

ORIGINAL

FORM MUST BE TYPED

SIDE ONE

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

Operator: License # 30689

Name: Marathon Oil Company

Address 1501 Stampede Avenue

City/State/Zip Cody, WY 82414-4721

Purchaser: \_\_\_\_\_

Operator Contact Person: R. P. Meabon

Phone (307) 587-4961

Contractor: Name: Murfin Drilling

License: 6003

Wellsite Geologist: Russel Bak

Designate Type of Completion

New Well  Re-Entry  Workover  
 Oil  SWD  SLOW  Temp. Abd.  
 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, Expl., Cathodic, etc)  
**GAS INJECTION**

If Workover:

Operator: Marathon Oil Company

Well Name: Krautkramer #2-30

Comp. Date \_\_\_\_\_ Old Total Depth 5292'

Stimulated Perforations  
 Deepening  Re-perf.  Conv. to Inj/SWD  
 Plug Back 5227' PBTB  
 Commingled  Docket No. \_\_\_\_\_  
 Dual Completion  Docket No. \_\_\_\_\_  
 Other (SWD or Inj?)  Docket No. \_\_\_\_\_

9/30/1997 12/21/87 9/30/1997

Starting Date of Workover 9/30/1997 Date Reached TD 12/21/87 Completion Date of Workover 9/30/1997

API NO. 15- 199-20126-0002 <sup>0002</sup> <sup>10000</sup>

County Wallace

NE - SE - NE - Sec. 30 Twp. 15S Rge. 42 X <sup>E</sup> <sub>W</sub>

3630 Feet from (S)N (circle one) Line of Section

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

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

Lease Name Krautkramer Well # 2-30

Field Name Stockholm

Producing Formation Morrow

Elevation: Ground 3901' KB 3906'

Total Depth 5292' PBTB 5226'

Amount of Surface Pipe Set and Cemented at 432 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from 1970

feet depth to Surface w/ 225 sx cmt.

Drilling Fluid Management Plan REWORK JH 4-16-98  
(Data must be collected from the Reserve Pit)

Chloride content \_\_\_\_\_ ppm Fluid volume \_\_\_\_\_ bbls

Dewatering method used \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name \_\_\_\_\_

Lease Name \_\_\_\_\_ License No. \_\_\_\_\_

\_\_\_\_\_ Quarter Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Rng. \_\_\_\_\_ E/W

County \_\_\_\_\_ Docket No. \_\_\_\_\_

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. 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 R P Meabon

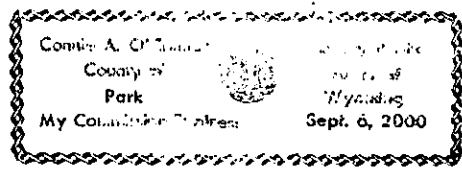
Title REGULATORY COORD. Date 3/13/98

Subscribed and sworn to before me this 13th day of March, 19 98.

Notary Public Connie A. O'Connor

Date Commission Expires 9-6-2000

K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Geologist Report Received  
Distribution:  KCC  SWD/Rep  MMS/GPA  
 KGS  Plug  Other (Specify)  
246-98



Form ACO-1 (7-91)  
Wichita, Kansas

Operator Name Marathon Oil Company

Lease Name Krautkramer

Well # 2-30

Sec. 30 Twp. 15S Rge. 42

East  
 West

County Wallace

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  NA

List All E.Logs Run:

Log Formation (Top), Depth and Datums  Sample

Name	Top	Datum
Blaine Salt	2275'	
Stone Corral	2775'	
Heebner	4132	
Morrow Shale	5030'	
Morrow Sand	5128'	
St. Genevieve		

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 1/2	8-5/8	24	432	60-40 Poz	250	2% gel, 3% CC
Production	7-7/8	5-1/2	15.5	5284	50-50 Poz	125	5% salt

