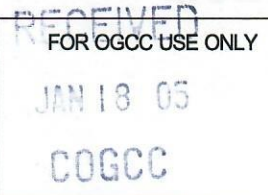




## State of Colorado

## Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



## SOURCE OF PRODUCED WATER FOR DISPOSAL

This form must be completed for any new disposal site and for any change in sources of produced water for an existing disposal site.

Complete the Attachment Checklist

OGCC Operator Number: 50150  
 Name of Operator: Lance Oil and Gas, Inc.  
 Address: 1099 18th St. Suite 1200  
 City: Denver State: CO Zip: 80202

Contact Name and Telephone:  
Russell Branting  
 No: 303-252-6234  
 Fax: 303-450-6927

Chemical Analysis of fluid	Oper	OGCC
<input checked="" type="checkbox"/>		

OGCC Disposal Facility Number: 159129Operator's Disposal Facility Name: Dirks Disposal Operator's Disposal Facility Number: 1-22Location (QtrQtr, Sec, Twp, Rng, Meridian): SWNW Sec 22 9N 43W 6thAddress: County rd 55 and 44City: Amherst State: Co Zip: 80721 County: Phillips

If more space is required, attach additional sheet.

Add Source: OGCC Lease No: \_\_\_\_\_ API No: 05-095-06070 Well Name & No: Schlachter 13-22  
☒ Operator Name: Lance Oil and Gas, Inc. Operator No: 50150

Delete Source: Location: QtrQtr: SWSW Section: 22 Township: 9N Range: 43W Producing Formation: Niobrara  
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: NR

Add Source: OGCC Lease No: \_\_\_\_\_ API No: 05-095-06069 Well Name & No: Olson 4-27  
☐ Operator Name: Lance Oil and Gas, Inc. Operator No: 50150

Delete Source: Location: QtrQtr: NWNW Section: 27 Township: 9N Range: 43W Producing Formation: Niobrara  
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: NR

Add Source: OGCC Lease No: \_\_\_\_\_ API No: 05-095-06075 Well Name & No: Harold 4-21  
☐ Operator Name: Lance Oil and Gas, Inc. Operator No: 50150

Delete Source: Location: QtrQtr: NWNW Section: 21 Township: 9N Range: 43W Producing Formation: Niobrara  
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 19547 ppm

Add Source: OGCC Lease No: \_\_\_\_\_ API No: 05-095-06073 Well Name & No: Schlachter 10-22  
☐ Operator Name: Lance Oil and Gas, Inc. Operator No: 50150

Delete Source: Location: QtrQtr: NWSE Section: 22 Township: 9N Range: 43W Producing Formation: Niobrara  
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 23485 ppm

Add Source: OGCC Lease No: \_\_\_\_\_ API No: 05-095-06074 Well Name & No: Ozman Trust 16-29  
☐ Operator Name: Lance Oil and Gas, Inc. Operator No: 50150

Delete Source: Location: QtrQtr: SESE Section: 29 Township: 9N Range: 43W Producing Formation: Niobrara  
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 19849 ppm

Add Source: OGCC Lease No: \_\_\_\_\_ API No: 05-095-06076 Well Name & No: Lebsack 7-21  
☐ Operator Name: Lance Oil and Gas, Inc. Operator No: 50150

Delete Source: Location: QtrQtr: SWSE Section: 21 Township: 9N Range: 43W Producing Formation: Niobrara  
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 18161 ppm

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Russell BrantingSigned: Russell BrantingTitle: GGR Project EngineerDate: 1/18/05OGCC Approved: Ed D. MattheeTitle: EngineerDate: 4/15/2005

CONDITIONS OF APPROVAL, IF ANY:



Customer:

Lance Oil &amp; Gas

Well:

Olson 4-27 &amp; Schlachter 13-22

Date:

