

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION OR RECOMPLETION FORM
ACO-1 WELL HISTORY

DESCRIPTION OF WELL AND LEASE

Operator: License # 4022
Name Vincent J. Duncan
Address 2300 South Tower
600 17th Street
City/State/Zip Denver, CO 80202

Purchaser N/A

Operator Contact Person Paul J. Cella
Phone (303) 623-4158

Contractor: License # 6033
Name Murfin Drilling Company

Wellsite Geologist Jim Blaha
Phone (303) 861-0728

Designate Type of Completion
 New Well Re-Entry Workover

Oil SWD Temp Abd
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply etc)

If OKWO: old well info as follows:
Operator
Well Name N/A
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable

12/18/84 12/27/84 12/28/84
Spud Date Date Reached TD Completion Date
4450 N/A
Total Depth PBDT

Amount of Surface Pipe Set and Cemented at 304 feet
Multiple Stage Cementing Collar Used? Yes No
if alternate 2 completion, cement circulated
from 0 feet depth to 304 w/ 225 SX cmt

API NO. 15-063-20,849-00-00

County Gove

C... SW SW Sec. 4 Twp 14 Rge 27 East West

660 Ft North from Southeast Corner of Section
4620 Ft West from Southeast Corner of Section

(Note: Locate well in section plat below)

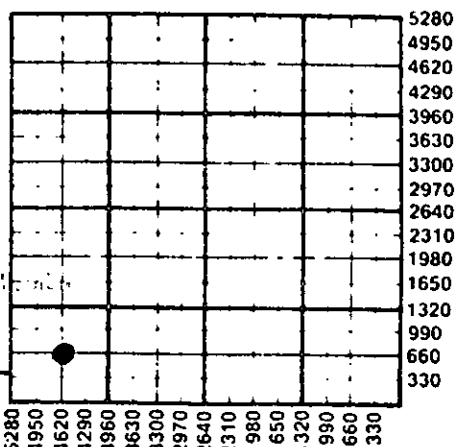
Lease Name Jacobs Well # 4-1

Field Name

Producing Formation

Elevation: Ground 2533 KB 2538

Section Plat



REC'D FEB 04 1985
02-04-85
Wichita, Kansas

WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal Repressuring
Docket #

Questions on this portion of the ACO-1 call:
Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit #

Groundwater.....Ft North from Southeast Corner
(Well)Ft West from Southeast Corner of
Sec Twp Rge East West

Surface Water.....Ft North from Southeast Corner
(Stream, pond etc).....Ft West from Southeast Corner
Sec Twp Rge East West

Other (explain).....
(purchased from city, R.W.D. #)

INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Paul J. Cella
Title Land Manager Date 1/28/85

Subscribed and sworn to before me this 28th day of January 1985
Notary Public Nina M. Jones
Date Commission Expires 5/28/87

K.C.C. OFFICE USE ONLY
 Letter of Confidentiality Attached
 Wireline Log Received
 Drillers Timelog Received
Distribution
 KCI SWD/Rep NGPA
 KGS Plug Other (Specify)

rec. 4 Twp 14 Rge 27W

Operator Name .. Vincent J. Duncan Lease Name..... Jacobs..... Well #. 4-1....

Sec. 4 Twp. 14 Rge. 27 East West County..... Gove

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken Yes No
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description
 Log Sample

See Attached
 Geologic Report

Name	Top	Bottom
Topeka	3479'	
Heebner	3707'	
Toronto	3727'	
Lansing	3743'	
Base/Kansas City	4032'	
Mississippian	4340'	

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CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (in O.D.)	Weight Lbs/Ft.	Setting Depth	Type of Cement	#Sacks Used	Type and Percent Additives
Surface		8-5/8"		304'	60/40 Poz	225	3% cc

PERFORATION RECORD		Acid, Fracture, Shot, Cement Squeeze Record	
Shots Per Foot	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used)	Depth
	N/A		

TUBING RECORD			
Size	Set At	Packer at	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No

Date of First Production	Producing Method				
	<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (explain).....				
Estimated Production Per 24 hours	Oil	Gas	Water	Gas-Oil Ratio	Gravity
	Bbls	MCF	Bbls	CFPB	
		N/A			

METHOD OF COMPLETION

Production Interval

Disposition of gas. Vented Open Hole Perforation
 Sold Other (Specify)
 Used on Lease Dually Completed
 Conningled

