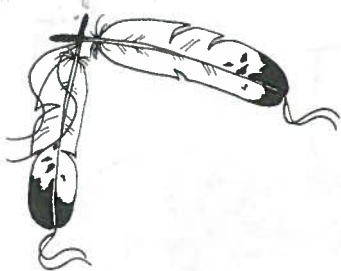




11D 1201  
entered 9/3/04



05-067-08905 Loc# 306863  
**RED WILLOW PRODUCTION COMPANY**  
**SOUTHERN UTE INDIAN TRIBE**

March 17, 2004

Bob Smith  
1530 County Road 523  
Bayfield, CO 81122-9669



Re: Water Well Testing Results

Dear Mr. Smith:

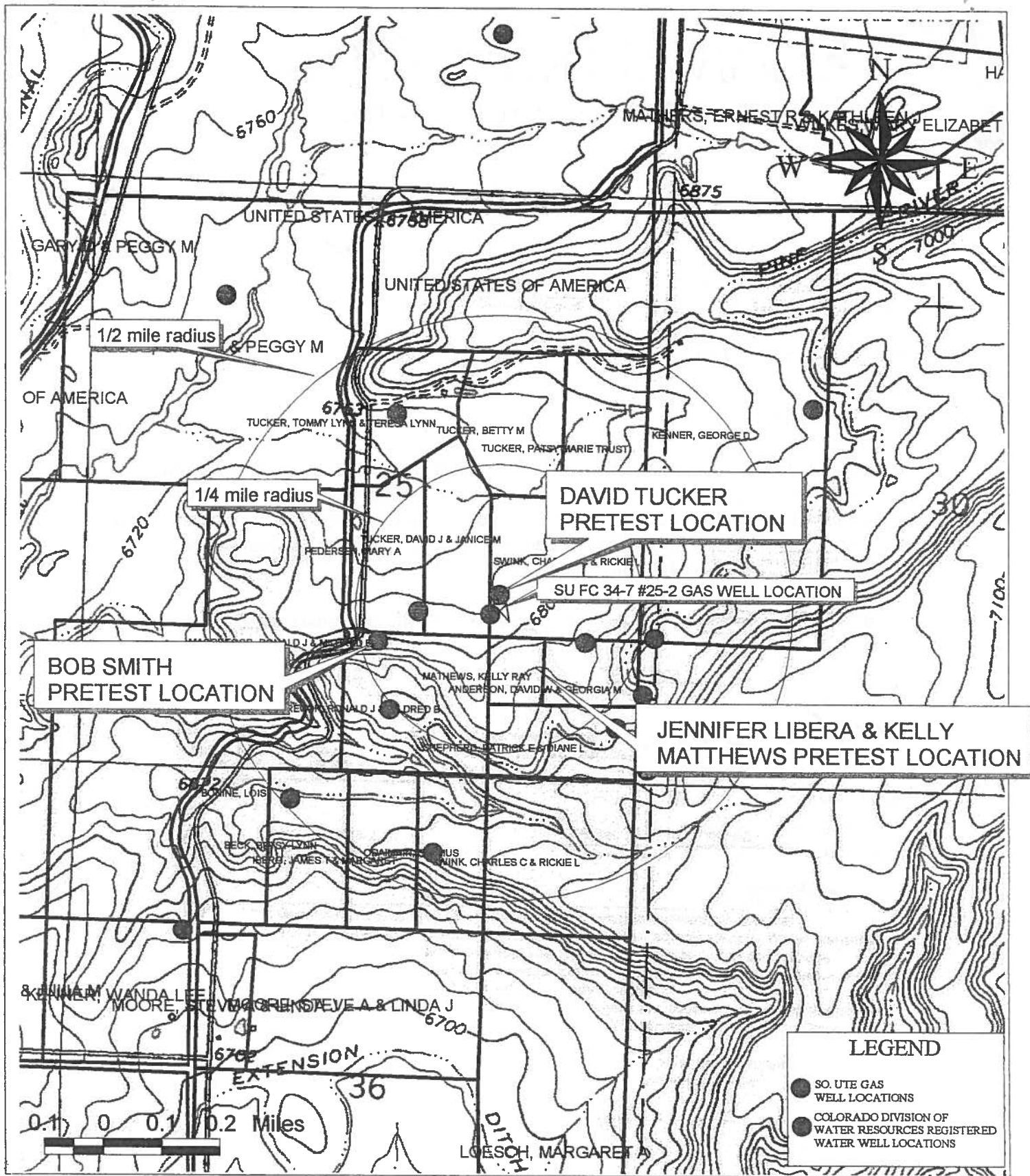
Please find attached the analytical results of the water well testing conducted on your property on December 29, 2003 and January 9, 2004 by Four Corners Geoscience. Red Willow Production Co. would like to collect a follow-up sample (post test) 8 months after the well is completed or first delivery. Red Willow Production Co. appreciates your cooperation in collecting the water samples.

