

Chief Drilling Co., Inc. Ziegenbalg "A"
Operator Name Lease Name Well #.....
Sec. 17 Twp. 15S. Rge. 28 ☐ 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		Formation Description	
Samples Sent to Geological Survey	☒ Yes ☐ No	☒ Log ☒ Sample	
Cores Taken	☐ Yes ☒ No		
DST #1 3670-3690 (LKC 70 zone) 30-45-30-45 1st open weak blow, 2nd open weak blow died in 30 min., Rec. 30' W, 1' O, IBHP: 1109 10741, FBHP: 18021-1756 IFP: 44-44 FFP: 44-44 BHT 121'		FORMATION TOPS: Anhydrite 1862 + 572 Base Anhydr. 1892 + 542 Heebner 3558 - 1124 Toronto 3580 - 1146 LKC 3594 - 1160 Muncie Creek 3750 - 1316 Stark Shale 3849 - 1415 Hush Puckney 3882 - 1448 BKC 3921 - 1487 Marmaton 3945 - 1511 Ft. Scott 4101 - 1667 Cherokee 4129 - 1695 Mississippi 4214 - 1780 RTD 4250 - 1818	
DST #2 3785' DST #2 3788-3820 (LKC 160 zone) 30-30-60-45, wk. blow throughout initial flow, wk. increasing to fair blow on final flow, Rec. 40' OCM, 5% G, 20% O, 75% H, IBHP: 11101 FBHP: 10891, IFP: 44-44 FFP: 44-44 1893-1847 Hydrostatic Pressures, 1893-1847 BHT 121'		E-LOG TOPS: Anhydrite 1853 + 581 Base Anhydr. 3559 - 1125 LKC 3595 - 1161 Muncie Creek 3754 - 1320 Stark 3850 - 1416 Hush Puckney 3884 - 1450 BKC 3919 - 1485 Marmaton 3938 - 1504 Pawnee 4026 - 1592 Fort Scott 4106 - 1672 Cherokee 4130 - 1696 Mississippi 4216 - 1782 LTD 4252 - 1818	
DST #3 3821-3851 (LKC 180 zone) 30-45-60-45 very strong blows throughout on both opens, Rec. 900' GIP, 770' CIGO 36' gravity 735' W, chlorides 52,000 1505' total fluid IBHP: 11191, FBHP: 11191 IFP: 133-312 FFP: 357-625 1939-1893 Hydrostatic Press. BHT 126'		Well Log Sand 0 543 Sand & Clay 543 1255 Shale 1255 1862 Anhydrite 1862 1892 Shale 1892 2840 Shale Lime 2840 3882 Lime Shale 3882 4005 Lime 4005 4250 RTD 4250	
DST #4 3847-3884 (LKC 200 zone) 30-45-75-45 fair blow incr. to strong off bottom of bucket in 8 min., Rec. 200' GIP, 60' CGO 90' MO, 2% G, 68% O, 30% H, 270' SOCM less than 2% O, IBHP: 11191, FBHP: 10741 IFP: 80-89 FFP: 133-205		RELEASED 9-10-86	
DST #5 3881-3912 (LKC 220 zone) 30-45-75-45 very strong blow throughout, Rec. 400' GIP 210' HCO (7% G, 53% O, 40% H), 720' W, IBHP: 11641, FBHP: 11641, IFP: 89-133 FFP: 178-401 Hydrostatic Press. 1905-1893 BHT 131'		CONFIDENTIAL	
DST #6 3918-3966 (Marmaton) 30-45-90-45 fair blow in 5 min., Rec. 105' MW IBHP: 133 FBHP: 133 IFP: 89-89 FFP: 89-89 Hydrostatic Press. 1985-1893 BHT 129'		CASING RECORD ☒ New ☐ Used	
DST #7 4090-4130 (Ft. Scott) 30-30-30-30 very wk. blow died in 20', Rec. 10' H, IBHP: 441, FBHP: 441, IFP: 35-35 FFP: 35-35, ran E-log T.D. 4250'		Type and	
DST #8 4130-4130 (Ft. Scott) 30-30-30-30 very wk. blow died in 20', Rec. 10' H, IBHP: 441, FBHP: 441, IFP: 35-35 FFP: 35-35, ran E-log T.D. 4250'		FROM CONFIDENTIAL	
DST #9 4130-4130 (Ft. Scott) 30-30-30-30 very wk. blow died in 20', Rec. 10' H, IBHP: 441, FBHP: 441, IFP: 35-35 FFP: 35-35, ran E-log T.D. 4250'		Type and	
DST #10 4130-4130 (Ft. Scott) 30-30-30-30 very wk. blow died in 20', Rec. 10' H, IBHP: 441, FBHP: 441, IFP: 35-35 FFP: 35-35, ran E-log T.D. 4250'		Type and	