STATISTICAL DATA

OPERATOR: Vincent J. Duncan
 WELL NUMBER: Jacobs No. 4-1
 LOCATION: SW SW Section 4
 Township 14 South - Range 27 West
 Gove County, Kansas
 ELEVATION: GR 2533' KB 2538'
 SPUD DATE: December 18, 1984
 CEASED DRILLING: December 27, 1984
 STATUS: P & A
 TOTAL DEPTH: 4450'
 SURFACE CASING: Set 297' 8-5/8" casing @ 303' KB with 225 sacks
 60-40 poz + 3% CaCl.
 DRILLSTEM TESTS: None
 LOG PROGRAM: Great Guns - RA Guard Log
 CONTRACTOR: Murfin Drilling Co., Rig #23
 WELLSITE GEOLOGIST: James A. Blaha

CHRONOLOGICAL HISTORY

December 18, 1984 Spud 12:15 P.M. Set surface casing as above.
 Plug down 5:15 P.M.
 7:00 A.M.
 December 19, 1984 1400' Drilling sandstone and shale.
 December 20, 1984 2820' Drilling limestone and shale.
 December 21, 1984 3540' Drilling limestone and shale.
 December 22, 1984 4090' Drilling limestone and shale. Prep to
 shut down for Christmas @ 4100'.
 December 26, 1984 4100' Start up rig to RIH.
 December 27, 1984 4300' Drilling limestone and shale.
 4450' TD. P & A.

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State Geological Survey
Wichita Branch

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FORMATION LOG TOPS AND DATUMS

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>
STONE CORRAL	1989	+ 549
BASE STONE CORRAL	2030	+ 508
TOPEKA	3479	- 941
HEEBNER	3707	-1169
TORONTO	3727	-1189
LANSING	3743	-1205
G OOLITE ZONE	3849	-1311
BASE KANSAS CITY	4032	-1494
MARMATON	4081	-1543
PAWNEE	4151	-1613
FT. SCOTT	4245	-1707
CHEROKEE	4268	-1730
MISSISSIPPIAN	4340	-1802
TOTAL DEPTH	4450	-1912

STATE GEOLOGICAL COMMISSION

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SAMPLE DESCRIPTIONCONSERVATION DIVISION
Wichita, Kansas

3450-3520	Shale, grey and red-brown, trace grey-green; anhydrite, clear and white; trace sandstone, grey, very finely grained, dirty; slight trace limestone, white, chalky.
3520-3580	Shale, as above; trace limestone, buff, very finely crystalline, dense; trace limestone, white, chalky.
3580-3610	Generally as above; trace sandstone, grey, medium grained, dirty; trace limestone, grey, very finely crystalline, dense.
3610-3650	Shale and limestone, as above.
3650-3660	Missing.
3660-3690	Limestone, tan to buff, very finely crystalline, occasionally oolitic and/or fossiliferous, dense; limestone, white, chalky; shale, grey, trace red-brown.
3690-3700	Shale, grey and red-brown; limestone, as above.

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- 3700-3710 Limestone, tan, very finely crystalline, occasionally oolitic and/or fossiliferous, dense; limestone, buff, very finely crystalline, dense; trace limestone, white, chalky; shale, grey, red-brown, trace grey-green.
- 3710-3740 Shale and limestone, as above.
- 3740-3750 Shale, grey, red-brown, grey-green; trace shale, dark grey to black, very carbonaceous and shale with carbon flecks; limestone, tan, very finely crystalline, dense; trace limestone, white, chalky.
- 3750-3770 Limestone and shale, as above.
- 3770-3780 Shale and limestone, as above.
- 3780-3800 Limestone, light tan to buff, to light buff, very finely crystalline, very occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; shale, grey, red-brown, trace grey-green.
- 3800-3810 Shale, grey and dark grey, red-brown, trace grey-green; trace limestone, light buff, very finely crystalline, dense.
- 3810-3830 Limestone, buff and light buff, very finely crystalline, occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; shale, as above; trace chert, milky and grey.
- 3830-3840 Limestone, light tan, microcrystalline, dense; limestone, buff and light buff, very finely crystalline, occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; shale, grey, dark grey, red-brown, grey-green.
- 3840-3860 Limestone and shale, as above; trace chert, light grey and milky.
- 3860-3880 Shale and limestone, as above; chert, as above.
- 3880-3890 Limestone, light tan, microcrystalline, dense; limestone, buff, very finely crystalline, occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; trace chert, light grey, and milky; trace sandstone, grey, very finely grained, dirty; shale, as above.
- 3890-3910 Limestone, as above; more limestone, white, chalky; trace chert, as above.
- 3910-3920 Limestone, as above; limestone, tan to dark tan, very finely crystalline, very occasionally oolitic, dense; trace chert, as above.

