

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 # 5293
Name Helmerich & Payne, Inc.
Address P.O. Box 558
City/State/Zip Garden City, KS 67846

Purchaser Permian

Operator Contact Person Millard Lindsay
Phone 316-276-3693

Contractor: License # 5652
Name Mustang Drlg

Wellsite Geologist Alan Downing
Phone 913-625-3550

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp Abd
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply etc.)

If OWWO: old well info as follows:
Operator
Well Name
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable
1-10-85 1-17-85 5-1-85
Spud Date Date Reached TD Completion Date
3731 3692
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 1034 feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set feet
If alternate 2 completion, cement circulated from feet depth to w/SX cmt

API NO. 15-165-21282-0000

County Rush

SW SW Sec. 24 Twp. 19S Rge. 16 East West

560 Ft North from Southeast Corner of Section
4290 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

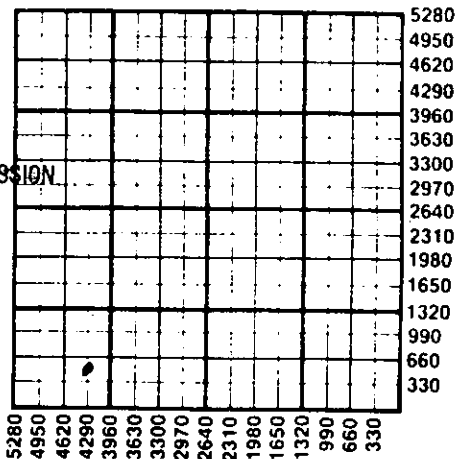
Lease Name Tammen Well # 1-24

Field Name Ryan N.E.

Producing Formation Arbuckle

Elevation: Ground 1969 KB 1974

Section Plat



RECEIVED
5-10-85
MAY 10 1985
CONSERVATION DIVISION
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 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) Hauled by private contractor. (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 Millard Lindsay
Title District Production Manager Date 5-9-85

Subscribed and sworn to before me this 9th day of May 1985

Notary Public Betty J. Purdy

Date Commission Expires 6 August 1986

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

Sec 24 Twp 19 Rge 16W

SIDE TWO

Operator Name Helmerich & Payne, Inc. Lease Name Tammen Well # 1-24

Sec.....24..... Twp.....19S. Rge.....16..... East West County.....Rush.....

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

Zones of interest

Anhydrite	1001	+973
Base i	1030	+944
Topeka	3028	+1054
Heebner	3283	-1309
Toronto	3298	-1324
Douglas	3311	-1337
Brown-Lime	3355	-1381
Lansing	3366	-1392
BKC	3586	-1612
Conglomerate	3604	-1630
Arbuckle	3672	-1698

Name	Top	Bottom
Oread	3224	3228
	20-25% porosity	
	23-28% SW	
LKC A	3368	3370
	10% porosity	
	27% SW	
LKC H	3508	3513
	14% porosity	
	30% SW	
Arbuckle	3674	3709
LTD	3731	
RTD	3730	

DST #1 Arbuckle 3672-3680 DST #2 Arbuckle 3661-3731
 30-60-60-120 15-60-180-120
 IFP 52- 52 IFP 137 -148
 ISIP 1037 ISIP 1171 Gas to surface
 FFP 52-52 FFP 148- 254
 FSIP 1140 FSIP 1078
 IHP 2012 IHP 1981
 FHP 1929 FHP 1929
 Rec: 55' mud Rec: 170' GOCM, 100' GMCO
 412' GMCO Chlorides -29000

CASING RECORD <input 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	12 1/4	8 5/8	23	1034	65/35 Poz	365	6% gel
Production	7 7/8	5 1/2	14	3730	Selfstress	125	2% CaCl ₂ , 1/4% / sk flake
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
2	3676 - 3683			500 gals 15% MSR-100			
2	3685 - 3709			and 1500 gals 15% DCA acid.			
TUBING RECORD		Size 27/8	Set At 3703	Packer at None	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Date of First Production	Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (explain).....						
3-1-85							
Estimated Production Per 24 Hours	Oil 5 Bbls	Gas 0 MCF	Water 46 Bbls	Gas-Oil Ratio CFPB	Gravity 37.4		

METHOD OF COMPLETION

Production Interval

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

.....Arbuckle.....
 3676-3683 & 3685-3709