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input checked="" type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	4511-4541	1	120	Class 'H' Neat Cement

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	5133'-5142' --1/5/88,10/16/93/7/29/96		
4	5126'-5133' --8/30/94	6 bbls. 15% MSR	
	September 30, 1997, stimulated with	155 bbls 2% KCl water	5233' to 5300'

TUBING RECORD	Size	Set At	Packer At	Liner Run
2 7/8" tubing in the well			5060'	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj. Resumed Gas Injection 9/30/1997	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

Disposition of Gas: METHOD OF COMPLETION

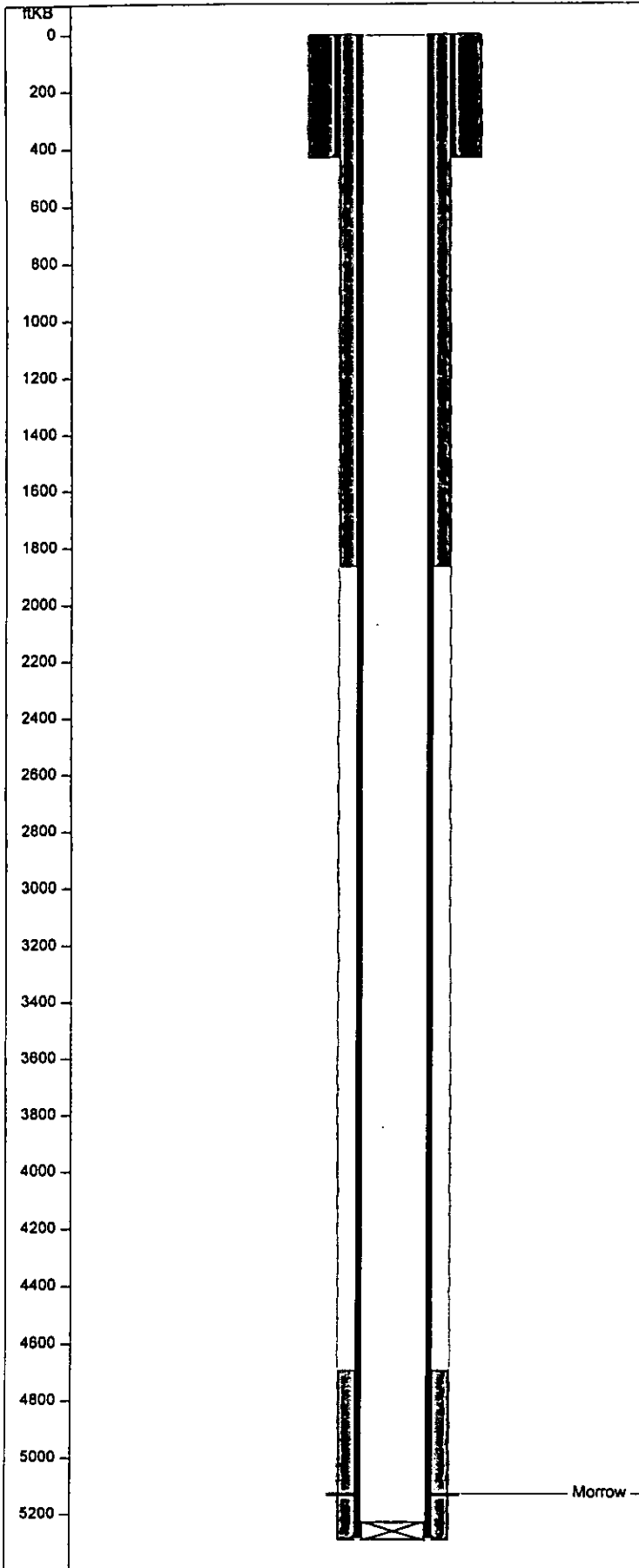
Vented  Sold  Used on Lease (If vented, submit ACO-18.)

