

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

API NO. 15-097-21431 0000

ORIGINAL

County Kiowa County, Kansas

G-N/2 - S/2 - SE Sec. 16 Twp. 29S Rge. 19 XX ^E _W

990 Feet from (S)N (circle one) Line of Section

1320 Feet from (E)W (circle one) Line of Section

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

Lease Name Rhodes Well # 1

Field Name Thach

Producing Formation Mississippian

Elevation: Ground 2355' KB 2364'

Total Depth 5155' PBDT 5200'

Amount of Surface Pipe Set and Cemented at 688.32 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set Feet

If Alternate II completion, cement circulated from

feet depth to w/ sx cmt.

Drilling Fluid Management Plan A.H. 1, 11-24-98 U.C.
(Data must be collected from the Reserve Pit)

Chloride content ppm Fluid volume 320 bbls

Dewatering method used Hauled offsite

Location of fluid disposal if hauled offsite:

Operator Name Richardson Oil Operating

Lease Name Unruh SWD License No. 5414

NE Quarter Sec. 15 Twp. 30S S Rng. 18W E/W

County Kiowa Docket No. D-25,237

Operator: License # 6236

Name: MTM Petroleum, Inc.

Address P.O. Box 82

City/State/Zip Spivey, Kansas 67124-0082

Purchaser:

Operator Contact Person: Marvin Miller

Phone (316) 532-3794

Contractor: Name: Duke Drilling Co., Inc.

License: 5929

Wellsite Geologist: Jerry Smith

Designate Type of Completion
 New Well Re-Entry Workover

Oil SWD SLOW Temp. Abd.
 Gas EHHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator:

Well Name:

Comp. Date Old Total Depth

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

06-10-98 06-19-98 7-15-98
Spud Date Date Reached TD Completion Date
TA'd

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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. ALL CEMENTING TICKETS MUST BE ATTACHED. 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 *Marvin A. Miller*
Title President Date 10-21-98

Subscribed and sworn to before me this 21 day of October, 1998.

Notary Public *Kathy Hill*
Kathy Hill 01-04-99
Date Commission Expires

KATHY HILL
Notary Public - State of Kansas
My Appt. Expires 01-04-99

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

Distribution
 KCC SWD/Rep NCPA
 KGS Plug Other
(Specify)

Sec. 16 **Twp. 29** **Rge. 19**
 East
 West

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
 (Attach Additional Sheets.)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 (Submit Copy.)
 List All E.Logs Run:

Log Name	Formation (Top), Depth and Datum		Sample Datum
	Top	Datum	
Heebner SH.	4271(-1907)	4263 (-1899)	
Lansing	4468(-2104)	4460 (-2096)	
B/Kansas City	4834(-2470)	4825 (-2461)	
Marmaton	4920(-2556)	4911 (-2547)	
Cherokee	5010(-2646)	5001 (-2637)	
Mississippian	5106(-2742)	5098 (-2734)	

Dual Induction Log
 Dual Compensated Porosity Log

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
Surface	12-1/4	8-5/8"	23#	688.32'	65/35 Class A	200 100	6%gel 3%cc 3%cc 2%gel
Production	7-7/8"	4-1/2"	10.5#	5165'	ASC	125	300gal Mudflus

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> 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	5108' to 5111'	3 3/8" HEC 500 gal. 15% Fe Acid Hydrojet 5112' to 5114' Delta Frac 11,000 gal.	

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

Date of First, Resumed Production, SWD or Inj. T/A 7-15-98
 Producing Method Flowing Pumping Gas Lift Other (Explain) T/A 7-15-98

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	0	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) T/A 7-15-98

Production Interval

ALLIED CEMENTING CO., INC. 2144 ORIGINAL

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Medicine Lodge

DATE <u>6-11-48</u>	SEC. <u>16</u>	TWP. <u>29S</u>	RANGE <u>19W</u>	CALLED OUT <u>4:00 AM</u>	ON LOCATION <u>6:30 AM</u>	JOB START <u>11:00 AM</u>	JOB FINISH <u>11:35</u>
LEASE <u>Rhodes</u>		WELL# <u>1</u>	LOCATION <u>Jay Elev Jet on Hwy 54, S, W/5</u>			COUNTY <u>Kiowa</u>	STATE <u>Kansas</u>

