#### Jones, William V., EMNRD

From: Jones, William V., EMNRD

Sent: Monday, August 06, 2007 11:57 AM

To: 'Lane, Myke (E&P)'

**Cc:** Ezeanyim, Richard, EMNRD; Chavez, Carl J, EMNRD; Perrin, Charlie, EMNRD; Lepich, Mark (E&P); Katirgis, Stergie (E&P)

Subject: RE: Status on Request to Recieved WFS produced water

Hello Myke:

As far as the engineering bureau, I think this email acknowledging your submittal should suffice.

Say hello to Sterg....

William V. Jones PE New Mexico Oil Conservation Division 1220 South St. Francis Santa Fe, NM 87505 505-476-3448

From: Lane, Myke (E&P) [mailto:Myke.Lane@Williams.Com]
Sent: Monday, August 06, 2007 11:30 AM
To: Jones, William V., EMNRD
Cc: Ezeanyim, Richard, EMNRD; Chavez, Carl J, EMNRD; Perrin, Charlie, EMNRD; Lepich, Mark (E&P); Katirgis, Stergie (E&P)
Subject: RE: Status on Request to Recieved WFS produced water

Attached is your 6/1/07 email to me requesting that I get with Charlie Perrin. The reformatted packet I sent in July was to meet the requirements outlined by Charlie for this request. I do not believe there are any issues and our request should be acceptable for the following reasons outlined in the request:

- The Williams Field Service water is RCRA exempt produced water
- Analytical indicates the water is not significantly different from the water currently produced and disposed of in the wells (if anything it is fresher)
- Both permits allow for the disposal of "produced water," and I did not find any other limits or restrictions specified in the permits related to the source of the water.
- Williams will continue to follow all of the NMOCD and permit conditions/requirements including recordkeeping and well
  integrity testing.

Charlie was provided a copy of the packet sent in July. Do you want me to contact Charlie, and will NMOCD provide some type of written approval?

Myke Lane WPX - EH&S Specialist 505/634-4219 (off) 505/330-3198 (mob)

"Every new beginning starts with some other beginning's end!" ---Closing Time by Semisonic

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Monday, August 06, 2007 10:44 AM
To: Lane, Myke (E&P)
Cc: Ezeanyim, Richard, EMNRD; Chavez, Carl J, EMNRD; Perrin, Charlie, EMNRD
Subject: RE: Status on Request to Recieved WFS produced water

#### Myke:

Forgot what we told you earlier - so if you would remind me it would help.

Without knowing what else we may have said, and without again checking with Carl Chavez of the environmental bureau (making sure this was all RCRA Exempt waters), all I need is the packet you sent with the notice of new waters and the water analysis of those waters. I will get it scanned into the permit file for this well.

All is a "GO" from this end. If Charlie or Carl wants something else, I'm sure they will let you know.

Thank You,

William V. Jones PE New Mexico Oil Conservation Division 1220 South St. Francis Santa Fe, NM 87505 505-476-3448

From: Lane, Myke (E&P) [mailto:Myke.Lane@Williams.Com]
Sent: Monday, August 06, 2007 10:11 AM
To: Jones, William V., EMNRD
Subject: Status on Request to Recieved WFS produced water

Will:

Any word on the request for Williams Production to receive Williams Field Service (Midstream) produced water. I reformatted our request to meet the submittal suggested by Charlie Perrin.

Please let me know if there is anything further we need to do to get this going?

Thanks for your time and consideration.

MICHAEL K. (MYKE) LANE, PE EH&S SPECIALIST WILLIAMS EXPLORATION & PRODUCTION, LLC PO Box 640 721 South Main Aztec, NM 87410 505/634-4219 (off); -4205(fax); 505-330-3198 (mobile)

"The problems we face cannot be resolved at the same level of thinking as that which gave rise to them"

-- shared with me by Brent Hale

This inbound email has been scanned by the MessageLabs Email Security System.

