



**ANNUAL REPORT OF PRESSURE MONITORING,
 FLUID INJECTION AND ENHANCED RECOVERY**

Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.

OPERATOR: License # _____
 Name: _____
 Address 1: _____
 Address 2: _____
 City: _____ State: _____ Zip: _____ + _____
 Contact Person: _____
 Phone: (_____) _____
 Lease Name: _____
 Well Number: _____

API No.: _____
 Permit No.: _____
 Reporting Year: _____
 (January 1 to December 31)
 _____ - _____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ E W
 (a/a/a/a)
 _____ feet from N / S Line of Section
 _____ feet from E / W Line of Section
 County: _____

I. Injection Fluid:

Type (Pick one): Fresh Water Treated Brine Untreated Brine Water/Brine
 Source: Produced Water Other (Attach list)
 Quality: Total Dissolved Solids: _____ mg/l Specific Gravity: _____ Additives: _____
 (Attach water analysis, if available)

II. Well Data:

Maximum Authorized Injection Pressure: _____ psi Injection Zone: _____
 Maximum Authorized Injection Rate: _____ barrels per day
 Total Number of Enhanced Recovery Injection Wells Covered by this Permit: _____ (Include TA's)

III.	Month:	Total Fluid Injected BBL	Maximum Fluid Pressure	Total Gas Injected MCF	Maximum Gas Pressure	# Days of Injection
	January	_____	_____	_____	_____	_____
	February	_____	_____	_____	_____	_____
	March	_____	_____	_____	_____	_____
	April	_____	_____	_____	_____	_____
	May	_____	_____	_____	_____	_____
	June	_____	_____	_____	_____	_____
	July	_____	_____	_____	_____	_____
	August	_____	_____	_____	_____	_____
	September	_____	_____	_____	_____	_____
	October	_____	_____	_____	_____	_____
	November	_____	_____	_____	_____	_____
	December	_____	_____	_____	_____	_____
	TOTAL	_____	_____	_____	_____	_____

March 27, 2015

Mr. Dan Flowers
Sonoma Resources, LLC.
P.O. Box 384
El Dorado, KS 67042

RE: Castle Resources: Rice Tanner A-7/Wilson Ralston #9

Dear Dan:

Please find enclosed the water analyses on the Rice Tanner A-7 and Wilson Ralston #9. The following is a discussion of problem areas and chemical recommendations.

Corrosion:

Based on the water analysis data, both wells are producing from the Arbuckle and are corrosive.

Recommended chemical treatments on both wells are continuous injections of ES 2578, water soluble corrosion inhibitor, injected down the annulus with a slipstream overflush. Recommend an injection rate of 20 to 25 parts per million (ppm) on both wells which equates to the following.

Rice-Tanner A-7 (225 TBPD = 1.0 quart daily)
Wilson -Ralston #9 (331 TBPD = 1.5 quarts daily)

Bacteria:

At the time of sampling produced fluid was taken to determine if sulfate-reducing bacteria (SRB) was present and if concentrations were high enough to contribute to corrosion related failures. The cultures were incubated and readings were taken after 21 days. SRB results indicate positive bacteria growth (10 – 100 cpm) on both wells and future well pulls should be visually inspected for possible bacteria pitting.

Thanks again, Dan, for using Energy Services.

Sincerely,



Gary Fritzler
ENERGY SERVICES, INC.

cc: Mr. Jerry Green

ENERGY SERVICES, INC.

P.O. Box 931
El Dorado, KS 67042

Phone: (316) 452-5858
Fax: (316) 452-5856

WATER ANALYSIS REPORT

Company: CASTLE RESOURCES
Source: Rice Tanner A #7

Date Sampled: 02/20/2015
Date Analyzed: 02/27/2015

pH:	6.60	Total Dissolved Solids (mg/L):	27,700
Dissolved H ₂ S:	4		
Dissolved CO ₂ :	45	Total Ionic Strength:	0.544
Specific Gravity:	1.030		
Density, (lbs/gal):	8.59		

	mg/L	Meq/L
Anions		
Bicarbonate:	336	6
Chloride:	15,500	437
Sulfate:	1,500	31
Cations		
Calcium:	1,642	82
Magnesium:	315	26
Sodium:	8,406	365
Barium:	2	
Strontium:	0	
Total Hardness:	5,400	
Total Dissolved Iron:	0.6	
Ferrous Iron:	Not Determined	

PROBABLE MINERAL COMPOSITION

82 Ca	6 HCO ₃		
26 Mg	31 SO ₄	Meq/L	mg/L
365 Na	437 Cl		
Saturation Values			
In Distilled Water @ 20°C			
CaCO ₃	13 mg/L	Calcium Bicarbonate:	6 446
CaSO ₄ * 2H ₂ O	2,090 mg/L	Calcium Sulfate:	31 2,127
MgCO ₃	103 mg/L	Calcium Chloride:	45 2,516
		Magnesium Bicarbonate:	0 0
		Magnesium Sulfate:	0 0
		Magnesium Chloride:	26 1,229
		Sodium Bicarbonate:	0 0
		Sodium Sulfate:	0 0
		Sodium Chloride:	365 21,366

Remarks Arbuckle