03/17/2004

HALLIBURTON

## LABORATORY WATER ANALYSIS

Sample.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Well Name	Olson 4-27	Olson 4-28	Olson 4-29	Olson 4-30	Olson 4-31	Olson 4-32	Olson 4-33	Olson 4-27	Olson 4-27	Olson 4-27	Olson 4-27			
Sample labeled	2/28	2/29	3/1	3/2	3/3	3/4	3/5	3/6	3/8	3/10	3/12			
Temperature (°F)	67.6	67.6	67.6	67.6	67.6	67.6	67.6	64.2	64.9	64.2	64.2			
pH	7.23	7.30	7.40	7.33	7.45	7.47.7.50	7.38	7.30	7.24	7.50	7.50			
Chlorides (mg/L):	14813	14813	14699	14813	14635	15877	15231	12409	12550	12479	12550			
Potassium (mg/L):	56	53	53	49	50	49	49	90	60	58	61			
Sodium (mg/L):	8970	8840	9540	9160	9120	9420	8930	7866	7980	7947	7977			
Sulfate (mg/L):	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50			
Iron (mg/L):	0.15	0.25	0.05	0.05	0.05	0.05	0.05	0.30	0.40	0.40	0.30			
Bicarbonates (mg/L):	2001	1952	1952	1952	1952	1952	1952	2318	2284	2318	2318			
Reducing Agents (mg/L):	P	P	P	P	P	P	P	P	P	P	P			
Calcium (Ca) (mg/L):	680	680	680	670	680	680	680	720	710	710	700			
Magnesium (Mg) (mg/L):	80	80	80	90	80	80	90	90	100	80	80			
Phosphates (PO <sub>4</sub> ) (mg/L):	10	10	10	10	10	10	10	10	5	10	5			
Specific Gravity	1.016	1.016	1.017	1.016	1.015	1.017	n/a	1.017	na	na	na			
Resistivity, ohm*m							0.90	0.35	0.34	0.33	0.34			

Sample.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Well Name	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter	Schlachter			
Sample labeled	2/28	2/29	3/1	3/2	3/4	3/4	3/5	3/6	3/8	3/10	3/12			
Temperature (°F)	67.6	67.6	67.6	67.6	67.6	67.6	67.6	64.9	64.7	64.9	65.4			
pH	7.38	7.38	7.417.48	7.53	7.29	7.29	7.53	7.46	7.47	7.53	7.55			
Chlorides (mg/L):	14231	14125	14231	14231	14231	14753	14877	12692	12621	12763	12763			
Potassium (mg/L):	61	54	51	51	51	51	52	82	66	64	68			
Sodium (mg/L):	8950	9100	9240	9360	9190	9210	9220	8056	8033	8089	8060			
Sulfate (mg/L):	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50			
Iron (mg/L):	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.20	0.10	0.20	0.20			
Bicarbonates (mg/L):	2001	2001	2001	2025	2025	2050	2050	2289	2289	2257	2257			
Reducing Agents (mg/L):	P	P	P	P	P	P	P	P	P	P	P			
Calcium (Ca) (mg/L):	680	680	680	680	680	680	680	690	720	710	710			
Magnesium (Mg) (mg/L):	90	90	80	80	80	80	80	100	90	90	90			
Phosphates (PO <sub>4</sub> ) (mg/L):	10	10	10	10	10	10	10	5	10	10	10			
Specific Gravity	1.016	1.016	1.016	1.016	1.016	1.017	n/a	1.017	na	na	na			
Resistivity, ohm*m							0.37	0.33	0.32	0.32	0.32			





**BJ SERVICES**  
**Rocky Mountain Region Laboratory**  
**Water Analysis Report**

Project # S09-36-0-4

**Customer/Well Information**

**Company:** Western Gas  
**Well Name:** Harold 4-21  
**Location:**  
**State:** Phillips County, Colorado  
**Formation:**  
**Depth:** ft  
**Date:** 09/13/2004  
**Prepared for:**  
**Submitted by:**  
**Prepared by:** Dean Koutroulis  
**Water Type:** Produced water