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may

8/6/2007



Exploration & Production PO Box 640 Aztec, NM 84710 505/634-4219 505/634-4205 Fax

July 23, 2007

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Mr. William Jones New Mexico Oil Conservation Division Engineering and Geological Services Bureau 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Request to Expand Use and Allow Acceptance of Produced Water for Injection

Dear Mr. Jones:

Williams Four Corners, LLC (WFS) would like to use the following injections wells operated by Williams Production Company, LLC (WPX) for the disposal of recovered produced water from some of their facilities located in Rio Arriba Co., New Mexico.

Per discussions with your office and the Aztec District Office, WPX request permission from NMOCD to expand use of the following Injection wells which we operate under the reference permits.

#### **Verification of Permit Status:**

API Number	ULSTR	Footages
3003923035	K-16-31N-5W	1650 FSL & 1820 FWL
Well Name & Number: ROS	SA UNIT No. 094	
Operator: WILLIAMS PRC	DUCTION COMPANY, LI	_C
Permit: Case 9401 R-868	35	
API Number	ULSTR	Footages
<b>API Number</b> 3003927055	ULSTR I-23-31N-6W	Footages 2420 FSL & 1210 FEL
	I-23-31N-6W	
3003927055	I-23-31N-6W SA UNIT SWD No. 001	2420 FSL & 1210 FEL

#### Allowance within Permit for Expansion:

The produced water will be coming from the following compressor stations/CDP operated by WFS and located in Rio Arriba Co, NM.

Facility	GW Discharge Permit	STR
Eul Canyon		S24 T32N R6W
Bancos Canyon		S32 T32N R5W
Quintana Mesa	GW 309	S32 T32N R5W
Laguna Seca	GW 307	S19 T31N R5W
Martinez Draw	GW 308	S17 T31N R5W
31-6 CDP	GW 118	S1 T31N R6W
30-5 CDP	GW 108	S18 T30N R5W

Request to Expand Use of Rosa Injection Wells Williams Production Co, LLC

Produced water samples were collected from each of the listed sites earlier this spring and copies of the analytical are attached. All produced water to be received from WFS is according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, RCRA Exempt (Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste).

Injection of this produced water is consistent with each permit. Both wells are permitted as Class II UIC injection wells, permitted to inject produced water meeting the RCRA Exempt waste status, and there is no restrictions regarding the source of the produced water in the permits (e.g. production wells, location or volumes). Please refer to the highlighted sections of each permit, attached.

#### Time Period of Expanded Use:

If approved by the Division, WPX would like to accept the subject produced water from WFS as long as the wells are operational.

#### **Temporary Water Storage Restrictions:**

There will be no change in the water storage system associated with either well. No water will be stored in pits or ponds following acceptance at the facility and prior to injection.

#### Notice to the Surface Management Agency

Please refer to the attached formal notice to the Bureau of Land Management –FFO of our intent to expand use of the subject injection wells.

#### **Certification:**

WPX is not requesting any variance from the general permit conditions, NMOCD rules, regulations, and/or any pertinent orders governing the operation and use of these wells.

Please contact myself (505) 634-4219 for Williams Production Co, LLC and Mr. David Bays of Williams Four Corners, LLC (505) 634-4951 if you require any additional information. Thank you for your time and consideration.

Respectfully submitted,

Michael K. Lane EHS Specialist Williams Production - San Juan Basin Operations

- CC: Charlie Perrin, NMOCD Aztec District Office David Bays, WFS Mark Lepich, WPX Coal Team Lead WPX Env. Well Files
- Encl: Analytical Permits BLM-FFO Sundries

#### **CATION / ANION ANALYSIS**

Client:	Williams Four Corners	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40719	Date Sampled:	04-03-07
Chain of Custody:	2332	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-05-07
Condition:	Cool & Intact		

	Analytical			
Parameter	Result	Units		
рН	6.82	S.U.		
Conductivity @ 25° C	5,230	umhos/cm		
Total Dissolved Solids @ 180C	3,030	mg/L		
Total Dissolved Solids (Calc)	3,010	mg/L		
SAR	26.6	ratio		
Total Alkalinity as CaCO3	774	mg/L		
Total Hardness as CaCO3	294	mg/L		
Bicarbonate as HCO3	774	mg/L	12.69	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	2.3	mg/L	0.04	meg/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	1,360	mg/L	38.37	meq/L
Fluoride	<0.01	mg/L	0.00	meq/L
Phosphate	19.4	mg/L	0.61	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	14.7	mg/L	0.53	meq/L
Calcium	93.6	mg/L	4.67	meq/L
Magnesium	14.7	mg/L	1.21	meq/L
Potassium	2.00	mg/L	0.05	meq/L
Sodium	1,050	mg/L	45.68	meq/L
Cations			51.60	meq/L
Anions			51.70	meq/L
Cation/Anion Difference			0.19%	