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs/Ft.	Setting Depth	Type Cement	Used	Additives
...surface...	12.1/4.	8.5/8". 20#	new set	@.304!	cem.w/190.sk	60-40	posmix
...production	7.7/8	4.1/2". 10.45#	3980'	cem.w/150.sk	common	2% gel	3% gils

PERFORATION RECORD		Acid, Fracture, Shot, Cement Squeeze Record	
Shots Per Foot	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used)	Depth
.....	3832' w/.1 hole perf. 3862' w/.1 hole		
.....	acidized w/2000.gall. 15% NE. 6.BPM. @.1700#, load. 110.bbls.		
.....	swab back load, swab down. 106.41.bbls.		

TUBING RECORD	Size 2 3/8"	Set At 2963.33	Packer at none	Liner Run	☐ Yes ☒ No
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Date of First Production	Producing Method
5-21-85	☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (explain).....

Estimated Production Per 24 Hours	Oil 68 bbls	Gas MCF	Water 74 bbls	Gas-Oil Ratio CFPB	Gravity
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METHOD OF COMPLETION

Production Interval

Disposition of gas: ☐ Vented
☐ Sold
☒ Used on Lease

☐ Open Hole ☒ Perforation
☐ Other (Specify)

3832.3862.....

☐ Dually Completed
☒ Commingled

CHIEF DRILLING CO., Inc.

Drilling Contractors - Oil Producers

SUITE 905 CENTURY PLAZA

WICHITA, KANSAS 67202

V. RICHARD HOOVER
PRESIDENT

DAILY COMPLETION REPORT

(316) 262-3791

ZIEGENBALG "A" #1
SE SE SW SEC. 17-15S-28W
GOVE COUNTY, KANSAS

CONFIDENTIAL

- 5-3-85 Moved in Warrior Double Drum, Ran Correlation, Cement and Collar Log, Cement log showed bad cement, Perf. 3832' w/l hole, Perf. 3862' w/l hole, swabbed down
- 5-4-85 shut down
- 5-5-85 shut down
- 5-6-85 2986' fill up, down 1000' from top, 28 bbls., O and 27.63 bbls. W, swab down 55.63 bbls.,
1/2 hr. test 8.12 bbls., 60% O
1/2 hr. test 6.68 bbls., 68% O
acidized w/2000 gallons 15% NE 6 BPM @ 1700#, load 110 bbls.
swabbed back load, swab down 106.41 bbls.,
1 hr. test 43.35 bbls., 55% O
- 5-7-85 2960' fill up, 33 bbls., O, 35 bbls., W
- 5-8-85 Ran retrievable bridge plug to 1867', spotted 2 sks sand on plug, open port collar @ 1837', cemented w/450 sks. lite cement w/gilsonite & cello seal, cement did circulate, wash sand off plug, pulled out of hole w/same, started running production string.
- | | |
|------------------------|---------|
| Mud anchor | 27.09 |
| 127 jts. 2 3/8" tubing | 3936.24 |
| Total | 3963.33 |
- 5-9-85 2 x 1 1/2 x 12 THD insert pump
157 3/4" sucker rods
1 - 4' pony rod
1 - 16' polish rod
- 5-21-85 set tank battery P.O.P.
- 5-22-85 motor down
- 5-23-85 68 bbls. O; 74 bbls., W

MAY 31 1985

State Geological Survey

RELEASED

SEP 10 1986

FROM CONFIDENTIAL

RELEASED

Date: SEP 1 1986

FROM CONFIDENTIAL

CHIEF DRILLING CO., Inc.

