Jones, William V., EMNRD

From: Ingram, Scott (ScottIngram) [ScottIngram@chevron.com]
Sent: Monday, November 27, 2006 11:17 AM
To: Jones, William V., EMNRD
Subject: FW: Requested Data related to SWD Application: NM O State #40
Attachments: offset water well Cl analysis.pdf

From: Ingram, Scott (ScottIngram)
Sent: Monday, November 27, 2006 11:18 AM
To: 'Jones, William V., EMNRD '
Cc: Morris, Trudy (TKMO); Wann, J D (Denise); Bondy, Mark C. (MarkBondy)
Subject: Requested Data related to SWD Application: NM O State #40

Mr. Jones,

Attached is the data you requested in your 10/17 Email (below) related to Chevron's SWD permit application for the New Mexico 'O' State (NCT-1) #40 well.

The attached water analysis is from the nearest water well, which is located <1/2 mile away from the proposed 'O' #40 SWD well. This water well produces fresh water from a well depth of 130'.

With regard to item 2 of your Email, we do anticipate trace amounts of both H2S and CO2 to be entrained in the disposal stream for this SWD well as these gasses exist in the produced fluids from the three primary water flood or CO2 units which the subject SWD well will get its disposal fluids, however analyses of these make-up waters show these gasses average only 110 ppm and 140 ppm respectively from these units. The injection water will not be treated for corrosion due to the anticipated injection volumes however we will prevent corrosion where feasible through metallurgy and/or coating of tubulars and wellhead equipment.

As you request, we will plan to run an injection profile within 6 months of injection start-up. Please let Ms.Trudy Morris or myself know if you need any additional data.

Thank you and Happy Holidays, Scott

Scott M. Ingram
Sr. Staff Geologist, Mid-Continent SBU
Chevron North America E & P
15 Smith Road, Midland, Tx. 79705
432-687-7212 office 432-238-3479 cell
scottingram@chevron.com

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

Sent: Tuesday, October 17, 2006 6:22 PM
To: Morris, Trudy (TKMO)
Cc: Ezeanyim, Richard, EMNRD
Subject: SWD Application: NM O State #40

Hello Ms. Morris:
After reviewing your application, we have the following requests:

1) Please have your field people catch a fresh water sample from a windmill or other fresh water source closest as possible to this well location, analyze the sample, and send a copy of the analysis to this office.

2) You are proposing to inject excess water from waterfloods and some of these are under CO2 injection. Please let me know whether any H2S or CO2 is planned for injection into this well in the future? How do you ensure the injection water is devoid of these? Will the injection water be treated for corrosion?

Since you are proposing injection into a very large open hole section, an injection profile log will be required within 6 months of beginning injection.

We are releasing this permit today as SWD-1051. However, please send answers to these requests to this office for incorporation into the permit file.

Regards,

William V. Jones PE Engineering Bureau Oil Conservation Division Santa Fe

Mobile Analytical Laboratories, Inc.

LABORATORIES IN ODESSA, GIDDINGS & STACY DAM
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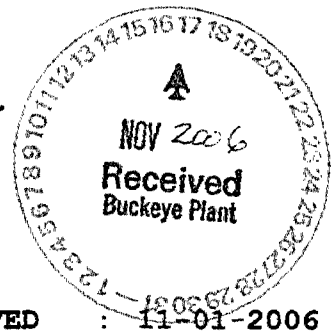

MR. JESSE NAVARRETTE
CHEVRON U.S.A.
HCR 60 BOX 425
LOVINGTON, NEW MEXICO 88260
SAMPLE SOURCE: BUCKEYE FIELD OFFICE WATER

SAMPLE RECEIVED : 11-01-2006
ANALYSIS COMPLETED: 11-06-2006
LAB NUMBER : 2357

DISSOLVED SOLIDS:

CATIONS:	MEQ/L	mg/L	
SODIUM (Na+)	1.26	29	
CALCIUM (Ca++)	5.00	100	
MAGNESIUM (Mg++)	2.80	34	
ANIONS:			
CHLORIDE (Cl-)	1.52	54	<250
SULFATE (SO4=)	1.10	53	<250
CARBONATE (CO3=)	0.00	0	
BICARBONATE (HCO3-)	4.34	265	
HYDROXIDE (OH-)	0.00	0	
TOTAL DISSOLVED SOLIDS:	ODESSA CITY WATER = 1200+	535	<500

OTHER PROPERTIES:

pH	7.30	P-ALKALINITY (AS CaCO3)	0 mg/L
SPEC. GRAV.	1.00	M-ALKALINITY (AS CaCO3)	217 mg/L
CONDUCTIVITY @ 77 °F	661 µMHOS/CM	CALCIUM HARDNESS (AS CaCO3)	250 mg/L
		MAGNESIUM HARDNESS (AS CaCO3)	140 mg/L
H2S	0 mg/L	TOTAL HARDNESS (AS CaCO3)	390 mg/L
CO2	12 mg/L		
IRON	0.00 mg/L		

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MR. JESSE NAVARRETTE
CHEVRON
HCR 60 BOX 425
LOVINGTON, NEW MEXICO 88260

NOVEMBER 10, 2006

DEAR MR. NAVARRETTE:
THE FOLLOWING ARE THE RESULTS OF THE BUCKEYE PLANT DRINKING WATER SAMPLE FOR BTEX, HEXANE AND OTHER HYDROCARBONS SAMPLED 10/24/06, LAB NO. 2311:

	LAB NO. 2311 **BUCKEYE PLANT** **DRINKING WATER** **10/24/06** **mg/L**
BENZENE:	**< 0.1**
TOLUENE:	**< 0.1**
ETHYL BENZENE:	**< 0.1**
M&P-XYLENES:	**< 0.1**
O-XYLENE:	**< 0.1**
HEXANE:	**< 0.1**
OTHER HYDROCARBONS:	**< 0.1**

TEST METHOD: GC/FID

WE APPRECIATE THE OPPORTUNITY TO WORK WITH YOU ON THESE TESTS. IF YOU HAVE ANY QUESTIONS OR REQUIRE ANY FURTHER INFORMATION, PLEASE FEEL FREE TO CONTACT ME AT ANY TIME.

SINCERELY,

Stephen Reid

STEPHEN REID
SR/dt

Mobile Analytical Laboratories, Inc.

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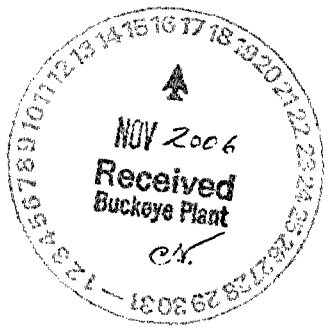
MR. JESSE NAVARRETTE
CHEVRON
HCR 60 BOX 425
LOVINGTON, NEW MEXICO 88260

NOVEMBER 10, 2006

DEAR MR. NAVARRETTE:
THE FOLLOWING ARE THE RESULTS OF THE BUCKEYE PLANT DRINKING WATER SAMPLE FOR BACTERIA, SAMPLED 10/24/06, LAB NO. 2311:



COLIFORM BACTERIA NOT DETECTED

NOTE: RESULTS ARE FROM ANOTHER LAB.

METHOD: USEPA EQUIVALENT PRESENCE/ABSENCE METHOD 8364.

WE APPRECIATE THE OPPORTUNITY TO WORK WITH YOU ON THESE TESTS. IF YOU HAVE ANY QUESTIONS OR REQUIRE ANY FURTHER INFORMATION, PLEASE FEEL FREE TO CONTACT ME AT ANY TIME.

SINCERELY,

Stephen Reid

STEPHEN REID
SR/dt