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: Eul

Analyst

Review

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#### **CATION / ANION ANALYSIS**

Client:	Williams	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40720	Date Sampled:	04-03-07
Chain of Custody:	2333	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-05-07
Condition:	Cool & Intact		

	Analytical			
Parameter	Result	Units		
рН	7.83	s.u.		Kaline
Conductivity @ 25° C	11,700	umhos/cm		
Total Dissolved Solids @ 180C	6,970	mg/L	х	
Total Dissolved Solids (Calc)	6,930	mg/L		
SAR	114	ratio		
Total Alkalinity as CaCO3	3,710	mg/L		
Total Hardness as CaCO3	102	mg/L		
Bicarbonate as HCO3	3,710	mg/L	60.81	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	2.7	mg/L	0.04	meq/L
Nitrite Nitrogen	0.006	mg/L	0.00	meq/L
Chloride	1,970	mg/L	55.57	meq/L
Fluoride	0.77	mg/L	0.04	meq/L
Phosphate	15.2	mg/L	0.48	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	1.23	mg/L	0.04	meq/L
Calcium	32.0	mg/L	1.60	meq/L
Magnesium	5.37	mg/L	0.44	meq/L
Potassium	8.85	mg/L	0.23	meq/L
Sodium	2,640	mg/L	114.84	meq/L
Cations			117.11	meq/L
Anions			116.94	meq/L
Cation/Anion Difference			0.14%	

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: Bancos

Leters Analyst

Review

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#### **CATION / ANION ANALYSIS**

Client:	Williams	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40721	Date Sampled:	04-03-07
Chain of Custody:	2334	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-05-07
Condition:	Cool & Intact		

	Analytical			
Parameter	Result	Units		
рН	7.21	s.u.		
Conductivity @ 25° C	4,230	umhos/cm		
Total Dissolved Solids @ 180C	3,490	mg/L		
Total Dissolved Solids (Calc)	3,320	mg/L		
SAR	22.7	ratio		
Total Alkalinity as CaCO3	1,360	mg/L		
Total Hardness as CaCO3	436	mg/L		
Bicarbonate as HCO3	1,360	mg/L	22.29	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	6.5	mg/L	0.10	meq/L
Nitrite Nitrogen	0.030	mg/L	0.00	meq/L
Chloride	1,160	mg/L	32.72	meq/L
Fluoride	<0.01	mg/L	0.00	meq/L
Phosphate	48.1	mg/L	1.52	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	0.495	mg/L	0.02	meq/L
Calcium	170	mg/L	8.46	meq/L
Magnesium	2.92	mg/L	0.24	meq/L
Potassium	19.2	mg/L	0.49	meq/L
Sodium	1,090	mg/L	47.42	meq/L
Cations			56.61	meq/L
Anions			56.64	meq/L

#### **Cation/Anion Difference**

0.05%

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: Quintana Mesa

milleles 22 Analyst

Review

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

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#### **CATION / ANION ANALYSIS**

Client:	Williams	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40722	Date Sampled:	04-03-07
Chain of Custody:	2335	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-05-07
Condition:	Cool & Intact		

	Analytical			
Parameter	Result	Units		
рН	7.02	s.u.		
Conductivity @ 25° C	5,190	umhos/cm		
Total Dissolved Solids @ 180C	3,170	mg/L		
Total Dissolved Solids (Calc)	3,140	mg/L		
SAR	57.4	ratio		
Total Alkalinity as CaCO3	1,740	mg/L		
Total Hardness as CaCO3	80.0	mg/L		
Bicarbonate as HCO3	1,740	mg/L	28.52	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	17.5	mg/L	0.28	meq/L
Nitrite Nitrogen	0.002	mg/L	0.00	meq/L
Chloride	700	mg/L	19.75	meq/L
Fluoride	<0.01	mg/L	0.00	meq/L
Phosphate	147	mg/L	4.64	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	11.7	mg/L	0.42	meq/L
Calcium	32.0	mg/L	1.60	meq/L
Magnesium	<0.01	mg/L	0.00	meq/L
Potassium	7.00	mg/L	0.18	meq/L
Sodium	1,180	mg/L	51.33	meq/L
Cations			53.11	meq/L
Anions			53.19	meq/L

