

ORIGINAL

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

API NO. 15- 189-219960000  
County Stevens  
SW - NE - NE Sec. 10 Twp. 33S Rge. 37 X W  
E

Operator: License # 5208

1250 Feet from S/N (circle one) Line of Section  
1250 Feet from E/W (circle one) Line of Section

Name: Mobil Oil Corporation

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

Address P.O. Box 2173

2319 North Kansas Avenue

Lease Name Crawford Estate #1 Unit Well # 3

City/State/Zip Liberal, KS 67905-2173

Field Name Hugoton

Purchaser: Spot Market

Producing Formation Chase

Operator Contact Person: Sharon Cook

Elevation: Ground 3111 KB 3119

Phone (316) 626-1142

Total Depth 2928 PBDT 2873

Contractor: Name: Murfin Drilling Co., Inc.

Amount of Surface Pipe Set and Cemented at 629 Feet

License: 30606

Multiple Stage Cementing Collar Used? Yes X No

Wellsite Geologist: L. J. Reimer

If yes, show depth set NA Feet

Designate Type of Completion  
X New Well Re-Entry Workover

If Alternate II completion, cement circulated from NA

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

feet depth to NA w/ NA sx cmt.

If Workover:

Drilling Fluid Management Plan alt I 5-8-96  
(Data must be collected from the Reserve Pit) Le

Operator: \_\_\_\_\_

Chloride content 2,800 ppm Fluid volume 260 bbls

Well Name: \_\_\_\_\_

Dewatering method used Waste Minimization Mud System

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

Location of fluid disposal if hauled offsite:

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

Operator Name Mobil Oil Corporation

11-20-95 11-23-95 1-2-96  
Spud Date Date Reached TD Completion Date

Lease Name Hill #3 SWDW License No. 5208

SW Quarter Sec. 3 Twp. 33 S Rng. 37 E/W

County Stevens Docket No. CD-117710

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 Sharon A. Cook Sharon A. Cook

Title Regulatory Assistant Date 2-1-96

Subscribed and sworn to before me this 1st day of February, 19 96.

Notary Public Kathleen R. Poulton

Date Commission Expires August 18, 1998  
6-54.kcc

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)

NOTARY PUBLIC - State of Kansas  
KATHLEEN R. POULTON  
My Appl. Exp. 08-10-98

RECEIVED  
2-2-96

SIDE TWO

Operator Name Mobil Oil Corporation Lease Name Crawford Estate #1 Unit Well # 3

Sec. 10 Twp. 33S Rge. 37  East  West  
 County Stevens

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.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run (Submit Copy.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
List All E.Logs Run:				
NO LOGS RUN				

CASING RECORD <input checked="" 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 Casing	12.250	8.625	24#	629	Class C Class C	215 150	50:50 C/poz 50:50 C/poz
Production Casing	7.875	5.500	14#	2918	Class C Class C	150 75	3% D79 2% B28

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
	1 SPF	2611-2621	2800-2815	Acid: 1,000 gals 7.5% HCL	
	2650-2670		Fract: 1,000 bbls 20# Crosslink gel		
	2700-2710		140,589 lbs 12/20 Brady Sand		
	2753-2773				

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Date of First, Resumed Production, SWD or Inj. 12-22-95	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
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Estimated Production Per 24 Hours	Oil Bbls.	Gas 487.1 Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION:  Open Hole  Perf.  Dually Comp.  Commingled

Production Interval: \_\_\_\_\_ 2611 \_\_\_\_\_ 2815 \_\_\_\_\_

STEVENS COUNTY, MISSOURI  
 RECORD BOOK FOR WELL LOGS  
 1990-1995

CEMENTING SERVICE REPORT

Schlumberger

Dowell

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER	12-873	DATE	11/22/95
STAGE	DS	DISTRICT	UKS 03-12

DS-496-A PRINTED IN U.S.A.

