### 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



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

July 23, 2007

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: ROSA UNIT No. 094

Operator: WILLIAMS PRODUCTION COMPANY, LLC

Permit: Case 9401 R-8685

**API Number** 

ULSTR

**Footages** 

3003927055

I-23-31N-6W

2420 FSL & 1210 FEL

Well Name & Number: ROSA UNIT SWD No. 001

Operator: WILLIAMS PRODUCTION COMPANY, LLC

Permit: SWD-916

## 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 40719 Laboratory Number: 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 Hα 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 12.69 mg/L meq/L Carbonate as CO3 < 0.1 0.00 mg/L meq/L Hydroxide as OH < 0.1 0.00 mg/L meg/L Nitrate Nitrogen 2.3 mg/L 0.04 meg/L Nitrite Nitrogen < 0.001 0.00 mg/L meq/L Chloride 1,360 mg/L 38.37 meq/L Fluoride < 0.01 mg/L 0.00 meg/L **Phosphate** 19.4 0.61 mg/L meq/L **Sulfate** < 0.1 0.00 mg/L meq/L 14.7 Iron 0.53 meg/L mg/L 93.6 4.67 Calcium mg/L meg/L 14.7 Magnesium mg/L 1.21 meq/L **Potassium** 2.00 mg/L 0.05 meq/L Sodium 1,050 45.68 meq/L mg/L Cations 51.60 meg/L **Anions** 51.70 meg/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

Sampler Client No.  Sample No./ Identification Date Identification Time Lab Number  Profluce & H20 4.3-07 1200 40119  Profluce & H20 4.3-07 1200 40119  Profluce & H20 4.3-07 1200 40119	Sample Matrix	o .cf ainers						•
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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.		
Conductivity @ 25° C	11,700	umhos/cm		
Total Dissolved Solids @ 180C	6,970	mg/L		
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

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or S	-002	Sample Matrix	Water				 Date Time Rec		Reco	FOVIROTECH INC.		5796 U.S. Highway 64 Farmington, New Mexico 87401	(505) 632-0615
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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		

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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	meg/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

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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		
pH	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

Christin Maeters

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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		

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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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## **CATION / ANION ANALYSIS**

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		

	Analytical		THE CONTRACTOR OF THE CONTRACT	
Parameter	Result	Units		
рН	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	meq/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

Christine mulaeters Analyst Review P. Ophoes

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Client / Project Name		Project Location					PISK IANA	ANAI VSIS / PABAMETEBS	FBS		
Williams	m Manager 20 - P	31-60	CDP						į		
Sampler:		Client No.		1	S191	5	2 40			Remarks	
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Sample No./ Sample Identification Date	e Sample Time	Lab Number	Sample Matrix		ď	L	<b>4∨</b>				
Proluced H. 0 4-3-0	4-3-07 1:40	40724	Water		メ	×	<u>م</u>				
		(	5			and the state of the control					
						TOTAL SECTION SECTION					
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							************				
Relinquished by: (Signature)				Received by:	/: (Signature)	<b>**</b>			,	Date	Time
the Mark			4-3-07 4: 5021	Jago!	Tear T	¥		de, o o designa o estra de majora de desperadora de mesencialmente	<b>7</b>	4-3-07	4.00
Relinquished by: (Signature)				Received by: (Signatthe)	/: (Signat <b>u</b> f	(e)					
Relinquished by: (Signature)				Received by: (Signature)	/: (Signature	(e)					
			<b>ENVIROTECH INC</b>	TO T		17			Sample	Sample Receipt	
										>	N N/A
			5796 U.S. Highway 64 Farmington New Mexico 87401	Highway	, 64 2 87401			Re	Received Intact		
			(505)	(505) 632-0615				Coo	Cool - Ice/Blue Ice	(t)	
										een luan renrochiction 578-129	Inction 578-1

## **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:	04-05-07
Condition:	Cool & Intact		

	Analytical			7
Parameter	Result	Units		
рН	6.50	s.u.	The state of the s	an rose production from 1 court to the court of the court
Conductivity @ 25° C	2,450	umhos/cm	<u>:</u>	
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	meq/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	meg/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

(hristin muceles

Review

Client / Project Name Williams	Pa	Project Location	CDP				¥	ANALYSIS / PARAMETERS	AMETERS			
Sampler:	<u>ö</u>	Client No. OCOをB・	- 605	o. of tainers	t	5 7	5~0	5001-		Remarks	arks	
Sample No./ Sample San Identification Date Tir	Sample Time	Lab Number	Sample Matrix	- 1	1 9	ΓŢ	iΔA	t&⊃				
Produced Hz > 4.3-01 20	205pm	SZLOT	Water	_	×	X	×	×				
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Relinquished by: (Signature)		1	1	Received by: (Signature)	(Signati		)			2	) )	2
Relinquished by: (Signature)			Rec	Received by: (Signature)	(Signati	Ire)						
		_   <b>  1.1.</b>	FOVIDOTECH IOC	I C	Š	C			Sam	Sample Receipt	eipt	
								-			Z ≻	N/A
			5796 U.S. Highway 64 Farminaton New Mexico 87401	ghway (	34 8740	<b>.</b>			Received Intact	प्र		
			(505) 632-0615	2-0615	6				Cool - Ice/Blue Ice	<u>8</u>		
				-								

