FORM MUST BE TYPED

SIDE ONE

CONFIDENTIAL

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15- 119-20893

County Meade

E/2 - NW - NW Sec. 23 Twp. 34S Rge. 26 E X W

660 Feet from S (circle one) Line of Section

1125 Feet from E (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name Goodnight Well # 1-23

Field Name McKinney

Producing Formation Morrow

Elevation: Ground 2247' KB 2260'

Total Depth 6,115' PBTD

Amount of Surface Pipe Set and Cemented at 882 Feet

Multiple Stage Cementing Collar Used? ____ Yes X No

If yes, show depth set ____ Feet

If Alternate II completion, cement circulated from ____

feet depth to ____ w/ ____ sx cmt.

Drilling Fluid Management Plan ALT 1 JH 8-22-94
(Data must be collected from the Reserve Pit)
NOTE: What little fluid was in pit has evaporated.

Chloride content ____ ppm Fluid volume 0 bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite:

Operator Name Halliburton Oil Producing Co.

Lease Name Goodnight #1-23 License No. 05988

NW Quarter Sec. 23 Twp. 23S S Rng. 26 E X W

County Meade Docket No. ____

Operator: License # 05988

Name: Halliburton Oil Producing

Address 525 Central Park Drive

Central Park I - Suite 210

City/State/Zip Oklahoma City, OK 73103

Purchaser: Rangeline Corporation

Operator Contact Person: Tom Carroll

Phone (405) 525-3371

Contractor: Name: H-40 Drilling, Inc.

License: 30692

Wellsite Geologist: Kevan Marsh

Designate Type of Completion
X New Well ____ Re-Entry ____ Workover

X Oil ____ SWD ____ SIOW ____ Temp. Abd.
X Gas ____ ENHR ____ SIGW
____ Dry ____ Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator: ____

Well Name: ____

Comp. Date ____ Old Total Depth ____

____ Deepening ____ Re-perf. ____ Conv. to Inj/SWD
____ Plug Back ____ PBTD
____ Commingled Docket No. ____
____ Dual Completion Docket No. ____
____ Other (SWD or Inj?) Docket No. ____

2/20/94 Spud Date
2/28/94 Date Reached TD
4/18/94 Completion Date

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INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 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 geologist well report shall be attached with this form. SEE CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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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 Tom Carroll

Tom Carroll, Vice President/Operations

Date 5/27/94

Subscribed and sworn to before me this 27th day of May, 1994.

Ginna L. Hawthorne
Notary Public

Ginna L. Hawthorne

Date Commission Expires 5/7/96

GINNA L. HAWTHORNE
NOTARY PUBLIC
No. ACV Public
Comm. Exp. 5-7-96
State Commission Expires
STATE OF OKLAHOMA
CLEVELAND COUNTY

CONSERVATION DIVISION
Wichita, Kansas

K.C.C. OFFICE USE ONLY
F ✓ Letter of Confidentiality Attached
C ✓ Wireline Log Received
C ✓ Geologist Report Received

Distribution
KCC ____ SWD/Rep ____ NGPA
✓ KGS ____ Plug ____ Other (Specify)

Form ACO-1 (7-91)

SIDE TWO

Operator Name Halliburton Oil Producing Lease Name Goodnight Well # 1-23

Sec. 23 Twp. 34S Rge. 26 ☐ East ☒ West County Meade

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 (Attach Additional Sheets.) ☒ Yes ☐ No

Samples Sent to Geological Survey ☒ Yes ☐ No

Cores Taken ☐ Yes ☒ No

Electric Log Run (Submit Copy.) ☒ Yes ☐ No

List All E.Logs Run:
Dual Induction
Density/Neutron
Microlog

☐ Log Formation (Top), Depth and Datums ☒ Sample

Name	Top	Datum
Stone Corral Anhy	1219	(+1041)
Chase	2571	(-311)
Heebner Shale	4455	(-2195)
Lansing Lime	4640	(-2380)
Marmaton Lime	5342	(-3082)
Cherokee Shale	5521	(-3261)
Morrow Shale	5824	(-3564)
Morrow Sand Zone	5844	(-3584)
Chester Lime	5888	(-3628)
Total Depth	6115	(-3855)

CASING RECORD ☒ New ☒ 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
Conductor		20"		40'	4 yards grout		
Surface	12-1/4"	8-5/8"	24#	882'	Class C	150	2% cc
Production	7-7/8"	5-1/2"	11.5#	6,113'	Light Class A	300 150	2% cc

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top	Depth Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate					
___ Protect Casing					
___ Plug Back TD					
___ Plug Off Zone					

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	5865'-5872'	1500 g 50% foam 50% 7-1/2% FE Acid	

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2-3/8	5965'	none	☐ Yes ☒ No

Date of First, Resumed Production, SWD or Inj. 1st gas sales 5/18/94 Producing Method ☐ Flowing ☐ Pumping ☐ Gas Lift ☒ Compressor Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	tr	53	0		

Disposition of Gas:
☐ Vented ☒ Sold ☐ Used on Lease
(If vented, submit ACO-18.)

METHOD OF COMPLETION
☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled
☐ Other (Specify)

Production Interval 5865'-5872'

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II. Primary Zones of Interest

F. Morrow Sand 5865 - 5872

Sample Analysis: The Morrow consisted of white to light gray sand which was very fine to fine grain, subangular to subrounded, and fairly clean in part. Some of the sample showed abundant individual grains. The sand clusters contained glauconite, kaolinite, and a pale blue-green weathered clay(possibly chlorite). The clusters had fair to poor porosity, were fairly calcareous, and carried no hydrocarbon show other than gas bubbles liberated in the acid. A gas increase of 2 units was registered.

A straddle DST was run to determine the reservoir characteristics of the Morrow. The test recovered 120 feet of gassy drilling mud . Times and pressures are as follows:

DST No.1 5828 - 5958

IHP	2838	
IFP	109-109	30 min.
ISIP	281	60 min.
FFP	122-122	90 min.
FSIP	273	180 min.
FHP	2760	

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The test started with a weak blow which increased to a strong blow off the bottom of the bucket in 20 minutes. Gas reached the surface after 66 minutes and reached a rate of 22 mcf/d and was still increasing. Analysis of the blanked off recorder below the lower packer indicates that the tested interval was isolated from above and below. Shut-in pressure readings showed the zone to have good permeability.

Log Analysis: The logs indicate the Morrow to have good porosity and permeability. Favorable water saturation calculations indicate this zone to be commercial.

Conclusion: Based on reservoir rock quality, drillstem test results, and electric log readings, it is believed that the Morrow Sand is capable of commercial production at this location. The final shut-in pressure was approximately 100 pounds greater than the present reservoir pressure in the Easterday 1-23.

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