WELL NAME AND NO.	CRAWFORD EST. #3	LOCATION (LEGAL)	SEC. 10-33S-37W	RIG NAME:	MURFIN #24
FIELD-POOL	Nugotony	FORMATION	CHASE	WELL DATA:	
COUNTY/PARISH	STEVENS 189	STATE	KS 15	API. NO.	
NAME	MURIL OIL CORP.	WELL DATA: BIT SIZE 7 7/8" CSG/Liner Size 5 1/2" TOTAL DEPTH 2928' WEIGHT 14#			
AND		MUD TYPE WB GRADE ORIGINAL			
ADDRESS		MUD DENSITY 19 LESS FOOTAGE SHOE JOINT(S) 44.80 TOTAL 2872.79			
ZIP CODE		MUD VISC. Disp. Capacity 2872.79			

SPECIAL INSTRUCTIONS

Safely Cement. 5 1/2 Long strings with 150 SKS class 'C' + 390 D79 + 290 D46 + 1/4 #1 SK D29; LEAD and 75 SKS class 'C' + 270 B28 + 270 S1 + 1670 D60 + 270 D46 + 1/4 #1 SK D29

IS CASING/TUBING SECURED?  YES  NO

LIFT PRESSURE 1720 PSI CASING WEIGHT ÷ SURFACE AREA (3.14 x R<sup>2</sup>) CMT

PRESSURE LIMIT 2500 PSI BUMP PLUG TO 500' + LIFT PSI

ROTATE 8 RPM RECIPROCATATE 8 FT No. of Centralizers 15

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME: 08:00	DATE: 11/22/95	TIME: 08:00	DATE: 11/22/95	TIME: 3:45	DATE: 11-23-95	
02:00											
02:13		2200									
02:18		260	35	-	5.5	H <sub>2</sub> O	8.34				
02:26		320	74	35	5.6	CMT	11.5				
02:40		100	18	109	4	CMT	14.8				
02:45		0		127							
02:51		0	20	127	6.4	H <sub>2</sub> O	8.34				
03:01		200		189	2	H <sub>2</sub> O	8.34				
03:05		840		197	2	H <sub>2</sub> O	8.34				
03:06											

PRE-JOB SAFETY MEETING

Pressure Test LINES TEST OK

START WTK AHEAD. BREAK CIRCULATION

START LEAD SLURRY

START TAIL SLURRY

SHUTDOWN. WASH LINES / DROP TOP PLUG

STEAM DISPLACEMENT

Lower Pump Rate

Bump Top Plug

Bleed off pressure. Check float

Float held SHUTDOWN.

Release Dowell

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	150	2.75	Class 'C' + 390 D79 + 270 D46 + 1/4 #1 SK D29				73.5	11.5
2.	75	1.37	Class 'C' + 270 B28 + 270 S1 + 1670 D60 + 270 D46 + 1/4 #1 SK D29				18.3	14.8
3.								
4.								
5.								
6.								

RECEIVED KANSAS CORP COMM 1995 FEB -2 A 11:11

BREAKDOWN FLUID TYPE

HESITATION SQ.  RUNNING SQ.  CIRCULATION LOST  YES  NO

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. 70 Bbls

Washed Thru Perfs  YES  NO TO FT. MEASURED DISPLACEMENT  WIRELINE

PERFORATIONS TO TO TO TO

CUSTOMER REPRESENTATIVE MR. Jeff LASITER

DS SUPERVISOR MR. DAVID R. SAUER

CEMENTING SERVICE REPORT

Schlumberger

Dowell

DOWELL SCHLUMBERGER INCORPORATED

TRENT NUMBER	DATE
12-7857	11/20/95
STAGE	DISTRICT
DS	URS 03-12

DS 496-A PRINTED IN U.S.A.