OLD OR NEW (Circle one)

CONTRACTOR Dike Rig # 4

TYPE OF JOB Sur Face

HOLE SIZE 12 1/4 T.D. 688

CASING SIZE 8 1/2 DEPTH 688

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX 300 MINIMUM 100

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15 Feet

PERFS. _____

OWNER M+M Petroleum
CEMENT

AMOUNT ORDERED 200 sx 65:35:6 + 3% CC
100 sx CLASS A + 3% CC + 2% gel

COMMON _____	@ _____
POZMIX _____	@ _____
GEL _____	@ _____
CHLORIDE _____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
HANDLING _____	@ _____
MILEAGE _____	@ _____

EQUIPMENT

PUMP TRUCK CEMENTER Carl Balding

#255-265 HELPER Shane Winser

BULK TRUCK

#256-252 DRIVER Mark Brungardt

BULK TRUCK

_____ DRIVER _____

TOTAL _____

REMARKS:

SERVICE

Pipe on Jetten break circulation/Rig
imp 5 Bbls freshwater spacer
pump 200 sx 65:35:6 + 3% CC + 2% gel
+ 3% CC + 2% gel cement in switch valves
+ Release plug. Displace w/ 42 1/2 Bbls freshwater.
Displacement in stop pumps + shut in
Cement did circulate.

DEPTH OF JOB 688

PUMP TRUCK CHARGE _____

EXTRA FOOTAGE _____ @ _____

MILEAGE _____ @ _____

PLUG Rubber _____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

CHARGE TO: Dike Drilling Co.

STREET _____

CITY _____ STATE _____ ZIP _____

FLOAT EQUIPMENT

_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____

TOTAL _____

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE Rich Wheeler

ALLIED CEMENTING CO., INC. 2203

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL SERVICE POINT
med lodge, ks

DATE <u>6-20-98</u>	SEC. <u>16</u>	TWP. <u>29S</u>	RANGE <u>19W</u>	CALLED OUT <u>8:00AM</u>	ON LOCATION <u>11:00AM</u>	JOB START <u>3:00PM</u>	JOB FINISH <u>4:30PM</u>
LEASE <u>Rhodes</u>		WELL # <u>1</u>	LOCATION <u>54th Jay Elevator, 5S, W/S</u>			COUNTY <u>Kiowa</u>	STATE <u>KS</u>

OLD OR NEW (Circle one)

CONTRACTOR <u>Duke Doh #4</u>	OWNER <u>mtm Petroleum</u>
TYPE OF JOB <u>Prod CSG</u>	CEMENT
HOLE SIZE <u>7 7/8</u>	T.D. <u>5166 LTD</u>
CASING SIZE <u>4 1/2 x 10.5</u>	DEPTH <u>5158</u>
TUBING SIZE _____	DEPTH _____
DRILL PIPE <u>4 1/2 x hole</u>	DEPTH <u>5155 RTD</u>
TOOL _____	DEPTH _____
PRES. MAX <u>1300</u>	MINIMUM <u>300</u>
MEAS. LINE _____	SHOE JOINT <u>31.00</u>
CEMENT LEFT IN CSG _____	
PERFS _____	

AMOUNT ORDERED <u>300gals mud - Sweep</u>	
<u>155XS 60140/696Gel</u>	
<u>1255XS CLASS A + ASC + 5# K6-SEAL/5X</u>	
COMMON _____	@ _____
POZMIX _____	@ _____
GEL _____	@ _____
CHLORIDE _____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
HANDLING _____	@ _____
MILEAGE _____	@ _____
	TOTAL _____

EQUIPMENT

PUMP TRUCK # <u>343</u>	CEMENTER <u>Arny Dreding</u>
	HELPER <u>Justin Hart</u>
BULK TRUCK # <u>301</u>	DRIVER <u>Mark Brungardt</u>
BULK TRUCK # _____	DRIVER _____

REMARKS:

Pipe on Bottom - Break Circ
mix + Pump 300gals mud - Sweep
Plug Rathole - 155XS 60140/696Gel
mix + Pump 1255XS ASC + 5# K6-SEAL
Cement In. Stop Pumps wash out
Pump Lines Release Plug Pump +
Displace Plug w/ 8.3 Bds Fresh H₂O
Bump Plug Release PST Float Held

SERVICE

DEPTH OF JOB <u>5158</u>	
PUMP TRUCK CHARGE _____	
EXTRA FOOTAGE _____	@ _____
MILEAGE _____	@ _____
PLUG RUBBER <u>4 1/2</u>	@ _____
_____	@ _____
_____	@ _____
	TOTAL _____

CHARGE TO: mtm Petroleum
 STREET _____
 CITY _____ STATE _____ ZIP _____

FLOAT EQUIPMENT

_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
_____	@ _____
	TOTAL _____

To Allied Cementing Co., Inc.
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____
 TOTAL CHARGE _____
 DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE X [Signature]



CEMENTING LOG ORIGINAL

Date: 6-20-98 District: Med. Lodge Ticket No. 2203
 Company: M T M Petroleum Rig: Duke #4
 Lease: Rhodes Well No. 1
 County: Kiowa State: KS
 Location: 544 Toy Elevator Field: 16-295-19W
5S-W/S

CEMENT DATA:
 Spacer Type: 300gals. mud-sweep
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG _____

CASING DATA: PTA Squeeze
 Surface Intermediate Production Liner
 Size: 4 1/2 Type: F-55 Weight: 10.5 Collar _____

LEAD: Pump Time _____ hrs. Type: CLASS A
60/40/16% Gel Excess _____
 Amt. 15 Sks Yield 1.58 ft³/sk Density 13.8 PPG _____

Casing Depths: Top _____ Bottom _____

TAIL: Pump Time _____ hrs. Type: CLASS A - ASC
5# Kol-Seal/SX. Excess _____
 Amt. 125 Sks Yield 1.57 ft³/sk Density 14.5 PPG _____
 WATER: Lead 7.8 gals/sk Tail 7.23 gals/sk Total _____ Bbls. _____

Drill Pipe: Size 4 1/2 Weight 16.60 Collars Xhole
 Open Hole: Size 7 7/8 T.D. 5166 ft. ~~5155~~ ft. LTD RTD

Pump Trucks Used 343 Justin H.
 Bulk Equip. 301 MARK B.

CAPACITY FACTORS:
 Casing: Bbls/Lin. ft. 0.159 Lin. ft./Bbl. 62.70
 Open Holes: Bbls/Lin. ft. 0.602 Lin. ft./Bbl. 16.5993
 Drill Pipe: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbls/Lin. ft. 0.406 Lin. ft./Bbl. 24.6474
 Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

Float Equip: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top Rubber Btm. _____
 Stage Collars _____
 Special Equip. _____
 Disp. Fluid Type Fresh H₂O Amt. 83 Bbls. Weight 8.34 PPG _____
 Mud Type Chemical Weight 9.1 PPG _____

COMPANY REPRESENTATIVE Don Amiller

CEMENTER Harry Dreiling

TIME	PRESSURES: PSI		FLUID PUMPED DATA			REMARKS
	AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	
3:20						Pipe on Bottom - Break Circ.
3:55				7		4 1/2 mix + Pump 300gals. mud-sweep
4:00		50		3		3 Plug Rathole w/ 155xs. 60/40/16% Gel
4:07		250		35		5 1/2 Cement - 1255xs. ASC + 5# Kol-Seal
4:14						Cement In. Stop Pumps
4:15				5		Wash out Pump + Lines
4:17		250		20		6 Release Plug
4:17		250		20		6 START Fresh H ₂ O Displace
		250		40		6 Steady Rate + PSI
		275		40		6 Slight PSI Increase
		275		41		6 mud-sweep turn shoe
		300		47		6 ASC Cement turn shoe
		350		49		4 Slow Rate - Steady Increase
		700		79		3 Decrease Rate
4:30		1300		83		3 Bump Plug
						3 Release PSI
						Float Held

FINAL DISP. PRESS: 700 PSI BUMP PLUG TO 1300 PSI BLEEDBACK: 1/4 BBLs. THANK YOU