Open Hole  Perf.  Dually Comp.  Commingled  Other (Specify)

INJECTION Production Interval

5126'-5133'  
5133'-5142'

Dist: KCC-Orig +1, WRF,EMG, DTJ,RHS,SJP,T&C(Hous),Cheyenne Wells,Colo



Krautkramer #2-30						
API Code	15-199-20128	Field Code				
TD	5292.0 RKB	Basin				
PBTD	5228.0 RKB	Basin Code				
Operator	MOC	Permit				
State	Kansas	Spud	12-Dec-87			
County	Wallace	Finish Dr	22-Dec-87			
Permit No.		Completion	23-Dec-87			
TD Measured		Abandon	24-Jan-88			
Reservoir	Morrow					
Field	STOCKHOLM					
Location						
Mendian	8 th	Top Latitude	0			
Township	15 South	Top Longitude	0			
Range	42 West	Top NS Distance				
Section	3630' FSL, 330' FEL Sec.30	Top EW Distance				
Quarter	SE NE Sec.30	Bottom Latitude	0			
	3630' FSL, 330' FEL	Bottom Longitude	0			
	KB-3908' GL.- 3901'	Btm NS Distance				
		Btm EW Distance				
Elevations						
KB	3908.0 ft	Cas Fing				
Grd	3901.0 ft	Tub Head				
KB-Grd	5.0 ft					
Formation/Horizon Tops						
Top (ftKB)	TVD (ftKB)	Formation	Code	frm.user3	Source	
5128.0	5128.0	Morrow				
Casing String - Surface						
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd
8 5/8 in Casing	432.0	10	8 3/32	24.00		
Casing String - Production						
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd
5 1/2 in Casing	5284.0	133	4 81/64	15.50		
Casing Cement						
Casing String	Top (ftKB)	Amount (sx)	Comments			
Surface	0.0	150				
Production	0.0	225	DV @ 1868'			
Production	4692.0	125				
Perforations						
Date	Int	Zone	Shots (ft)	Type		
05-Jan-88	5133.0 - 5142.0	Morrow	4.0	Jet Perforation		
16-Oct-93	5133.0 - 5142.0	Morrow	4.0	Jet Perforation		
30-Aug-94	5128.0 - 5133.0	Morrow	4.0	Jet Perforation		
29-Jul-96	5133.0 - 5142.0	Morrow	4.0	Jet Perforation		
General Notes						
Date	Note					
04-Aug-94	Well drilled in 1987 to 5292 TD. Surface casing cemented w/ 250 sxs. Cement to surface. DV at 1868' (CBL 12/30/87) cemented w/ 225 sxs. second stage, (cmt. top at surface) and 125 sxs. on first stage with cement top at 4692' on production string. During completion the well was perforated and acidized w/ 8 bbls. 15% MSR acid. The well was shut-in as uneconomic on 2/1/94.					
01-Oct-94	Well was converted to gas injection after reperforating at 5128'-5133', squeezing casing leaks at 4511'-4541' with a total of 120 sacks cement and performing a 2% KCl water breakdown with a total 270 BWV at rates from 6.5 to 0.25 BPM and pressures from 2650 to 1647 psig. Started gas injection at 450 MCFD and 520 psig on 10/1/94 after KCl breakdown.					
17-Jul-98	Performed formation breakdown of 82 bbls. of 2% KCl water.					
29-Jul-96	Reperforated as below:					
05-Aug-96	Performed breakdown of 135 bbls. water containing 2% ClayFix. Returned well to injection.					
30-Sep-97	Performed routine break down of 155 bbls. 2% KCl water at 7-9 BPM and 2000-1800 psi. Injection prior was 75 MCFD at 100 psi while injection after was 361 MCFD at 367 psi. The equipment was not pulled for this work and remains set as before with the pkr. at 5060' on 2 7/8" tubing.					

RECEIVED  
STATE REGULATION COMMISSION

MAP # 6 1008