OIL & GAS CONSERVATION DIVISION	Al API NO. 15- 033-20-811-6000
WELL COMPLETION FORM ACO-1 WELL HISTORY	County Comanche
DESCRIPTION OF WELL AND LEASE	SW - NE - SW - sec. 16 Twp. 34S Rge. 20 x
Operator: License #3882	1950 Feet from SVN (circle one) Line of Section
Name: Samuel Gary Ir & Associates, In	nc. 3520 Feet from EYW (circle one) Line of Section
Address 1775 Sherman Street	
Suite 1925	NE, SE, NW or SW (circle one)
City/State/Zip Denver, CO 80203	Lease Name Selzer Well # 16-11
Purchaser: Enron	Field Name First Snow
Operator Contact Person: Hugh Harvey	Producing Formation <u>Viola</u>
Phone (303) 831-4673	Elevation: Ground 1753 KB 1766
Contractor: Name: Eagle Drilling	Total Depth 6500 PBTD 6152
License: 5380	Amount of Surface Pipe Set and Cemented at 665 Fee
Wellsite Geologist: T. M. McCov	Multiple Stage Cementing Collar Used? X Yes 1
Designate Type of Completion	If yes, show depth set 5174
X New Well Re-Entry Workover	If Alternate II completion, cement circulated from
SIGW SIGW SIGW SIGW SIGW SIGW SIGW	# deet depth to w/ sx cmt
### Operator:	Chloride content N/A ppm Fluid volume N/A bbl D Waynering method used By evaporation KS Location of fluid disposal if hauled offsite: Operator Name Samuel Gary Jr. & Associates, Inc. Lease Name Selzer License No. 3882 SW/4 Quarter Sec. 16 Twp. 34 S Rng. 20 K/W
Spud Date Date Reached TD Completion Date	County Comanche Docket No.
Rule 82-3-130, 82-3-166 and 82-3-107 apply. Information or 12 contins if requested in writing and submitted with the months). One copy of all wireline logs and geologist well MUST BE ATTACHED. Submit the form with all plugged we with and the statement her in are complete and correct to the statute. Signature Samuel Gary r.	02/18/92 R.C.C. OFFICE USE ONLY Letter of Confidentiality Attached Wireline Log Received
Joan S. Lucero /21/1996	KGS Plug Other (Specify)

Operator Name Sam	nuel Gary J	r. & Ass	ociates	, Inc	ase Name	Selz	er	Well #	16-11
16 24	2 22	□ East		Cou	unty C	omanche		_	<u> </u>
c. 16 Twp. 34	S Rge. 20	☑ West			• ===				······································
MSTRUCTIONS: Show nterval tested, ti ydrostatic pressure f more space is ne	ime tool open es, bottom hole	and closed, temperatur	, flowing e, fluid r	and shut.	-in press	urae uha	.haa ab :		
ill Stem Tests Tai (Attach Addition		X Yes	□ No		X Log	Formati	on (Top), Depth	and Datum	Sample
mples Sent to Geo	logical Survey	⊠ _{Yes}	□ No	i	lame	•	Тор		Datum
res Taken		☐ _{Yes}	☑ _{No}	:	tone Co abaunse		. 78 <i>6</i> 3195		798
ectric Log Run (Submit Copy.)		∑ _{Y••}	No	S M	tark armator		4682 4813		4008 4705 4896
st All E.Logs Run:	Array Indu	ction El	ec. Log		hester sage		5049 5544		5544 6035
ompensated Neutron ompensated Photo-Density Log orehole Compensated Sonic		V:	Viola 600 Simpson 620 Arbuckle 630			6208 6357			
ntegrated Tran	nsit Time L	og			·				
	Report a		MG RECORD	전 Nev	J Used	d ormediate,	production, et	c.	
urpose of String	Size Hole Drilled	Size C. Set (I	asing n O.D.)	Weigh Lbs./	•	Setting Depth	Type of Cement	# Sacks Used	Type and Percer Additives
Surface	12-1/4"	8-5/8"		24	#	665	Common	200	3% CaCl2
roduction	7-7/8''	5-1/2"		15.5#		6200	Light 50/50 poz		3% CaCl2 % salts, 15
	<u> </u>						50/50 poz	250 10	ge % salt, 12.
	1	,	ADDITIONAL	CEMENTIN	G/SQUEEZE	RECORD			
urpose: Perforate	Depth Top Bottom	Type of C	ement	#Sacks	ks Used Type and Percent Ad		Additives		
Protect Casing Plug Back TD			i		į				
Plug Off Zone						·· <u> </u>			
Shots Per Foot	PERFORATION Specify Footag	RECORD - B	ridge Pluj	gs Set/Typ erforated		Acid, F	racture, Shot, Kind of Materi	Coment Squ at Used:	Deze Record
4 . 6050–6057					1000 gallons 15% HCL 6050-57				
								<u></u>	0030 1.7
						·		***************************************	
						,			
BING RECORD 2-	Size -7/8"	Set At 5006'		Packer A N/A	it Li	ner Run	☐ _{Y••} ☐	lo	
te of First, Resum 04/12/91	ed Production,	SWD or Inj.	Produc	ing Hetho	d Flowi	ng 🖫 Pumi	oing Gas Lit	it 🗆 othe	r (Explain)
timated Production Per 24 Hours	01 L 38	8bls.	Gas 60	Mcf	Water	Bbls.	988-011 F 1579		Gravity 43
position of Gas:			<u>i</u>	HOD OF COM	<u>i </u>			Pro	duction Interva
Vented Sold (If vented, subm	Used on Le		Open H	ole 🖾	Perf.	Dually o	omp. Commin		Viola
		f	Other	(Specify)				_60	050-6057

