

05-067-08398  
LOC# 326613



PID 648

**FINNEY LAND CO.**  
OIL & GAS CONSULTING  
P.O. BOX 2471  
DURANGO, CO 81302  
PHONE: (970) 259-5691 • FAX (970) 259-4279

December 26, 2001

Ms. Rowean Crader  
28481 Us Hwy 160  
Durango, CO 81301

Re: Hallwood Petroleum, Inc.  
Crader #5-3 Well  
Post Water Well Test Results

Dear Ms. Crader;

Attached please find a copy of the test results for the water well sample that Hallwood Petroleum has taken for the above captioned well. This is to complete the State requirement Order No. 112-56 that states we re-test the well within one year of the completion .

Please don't hesitate to give me a call if you have any questions.

Sincerely,

Finney Land Co.

*Michael J. Finney*  
Michael J. Finney, CPL *que*  
President

enclosures

cc: Hallwood Petroleum  
COGCC  
La Plata County

Finney Land Co / Hallwood Petroleum  
 PO Box 2471  
 Durango, CO 81302  
 Attention: Mike Finney

**Acculabs I.D.:** 7-110-021-01

Date Received: 10/03/01

Date Reported: 11/27/01

QC Batches:

**PROJECT NAME:** Crader #5-3  
**PROJECT NUMBER:** 100301-3  
**SAMPLE I.D.:** Rowean Crader - Post


Sample Date: 10/03/01

Sample Matrix: Water

## Laboratory Report

### RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	Maximum Contamination Level
		LIMIT	RESULT			
Alkalinity, Total	2320B	10	356	1	mg/L	
Alkalinity, Bicarbonate	2320B	10	356	1	mg/L	
Alkalinity, Carbonate	2320B	10	<10	1	mg/L	
Alkalinity, Hydroxide	2320B	10	<10	1	mg/L	
Calcium	200.7	0.5	69	1	mg/L	
Chloride	4500CL	10	20	1	mg/L	
Conductivity	120.1	1.0	716	1	uS/cm	
Fluoride	4500F C	0.2	<0.2	1	mg/L	4.0
Iron	200.7	0.05	<0.05	1	mg/L	
Magnesium	200.7	0.5	9.0	1	mg/L	
Nitrate/Nitrite as N	353.2	0.05	0.16	1	mg/L	
pH	150.1	NA	8.06	NA	SU	
Potassium	200.7	0.5	0.9	1	mg/L	
Selenium	3114B	0.005	<0.005	1	mg/L	0.05
Sodium	200.7	0.5	83	1	mg/L	
Sulfate	4500SO4	10	49	1	mg/L	
TDS	160.1	10	395	1	mg/L	
Hardness	Calc	14	209	1	mg/L	
CAB	Calc		2.55		%	

  
 John Green, Laboratory Manager



# Hallwood Groundwater Monitoring Water Well Test Report

100301-3

FCG

Rowean Crader Post

NAME

No

BLM

10/3/2001

DATE

970-259-6458

TELEPHONE

28481 U S Hwy 160 Durango, CO 81301

AddressWaterWell

Same

MAILINGADD

Water Well Location and Permit Information

unavail

PERMIT

80

WELLDEPTH

Feet

unk

STATICWATE

Feet

SW

QTRQTR

2

SECTION

34

TOWNSHP

North

9

RANGE

West

- 107.82869

~~107.22991~~

LONG

37.22991

~~37.82900~~

LATITUDE

DEB per phone call to  
4 corners 12/10/02

Crader #3-3

NUMBER

Sec 3 T34N R9W NUL

LOCATIONGA

WELLTYPE

Fee

FEE\_FED\_TR

## Field Chemistries

7.19

PH\_FIELD

662

COND\_FIELD

414

TDS\_CALC

15.5

H2O\_TEMP

Celsius

Methane Result in mg/L

0.022 mg/L

CH4\_MG\_L

Detection Limit

0.0004 mg/L

Hydrogen sulfide(HACH Test Kit Field)

<0.1 mg/L

H\_2\_S\_MG\_L

0.1 mg/L Det.Limit

San Juan Basin Health-State of Colorado Health Dept

ABSENT

BACTERIA\_E

See attached report

Water very clear appears bluish tint, No distinct odor or tint, no sand or sediment.