**Cation/Anion Difference** 

0.16%

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: Laguna Seca

Dalters Analyst

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	CHAIN	OF CUSTODY RECORD	STOD	Y RI		RD		2335	10	
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#### **CATION / ANION ANALYSIS**

Client:	Williams	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40723	Date Sampled:	04-03-07
Chain of Custody:	2336	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-05-07
Condition:	Cool & Intact		

	Analytical			
Parameter	Result	Units		
pH	7.88	s.u.		
Conductivity @ 25° C	9,800	umhos/cm		
Total Dissolved Solids @ 180C	5,850	mg/L		
Total Dissolved Solids (Calc)	5,630	mg/L		
SAR	112	ratio		
Total Alkalinity as CaCO3	4,080	mg/L		
Total Hardness as CaCO3	66.0	mg/L		
Bicarbonate as HCO3	4,080	mg/L	66.87	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.0	mg/L	0.02	meq/L
Nitrite Nitrogen	0.017	mg/L	0.00	meq/L
Chloride	980	mg/L	27.65	meq/L
Fluoride	0.80	mg/L	0.04	meq/L
Phosphate	2.5	mg/L	0.08	meq/L
Sulfate	<0.1	mg/L	0.00	meq/L
Iron	0.137	mg/L	0.00	meq/L
Calcium	20.8	mg/L	1.04	meq/L
Magnesium	4.15	mg/L	0.34	meq/L
Potassium	0.20	mg/L	0.01	meq/L
Sodium	2,140	mg/L	93.09	meq/L
Cations			94.47	meq/L
Anions			94.65	meq/L
Cation/Anion Difference			0.19%	

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: Martinez Draw

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			5796 U.S. Highway 64 Farminoton, New Mexico 87401	ghway 6 Mexico	4 87401				Received Intact	ntact			
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CHAIN OF CUSTODY RECORD

2336

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### R( ACTICAL SOLUTIONS FOR A BETTER TOMORROW

#### **CATION / ANION ANALYSIS**

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Client:	Williams	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40724	Date Sampled:	04-03-07
Chain of Custody:	2337	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-05-07
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	6.28	S.U.		
•				
Conductivity @ 25° C	742	umhos/cm		
Total Dissolved Solids @ 180C	490	mg/L		
Total Dissolved Solids (Calc)	426	mg/L		
SAR	3.7	ratio		
Total Alkalinity as CaCO3	168	mg/L		
Total Hardness as CaCO3	140.0	mg/L		
Bicarbonate as HCO3	168	mg/L	2.75	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.9	mg/L	0.03	meq/L
Nitrite Nitrogen	0.018	mg/L	0.00	meq/L
Chloride	108	mg/L	3.05	meq/L
Fluoride	0.13	mg/L	0.01	meq/L
Phosphate	8.0	mg/L	0.25	meq/L
Sulfate	51.0	mg/L	1.06	meq/L
Iron	76.9	mg/L	2.75	meq/L
Calcium	52.8	mg/L	2.63	meq/L
Magnesium	1.95	mg/L	0.16	meq/L
Potassium	0.73	mg/L	0.02	meq/L
Sodium	99.7	mg/L	4.34	meq/L
Cations			7.15	mea/L
Anions			7.15	meq/L

#### **Cation/Anion Difference**

0.03%

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: 31-6 CDP

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

Project Location       3:-6     CDP       3:-6     CDP       2:-6     CDP       2:-6     CDP       2:-6     Cooce       2:40     Value       4-3-07     Value       4-3-07     Value       1:40     Value       4-3-07     Value	ANALYSIS /	_	
lient No. 00068 - 005 Lab Number Matrix 40724 Water		ANALYSIS / PARAMETERS	
Lab Number Sample Matrix 40724 Water		Remarks	arks
40724 Water	Cont Cont LT		
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			X N N/A
5796 U.S. Highway 64 Earmington Now Movico o	hway 64	Received Intact	
(505) 632-0615	0615	Cool - Ice/Blue Ice	