Drilling Contractors - Oil Producers

SUITE 905 CENTURY PLAZA

WICHITA, KANSAS 67202

V. RICHARD HOOVER
PRESIDENT

DAILY DRILLING REPORT

API: 15-063-20,882

RIG #2

ZIEGENBALG "A" #1 (#2316)
SE SE SW SEC. 17-15S-28W
Gove County, Kansas

ELEVATION: 2427 Gr
2431 D.F.
2434 K.B.

CONFIDENTIAL

4-17-85 Moving in on location, Rigged up, spudded in @ 5:00 p.m., ran 7 jts. new 20#, 8 5/8" 295', set @ 304' cemented w/190 sx., 60-40 posmix 3% c.c., 2% gel, plug down @ 12:00 midnight

4-18-85 Drilling on plug

4-19-85 Drilling @ 2245'

4-20-85 Drilling @ 2948'

4-21-85 Drilling @ 3585' DST #1 3670-3690
(LKC 70 zone) 30-45-30-45 1st open weak blow, 2nd open weak blow died in 30 min., Rec. 30' W, 1' O, IBHP: 1109# FBHP: 1074# HP: 1802' -1756 IFP: 44-44 FFP: 44-44 BHT 121'

4-22-85 Drilling @ 3785' DST #2 3788-3820
(LKC 160 zone) 30-30-60-45, wk. blow throughout initial flow, wk. increasing to fair blow on final flow, Rec. 40' OCM, 5% G, 20% O, 75% M, IBHP: 1110# FBHP: 1089#, IFP: 44-44 FFP: 44-44 1893-1847 Hydrostatic Pressures

4-23-85 DST #3 3821-3851 (LKC 180 zone) 30-45-60-45 very strong blows throughout on both opens, Rec. 900' GIP, 770' CIGO 36" gravity 735' W, chlorides 52,000 1505' total fluid IBHP: 1119#, FBHP: 1119# IFP: 133-312 FFP: 357-625 1939-1893 Hydrostatic Press. BHT 126 DST #4 3847-3884 (LKC 200 zone) 30-45-75-45 fair blow incr. to strong off bottom of bucket in 8 min., Rec. 200' GIP, 60' CGO 90' MO, 2% G, 68% O, 30% M, 270' SOCW less than 2% O, IBHP: 1119#, FBHP: 1074# IFP: 80-89 FFP: 133-205

4-24-85 DST #5 3881-3912 (LKC 220 zone) 30-45-75-45 very strong blow throughout, Rec. 400' GIP 210' MCO (7%G, 53%O, 40%M), 720' W, IBHP: 1164#, FBHP: 1164#, IFP: 89-133 FFP: 178-401 Hydrostatic Press. 1985-1893 BHT 131

FORMATION TOPS:

Anhydrite	1862	+	572
Base Anhydr.	1892	+	542
Heebner	3558	-	1124
Toronto	3580	-	1146
LKC	3594	-	1160
Muncie Creek	3750	-	1316
Stark Shale	3849	-	1415
Hush Puckney	3882	-	1448
BKC	3921	-	1487
Marmaton	3945	-	1511
Ft. Scott	4101	-	1667
Cherokee	4129	-	1695
Mississippi	4214	-	1780
RTD	4250	-	1816

E-LOG TOPS:

Anhydrite	1853	+	581
Base Anhydr			
Heebner	3559	-	1125
LKC	3595	-	1161
Muncie Creek	3754	-	1320
Stark	3850	-	1416
Hush Puckney	3884	-	1450
BKC	3919	-	1485
Marmaton	3938	-	1504
Pawnee	4026	-	1592
Fort Scott	4106	-	1672
Cherokee	4130	-	1696
Mississippi	4216	-	1782
LTD	4252	-	1818

RECEIVED
RELEASED
MAY 30 1985
SEP 10 1986
STATE COOPERATION COMMISSION
CONSERVATION DIVISION
FROM CONFIDENTIAL

CHIEF DRILLING CO., Inc.