**Background Information**

**Reason for Testing:**  
**Completion type:**  
**Well History:**  
**Special Considerations:** 9/9/2004 12:40:00 PM

**Sample Characteristics**

**Sample Temp:** 70 (°F)  
**pH:** 7.50  
**Specific Gravity:** 1.200  
**S.G. (Corrected):** 1.202 @ 60 °F  
**Resistivity (Calc):** 0.33 Ω-m  
**Viscosity:** 1 cp  
**Color:** Clear  
**Odor:** None  
**Turbidity:** Clear  
**Filtrates:** None

**Sample Composition**

**CATIONS**

	mg/l	me/l	ppm
Sodium (calc.)	7999	347.9	6666
Calcium	545	27.2	454
Magnesium	83	6.8	69
Barium	0	0.0	0
Potassium	800	20.5	667
Iron	1.00	0.0	0.83

**ANIONS**

Chloride	13600	383.6	11333
Sulfate	8	0.2	7
Hydroxide	0	0.0	0
Carbonate	< 1	----	----
Bicarbonate	1220	20.0	1017

**SUMMARY**

Total Dissolved Solids(calc.)	23456		19547
Total Hardness as CaCO3	1702	34.0	1418

**Scaling Tendencies**

CaCO3 Factor 665339.2 Calcium Carbonate Scale Probability --> POSSIBLE  
CaSO4 Factor 4362.88 Calcium Sulfate Scale Probability -----> REMOTE

**Comments**





**BJ SERVICES**  
**Rocky Mountain Region Laboratory**  
**Water Analysis Report**

Project # S09-38-0-4

**Customer/Well Information**

**Company:** Western Gas  
**Well Name:** Schlacter 10-22  
**Location:**  
**State:** Phillips County, Colorado  
**Formation:**  
**Depth:** ft  
**Date:** 09/13/2004  
**Prepared for:**  
**Submitted by:**  
**Prepared by:** Dean Koutroulis  
**Water Type:** Produced water

**Background Information**

**Reason for Testing:**  
**Completion type:**  
**Well History:**  
**Special Considerations:** 9/9/2004 2:00 PM ✓

**Sample Characteristics**

**Sample Temp:** 70 (°F)  
**pH:** 7.30  
**Specific Gravity:** 1.200  
**S.G. (Corrected):** 1.202 @ 60 °F  
**Resistivity (Calc):** 0.30 Ω-m  
**Viscosity:** 1 cp  
**Color:** Clear  
**Odor:** None  
**Turbidity:** Clear  
**Filtrates:** None

**Sample Composition**

**CATIONS**

	mg/l	me/l	ppm
Sodium (calc.)	9135	397.4	7613
Calcium	521	26.0	434
Magnesium	107	8.8	89
Barium	0	0.0	0
Potassium	1600	40.9	1333
Iron	0.80	0.0	0.67

**ANIONS**

Chloride	14600	411.8	12167 ✓
Sulfate	60	1.2	50
Hydroxide	0	0.0	0
Carbonate	< 1	----	----
Bicarbonate	3758	61.6	3131

**SUMMARY**

Total Dissolved Solids(calc.)	28182		23485
Total Hardness as CaCO3	1742	34.8	1452

**Scaling Tendencies**

CaCO3 Factor 1958837 Calcium Carbonate Scale Probability --> PROBABLE  
CaSO4 Factor 31278 Calcium Sulfate Scale Probability -----> REMOTE

**Comments**





**BJ SERVICES**  
**Rocky Mountain Region Laboratory**  
**Water Analysis Report**

Project # S09-35-0-4

**Customer/Well Information**

**Company:** Western Gas  
**Well Name:** Ozman Trust 16-29  
**Location:**  
**State:** Phillips County, Colorado  
**Formation:**  
**Depth:** ft  
**Date:** 09/13/2004  
**Prepared for:**  
**Submitted by:**  
**Prepared by:** Dean Koutroulis  
**Water Type:** Produced water

