

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-4
Form must be typed
March 2009

APPLICATION FOR COMMINGLING OF
PRODUCTION (K.A.R. 82-3-123) OR FLUIDS (K.A.R. 82-3-123a)

Commingling ID # CO 070902

OPERATOR: License # 5278 API No. 15 - 189225920000
Name: EOG Resources, Inc Spot Description: _____
Address 1: 3817 N W Expressway #500 NW SW SW Sec. 11 Twp. 34 S. R. 38 East West
Address 2: _____ 1,270 Feet from North / South Line of Section
City: Oklahoma City State: Ok Zip: 73112 + _____ 590 Feet from East / West Line of Section
Contact Person: Nancy Ford County: Stevens
Phone: (405) 246-3184 Lease Name: Verna Well #: 4

1. Name and upper and lower limit of each production interval to be commingled:
Formation: Morrow (Perfs): 6268-6288'
Formation: St. Louis (Perfs): 6583-6646'
Formation: _____ (Perfs): _____
Formation: _____ (Perfs): _____
Formation: _____ (Perfs): _____

KANSAS CORPORATION COMMISSION

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2. Estimated amount of fluid production to be commingled from each interval:
Formation: Morrow BOPD: 4 MCFPD: 15 BWPD: 12
Formation: St. Louis BOPD: 40 MCFPD: 5 BWPD: 10
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____
Formation: _____ BOPD: _____ MCFPD: _____ BWPD: _____

3. Plat map showing the location of the subject well, all other wells on the subject lease, and all wells on offsetting leases within a 1/2 mile radius of the subject well, and for each well the names and addresses of the lessee of record or operator.

4. Signed certificate showing service of the application and affidavit of publication as required in K.A.R. 82-3-135a.

For Commingling of PRODUCTION ONLY, include the following:

- 5. Wireline log of subject well. Previously Filed with ACO-1: Yes No
- 6. Complete Form ACO-1 (Well Completion form) for the subject well.

For Commingling of FLUIDS ONLY, include the following:

- 7. Well construction diagram of subject well.
- 8. Any available water chemistry data demonstrating the compatibility of the fluids to be commingled.

AFFIDAVIT: I am the affiant and hereby certify that to the best of my current information, knowledge and personal belief, this request for commingling is true and proper and I have no information or knowledge, which is inconsistent with the information supplied in this application.

Signature: Nancy Ford
Printed Name: Nancy A Ford
Title: Production Engineer

KCC Office Use Only
 Denied Approved
15-Day Periods Ends: 7/30/2009
Approved By: _____ Date: _____

Protests may be filed by any party having a valid interest in the application. Protests must be in writing and comply with K.A.R. 82-3-135b and must be filed within 15 days of publication of the notice of application.

July 30, 2009

Nancy Ford
EOG Resources, Inc.
3817 NW Expressway #500
Oklahoma City, OK 73112

RE: Approved Commingling CO070902
Verna 11-4, Sec. 11-T34S-R38W, Stevens County
API No. 15-189-22592-00-00

Dear Ms. Ford:

Your Application for Commingling (ACO-4) for the above described well has been reviewed and approved by the Kansas Corporation Commission (KCC) per K.A.R. 82-3-123. Notice was examined and found to be proper per K.A.R. 82-3-135a. No protest had been filed within the 15-day protest period. This application, which was received by the KCC on July 15, 2009 concerns approval to simultaneously produce from the following sources of supply through the same tubing string in the same wellbore:

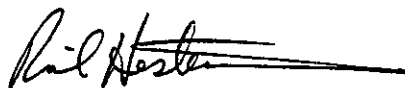
Source of Supply	Estimated Current Production			Perf Depth
	BOPD	MCFPD	BWPD	
Morrow	4	15	12	6268-6288
St. Louis	40	5	10	6583-6646
Total Estimated Current Production	44	20	22	

Based upon the depth of the St. Louisi formation perforations, total oil production shall not exceed 300 BOPD and total gas production shall not exceed 50% of the absolute open flow (AOF).