Drilling Contractors - Oil Producers

SUITE 905 CENTURY PLAZA

WICHITA, KANSAS 67202

V. RICHARD HOOVER
PRESIDENT

DAILY DRILLING REPORT

RIG #2

PAGE TWO

(316) 262-3791

ZIEGENBALG "A" #1
SE SE SW 17-15S-28W
Gove County, Kansas

CONFIDENTIAL

- 4-24-85 DST #6 3918-3966 (Marmaton) 30-45-90-45
fair blow in 5 min., Rec. 105' MW
IBHP: 133 FBHP: 133 IFP: 89-89 FFP: 89-89
Hydrostatic Press. 1985-1893 BHT 129
- 4-25-85 Drilling @ 3990'
- 4-26-85 DST #7 4090-4130 (Ft. Scott) 30-30-30-30
very wk. blow died in 20", Rec. 10' M,
IBHP: 44#, FBHP: 44#, IFP: 35-35 FFP:
35-35, ran E-log T.D. 4250'
- 4-27-85 Ran 110 jts. used 10 1/2# 4 1/2" casing,
3980' pipe set @ 3986', cemented w/150
sks. common, 2% gel, 3% gilsonite, 5
centralizers @ 3968', 3910', 3850', 3780',
1874', cement control basket @ 1874', insert
float @ 2968', baker port collar @ 1836'
completed @ 7:15 a.m.

RELEASED

Date: SEP 1 1986

FROM CONFIDENTIAL

MAY 31 1985

Gove County

RECEIVED
STATE CORPORATION COMMISSION

MAY 30 1985

CONSERVATION DIVISION
Wichita, Kansas

RELEASED

SEP 1 0 1986

FROM CONFIDENTIAL

ACO-

Taken 1 1905 Effective 1 19 Sec 11 Twp 15 R. 28 W API #

Month 1 Day 1 Month 1 Day 1 Lease Description

		8-1 Opening Gauge					8-2 Closing Gauge					Well Data			
		Time on:					Time off:								
		Oil Level		B. S. & W.		Barrels	Oil Level		B. S. & W.		Barrels				
Tank No.	Size	Ft.	In.	Ft.	In.		Ft.	In.	Ft.	In.					
Gun Bbl.....												Top Prod. Horizon 3815 Ft. Total Depth 4250 Ft.			
Settling Tank.....												Perforations 3832 to 3862 to 64 Ft.			
143617	200	2	7 1/2			52.70	6	7 1/2			132.74	Packer..... Set at..... Ft.			
												Size of Casing 4 1/2 Set at 3986 Ft.			
												Size of Tubing 2 3/8 Set at 3963 Ft.			
												Size of Pump 1 1/2 Type 2no.			
												Gravity of Oil 39 Temp.....			
												Percentage of Water 50% Acid 2000 gal. Date 5/6-85			
												Test Data			
												Temporary..... <u>Permanent</u> Field..... Special.....			

Total Bbls. Produced=.....X 3=.....Productivity.

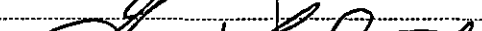
REMARKS: The allowance on this well is 50 Bbs of Air Friday,

Length of Stroke..... 54 In. S. P. M. 70

Pretest Information: Well Location 26, 26, 2 1/2

SEALS and USES:

WITNESSING: We, the undersigned, personally witnessed the gauging periods as indicated by our signatures, and certify that they were taken according to the Commission's Rules.

Gauge Witnesses	Opening Gauge	Closing Gauge
For Producer.....	 	
Offset Owner.....		
For Offset Owner.....		
For State.....		

Hours pumped.....247.....

Bbls. Produced.....	F			e
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Tank Tables Used				N.
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Est.			
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(Bbls. per In.)

Checked by: _____

Send ORIGINAL WHITE COPY to OFFICE. Give PINK to PRODUCER. BLUE to last OFFSET WITNESS. YELLOW retained by GAUGER.—REPORT FULLY ANY INCOMPLETED POTENTIAL.