GEOLOGIST'S REPORT

Samuel Gary Jr. & Associates, Inc. Selzer #16-11

DISCUSSION

Production casing was run at the Samuel Gary Jr. & Associates, Inc. Selzer #16-11 for completion of the principal objective, Ordovician Viola "B", and to test secondary objectives including Pennsylvanian Lansing.

Structure

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The Selzer #16-11 tested a seismically defined high. apparent bed thickness compared to those at the Samuel Gary Jr. & Associates Lemon Ranch #14-10, NWSE Sec. 14, T34S, R20W, the high is reflected by 90 ft. of thinning in the Pennsylvanian Wabaunsee -Mississippian Chester, and by 40 ft. of thinning in the Ordovician Viola Arbuckle interval. The Mississippian Osage at the Selzer #16-11, however, is 70 ft. thicker than at the Lemon Ranch #14-10, and may record deposition in a down-dropped block or steep dips.

Compared to the Lemon Ranch #14-10, the Selzer #16-11 is about flat at the Wabaunsee, 50 ft. high at the Heebner, 90 ft. high at the Chester, 120 ft. high at the Osage, 50 ft. high at the Viola, and 100

ft. high at the Arbuckle.

KANSAS CONTROL MULTIPLICITY

The high structural setting undoubtedly accounts for the multiplicity

Column #16-11.

<u>Pennsylvanian</u>

CONSERVATION DIVISION Lansing interval, Kg 3360 Primary Pennsylvanian zone is Lansing intervals 4312'- 4324' and 4550' - 4555' should be tested. These limestones are characterized by good drilling breaks, fair to good log porosity, and Sw values from 27% to 34%.

Secondary zones include: 1) Toronto interval 4190'-4196' where log porosity is fair and Sw = 45%, 2) Marmaton interval 4861'-4870' where log porosity is rather low, Sw = 36%, 3) Pawnee interval 4908'-4920' where log porosity is fair and Sw = 52%, 4) Stark interval 4692'-4698' where log porosity is rather low and Sw = 28%, and 5) Swope intervals 4738'-4741' and 4746'-4750' where log porosity is low, Sw = 40%.

Lansing intervals 4726'-4281' and 4526'-4529' exhibit low log porosity and high Sw values.

ORIGINAL

GEOLOGIST'S REPORT

Selzer #16-11
Page two of five

Mississippian

Shows from Chester 5051'-5060' and 5184'-5204' and from Osage 5558'-5578' are considered less important than the secondary Pennsylvanian shows. Porosity in the Chester is low; Sw values are variable. Visible porosity in the Osage is low, log porosity is apparently influenced by clay; Sw values are high.

Viola "B"

1650 ft. of free oil and highly gas cut oil were produced on DST #1. Gas production during the test varied from 536 to 119 MCFPD. No water was recovered. Fracturing is indicated. No log calculations are presented from the Viola "B". Additional work is required to determine values of log calculation parameters which yield results consistent with the indicated discovery.

