	100.00
Density(mg/L)	1.01
Pressure(atm)	14.70
Calculated T.D.S.	9269
Molar Conductivity	13693

COMMENTS

UNICHEM - Midland Analytical Laboratory
P.O. Box 61427, Midland, Texas 79711



LTR



Job separation sheet



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 26, 1994

KELLAHIN AND KELLAHIN
Attorneys at Law
P. O. Drawer 2265
Santa Fe, New Mexico 87504

RE: CASE NO. 11042
ORDER NO. R-10168

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,


Sally E. Martinez
Administrative Secretary

cc: BLM - Farmington
OCD - Aztec
Ed Martin
Paul and Donald Candelaria