**Background Information**

**Reason for Testing:**  
**Completion type:**  
**Well History:**  
**Special Considerations:** 9/9/2004 2:30 PM ✓

**Sample Characteristics**

**Sample Temp:** 70 (°F)  
**pH:** 7.14  
**Specific Gravity:** 1.060  
**S.G. (Corrected):** 1.062 @ 60 °F  
**Resistivity (Calc):** 0.35 Ω-m  
**Viscosity:** 1 cp  
**Color:** Clear  
**Odor:** None  
**Turbidity:** Clear  
**Filtrates:** None

**Sample Composition**

**CATIONS**

	mg/l	me/l	ppm
Sodium (calc.)	6453	280.7	6088
Calcium	152	7.6	144
Magnesium	73	6.0	69
Barium	0	0.0	0
Potassium	3200	81.8	3019
Iron	1.20	0.0	1.13

**ANIONS**

Chloride	12000	338.5	11321 ✓
Sulfate	18	0.4	17
Hydroxide	0	0.0	0
Carbonate	< 1	----	----
Bicarbonate	2342	38.4	2210

**SUMMARY**

Total Dissolved Solids(calc.)	21040		19849
Total Hardness as CaCO3	681	13.6	642

**Scaling Tendencies**

CaCO3 Factor 356934.9 Calcium Carbonate Scale Probability --> REMOTE  
CaSO4 Factor 2742.84 Calcium Sulfate Scale Probability -----> REMOTE

**Comments**





**BJ SERVICES**  
**Rocky Mountain Region Laboratory**  
**Water Analysis Report**

Project # S08-89-04

**Customer/Well Information**

<b>Company:</b>	Lance Oil & Gas	<b>Date:</b>	08/31/2004
<b>Well Name:</b>	Lebsack 7-21	<b>Prepared for:</b>	
<b>Location:</b>		<b>Submitted by:</b>	Chuck Klosterman
<b>State:</b>	Phillips County, Colorado	<b>Prepared by:</b>	Dean Koutroulis
<b>Formation:</b>	Niobrara	<b>Water Type:</b>	Niobrara Produced water
<b>Depth:</b>	2366-2406 ft		

**Background Information**

**Reason for Testing:** \_\_\_\_\_  
**Completion type:** \_\_\_\_\_  
**Well History:** \_\_\_\_\_  
**Special Considerations:** Niobrara water. \_\_\_\_\_

**Sample Characteristics**

<b>Sample Temp:</b>	74 (°F)	<b>Viscosity:</b>	1 cp
<b>pH:</b>	7.87	<b>Color:</b>	brn
<b>Specific Gravity:</b>	1.011	<b>Odor:</b>	None
<b>S.G. (Corrected):</b>	1.014 @ 60 °F	<b>Turbidity:</b>	Clear
<b>Resistivity (Calc):</b>	0.37 Ω-m	<b>Filtrates:</b>	None

**Sample Composition**

**CATIONS**

	mg/l	me/l	ppm
Sodium (calc.)	6374	277.2	6304
Calcium	112	5.6	111
Magnesium	73	6.0	72
Barium	0	0.0	0
Potassium	500	12.8	495
Iron	37.00	1.3	36.60

**ANIONS**

Chloride	9400	265.2	9298
Sulfate	23	0.5	23
Hydroxide	0	0.0	0
Carbonate	< 1	----	----
Bicarbonate	2342	38.4	2317

**SUMMARY**

Total Dissolved Solids(calc.)	18361		18161
Total Hardness as CaCO3	581	11.6	574

**Scaling Tendencies**

CaCO3 Factor	263004.7	Calcium Carbonate Scale Probability -->	REMOTE
CaSO4 Factor	2582.44	Calcium Sulfate Scale Probability ----->	REMOTE