If you have any questions regarding the sample results, please contact me at (970) 563-0145.

Sincerely,

Andy Young  
Environmental, Health and Safety Manager  
Red Willow Production Co.

C: Debbie Baldwin, COGCC



COLORADO

RED WILLOW PRODUCTION CO.  
 SU FC 34-7 #25-2 GAS WELL LOCATION  
 DOMESTIC WATER WELL SAMPLING LOCATIONS  
 T34N, R7W, SECTION 25  
 NEW MEXICO PRINCIPAL MERIDIAN

PROJECT AREA  
 MAP  
 Prepared By:  
 Ecosphere Environmental  
 Services

11D 1201  
entered 9/2/04

Red Willow Production/Ecosphere Environmental  
Domestic Water Well Test  
COGCC Infill Order 112-156;112-157  
FCGeo Water Well Test Report

FCG # 122903-1

BLM NO

DATE 12/29/2003

IID(COGCC) 0

Bob Smith(Pretest)

NAME

1530 CR 523 Bayfield,CO 81122

AddressWaterWell

P.O. Box 518 Bayfield,CO 81122

Mailing Address

970-884-0372

Telephone#

Water Well Location and Permit Data

Poss132509

140

50

WaterWellPermit#

WellDepth(Ft)

StaticWater Level(Ft)

SWSE(SUL)

25

34

7

1195S2590E

QTRQTR

SECTION

TWP(North)

RGE(West)

FTG

Garmin GPS NADS CONUS 27

-107.55888

37.15794

Longitude(DecDegrees)

Latitude(DecDegrees)

Field Chemistries

8.41

942

589

5

PH\_FIELD

COND\_FIELD

TDS\_CALC

WATERTEMP\_

Methane Result (mg/L)  
(Dissolved)

8.42 mg/L

DetectionLimit 0.0005 mg/L  
USGS/BLM METHOD

HydrogenSulfide (mg/L)  
HACH Test Kit Field 25378-00

>0.1<0.3 mg/L

Detection Limit 0.1 mg/L

San Juan Basin Health-State of Colorado  
Health Dept Coliform Test Only

Absent

ColiformBacteria

Initially Strong "S" odor, water clear then increasingly cloudy & yellow tint til end of pumping. Musty odor & slight "S" odor. Trace iron flakes in bottom of sample bucket. No bubbles or effervescence. Precistern sample. Possible isotope collection >2.0CH4

COMMENTS

SUIT 34-7#25-2

GasWellName

SE Sec 25 T34N R7W(NUL)

LocationGasWell

05-067-08905

Four Corners Geoscience conducted onsite field chemistries, observations of physical characteristics of well water while pumping well to receive a fresh aquifer sample. Water samples were collected and delivered to Green Analytical Lab located in Durango, Colorado. Methane samples were delivered to Four Corners Geoscience for analysis for methane in accordance with BLM/USGS Method established in 1993 for LaPlata County Colorado. Onsite water well evaluation and sample collection and analysis are conducted in compliance with La Plata County Government and the Colorado Oil and Gas Conservation Commission Order Number 112-156 and 112-157 established in July 2000. Four Corners Geoscience is not liable for the results or interpretation of these analyses. Qualified specialists should be consulted for interpretation or treatment of water.

1201  
entered 9/3/04

Red Willow Production/Ecosphere Environmental  
Domestic Water Well Test  
COGCC Infill Order 112-156;112-157  
FCGeo Water Well Test Report

FCG # 010904-2 BLM NO  
DATE 1/9/2004 IID(COGCC) 0

Bob Smith(Methane & Isotope Sampling)  
NAME

1530 CR 523 Bayfield,CO 81122 P.O. Box 518 Bayfield,CO 81122 970-884-0372  
AddressWaterWell Mailing Address Telephone#

Water Well Location and Permit Data

Poss132509 140 50  
WaterWellPermit# WellDepth(Ft) StaticWater Level(Ft)  
SWSE(SUL) 25 34 7 1195S2590E  
QTRQTR SECTION TWP(North) RGE(West) FTG

