

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

Operator: License # 5208

Name: Mobil Oil Corporation

Address P.O. Box 2173

2319 North Kansas Avenue

City/State/Zip Liberal, KS 67905-2173

Purchaser: Spot Market

Operator Contact Person: Sharon Cook

Phone (316) 626-1142

Contractor: Name: Norseman Drilling Inc.

License: 3779

Wellsite Geologist: L. J. Reimer

Designate Type of Completion  
 New Well  Re-Entry  Workover

Oil  SWD  SLOW  Temp. Abd.  
 Gas  ENHR  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  PBTB  
 Commingled  Docket No. \_\_\_\_\_  
 Dual Completion  Docket No. \_\_\_\_\_  
 Other (SWD or Inj?)  Docket No. \_\_\_\_\_

12-10-97 12-14-97 1-14-98  
Spud Date Date Reached TD Completion Date

API NO. 15- 189-222590000

County Stevens

SW - NW - SW Sec. 19 Twp. 32 Rge. 37 X W

1350 Feet from S/N (circle one) Line of Section

158 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 WRD #3 Unit Well # 4

Field Name Hugoton

Producing Formation Chase

Elevation: Ground 3159 KB 3168

Total Depth 3042 PBTB 2981

Amount of Surface Pipe Set and Cemented at 651 Feet

Multiple Stage Cementing Collar Used? Yes  No

If yes, show depth set NA Feet

If Alternate II completion, cement circulated from NA

feet depth to NA w/ NA sx cmt.

Drilling Fluid Management Plan A.H.1, 6-12-98 U.C.  
(Data must be collected from the Reserve Pit)

Chloride content 26,000 ppm Fluid volume 250 bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite:

Operator Name Mobil Oil Corporation

Lease Name \_\_\_\_\_ License No. 5208

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, 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 confidentially 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 4-9-98

Subscribed and sworn to before me this 9th day of April, 19 98.

Notary Public Lynn K. Hunt

Date Commission Expires February 20, 2001  
8-30.kcc

K.C.C. OFFICE USE ONLY		
F	<input type="checkbox"/>	Letter of Confidentiality Attached
C	<input checked="" type="checkbox"/>	Wireline Log Received
C	<input type="checkbox"/>	Geologist Report Received
Distribution		
<input checked="" type="checkbox"/>	KCC	<input type="checkbox"/> SWD/Rep <input type="checkbox"/> NGPA
<input type="checkbox"/>	KGS	<input type="checkbox"/> Plug <input type="checkbox"/> Other (Specify)



JAN 31 1998

Operator Name Mobil Oil Corporation Lease Name WRD #3 Unit Well # 4  
 Sec. 19 Twp. 32 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  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:  
 Array Induction Microresistivity/SP  
 Compensated Neutron Litho Density/GR  
 Natural Gamma Ray Spectrometry

Log Name	Formation (Top)	Depth	Datums	Sample Datum
Glorietta		1241		1407
Stone Corral		1699		1766
Chase		2532		2871
Council Grove		2871		--

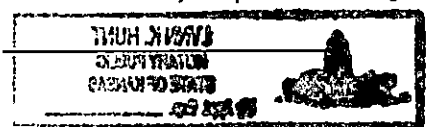
CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface Casing	12.250	8.625	24#	651	Class C Class C	220 150	50:50 C/poz 50:50 C/poz
Production Casing	7.875	5.500	14#	3032	Class C Class C	200 100	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	
2 SPF	2565-75	2730-38	Acid: 1,000 gals 7.5% HCL	
	2603-13	2767-77	Fract: 44,000 gals WF130 in 70q foam	
	2659-67		131,420 lbs 16/30 sand	
	2705-13			

TUBING RECORD		Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD\or Inj.	1-26-98	Producing Method <input checked="" 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
			375		

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)  
 METHOD OF COMPLETION:  Open Hole  Perf.  Dually Comp.  Conmingled  Other (Specify)  
 Production Interval: 2565 - 2777



