STATE CORPORATION COMMISSION OF KANSAS OIL & GAS CONSERVATION DIVISION	API NO. 15119-20,652 -00-00					
WELL COMPLETION OR RECOMPLETION FORM ACO-1 WELL HISTORY	County Meade xxxxxx					
DESCRIPTION OF WELL AND LEASE	140' SE of C SE NEC 2 Twp 34S Age 29 West					
Operator: license # 5673						
name W. L. Kirkman, Inc. address P.O. Box 18611, 453 S. Webb Road						
City/State/Zip Wichita, Kansas 67207	Lease NameCordes					
Operator Contact Person Wayne L. Kirkman Phone (316)685-5372	Field Name MOALER EAST					
5020	Producing Formation Marmaton					
Contractor: license #	Elevation: Ground 2466 KB 2474					
Wellsite Geologist Brian J. Kissick	Section Plat					
Phone (316), 685–5372	5280					
PURCHASER Koch. Oil. Company	4950 e					
Designate Type of Completion New Well Re-Entry Workover						
, New Well Ne-Lindy (Workove)	3960					
送] Oil [] SWD [] Temp Abd	3300					
☐ Gas ☐ Inj ☐ Delayed Comp. 🖺	DEIVED 2970 2640					
☐ Dry ☐ Other (Core, Water Supply etc.) STATE CORPOR	ATION COMMANSSION TO THE PARTY OF THE PARTY					
•	1650					
If OWWO: old well info as follows: Operator	0 4 1084					
Well Name	990					
Comp. Date	ION DIVISION - 330					
Sample Suite	25280 33630 33630 33630 1320 1320 330 330					
•	28 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4					
WELL HISTORY	WATER SUPPLY INFORMATION					
Drilling Method: ※ Mud Rotary ☐ Air Rotary ☐ Cable	Source of Water:					
.4-13-845-5-84	Division of Water Resources Permit #					
Spud Date Date Reached TD Completion Date						
(120						
. 6430 5825 Total Depth PBTD	(Well)Ft. West From Southeast Corner of Sec Twp Rge [East x West					
Amount of Surface Pipe Set and Cemented at 1475 feet	2 34S 29 Surface Water Ft North From Sourtheast Corner and					
Multiple Stage Cementing Collar Used? Yes No	(Stream, Pond etc.). Ft West From Southeast Corne					
If Yes, Show Depth Set feet	☐ Other (explain)					
	(purchased from city, R.W.D.#)					
If alternate 2 completion, cement circulated						
from feet depth to w/ SX cmt	isposition of Produced Water: Disposal Repressuring Disposal					
	•					
INSTRUCTIONS: This farms to the same of th						
Wichita, Kansas 67202, within 90 days after completion or recompletion of any	d with the Kansas Corporation Commission, 200 Colorado Derby Building, well Rules 82-3-130 and 82-3-107 apply					
	months if requested in writing and submitted with the form. See rule 82-3-107					
for confidentiality in excess of 12 months.	inorities it requested in writing and submitted with the form. See rule 82-3-107					
One copy of all wireline logs and drillers time log shall be attached with thi all temporarily abandoned wells.	is form. Submit CP-4 form with all plugged wells. Submit CP-111 form with					
antemporarily abandonica wents.						
All requirements of the statutes, rules, and regulations promulgated to regula herein are complete and correct to the best of my knowledge.	ite the oil and gas industry have been fully complied with and the statements					
/	ž.					
//.	l e					
	K.C.C. OFFICE USE ONLY					
sizzania ///an/	K.C.C. OFFICE USE ONLY F Letter of Confidentiality Attached					
	K.C.C. OFFICE USE ONLY F Letter of Confidentiality Attached					
Wayne L. Kirkman	K.C.C. OFFICE USE ONLY F Letter of Confidentiality Attached					
Wayne L. Kirkman	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date Subscribed and sworn to before me this 3rd day of October	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date Subscribed and sworn to before me this 3rd day of October Notary Public Author Dum	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date Subscribed and sworn to before me this 3rd day of October Notary Public Julian State Commission Expires 3-20-87 Kathleen G. Quin	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date Subscribed and sworn to before me this 3rd day of October Notary Public Julian Date Commission Expires 3 20 37 Kathleen G. Quin	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date Subscribed and sworn to before me this 3rd day of October Notary Public Date Commission Expires 3 20 87 Kathleen G. Quin KATHLEEN G. QUINN STATE NOTARY FUELIC	K.C.C. OFFICE USE ONLY F					
Wayne L. Kirkman Title President Date Subscribed and sworn to before me this 3rd day of October Notary Public Julian Date Commission Expires 3 20 37 Kathleen G. Quin	K.C.C. OFFICE USE ONLY F					