#### **CATION / ANION ANALYSIS**

Client:	Williams	Project #:	00068-005
Sample ID:	Produced Water	Date Reported:	04-06-07
Laboratory Number:	40725	Date Sampled:	04-03-07
Chain of Custody:	2338	Date Received:	04-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04 <b>-</b> 05-07
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	6.50	s.u.	ал анд намандай и долгон и полот и соторого соторой ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	
Conductivity @ 25° C	2,450	umhos/cm		
Total Dissolved Solids @ 180C	1,480	mg/L		
Total Dissolved Solids (Calc)	1,410	mg/L		
SAR	38.1	ratio		
Total Alkalinity as CaCO3	240	mg/L		
Total Hardness as CaCO3	32.0	mg/L		
Bicarbonate as HCO3	240	mg/L	3.93	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	4.9	mg/L	0.08	meq/L
Nitrite Nitrogen	0.094	mg/L	0.00	meq/L
Chloride	500	mg/L	14.11	meq/L
Fluoride	0.73	mg/L	0.04	meq/L
Phosphate	16.7	mg/L	0.53	meg/L
Sulfate	203	mg/L	4.22	meq/L
Iron	105	mg/L	3.75	meq/L
Calcium	9.60	mg/L	0.48	meq/L
Magnesium	1.95	mg/L	0.16	meq/L
Potassium	28.0	mg/L	0.72	meq/L
Sodium	495	mg/L	21.53	meq/L
Cations			22.89	meq/L
Anions			22.90	meq/L

#### **Cation/Anion Difference**

0.06%

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: 30-5 CDP

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	CHAIN	OF CUSTODY RECORD		× Z E	COR	Δ	2338	38		
Client / Project Name	Project Location	9 C.D			ANAL	ANALYSIS / PARAMETERS	METERS			[
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		FOUROTF	H C H	20			Sample	Sample Receipt		
								7	N N	N/A
		5796 U.S. Highway 64 Farmington New Mexico 87401	ighway 6 Mexico 3	;4 87401			Received Intact			T
		(505) 632-0615	2-0615				Cool - Ice/Blue Ice	ġ		
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	UNITED STATES PARTMENT OF THE IN EAU OF LAND MANA	NTERIOR			Ol Exp 5. Lease Serial No.	MB N	APPROVED o. 1004-0137 March 31, 2007
Do not use this f	IOTICES AND REPOR form for proposals to Use Form 3160-3 (AF	drill or to re	enter an	•	SF-078771 6. If Indian, Allottee or	Trib	e Name
SUBMI	T IN TRIPLICATE – Other in	nstructions on pa	nge 2.	<u> </u>	7. If Unit of CA/Agree	ment,	Name and/or No.
1. Type of Well					- Rosa 8. Well Name and No.		<u> </u>
2. Name of Operator	/ell 🖌 Other				Rosa Unit SWD #1 9. API Well No.		
Williams Production Co.			<u> </u>		30-039-27055		
3a. Address PO Box 640, Aztec, NM		b. Phone No. <i>(in</i> 505-634-4200	clude area cod	e) 	10. Field and Pool or E Entrada	_	atory Area
4. Location of Well (Footage, Sec., T., 2420'FSL & 1210' FEL, Sec23, Twp 31N, Rng C	R., M., or Survey Description) 6W, NMPM	<u> </u>			11. Country or Parish, Rio Arriba Co., NM	State	
12. CHEC	K THE APPROPRIATE BOX	(ES) TO INDICA	TE NATURE	OF NOTI	CE, REPORT OR OTHE	ER DA	АТА
TYPE OF SUBMISSION			ТҮР	E OF ACT	TION		
Notice of Intent	Acidize	Deepen Fracture	Freat	Ξ	luction (Start/Resume) amation		Water Shut-Off Well Integrity
Subsequent Report	Casing Repair	New Cor	struction	_	omplete		Other
Final Abandonment Notice	Change Plans	Plug and Plug Bac		-	porarily Abandon er Disposal		
the proposal is to deepen direction Attach the Bond under which the v following completion of the involv testing has been completed. Final determined that the site is ready fo Once approval recieved from NMO0 Mesa, Laguna Seca, Martinez Draw	vork will be performed or prov red operations. If the operation Abandonment Notices must be r final inspection.) CD, plan to accept produced r, 31-6 CDP, and 30-5 CDP.	ide the Bond No. a results in a multi filed only after a d water from Will	on file with BI ple completion l requirements	M/BIA. I or recomp , including	Required subsequent rep- oletion in a new interval, reclamation, have been	orts n a Foi comp	nust be filed within 30 days rm 3160-4 must be filed once leted and the operator has
Name (Printed/Typed) Michael K. Lane		Ti	ile EH&S Sp	ecialist - S	San Juan Basin Opera	tions	
Signature	Dee	D	the 7/23	107	•		
	THIS SPACE F	OR FEDER	L OR STA	TE OF	FICE USE		
Approved by			Title				
Conditions of approval, if any, are attache that the applicant holds legal or equitable entitle the applicant to conduct operations	title to those rights in the subject		Y Office		IL	Date .	
Title 18 U.S.C. Section 1001 and Title 43 fictitious or fraudulent statements or repr			n knowingly an	1 willfully (	to make to any department	t or ag	ency of the United States any false,
(Instructions on page 2)							