CEMENTING SERVICE REPORT

Schlumberger  
Dowell

TREATMENT NUMBER: 20031089  
DATE: 12-14-97  
STAGE: DS DISTRICT: 11/5555, KS

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

WELL NAME AND NO. **WRO #3-4**  
 LOCATION (LEGAL) **Sec 19-32c-37**  
 FIELD-POOL **Huerton**  
 COUNTY/PARISH **Stevens** STATE **KS.** API. NO. **1998 APR 10**  
 NAME **Mobil Oil Corp**

RIG NAME **Norseman #4**  
 WELL DATA: BIT SIZE **7 7/8** CSG/Liner Size **5 7/8**  
 TOTAL DEPTH **3032** WEIGHT **14**  
 ROT  CABLE FOOTAGE **3032**  
 MUD TYPE GRADE **U5550**  
 BHST THREAD **8pd**  
 BHCT LESS FOOTAGE SHOE JOINT(S) **41**  
 MUD DENSITY MUD VISC. Disp. Capacity **12.8**

AND \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 ZIP CODE \_\_\_\_\_

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

Floor	TYPE	<b>4 1/2" apt. float valve</b>	TYPE	
	DEPTH	<b>2985</b>	DEPTH	
SHOE	TYPE	<b>cmf nose</b>	TYPE	
	DEPTH	<b>3032</b>	DEPTH	

SPECIAL INSTRUCTIONS  
**ORIGINAL**

IS CASING/TUBING SECURED?  YES  NO  
 LIFT PRESSURE **1788** PSI CASING WEIGHT + SURFACE AREA (3.14 x R<sup>2</sup>)  
 PRESSURE LIMIT PSI BUMP PLUG TO **1300** PSI  
 ROTATE RPM RECIPROCATATE FT No. of Centralizers

Head & Plugs  TBG  D.P. SQUEEZE JOB  
 Double SIZE TOOL TYPE  
 Single  WEIGHT DEPTH  
 Swage  GRADE TAIL PIPE: SIZE DEPTH  
 Knockoff  THREAD TUBING VOLUME Bbls  
 TOP  OR  NEW  USED CASING VOL. BELOW TOOL Bbls  
 BOT  OR  DEPTH TOTAL Bbls  
 ANNUAL VOLUME Bbls

JOB SCHEDULED FOR TIME: **1030** DATE: **12-14** ARRIVE ON LOCATION TIME: **1430** DATE: **12-14** LEFT LOCATION TIME: **1930** DATE: **12-14**

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUM				
1704	3200						PRE-JOB SAFETY MEETING PSI TEST	
1705	0		25		5.6	H2O	START H2O ahead	
1710	280		48		5.6	cmf	START lead cmf.	
1720	110		57		5.6	cmf	PSI check	
1727	120		24		5.6	cmf	START TAIL cmf.	
1730	210		14		5.6	cmf	PSI check	
1732	0						shut down wash pump lines deep stop plug	
1738	0		72.8		5.6	H2O	START displacement	
1741	70		20		5.6	H2O	PSI check	
1744	50		30		4.		" "	
1746	183		40		5.6		" "	
1748	335		50		5.6		" "	
1749	530		60		5.3		" "	
1750	615		65		2		lower rate	
1752	600		70		2		PSI check	
1753	620		72		2		" "	
1755	1300		13		2		bump top plug.	

REMARKS **1756 blood psi of check float + holding on job**

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
					BBLs	DENSITY
1.	200	2.75	class C + 3% D79 + 2% D46 + 1/4" D29		97.9	11.3
2.						
3.	100	1.37	class C + 2% B28 + 2% each + 1/6" Neo + 2% D46 + 1/4" D29		24.3	14.8
4.						
5.						
6.						