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			SIDE T	_		·	ه در ا	. Elsa A
Operator Name	W. L. Kirkman,	Inc. Lease N	lame .Corde	\$ Well#	1 sec .2	TWP 34≦ RG∑	29	xx West
			WELL	LOG	•	•		•
giving interval ter level, hydrostatic	NS: Show imposted, time tool open pressures, botton e space is needed.	en and closed, f n hole temperat	base of form lowing and ture, fluid re	nations penet shut-in press	ures, whether	shut-in pressi	ure reach	ned static
Drill Stem Te	Drill Stem Tests Taken 🛣 Yes 📋 No				Formation Description			
Samples Se	nt to Geological Survey		∏ No ☑ No	:	☆ Log ☐ Sample			
Cores Taker	n	☐ Yes	X) NO	. N	ame		Тор	Bottom
ISIP: FF: 77 FSIP: HP: 16 Recover Temp: The six Limesto colitic gas. 6 DST #2 3143-31 30-60-3	0-60 054 873 -97 851 14-1528 y: 120' Muddy 112° th "break" (314 one, cream, find a, good oolicase o units Chromato	48-3156) is of the control of the co	descrived e, oolisca , slight s	C. H. L. S. S. M. M. C. C. C. C. C. C. S.	reford ouncil Grove eebner ansing tark Shale wope armaton Middle" Marm herokee Shal orrow hester hester "Gas" asal Chester t. Genevieve t. Louis t. Louis "Br	2 34 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	936 044 364 524 0022 172 244 370 699 820 832 084 140 197 254 421	(- 462) (- 570) (-1890) (-2050) (-2530) (-2548) (-2698) (-2770) (-2896) (-3225) (-3346) (-3358) (-3610) (-3666) (-3723) (-3780) (-3947)
ISIP: FF: 12 FSIP: Recover Temp: The top litholo encount	-86 894 9-172 1603-1495 y: 340' saltwa 102° 38' of the Torgy change related in the W. ng is the description	ronto exhibit tive to the t L. Kirkman,	ted a cons upper Toro Inc. #1 E	iderable				
	light gray, mid							
<u>Sandsto</u>	ne, white, fier	n grained, m CASING RE			<u>iable to fir</u>]u sed	m, no snow.	CONTI	תפטאי.
		ort all strings set - c	_	-	₹'		type a	
Purpose of string	size hole drilled	size casing set (in O.D.)	weight	setting · depth	type of cement	# sacks used	perce additiv	ľ
Surface	12.1/4.	8 5/8	23	1475	Lite	500	6% gel.	2%.CC
Production	7.7/8	5 1/2	, .14	6381	Common LW(Scavenge	200	3% .CC	
PERFORATION RECORD				Acid	Acid, Fracture, Shot, Coment Squeeze Record 12#G1			
shots per foot	specify footage of e	ach interval perfora	ited			d of material used		Depth
4	5830-5836 5248-5251			4000.gal	s15%. Reg. A s.28%. NE. aci s15%. S.O. S	d	58	330-36 330-36 248-51
	······································	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	·····	·····	

Estimated Production 85 Per 24 Hours Bbls MCF Bbls CFPB

open hole

Gas

 $\hfill \square$ flowing

set at

Producing method

Oil

packer at

🔯 pumping

METHOD OF COMPLETION

★★ perforation

_other (specify)

Liner Run

🔲 gas lift

Water

☐ Yes

☐ Other (explain)