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Survey
-3- WICHITA BRANCH

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Wichita, Kansas

- 3920-3950 Limestone, light tan and buff, microcrystalline to very finely crystalline, very occasionally oolitic, dense; limestone, white, chalky; trace chert, grey and milky; trace shale, grey, dark grey, red-brown.
- 3950-3970 Generally as above; trace shale, dark grey to black, very carbonaceous.
- 3970-3990 As above; no shale, carbonaceous; more shale, grey, dark grey, red-brown, grey-green.
- 3990-4010 Limestone, light tan and buff, microcrystalline to very finely crystalline, dense; limestone, grey-tan, microcrystalline, dense; trace limestone, white, chalky; trace chert, grey and milky; trace shale, grey, dark grey, red-brown, grey-green and dark grey to black, very carbonaceous.
- 4010-4020 Limestone, light tan to buff, microcrystalline to very finely crystalline, dense; limestone, light tan, very finely crystalline, oolitic, dense; trace limestone, white, chalky; much chert, light grey-tan and milky; trace shale, grey, dark grey, red-brown, grey-green.
- 4020-4030 Generally as above; slight trace only limestone, oolitic.
- 4030-4040 Limestone, tan, microcrystalline, dense, very occasionally oolitic; limestone, buff, very finely crystalline, dense; trace limestone, white, chalky; trace chert, grey and milky.
- 4040-4070 Generally as above; trace shale, dark grey, grey, red-brown, grey-green; trace shale, dark grey to black, very carbonaceous.
- 4070-4090 As above, more shale.
- 4090-4100 Limestone, tan and buff, microcrystalline to very finely crystalline, dense; limestone, grey, tan, very finely crystalline, dense; limestone, white, chalky; shale, grey, dark grey, red-brown, grey-green; trace siltstone, grey-brown, very soft, trace chert, grey and milky.
- 4100- Circulating Samples
 30 minutes - As above.
 60 minutes - As above.
 Shut down for Christmas.
- 4100-4110 First sample after shut down. Shale grey-dark grey, red-brown.
- 4110-4140 Shale, as above; trace limestone, tan, microcrystalline, dense; trace limestone, white, chalky.
- 4140-4150 Shale and limestone, as above.