Submit Form ACO-1 upon re-completion of the well to commingle.

Docket Number CO070902 has been assigned to this approved application. Use this number for well completion reports (ACO-1) and other correspondence that may concern this approved commingling.

Sincerely,



Rick Hestermann
Production Department

AFFIDAVIT

STATE OF KANSAS \
- SS.
County of Sedgwick /

KANSAS CORPORATION COMMISSION

JUL 15 2009

REG 11/11

Mark Fletchall, of lawful age, being first duly sworn, deposeth and saith: That he is Record Clerk of The Wichita Eagle, a daily newspaper published in the City of Wichita, County of Sedgwick, State of Kansas, and having a general paid circulation on a daily basis in said County, which said newspaper has been continuously and uninterruptedly published in said County for more than one year prior to the first publication of the notice hereinafter mentioned, and which said newspaper has been entered as second class mail matter at the United States Post Office in Wichita, Kansas, and which said newspaper is not a trade, religious or fraternal publication and that a notice of a true copy is hereto attached was published in the regular and entire Morning issue of said The Wichita Eagle for 1 issues - ~~weeks~~ , that the first publication of said notice was

made as aforesaid on the 1st of

July A.D. 2009 , with

subsequent publications being made on the following dates:

LEGAL PUBLICATION

Published in the Wichita Eagle July 1, 2009 (2963255)

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

NOTICE OF FILING APPLICATION
Re: EOG RESOURCES, INC.

Application for a permit to authorize the commingling of production in the Verna 11-4, located in Stevens County, Kansas.

TO: All Oil and Gas Producers, Unleased Mineral Interest Owners, Landowners and all persons whomsoever concerned.

You, and each of you, are hereby notified that EOG Resources, Inc. has filed an application to commingle the production from the Morrow and Mississippian formations in the Verna 11-1, located in the NW SW SW of Sec. 11-T34S-R38W, Stevens County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of this publication. These protests shall be filed pursuant to Commission regulations and must state specific reasons why the grant of the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly.

EOG Resources, Inc.
3817 N. W. Expressway, Suite 500
Oklahoma City, Ok 73112
405-246-3184

And affiant further says that he has personal knowledge of the statements above set forth and that they are true.

Mark Fletchall

Subscribed and sworn to before me this

1st day of July, 2009



Linda D. Toon
Notary Public Sedgwick County, Kansas

Printer's Fee : \$76.00

AFFIDAVIT OF PUBLICATIONS

PUBLIC NOTICE

(First Published in The Hugoton Hermes, Thursday, July 2, 2009) 1t

**BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS
NOTICE OF FILING APPLICATION**

Re: **EOG RESOURCES INC.** - Application for a permit to authorize the commingling of production in the Verna 11-4, located in Stevens County, Kansas.

TO: All Oil and Gas Producers, Unleased Mineral Interest Owners, Landowners and all persons whomever concerned.

You, and each of you, are hereby notified that EOG Resources, Inc. has filed an application to commingle the production from the Morrow and Mississippian formations in the Verna 11-4, located in the NW SW SW of Sec. 11-T34S-R38W, Stevens County, Kansas.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within fifteen (15) days from the date of this publication. These protests shall be filed pursuant to Commission regulations and must state specific reasons why the grant of the application may cause waste, violate correlative rights or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly.

EOG Resources, Inc.
3817 N.W. Expressway, Suite 500
Oklahoma City, Ok 73112
405-246-3184

KANSAS CORPORATION COMMISSION

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STATE OF KANSAS, STEVENS COUNTY, ss Faith Publishing LLC, being first duly sworn, deposes and says: That they are Publisher of the Hugoton Hermes, a weekly newspaper printed in the State of Kansas, and published in and of general circulation in Stevens County, Kansas, with a general paid circulation on a weekly basis in Stevens County, Kansas, and that said newspaper is not a trade, religious or fraternal publication.