Tom Fertal Senior Geologist



GEOLOGIST'S REPORT

Selzer #16-11
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FORMATION TOPS

	MD	1766 KB
	Log To	p Datum
		•
PERMIAN		
Stone Corral	786	+ 980
Base Stone Corral	798	+ 968
Council Grove	2636	- 870
Cottonwood	2812	-1046
PENNSYLVANIAN		
Wabaunsee	3195	- 1429
Elgin	4008	-2242
Heebner	4102	- 2336
Toronto	4110	-2344
Lansing	4270	-2504
Stark	4682	-2916
Swope	4705	- 2939
Marmaton	4813	-3047
Pawnee	4896	-3130
Cherokee/Atoka Undivided	4956	- 3190
Base Atoka Limestone	5040	-3274
MISSISSIPPIAN		
Chester	5049	-3283
Osage	5544	- 3777
ORDOVICIAN		
Viola "A"	6035	-4260
Viola "B"	6044	-4269
Middle Viola Marker	6106	-4328
Simpson	6208	-4426
Simpson Shale (Main Body)	6308	- 4522
Simpson Sandstone	6333	- 4546
Arbuckle	6357	- 4569
TD Logger	6499	RECEIVED
TD Driller	6500	KANSAS CORPCIATION COMMISSIO:
TD Driller Final SLM	6502	= 00°4814110010.

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CONSERVATION DIVISION WICHITA, KS

ORIGINAL

GEOLOGIST'S REPORT

Selzer 16-11 Page four of five

WELL DATA

OPERATOR:

SAMUEL GARY JR. & ASSOCIATES, INC.

WELL NAME:

SELZER #16-11

LOCATION:

1950'FNL & 1760' FWL

NESW Sec. 16, T34S, R20W Comanche County, Kansas

ELEVATIONS:

1755' GL

1753' Graded GL

1766' KB

FIELD:

Wildcat

ROAD DIRECTIONS:

From Protection, S 5.5 miles on main county road, W 0.5 mile; S 2.3 miles; before bridge, W and S 1

mile on lease road to location.

SURFACE CASING:

17 joints 8-5/8" 28# set at 658 KB.

SPUD DATE:

12 February 1991 1:30 p.m.

DRILLING COMPLETED: 22 February 1991 2:30 p.m.

TOTAL DEPTH:

6500' Driller 6502' SLM

6499' Logger

MAXIMUM

TEMPERATURE:

127 deg. F

LAST FORMATION

PENETRATED:

WELL STATUS:

Arbuckle

Set 5-1/2" production desing ConATION COMMISSIO:

OPERATOR

REPRESENTATIVES:

Tom Fertal - Geologist

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Dan Hall - Engineer

Tim Howard - Engineer

CONSERVATION DIVISION WICHITA, KS

SAMUEL GARY JR. & ASSOCIATES, INC.

SELZER 16-11

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ORIGINAL

DRILL STEM TEST #1

Halliburton ran hookwall straddle test of Viola "B" after logs.

TEST INTERVAL:

5998' - 6088'

90 ft. open

PACKERS:

Upper Packers:

5992'

_ _

59981

Lower Packers:

6088' 6094'

Hookwall:

6156'

PRESSURES & TIMES:

Recorder Depth: 6083'

Initial Hydrostatic:

2787 psi

Initial Flow:

380 psi to 352 psi

15 min

Initial Shut-In:

1159 psi

30 min

Final Flow:

398 psi to 582 psi

90 min

Final Shut-In:

2248 psi

180 min

Final Hydrostatic:

2787 psi

RECOVERY:

90 ft. of free oil, 1560 ft. of very gassy, slightly mud cut oil. Flowline drip sample: 95% condensate, 5% gas. Top sample: 43 gravity oil. Bottom sample: 10% mud, 10% water (18,500 ppm chlorides), 50% gas, 30%

oil. Reversed out.

SAMPLER:

650 psi

3.158 cu. ft. of gas

1200 cc oil

BLOW:

Tool opened with strong blow. On 3/4" choke during 1st open, gas to surface in 4 min at 536 MCFPD, decreased to 450 MCFPD. On 1/2" choke during 2nd open, gas to surface varied

from 119 MCFPD to 169 MCFPD.

APPARENT SALINITY

Pit mud:

6500 ppm chlorides



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COMMENTATION DIVISION

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