Garmin GPS NADS CONUS 27 -107.55888 37.15794  
Longitude(DecDegrees) Latitude(DecDegrees)

Field Chemistries 8.5 864 540 6  
PH\_FIELD COND\_FIELD TDS\_CALC WATERTEMP\_

Methane Result (mg/L) 8.34 mg/L DetectionLimit 0.0005 mg/L  
(Dissolved) USGS/BLM METHOD

HydrogenSulfide (mg/L) >0.1<0.3 mg/L Detection Limit 0.1 mg/L  
HACH Test Kit Field 25378-00

San Juan Basin Health-State of Colorado PretestAbsent  
Health Dept Coliform Test Only ColiformBacteria

Strong "S"odor,water clearer than pretest yet cloudy&yellow tint."S" odor decreases after 9 minutes.Still present.Trace iron flakes in bottom of sample bucket.Effervescence at beginning of sampling;then bubbles off hose.Raw sampleISOTOPE  
COMMENTS

SUIT 34-7#25-2 SE Sec 25 T34N R7W(NUL)  
GasWellName LocationGasWell

Four Corners Geoscience conducted onsite field chemistries,observations of physical characteristics of well water while pumping well to receive a fresh aquifer sample. Water samples were collected and delivered to Green Analytical Lab located in Durango,Colorado.Methane samples were delivered to Four Corners Geoscience for analysis for methane in accordance with BLM/USGS Method established in 1993 for LaPlata County Colorado. Onsite water well evaluation and sample collection and analysis are conducted in compliance with La Plata County Government and the Colorado Oil and Gas Conservation Commission Order Number 112-156 and 112-157 established in July 2000. Four Corners Geoscience is not liable for the results or interpretation of these analyses. Qualified specialists should be consulted for interpretation or treatment of water.

11 D 1201  
entered

Four Corners Geoscience  
P.O. Box 4224  
Durango, CO 81302  
970-247-5046  
fcgeo@frontier.net

1/9/2004  
DATE

Client  
Red Willow Production  
P.O. Box 737  
Ignacio, CO 81137  
Tel 970-563-0145

Attn. : Andy Young

Site ID Bob Smith(After Cistern In House)

010904-2  
FCG #

7.33  
Methane Result(mg/L)

Detection Limit 0.02 mg/L  
USGS/BLM Method

Water samples were collected by Lynn Fechter of Four Corners Geoscience. Samples were collected at the kitchen s the Smith residence to determine the amount of methane and hydrogen sulfide delivered through water pipeline into cistern and into the house.

Mr Smith was referred to Ron Tate of Water Solutions for well water treatment.

Analysis is conducted within 24 hours of collection per standards and methods per USGS and BLM protocols.

Four Corners Geoscience is not liable for the interpretation of results nor is responsible for misinterpretation of results or text.

Recommended level for methane concentrations in water is less than 1.0 mg/L per BLM-San Juan Resource Area.

"Methane levels up to 7 mg/L are not of concern but should be monitored and treatment for removal of gases should between 7 mg/L and 13 mg/L should be monitored and treatment for the removal of gases should also be considered. Also, care should be taken to ventilate confined spaces where water well is used.

When methane levels are 13 mg/L or above treatment is a must. These treatments include some form of aeration to remove methane from well water and ventilation to allow the methane to safely dissipate outdoors rather than accumulate within the home, well houses or other confined spaces. When you find methane in your water well, additional, regular testing and monitoring should be performed since methane levels can fluctuate over time."

Taken from "How Well Do You Know Your Water Well" Groundwater and Water Wells in Southwest Colorado. Prepared by CDS Environmental Services, Plateau Services in cooperation with the Southern Ute Indian Tribe, LaPlata County, San Juan Basin Health Department, Colorado Oil and Gas Conservation Commission, and the Colorado Division of Water Resources.

Please call a qualified water treatment specialists for further information regarding treatment for the removal of high levels of methane form groundwater aquifers.



GAL ID No.: 312-078-01

January 7, 2004

Ecosphere Environmental  
2257 Main Ave, Patio Level  
Durango, CO 81301  
Attention Erika Berglund

Project Name: So Ute 34-7 #25-2  
Project Number: 122903-1  
Date Received: 12/29/03

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, and Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 12/29/03.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

A handwritten signature in cursive script that reads 'John Green'.