..Said newspaper is a weekly, published at least weekly 50 times a year; has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice; and has been admitted at the post office of Hugoton in Said County as second class matter.

..That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for _____ consecutive weeks, the first publication thereof being made as aforesaid on the day of

July 2, 2009, with subsequent publications being made on the following dates:

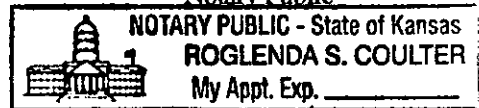
_____, 20____, 20____

_____, 20____, 20____

Kay M Daniels
Subscribed and sworn to before me this

day of July 2, 2009

Roglena S Coulter
Notary Public



My Commission expires: 4-10-10

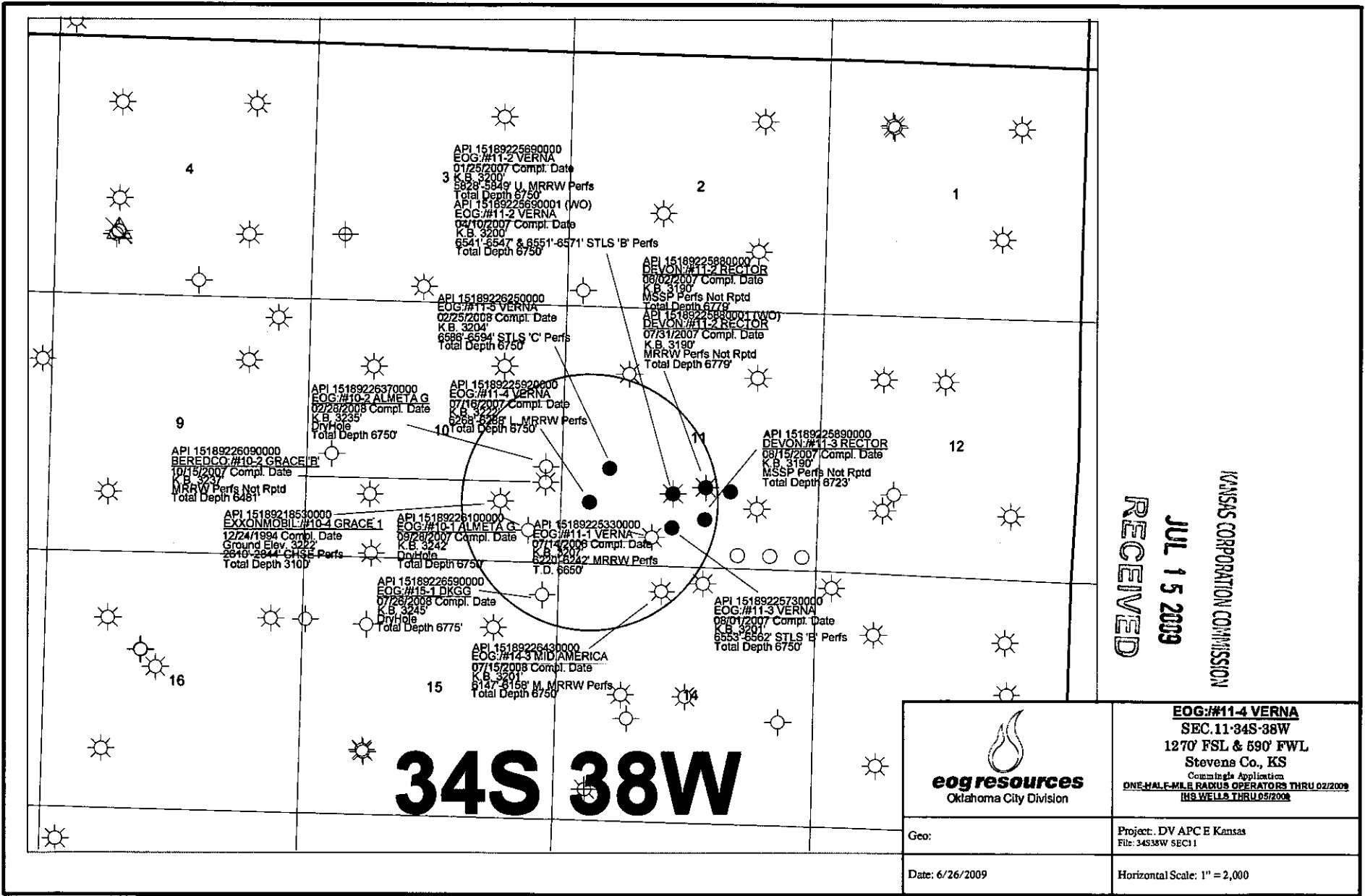
Printer's fee.....\$ 33.00

Additional Copies.....\$ _____


Total.....\$ 33.00

Approved this _____ day of _____, 20____

Judge



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 KANSAS CORPORATION COMMISSION

 eog resources Oklahoma City Division	EOG:#11-4 VERNA SEC.11-34S-38W 1270' FSL & 590' FWL Stevens Co., KS <small>Commingled Application</small> <small>ONE-HALF-MILE RADIUS OPERATORS THRU 02/2009</small> <small>HS WELLS THRU 05/2009</small>
	Project: DV APC E Kansas File: 34S38W SEC11
Date: 6/26/2009	Horizontal Scale: 1" = 2,000



Proposed Wellbore Schematic