## COMMENTS

Four Corners Geoscience conducted onsite field chemistries, observation of physical characteristics of water while pumping system to receive a fresh aquifer sample. Water samples were collected and delivered to EPA quality assured lab for analysis. Water samples for bacterial analysis were collected and delivered to San Juan Basin Health in Durango, CO. Samples for headspace gas analysis were taken to FCG lab and run within 4 hours of collection or less than 24 hours per USGS standard and methods for these analysis. Four Corners Geoscience is not liable for the results of these analysis and recommends referral to specialists in the field or water treatment. All methods are conducted in accordance with the requirements for this groundwater monitoring program in La Plata Colorado and COGCC Order Numbers 112-156 and 112-157 July 2000



LABORATORY & RADIATION SERVICES  
8100 LOWRY BOULEVARD  
DENVER, CO 80230-8928

US MAIL  
PO BOX 17123  
DENVER, CO 80217

# WATER BACTERIOLOGY

half  
5-3  
11-11-01

**SAMPLE INFORMATION:** ☐ COMMUNITY ☒ NON-COMMUNITY ☐ PRIVATE

PWS ID: ☐ ROUTINE ☒ RAW ☐ REPEAT FOR THE MONTH OF

☐ SPECIAL PURPOSE ☐ FINISHED

NAME OF SYSTEM: Rainbow Crater CHLORINE RESIDUAL: \_\_\_\_\_ MG/L

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ COUNTY: \_\_\_\_\_

ORDERED BY: (SAMPLE MAY NOT BE TESTED IF ALL INFORMATION IS NOT PROVIDED)

COLLECTED 10/3/01 ☐ AM ☒ PM 1458

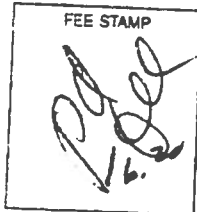
RECEIVED 10/3/01 ☐ AM ☒ PM

**RESULTS: SEE REVERSE FOR EXPLANATION**

TOTAL COLIFORM ☐ PRESENT ☒ ABSENT

MOST PROBABLE NO. \_\_\_\_\_ COLIFORM/100ML

011345



LAB 106 (07/97)

PHONE: 75046

NAME: Lynn FCG

ADDRESS: PO Box 4224

CITY / STATE / ZIP: Aspen CO 81302

TEST ORDERED ☒ STD BACT. ☐ OTHER \_\_\_\_\_

☐ DENVER ☒ DURANGO ☐ GRD. JCT.

ANALYST: Ch

7283214-22

## EXPLANATION OF RESULTS

Coliform absent: less than 1.1 (<1.1) indicates a safe sample.

Coliform present: Unsafe Sample, greater than or equal to 1 coliform per 100 ml, water should be treated and retested

TNTC - Too Numerous To Count: The test plate contained more than 200 bacterial colonies other than coliform. Coliform bacterial growth may have been inhibited. The water supply may be unsafe. Treat and retest.

TNTC - Too Numerous To Count with coliform present: Same as above, but with coliform bacteria present. The presence of other bacteria prevents an accurate coliform count. Water supply is unsafe. Treat and retest.

Confluent Growth: The test plate was covered with bacterial growth. Coliform bacteria growth may have been inhibited. The water supply may be unsafe. Treat and retest.

Confluent Growth with Coliform Present: Same as above, but with coliform bacteria present. The presence of other bacteria prevents an accurate coliform count. Water supply is unsafe. Treat and retest.

Outdated Samples: Sample greater than 48 hours old when received. Please resample.

QNS: Quantity not sufficient for testing. Please resample.

Overfilled: Unsatisfactory, laboratory cannot process accurately. Please resample.