John Green  
Laboratory Director

Enclosure

Green Analytical Laboratories, Inc.  
75 Suttle Street  
Durango, CO 81303

1201  
entered  
9/2/04

Ecosphere Environmental  
2257 Main Ave, Patio Level  
Durango, CO 81301  
Attention: Erika Berglund

GAL I.D.: 312-078-01

Date Received: 12/29/03

Date Reported: 01/07/04

QC Batches:

**PROJECT NAME:** So Ute 34-7 #25-2

**PROJECT NUMBER:** 122903-1

**SAMPLE I.D.:** Bob Smith (Pre)

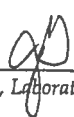
Sample Date: 12/29/04

Sample Matrix: Water

## Laboratory Report

### RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	Maximum Contamination Level
		LIMIT	RESULT			
Alkalinity, Total	2320B	10	420	1	mg/L	
Alkalinity, Bicarbonate	2320B	10	420	1	mg/L	
Alkalinity, Carbonate	2320B	10	<10	1	mg/L	
Alkalinity, Hydroxide	2320B	10	<10	1	mg/L	
Calcium	200.7	0.5	9.1	1	mg/L	
Chloride	4500CL	10	39	1	mg/L	
Conductivity	2510B	1.0	878	1	uS/cm	
Fluoride	4500F C	0.2	4.0	1	mg/L	4.0
Iron	200.7	0.05	<0.05	1	mg/L	
Magnesium	200.7	0.5	1.4	1	mg/L	
Nitrate/Nitrite as N	353.3	0.02	<0.02	1	mg/L	
pH	150.1	NA	8.33	NA	SU	
Potassium	200.7	0.5	0.6	1	mg/L	
Selenium	3114B	0.001	0.001	1	mg/L	0.05
Sodium	200.7	0.5	181	1	mg/L	
Sulfate	4500SO4	10	<10	1	mg/L	
TDS	2540C	10	475	1	mg/L	
Hardness	Calc	10	28	1	mg/L	
CAB	Calc		1.58		%	

  
John Green, Laboratory Manager



Analytical  
Laboratories, Inc.

# CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Ecosphere for Food & Agriculture

NOTES:

Contact: Fitzgerald/Erika Berglund

1) Ensure proper container packaging.

Address: 2257 MATHUR

2) Ship samples promptly following collection.

Path Level Road C881301

3) Designate Sample Reject Disposition.

Phone Number: 474/382 7256

PO# SUIT

FAX Number: 7959

Project Name: SUIT 347-#25-2

Samplers Signature: [Signature]

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water  
3 = Soil/Sediment, 4 = Rinsate, 5 = Oil  
6 = Waste, 7 = Other (Specify) \_\_\_\_\_

FOR GAL USE ONLY

GAL JOB #

312-078

Lab Name: Green Analytical Laboratories, Inc. (970) 247-4220 FAX (970) 247-4227

Address: 75 Suttle Street, Durango, CO 81303

Analyses Required

Sample ID	Date	Time	Collected by: (Init.)	Miscellaneous			Preservative(s)					Analyses Required					Comments
				Matrix Type From Table 1	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice Only)	HNO3	HCL	H2SO4	NAOH	Other (Specify)					
1. Bob Smith	12/29/03	1100					X										
2. 122503-1																	
3. Pudest																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	
Relinquished by: <u>[Signature]</u>			Date: <u>12/29/03</u>	Time: <u>1245</u>	Received by: <u>[Signature]</u>			Date: <u>12/29/03</u>	Time: <u>1245</u>								
Relinquished by: <u>[Signature]</u>			Date: <u>12/29/03</u>	Time: <u>1245</u>	Received by: <u>[Signature]</u>			Date: <u>12/29/03</u>	Time: <u>1245</u>								

## San Juan Basin Health Department

See copy of form from Water bacteriology report for Coliform, below.

Colilert test for presence or absence of coliform bacteria.