BRIEF WELL HISTORY

- 6/02/07 Spudded at 7:00 pm
- 6/04/07 Ran 8 5/8" surface pipe @ 1696'
cmt w/480 sx
- 6/09/07 Ran DST 1 6260 to 6290'
- 6/12/07 TD 6750'. Ran 4 1/2" to 6750', DV tool 3531'
Cmtd 1st stage w/230 sx, 2nd stage /200 sx
- 6/12/07 Released rig.
- 6/26/07 MIRU DDCU.
- 6/27/07 DO DV tool, tstd to 1000#, DO to 6702'.
- 6/29/07 Perf St. Louis B 6608-6613', 6597-6600',
6583-6594'. Swab'd 78 BO, 27 BLW, 29 BWOL.
Last hr swb 12 BO, 1 BW.
- 7/03/07 POOH, set CIBP 6604'.
- 7/04/07 Swab tstd upper perms (6583-6600').
- 7/06/07 Ac w/1500 gals 15% HCl, swabd 21 BO, 57 BLW
w/good gas blow. Last hr 2 BO, 1 BLW (4 LTR).
- 7/07/07 SITP 690#, flowed 3 hrs, rec 5 BO, 4 BLW.
- 7/15/07 Set CIBP 6550'. Perf Morrow 6268-6288' w/2 SPF.
- 7/16/07 Swabbed, KO flowing.
- 7/21/07 Day 5 - 1374 MCF, 13 BO w/ 147# FTP
- 1/17/08 Install plunger lift
- 2/13/08 Cut paraffin
- 8/22/08 Lay down plunger lift
- 8/25/08 Run rods & pump
- 8/27/08 Install pumping unit

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VERNA 11-4
1270' FSL & 590' FWL Sec. 11-T34S-R38W
STEVENS CTY, KS
KB 3223' GL 3211'
PREPARED BY BWC 6/19/07, rev 7/9/07 NAF, rev 7/25/07, rev 8/04/08 SLH; rev 9/2/08 CDB

Sentry 228D-246-86
Arrow C-96 Gas engine
86" SL, 6 SPM

DV TOOL @ -3531'

EST TOC @ -5600'

NO MARKER JT

PBTD @ -6704'