Gas-Oil Ratio

PRODUCTION INTERVAL

Gravity

📋 sold used on lease

TUBING RECORD

Date of First Production

Disposition of gas: \square vented

☐ Qually Completed. ☐ Commingled

<u>Swope</u> porosity was encountered at 5022'. Considerable thinning relative to the W. L. Kirkman, Inc. #1 Borchers was observed through the Swope porosity: 34' - #1 Cordes, versus 51' - #1 Brochers. Swope description (5022-5036):

Limestone, cream to tan, fine crystalline, oolitic to oolicastic, good oolicastic porosity, fair to poor crystalline porosity, fair show gas.

```
DST #3 5123-5136 covers this zone.
```

IF 30 min 350-779#
ISIP 60 min 1719#
FF 30 min 818-1089#
FSIP 60 min 1719

HP 2503-2491#

Recovery: 2150' saltwater chlorides 85,000 ppm

Temp: 118°

A pipe strap prior to DST #3 was made and revealed a 2.31' difference, the strap being the shorter of the two measurements. Weather conditions were windy. No correction was made.

The <u>Marmaton</u> was topped at a depth of 5172'. Porosity not present in the #1 Borchers was encountered from a depth of 5172' to 5180' and carries the following description:

Limestone, white, five crystalline, fossiliferous, colitic in part, poor pinpoint, small vuggy and interclastic porosity, very slight show gas, very slight show light brown oil, faint flourescence, faint odor.

DST #4 5132-5204 covers this zone.

IF 30 min 87-87#
ISIP 60 min 1716#
FF 30 min 109-109#
FSIP 60 min 1769#
HP 2487-?

Recovery: ?

Gas to surface on second opening.

Gauge: 49.3 MCF 10 min 34.3 MCF 20 min 30.7 MCF 30 min

The tool and drill pipe were found to be stuck in the hole when it was attempted to pick up off bottom. The bar was dropped to open the reverse circulating sub and circulation was established through the reverse circulating sub. Oil was then spotted around the collars with no results in freeing the tool and pipe. A free point was run and revealed that the pipe was stuck at 3130'. Oil was moved up hole and spotted around this point. Another free point was run following this and pipe was found to be stuck at approximately 4099' or just below the reverse circulating sub. After reaming the hole down to the top of the fish, washpipe was run and successfully washed down over the fish to the top of the top packer on the test tool. The fish was then successfully recovered.

The "Middle" Marmaton was encountered at 5244. Sample description of this zone from 5244' to 5250' is as follows:

Limestone, tan, fine crystalline, colitic to colicastic in part, good colicastic porosity, fair recrystalized interclastic porosity, good show bleeding gas, fair show bleeding light brown oil, good odor, good flourescence.

```
5242-5271 covers this zone
IF
        10 min
                 NO PRESSURES - both recorders failed
ISIP
        15 min
FF
        30 min
FSTP
        45 min
                                                         RECEIVED
Gas to surface in 3 minutes first opening.
                                                   STATE COPPORATION COMMISSION
            353 MCF
Guaged:
                         5 minutes
             319 MCF
                         10 minutes
                                                        TOCT 0 4 1984
Second Opening
            4.4 MCF
                          5 minutes
                                                     CONSERVATION DIVISION
             4.8
                         10 minutes
                                                        Wichita, Kansas
            5.2
                         15 minutes
             5.6
                         20 minutes
            5.2
                         25 minutes
            4.4
                         30 minutes
           4010' clean gassy oil
Recovery:
Temp: 122°
```

Two other zones of interest in the "Lower" Marmaton were drill stem tested. The first of these zones (5388-5394) is described as follows:

Limestone, cream, fine crystalline, scattered pinpoint porosity, scattered small vuggy porosity, faint flourescence, no odor, very slight show gas, very slight show oil.

```
5271-5316
                        covers this zone
           10 min
                         122-112#
ISIP
           15 min
                         1334#
           10 \ \text{min}
\mathbf{F}\mathbf{F}
                        112-133#
FSIP
           15 min
                         1313#
HP
                         2527-2516#
```

Initial flow: weak 1" blow

Final flow: no blow, flush tool - no blow. Recovery: 90' mud chlorides 12,000 ppm

Temp: 122°

The second of the "Lower" Marmaton zones tested carries the following description (5322-5326):