LABORATORY & RADIATION SERVICES  
8100 LOWRY BOULEVARD  
DENVER, CO 80230-6808**TO BE BILLED**  
DENVER, CO 80217  
**BACTERIOLOGY***paid by Legum  
SUIT*SAMPLE INFORMATION: ☐ COMMUNITY ☐ NON-COMMUNITY ☒ PRIVATE  
PWS ID: ☐ ROUTINE ☒ RAW ☐ REPEAT FOR THE MONTH OF  
☐ SPECIAL PURPOSE ☐ FINISHEDNAME OF SYSTEM: *Bob Smith* MGA  
ADDRESS: *1530 CR 923 Bayfield CO* CITY: *Bayfield* COUNTY: *CO*

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



LAB 106 (07/87)

PHONE: *4C Gen #1686*  
NAME: *P.O. Box 4224*  
ADDRESS: *Dgo 081302*  
CITY/STATE/ZIP: *Dgo 081302*TEST ORDERED: ☒ STD BACT. ☐ OTHERDATE: *12/19/03* TIME: *11* BY: *[Signature]*  
COLLECTED: ☐ AM ☒ PM  
RECEIVED: ☐ AM ☒ PM

RESULTS: SEE REVERSE FOR EXPLANATION

TOTAL COLIFORM: ☐ PRESENT ☒ ABSENT

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

DEC29 03 14:22 2000

☐ DENVER ☐ DURANGO ☐ GRD. JCT.  
ANALYST: *[Signature]*

778821-4-03

FAX 1-2-03 Eco



www.isotechlabs.com mail@isotechlabs.com

Isotech Laboratories, Inc. 1308 Parkland Court Champaign, IL 61821-1826 Telephone 217/398-3490 FAX 217/398-3493

February 10, 2004

FEB 17 2004

Andy Young  
Red Willow Production Co.  
PO Box 737  
Ignacio, CO 81137

Dear Mr. Young:

Enclosed are the analysis reports for the sample recently submitted from the Bob Smith Water Well. This sample was assigned to Isotech job numbers 4708 & 4709. These are the same data that were emailed to you earlier. I hope the data are helpful. If you have any questions concerning this data, or if there is anything else we can do for you, please do not hesitate to contact us.

We will hold the sample until 03/02/04 in case you should want any additional analyses carried out and will then dispose of the remaining sample material. I have also enclosed an invoice for this work and would appreciate it if you would pass it on to the appropriate office for processing. Thank you for choosing Isotech for your analysis needs, we appreciate your business.

Sincerely,

Steven R. Pelphrey  
Laboratory Manager

Enclosure

SRP:cw

11D 1201

*Entered*

# ANALYSIS REPORT

Lab #: 62013 Job #: 4708  
 Sample Name/Number: Bob Smith Water Well (010904-2)  
 Company: Red Willow Production  
 Date Sampled: 1/09/2004  
 Container: Glass Bottle  
 Field/Site Name: SUIT 34-7 #25-2  
 Location: SE Sec 25T3 4NR7WSUL  
 Formation/Depth: La Plata Cty  
 Sampling Point:  
 Date Received: 1/13/2004 Date Reported: 2/10/2004

Component	Chemical mol. %	Delta 13C per mil	Delta D per mil	Delta 15N per mil
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.920			
Oxygen -----	10.36			
Nitrogen -----	46.82			
Carbon Dioxide -----	0.57			
Methane -----	41.31	-65.62	-242.1	
Ethane -----	0.0136			
Ethylene -----	nd			
Propane -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0051			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 419

Specific gravity, calculated: 0.818

## Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen is relative to VSMOW. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Chemical analysis based on standards accurate to within 2%