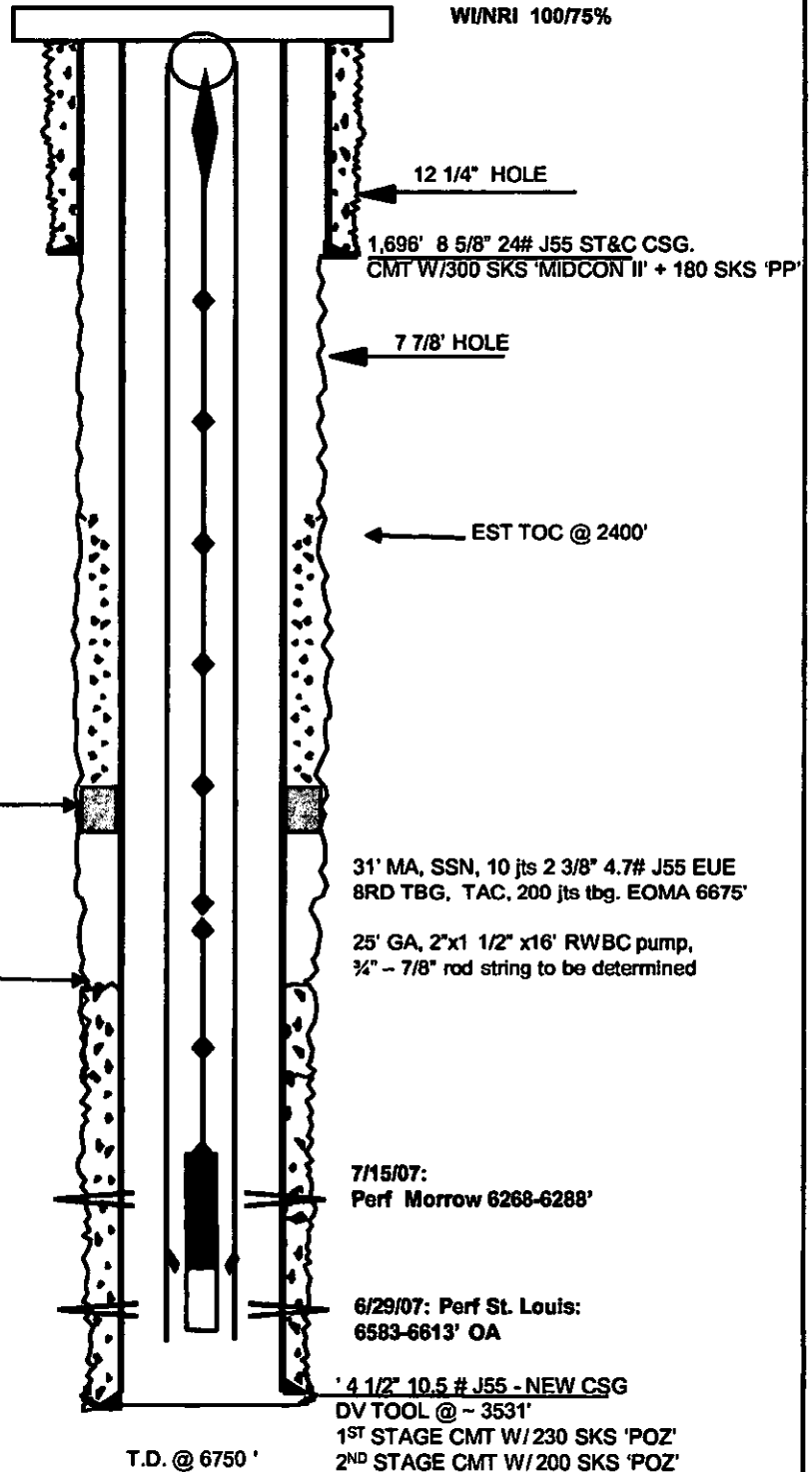


Exhibit "A"
Verna 11 #4
Section 11-34S-38W
Stevens County, Kansas
Page 1 of 1

1. **ExxonMobil Production Company**
P.O. Box 4610
Houston, TX 77210-4610

2. **Devon Energy Corporation**
20 N. Broadway Ave.
Oklahoma City, OK 73102-8260

3. **Berexco Inc.**
P.O. Box 20380
Wichita, KS 67208-1380

End of Exhibit "A"