WELL NAME AND NO. CPAWFORD EST #3	LOCATION (LEGAL) SEC 10-37S-37W	RIG NAME: MURFIN #24	
FIELD-POOL Hugoton	FORMATION SURFACE	WELL DATA:	
COUNTY/PARISH STEVENS	STATE KS	API NO.	
NAME MOBILE OIL CORP.	WELL DATA: BIT SIZE 12 1/4 CSG/Liner Size 8 7/8		
AND	TOTAL DEPTH 639 WEIGHT 24#		
ADDRESS	MUD TYPE GRADE		
ZIP CODE	MUD DENSITY LESS FOOTAGE SHOE JOINT(S) 41.95		
SPECIAL INSTRUCTIONS	MUD VISC. Disp. Capacity 587.5		
Safety cement 8 7/8 Surface casing WITH: 215 SKS 50/50 P02/C + 470 D20 + 390 SI + 590 D44 (BWOW) + 1/4 #1/SK D29 LEAD and 150 SKS 50/50 P02/C + 2.590 SI + 1/4 #1/SK D29 Tail	NOTE: Include Footage From Ground Level To Head In Disp. Capacity		
	IS CASING/TUBING SECURED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	SQUEEZE JOB	
	LIFT PRESSURE 262 PSI CASING WEIGHT ÷ SURFACE AREA (3.14 x R <sup>2</sup> )	TOOL TYPE	
	PRESSURE LIMIT 500 OVER PSI BUMP PLUG TO 640 PSI	DEPTH	
ROTATE 8 RPM RECIPROCATATE 8 FT No. of Centralizers 5	TUBING VOLUME Bbbls		
	CASING VOL. BELOW TOOL Bbbls		
	TOTAL Bbbls		
	ANNUAL VOLUME Bbbls		

ORIGINAL

TIME	PRESSURE	VOLUME PUMPED BBL	JOB SCHEDULED FOR TIME: 2100 DATE: 11/20/95	ARRIVE ON LOCATION TIME: 2055 DATE: 11/20/95	LEFT LOCATION TIME: 01:00 DATE: 11/21/95
0001 to 2400	TBG OR D.P. CASING	INCREMENT CUM	INJECT RATE FLUID TYPE FLUID DENSITY	SERVICE LOG DETAIL	
2330				PRE-JOB SAFETY MEETING	
2343	2820	-	H <sub>2</sub> O 8.34	Pressure Test lines	
2346		25	5.7 H <sub>2</sub> O 8.34	START H <sub>2</sub> O SPACER	
2350	170	72 97	5.7 CMT 12.8	START Lead Slurry	
0003	170	32.5 129.5	5.7 CMT 14.6	START Tail Slurry	
0011				SHUTDOWN/DROP TOP Plug	
0014		38	5.7 H <sub>2</sub> O 8.34	START Displacement	
0018	190	14.3	5.7 H <sub>2</sub> O 8.34	PSI check / CMT TO SURFACE	
0020	180	308	7.0 H <sub>2</sub> O 8.34	PSI check / CMT TO SURFACE slow rate	
0023	640	386	H <sub>2</sub> O 8.34	STOP Pump / Bump Plug	
0026				Bled off pressure / End job	

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	215	1.89	50/50 P02/C + 670 D20 + 390 SI + 590 D44 (BWOW) + 1/4 #1/SK D29				72 BBLs	12.8
2.	150	1.22	50/50 P02/C + 2.590 SI + 1/4 #1/SK D29				32.5 BBLs	14.6
3.								
4.								
5.								
6.								

REMARKS	BREAKDOWN FLUID TYPE		VOLUME		DENSITY		PRESSURE		MAX. MIN:	
	<input type="checkbox"/> HESITATION SQ. <input type="checkbox"/> RUNNING SQ.		CIRCULATION LOST		<input type="checkbox"/> YES <input type="checkbox"/> NO		Cement Circulated To Surf. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		18 Bbbls	
	BREAKDOWN PSI FINAL		DISPLACEMENT VOL. 38 Bbbls		TYPE OF WELL <input type="checkbox"/> OIL <input type="checkbox"/> GAS		STORAGE <input type="checkbox"/> INJECTION		<input type="checkbox"/> BRINE WATER <input type="checkbox"/> WILDCAT	
	Washed Thru Perfs <input type="checkbox"/> YES <input type="checkbox"/> NO		MEASURED DISPLACEMENT <input checked="" type="checkbox"/>		<input type="checkbox"/> WIRELINE					
	PERFORATIONS TO TO		CUSTOMER REPRESENTATIVE Jeff Lasiter		DS SUPERVISOR Jon Sosa					