**Comments**





**BJ SERVICES**  
**Rocky Mountain Region Laboratory**  
**Water Analysis Report**

Project # S08-66-04

**Customer/Well Information**

**Company:** Lance Oil & Gas  
**Well Name:** Lebsack 7-21  
**Location:**  
**State:** Weld County, Colorado  
**Formation:** Dakota  
**Depth:** 3573 ft  
**Date:** 08/25/2004  
**Prepared for:**  
**Submitted by:**  
**Prepared by:** Dean Koutroulis  
**Water Type:** Dakota Produced water

**Background Information**

**Reason for Testing:** \_\_\_\_\_  
**Completion type:** \_\_\_\_\_  
**Well History:** \_\_\_\_\_  
**Special Considerations:** \_\_\_\_\_

**Sample Characteristics**

**Sample Temp:** 72 (°F)  
**pH:** 7.95  
**Specific Gravity:** 1.011  
**S.G. (Corrected):** 1.013 @ 60 °F  
**Resistivity (Calc):** 0.55 Ω-m  
**Viscosity:** 1 cp  
**Color:** amber  
**Odor:** None  
**Turbidity:** Clear  
**Filtrates:** None

**Sample Composition**

**CATIONS**

	mg/l	me/l	ppm
Sodium (calc.)	3876	168.6	3834
Calcium	24	1.2	24
Magnesium	10	0.8	10
Barium	0	0.0	0
Potassium	1600	40.9	1583
Iron	4.20	0.2	4.15

**ANIONS**

Chloride	5400	152.3	5341
Sulfate	1450	30.2	1434
Hydroxide	0	0.0	0
Carbonate	102	3.4	101
Bicarbonate	1610	26.4	1593

**SUMMARY**

Total Dissolved Solids(calc.)	12374		12240
Total Hardness as CaCO3	100	2.0	99

**Scaling Tendencies**

**CaCO3 Factor** 38746.22 **Calcium Carbonate Scale Probability -->** REMOTE  
**CaSO4 Factor** 34887 **Calcium Sulfate Scale Probability ----->** REMOTE

**Comments**





**BJ SERVICES**  
**Rocky Mountain Region Laboratory**  
**Water Analysis Report**

Project # S08-89-04

**Customer/Well Information**

**Company:** Lance Oil & Gas  
**Well Name:** Lebsack 7-21  
**Location:**  
**State:** Phillips County, Colorado  
**Formation:** Niobrara  
**Depth:** 2366-2406 ft  
**Date:** 08/31/2004  
**Prepared for:**  
**Submitted by:** Chuck Klosterman  
**Prepared by:** Dean Koutroulis  
**Water Type:** Niobrara Produced water

**Background Information**

**Reason for Testing:**  
**Completion type:**  
**Well History:**  
**Special Considerations:** Niobrara water.

**Sample Characteristics**

**Sample Temp:** 74 (°F)  
**pH:** 7.87  
**Specific Gravity:** 1.011  
**S.G. (Corrected):** 1.014 @ 60 °F  
**Resistivity (Calc):** 0.37 Ω-m  
**Viscosity:** 1 cp  
**Color:** brn  
**Odor:** None  
**Turbidity:** Clear  
**Filtrates:** None

**Sample Composition**

**CATIONS**

	mg/l	me/l	ppm
Sodium (calc.)	6374	277.2	6304
Calcium	112	5.6	111
Magnesium	73	6.0	72
Barium	0	0.0	0
Potassium	500	12.8	495
Iron	37.00	1.3	36.60

**ANIONS**

Chloride	9400	265.2	9298
Sulfate	23	0.5	23
Hydroxide	0	0.0	0
Carbonate	< 1	----	----
Bicarbonate	2342	38.4	2317

**SUMMARY**

Total Dissolved Solids(calc.)	18361		18161
Total Hardness as CaCO3	581	11.6	574

**Scaling Tendencies**

**CaCO3 Factor** 263004.7 **Calcium Carbonate Scale Probability -->** REMOTE  
**CaSO4 Factor** 2582.44 **Calcium Sulfate Scale Probability ----->** REMOTE

**Comments**