KANSAS CORPORATION COMMISSION
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Guardian Products, Inc.
 P.O. Box 1166
 Liberal, KS 67905-1166
 (318) 624-1011

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Jerry Roberts 620 629-7990
 Representative

" Lab Copy "

Date: 29 June 2009
 8:20pm

Company: EOG Resources, Inc
Stymon, Oklahoma attn: Corby Johnson Fax 580 468-4870
 Lease: Verna 11-4 NW SW SW 11-34S-38W Stymon Co, KS

Specific Gravity	<u>1.134</u>	
Chlorides	<u>133,305.03</u>	
Calcium	<u>16,058.00</u>	mg/l 796.42
Magnesium	<u>2,089.10</u>	171.17
Sulfates	<u>53.7</u>	1.03
Bicarbonates	<u>200.90</u>	3.28
Iron	<u>77.3 mg/l =</u>	
Hydrogen Sulfide	<u>0/0</u>	Co ₂ = 295.00
Barium / Strontium	<u>0/0</u>	0/0
pH	<u>6.52</u>	
Sulfate Reducing Bacteria	<u>0/0</u>	
Sodium	<u>68,270.44</u>	2,968.28
Total Dissolved Solids	<u>220,501.0</u>	

Dissolved O₂ = 0.0 Total Ionic Strength = 4.3487
 Max CaSO₄ = 76 mg/l
 Total Hardness = 48,385.00

COMMENTS:

Sample analysis @ 90 Deg F - 22 Deg C.
 Produced water from well head. 29 June 2009

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St. Louis
Vernall-2

02/13/2007 16:21 FAX 5502564665

EOG RESOURCES

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Water Analysis

GUARDIAN PRODUCTS INC.

Company: EOG RESOURCES
Field: EOG RESOURCES
Lease: VERNA 11-2

P.O. Box 1156
Liberal, KS 67905-1156

Phone: 620-624-1011
Fax: 620-624-4222

Location:
Description:
Well:

Date: February 9, 2007
JERRY ROBERTS

Sample Point: BLEEDER

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	58,969.24	2,563.68
Calcium, Ca	15,048.00	748.66
Magnesium, Mg	2,080.59	170.54
Barium, Ba	5.00	0.07
Iron, Fe	250.00	13.44

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO3		
Bicarbonate, HCO3	66.49	1.02
Sulfate, SO4	50.00	1.02
Chloride, Cl	119,000.00	2,328.94
Sulfide, S	0.00	0.00

OTHER PROPERTIES

pH	5.21
Specific Gravity	1.140
Dissolved Oxygen, (mg/l)	0.00
Dissolved Carbon Dioxide	247.60
Sulfide as H2S, (ppm)	0.00
Sample Temp:	90F, 32C

Total Dissolved Solids (mg/l)	194,459
Total Ionic Strength	3,874.9
Maximum CaSO4, (calc.)	75
Maximum BaSO4, (calc.)	5
Total Hardness	45,960.00 mg/l, 919.20 meq/l

ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

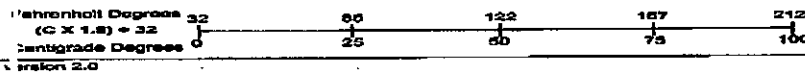
	meq/l	mg/l	lbs/kbbl
CaCO3	0.00	0.00	0.00
CaSO4	1.11	75.00	28.00
BaSO4	0.08	9.00	3.00

Note: Since scale forming molecules can exist in solution, refer to the CaCO3 saturation index for CaCO3, or the solubilities for CaSO4 and BaSO4, and compare with the calculated amounts above to determine if precipitated scale may be possible.

Conclusion:

Calcium Carbonate scaling index is positive above 63 degrees Centigrade.
Calcium Sulfate scale is indicated. See appropriate chart for temperature ranges.
Barium Sulfate scale is indicated below 15 degrees Centigrade.

Remarks:



Scaling Indices vs. Temperature