BREAKDOWN FLUID TYPE:  HESITATION SQ.  RUNNING SQ.  CIRCULATION LOST  YES  NO  
 Cement Circulated To Surf.  YES  NO Bbls  
 BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. **72.8** Bbls  
 TYPE OF WELL:  OIL  STORAGE  BRINE WATER  
 GAS  INJECTION  WILDCAT  
 Washed Thru Perfs:  YES  NO TO FT. MEASURED DISPLACEMENT  WIRELINE  
 PERFORATIONS TO TO CUSTOMER REPRESENTATIVE: **Marvin Harvey** DS SUPERVISOR: **James Esquivel**

CEMENTING SERVICE REPORT

Schlumberger  
Dowell

TREATMENT NUMBER: 51088  
DATE: 12-11-97  
STAGE: DS DISTRICT: Willsboro, Kc

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

WELL NAME AND NO. **WRD #3-4** LOCATION (LEGAL) **Sec. 19-32S-37W**  
 FIELD POOL **Hugoton** FORMATION  
 COUNTY/PARISH **Stevens** STATE **Ks.** API. NO.  
 NAME **Mobil Oil Corp**  
 ADDRESS  
 ZIP CODE

RIG NAME: **NORSEMAN #4**  
 WELL DATA: BIT SIZE **12 1/4** CSG/Liner Size **8 1/2**  
 TOTAL DEPTH **1051** WEIGHT **24**  
 MUD TYPE **15550** GRADE  
 MUD DENSITY **1.44** LESS FOOTAGE SHOE JOINT(S)  
 MUD VISC. **38.7** Disp. Capacity  
 NOTE: Include Footage From Ground Level To Head In Disp. Capacity

SPECIAL INSTRUCTIONS  
**ORIGINAL**  
 IS CASING/TUBING SECURED?  YES  NO  
 LIFT PRESSURE **7108** PSI CASING WEIGHT + SURFACE AREA (3.14 x R<sup>2</sup>)  
 PRESSURE LIMIT **10000** PSI BUMP PLUG TO **10000** PSI  
 ROTATE  RPM RECIPROCATE  FT No. of Centralizers

Float: TYPE **SAFETY PLATE** DEPTH **0.07**  
 Shoe: TYPE **CMT HOSE** DEPTH **1051**  
 Head & Plugs:  TBG  D.P.  Double  Single  Swage  Knockoff  
 SQUEEZE JOB: TOOL TYPE DEPTH  
 TUBING VOLUME Bbls  
 CASING VOL. BELOW TOOL Bbls  
 TOTAL Bbls  
 ANNUAL VOLUME Bbls

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR TIME DATE			ARRIVE ON LOCATION TIME DATE		LEFT LOCATION TIME DATE	
	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY				
0001 to 2400											
0:55	1100										
0:57	0		25		0	H <sub>2</sub> O					
0:521	235		74		0.2	CMT	12.8				
0:324	180		53		0	CMT	12.8				
0:334	109		33		0	CMT	14.0				
0:337	245		20		0	CMT	14.0				
0:340	0										
0:342	0		38.7		0	H <sub>2</sub> O					
0:344	750		10		0	H <sub>2</sub> O					
0:346	280		20		0						
0:349	331		39		3						
0:349	1000										
0:40											

REMARKS: bleed psi of 70 800 psi. SHUT IN CEMENT MANIFOLD - bleed psi of PHD job

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
			BBLs	DENSITY	BBLs	DENSITY		
1.	220	1.89	150pol + 6% gel + 3% calh + 5% D4	74	12.8			
2.								
3.	150	1.22	150pol + 2.5% calh + 4% D29	32.5	14.6			
4.								
5.								
6.								

BREAKDOWN FLUID TYPE:  HESITATION SQ.  RUNNING SQ.  CIRCULATION LOST  
 VOLUME: 38.7 Bbls  
 DENSITY: 38.7 Bbls  
 PRESSURE: 805 MIN. MAX. 219 Bbls  
 TYPE OF WELL:  OIL  STORAGE  BRINE WATER  
 GAS  INJECTION  WILDCAT  
 CUSTOMER REPRESENTATIVE: **MARVIN HARVEY**  
 SUPERVISOR: **JAMES EQUIVAL**