Form 3160-5 (February 2005)

(Instructions on page 2)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Eumiron: March 21 200

5. Lease Serial No. SF-078771

6. If Indian, Allottee or Tribe Name

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 proposal

	<u> </u>		<u> </u>			
SUBMI	IN TRIPLICATE - Other	instructions on pa	age 2.	· ·	1	ement, Name and/or No.
1. Type of Well					Rosa	
Oil Well Gas W	'ell				8. Well Name and No Rosa Unit SWD #1	
Name of Operator Williams Production Co.					9. API Well No. 30-039-27055	· ·
3a. Address PO Box 640, Aztec, NM		3b. Phone No. (in 505-634-4200	clude area code,	)	10. Field and Pool or I Entrada	Exploratory Area
4. Location of Well <i>(Footage, Sec., T.,</i> 2420'FSL & 1210' FEL, Sec23, Twp 31N, Rng 0	R.,M., or Survey Description 6W, NMPM	)			11. Country or Parish, Rio Arriba Co., NM	State
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICA	ATE NATURE (	OF NOTIC	CE, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			ТҮРЕ	OF ACT	ION	
✓ Notice of Intent	Acidize Alter Casing	Deepen Fracture	Treat	=	uction (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair Change Plans	<del></del>	nstruction Abandon	$\equiv$	omplete porarily Abandon	Other
Final Abandonment Notice	Convert to Injection	Plug Bac	k	<b>✓</b> Wate	er Disposal	
Attach the Bond under which the v 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	ed operations. If the operation Abandonment Notices must final inspection.)  CD, plan to accept produce	on results in a mult be filed only after a ed water from Will	iple completion ll requirements,	or recomp including	letion in a new interval reclamation, have been	, a Form 3160-4 must be filed once n completed and the operator has
14. I hereby certify that the foregoing is to Name (Printed/Typed)	rue and correct.		- FUAC C			
Michael K. Lane	· · · · · · · · · · · · · · · · · · ·	Ti	tle EH&S Spe	cialist - S	San Juan Basin Opera	ations
Signature	De Case	- D	ate 7/23	107	•	
	THIS SPACE	FOR FEDERA	AL OR STA	TE OF	ICE USE	
Approved by			Title	****		Data
Conditions of approval, if any, are attached that the applicant holds legal or equitable to entitle the applicant to conduct operations	itle to those rights in the subject				1	Date.
Title 18 U.S.C. Section 1001 and Title 43 fictitious or fraudulent statements or repre	•		n knowingly and	willfully t	o make to any departmen	nt or agency of the United States any false,

Form 3160-5 (February 2005)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED OMB No. 1004-0137 Expires: March 31, 2007

5. Lease Serial No. SF-078769

6. If Indian, Allottee or Tribe Name

	form for proposals t Use Form 3160-3 (A				
	IT IN TRIPLICATE - Other	instructions on page	2.	7. If Unit of CA/Agre	ement, Name and/or No.
1. Type of Well					
Oil Well Gas	Well Other			8. Well Name and No Rosa Unit 094	
Name of Operator     Williams Production Co.				9. API Well No. 30-039-23035	
3a. Address PO Box 640, Aztec, NM		3b. Phone No. (includ	le area code)	10. Field and Pool or	• •
		505-634-4200		Blanco Mesa Verde	`
4. Location of Well (Footage, Sec., T 1650 'FSL & 1820' FEL, Sec 16, Twp 31N, Rn	.,R.,M., or Survey Description, g 05W, NMPM	)		11. Country or Parish, Rio Arriba Co., NM	State
12. CHE	CK THE APPROPRIATE BO	X(ES) TO INDICATE	NATURE OF N	OTICE, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION	
✓ Notice of Intent	Acidize	Deepen		Production (Start/Resume)	Water Shut-Off
	Alter Casing	Fracture Trea	nt 🔲	Reclamation	Well Integrity
Subsequent Report	Casing Repair	New Constru	ction	Recomplete	Other
	Change Plans	Plug and Aba	andon	Temporarily Abandon	
Final Abandonment Notice	Convert to Injection	Plug Back	<b>✓</b>	Water Disposal	
Once approval recieved from NMC Mesa, Laguna Seca, Martinez Dra	w, 31-6 CDP, and 30-5 CDI		s Field Service	facilities including; Eul Ca	anyon, Bancos Canyon, Quintana
14. I hereby certify that the foregoing is Name (Printed/Typed)	true and correct.				
Michael K. Lane		Title	EH&S Specialis	st - San Juan Basin Opera	ations
Signature	De	Date	7/23/2	7	
	THIS SPACE	FOR FEDERAL	OR STATE	OFFICE USE	
Approved by					
			Γitle		Date .
Conditions of approval, if any, are attach		not warrant or certify	Office		

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,

entitle the applicant to conduct operations thereon.

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.