**ISOTECH** Laboratories, Inc. 1308 Parkland Ct. Champaign, IL 61821 217/398-3490

11D 1201  
Entered

# ANALYSIS REPORT

## Water Analysis Report

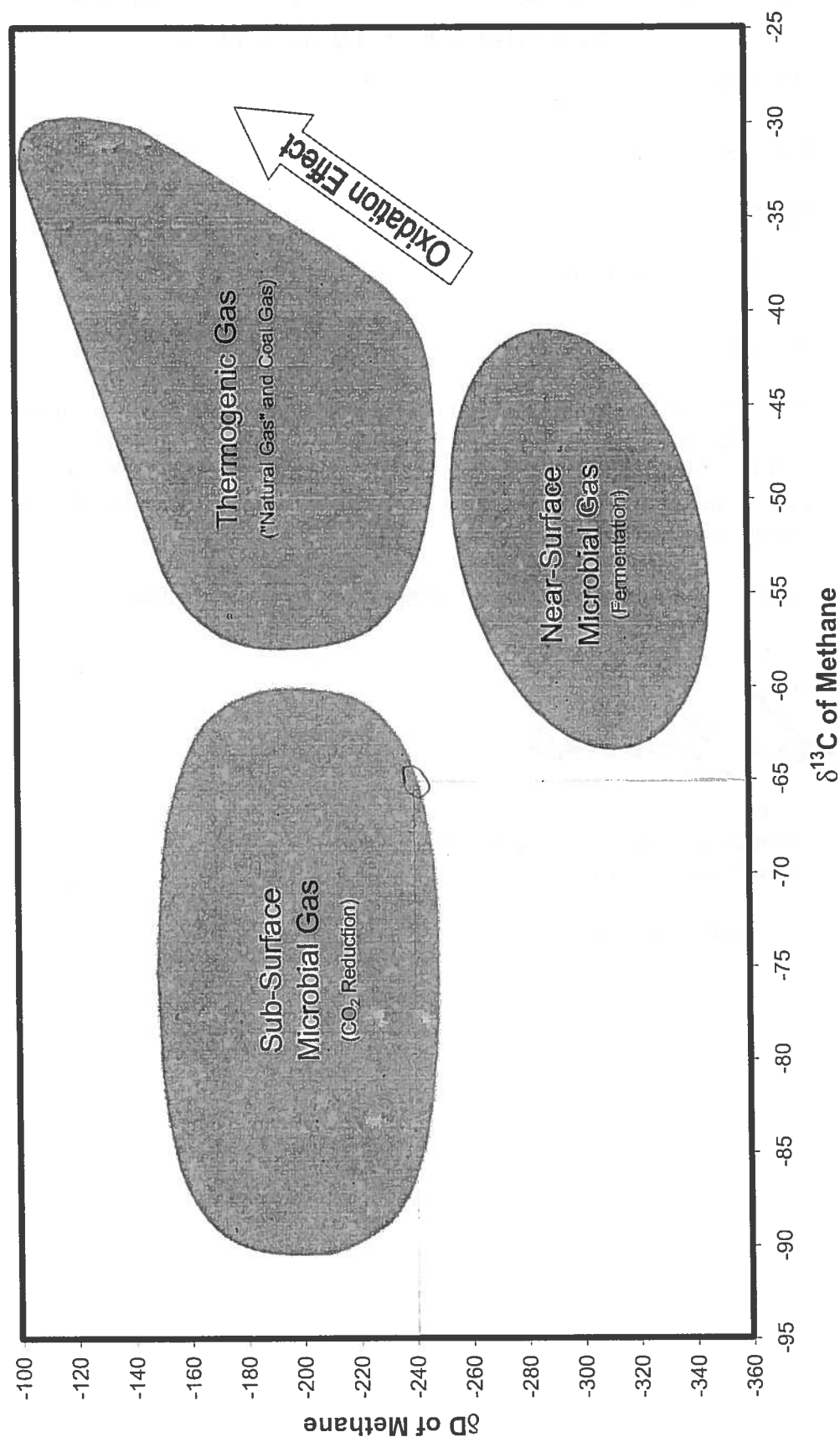
Lab Number: 62014 Job Number: 4709  
Submitter Sample Name: Bob Smith Water Well (010904-2)  
Submitter Sample ID:  
Submitter Job #:  
Company: Red Willow Production  
Field or Site: SUIT 34-7 #25-2  
Location: SE Sec 25T3 4NR7WSUL  
Depth/Formation: La Plata Cty  
Container Type: Vial - glass  
Sample Collected: 1/09/2004  
Results Reported: 2/10/2004

Delta D of water ----- -93.0 per mil relative to VSMOW  
Delta O-18 of water ----- -12.68 per mil relative to VSMOW  
Tritium content of water ----- na  
Delta C-13 of DIC ----- -8.77 per mil relative to VPDB  
Carbon-14 content of DIC ----- na

Remarks:



Typical Compositional Ranges of Methanes from Different Sources





RED WILLOW PRODUCTION COMPANY  
SOUTHERN UTE INDIAN TRIBE

March 17, 2004

Jennifer Libera  
1532 CR 523  
Bayfield, CO 81122

Re: Water Well Testing Results

Dear Ms. Libera:

Please find attached the analytical results of the water well testing conducted on your property on December 19, 2003 by Four Corners Geoscience. Red Willow Production Co. would like to collect a follow-up sample (post test) 8 months after the well is completed or first delivery. Red Willow Production Co. appreciates your cooperation in collecting the water samples.

If you have any questions regarding the sample results, please contact me at (970) 563-0145.

Sincerely,

Andy Young  
Environmental, Health and Safety Manager  
Red Willow Production Co.

C: Debbie Baldwin, COGCC