Limestone, cream, fine crystalline, good crystalline and small vuggy porosity, excellent show gas, good show oil, good odor, good flourescence.

```
DST #7
         5318-5364
                      covers this zone
        10 min
                     NO PRESSURES - both recordes failed.
IF
ISIP
        15 min
FF
        30 min
FSIP
        45 min
HP
```

60' oil cut mud (5% oil) Recovery:

60' saltwater chlorides 90,000 ppm

120° Temp:

Morrow Sand was encountered with shows of hydrocarbons present. One of these sandstones carries the following description (5748-5754):

Sandstone, white, tan, fine grained, angular, glauconitic in part, poor to fair visible porosity, good flourescence, faint odor, fair show oil, fair show gas, gilsonitic in part.

```
5731-5753 covers this zone
DST #8
                  421-454#
IF
        10 min
ISIP
        15 min
                 1863#
FF
        30 min
                  508-443#
                 1841#
FSIP
        45 min
                  2778-2789#
HP
Gas to surface 1st opening
            2.2 MMCF
                       5 minutes
  Guaged:
            2.5 MMCF
                       10 minutes
Second Opening:
            2.3 MMCF
                        5 minutes
                       10 minutes
            2.9 MMCF
            2.9 MMCF
                       15 minutes
            3.0 MMCF
                       20 minutes
            2.9 MMCF
                       25 minutes
            2.9 MMCF
                       30 minutes
           200' mud
Recovery:
           100' saltwater chlorides 115,000 ppm
       120°
```

A second Morrow Sand with hydrocarbon shows was encountered from 5756-5770:

Sandstone, white fine grained, poorly sorted, angular to subrounded, glauconitic, poor to fair visible porosity, no show to fair show oil and gas, gilsonitic.

```
DST #9
        5755-5768 covers this zone
                                                           RECEIVED
\mathbf{IF}
        10 min
                    64-54#
                                                    STATE CORPORATION COMMISSION
        15 min
                    1366#
ISIP
\mathbf{F}\mathbf{F}
        15 min
                    75-64#
                                                          MCT 0 4 1984
FSIP
        15 min
                    1216#
                    2701-2767#
                                                        CONSERVATION DIVISION
Both flows - weak 1/2" blow.
                                                           Wichita, Kansas
Recovery: 90' mud chlorides 60,000 ppm
Temp: 120°
```

and.

Temp:

Pre-Pennsylvanian erosion has apparently removed much of the top of the Mississippian Chester aged rocks. The top of the Chester was encountered at 5820'. The Chester zone that is correlative to the zone productive of gas in the W. L. Kirkman, Inc. #1 Borchers was preserved however. A description of the zone is (5832-5836):

Limestone, tan to cream, fine crystalline, fossil fragments, poor pinpoint and small vuggy porosity, very slight show gas, very slight show of oil, flourescence.

It was decided not to test this zone.

The Basal Chester Sand was encountered at depths of 6084-6102' and 6106-6118'.

6084-6102:

Limestone, white fine crystalline, slightly oolitic, slightly sandy, streaks with fair pinpoint porosity with slight show oil and gas.

Sandstone, white, fine grained, subangular, fair visible porosity, poor to fair show oil and gas, gilsonitic, weak flourescence, lime.

6106-6118:

Sandstone, tan, fine grained, subangular to subrounded, some fair visible porosity, limey, no show to very slight show oil.

A drilling break from 6254-6271 in the St. Louis carries the following description:

Limestone, white, fine crystalline, fossiliferous, oolitic, chalky matrix, very soft, falls apart very easily, flourescence, no visible cut, leaves light brown residue in dimple tray, no visible porosity,

Limestone, brown, fine crystalline, slightly oblitic, rare pinpoint porosity, flourescence, leaves light brown residue in dimple tray - only two pieces found, one of which had a fair show of gas. Two units Hot Wire maximum.

Pipe was set on the W. L. Kirkman, Inc. #1 Cordes for further evaluation of the above described zones.

RECEIVED
STATE CORRECTION COMMISSION

OCT 0 4 100 1

CONSERVATION DIVISION Wichita, Kansas