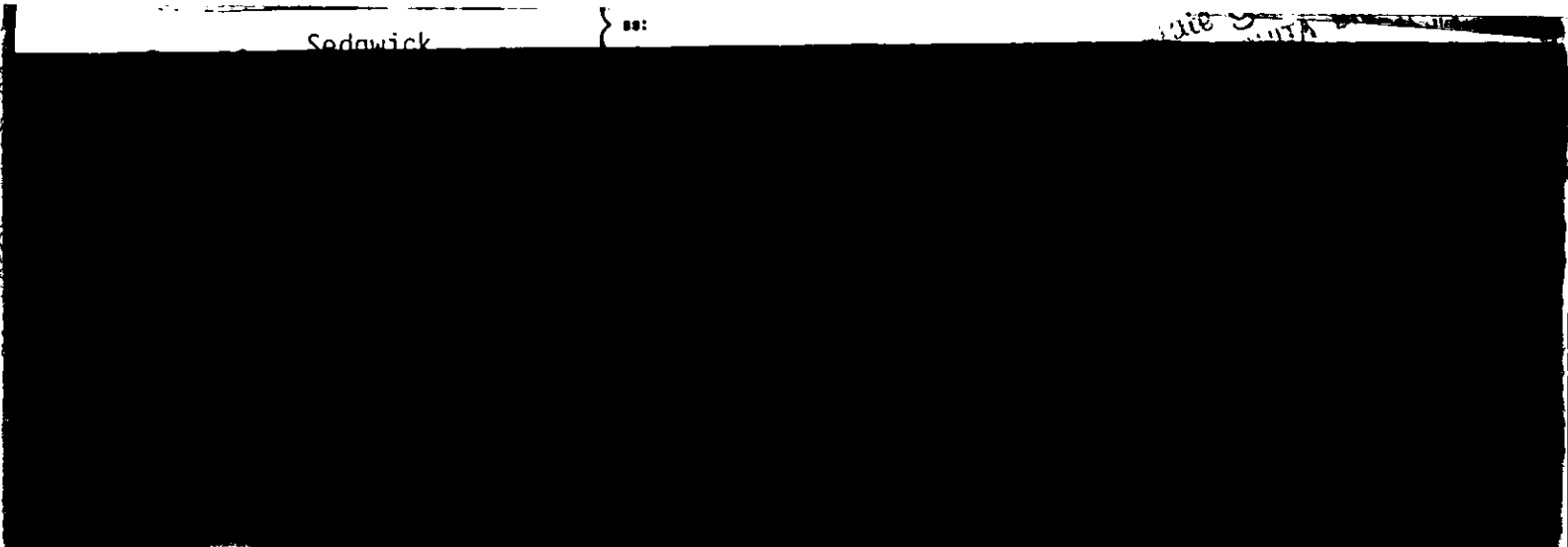
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- 4150-4160 Limestone, tan and grey-tan, microcrystalline, very occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; shale, grey and dark grey, red-brown, trace grey-green.
- 4160-4200 Generally as above; trace shale, dark grey to black, very carbonaceous.
- 4200-4210 Limestone, tan and buff, microcrystalline, dense; trace limestone, white, chalky; shale, grey and dark grey, red-brown, trace grey-green.
- 4210-4220 Limestone, tan and grey-tan, microcrystalline to very finely crystalline, dense; trace shale, as above.
- 4220-4230 Limestone, as above and limestone, light tan, microcrystalline, dense; trace shale, as above; trace chert, milky.
- 4230-4240 Shale, grey and dark grey; shale, dark grey-brown, very calcareous, grades to very argillaceous limestone; trace limestone, tan, as above; trace limestone, white, chalky; trace chert, as above.
- 4240-4250 Shale, grey and dark grey, trace dark grey to black, very carbonaceous; limestone, tan, microcrystalline, dense; trace limestone, white, chalky.
- 4250-4260 Shale, grey to dark grey and dark grey-brown with carbon flecks; limestone, tan, microcrystalline to very finely crystalline, very occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky.
- 4260-4270 Limestone, tan, very finely crystalline, occasionally oolitic, occasionally very oolitic (grainstone), dense to very poor porosity, trace dead oil stain; limestone, light tan, very finely crystalline, very occasionally oolitic, dense; shale, as above.
- 4270-4290 Limestone, tan and buff, microcrystalline to very finely crystalline, dense; trace grainstone (oolites), as above; trace limestone, white, chalky; shale, grey, dark grey and dark grey-brown with carbon flecks; trace shale, dark grey to black, very carbonaceous; trace chert, milky.
- 4290-4320 Limestone, tan and buff, microcrystalline to very finely crystalline, dense; trace limestone, white, chalky; minor amount shale, grey, dark grey, dark grey-brown and dark grey to black, very carbonaceous.
- 4320-4340 Generally as above; increase in limestone, white, chalky.
- 4340-4350 Limestone, tan and buff, microcrystalline, very occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; shale, grey, dark grey, trace red-brown, grey-green, purple, dark ocher.

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Sedgwick

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- 4350-4360 Limestone, as above; shale, as above and shale, dark grey to black, very carbonaceous; trace shale, brown with carbon flecks; slight trace sandstone, grey, very finely grained, well sort, fair porosity?, trace oil stain.
- 4360-4370 Shale, vericolored; limestone, grey-tan, tan, light tan, microcrystalline, dense; trace sandstone, grey with oil stain, as above; trace chert, tan and orange.
- 4370-4380 Generally as above; very slight trace only sandstone with oil stain.
- 4380-4400 Shale, vericolored; limestone, grey-tan, tan, light tan, microcrystalline to very finely crystalline, very occasionally oolitic and/or fossiliferous, dense; trace limestone, white, chalky; trace chert, tan and milky.
- 4400-4410 Limestone and shale, as above; slight trace limestone, light grey, very finely crystalline spots of heavy dark oil; slight trace sandstone, light grey, very finely grained, well sort, oil stain, poor porosity?.
- 4410-4420 Shale, vericolored; limestone tan and buff, microcrystalline to very finely crystalline, dense; trace limestone, white, chalky.
- 4420-4430 Shale and limestone, as above; more limestone, white, chalky.
- 4430-4450 Shale, vericolored; limestone, tan and buff, microcrystalline, dense; trace limestone, white, chalky; trace chert, grey, blue-grey.

4450- Circulating Samples

30 minutes - Shale, vericolored; limestone, tan and buff, microcrystalline to very finely crystalline, very occasionally oolitic and/or fossiliferous, dense; limestone, white, chalky; trace chert, grey and milky.

60 minutes - Generally as above; increase in chert.

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