Form 3160-5UNITED STATES(February 2005)DEPARTMENT OF THE INTERIORBUREAU OF LAND MANAGEMENT					FORM APPROVED OMB No. 1004-0137 Expires: March 31, 2007 5. Lease Serial No. SF-078769		
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.					6. If Indian, Allottee or Tribe Name		
SUBMIT IN TRIPLICATE – Other instructions on page 2. 1. Type of Well					7. If Unit of CA/Agreement, Name and/or No. - Rosa		
Oil Well Gas Well  Other					8. Well Name and No. Rosa Unit 094 9. API Well No.		
2. Name of Operator Williams Production Co.					30-039-23035		
3a. Address3b. Phone NoPO Box 640, Aztec, NM505-634-420			(include area code) 10. Field and Pool or Exploratory Area Blanco Mesa Verde Ext.				
4. Location of Well ( <i>Footage, Sec., T.,R.,M., or Survey Description</i> ) 1650 'FSL & 1820' FEL, Sec 16, Twp 31N, Rng 05W, NMPM			· · · ·		11. Country or Parish, State Rio Arriba Co., NM		
12. CHEC	K THE APPROPRIATE BC	X(ES) TO INDI	CATE NATURI	E OF NOTIC	CE, REPORT OR OTH	ER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION						
Notice of Intent	Acidize	Deepe	n re Treat	=	uction (Start/Resume) amation	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair	New (	Construction	Reco	mplete	Other	
	Change Plans	Plug a	nd Abandon	Temp	porarily Abandon		
Final Abandonment Notice	Convert to Injection	🔲 Plug I	Back Water Disposal				
the proposal is to deepen directiona Attach the Bond under which the w following completion of the involv testing has been completed. Final determined that the site is ready for Once approval recieved from NMOO Mesa, Laguna Seca, Martinez Draw	vork will be performed or pro- ed operations. If the operation Abandonment Notices must la final inspection.) CD, plan to accept produce , 31-6 CDP, and 30-5 CDI	ovide the Bond N on results in a m be filed only afte ed water from V	lo. on file with B ultiple completio r all requirement	ELM/BIA. R on or recomp is, including	Required subsequent rep letion in a new interval reclamation, have been	orts must be filed within 30 days , a Form 3160-4 must be filed once completed and the operator has	
				itle EH&S Specialist - San Juan Basin Operations			
Signature	Sole		Date $7/2$	3/07	. :		
	THIS SPACE	FOR FEDE	RAL OR ST	ATE OFF	FICE USE		
Approved by			Title	<u></u> "		Date	
Conditions of approval, if any, are attached that the applicant holds legal or equitable t entitle the applicant to conduct operations	itle to those rights in the subject		rtify		<u> </u> 1	,	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

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