

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

ORIGINAL

API NO. 15- 189-219220000
County Stevens
SW - NW - NW - NE Sec. 3 Twp. 32S Rge. 36 X W

Operator: License # 5208

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

Name: Mobil Oil Corporation

2600 Feet from E(W) (circle one) Line of Section

Address P.O. Box 2173

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

2319 North Kansas Avenue

Lease Name Barngrover 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 3056 KB 3065

Phone (316) 626-1142

Total Depth 2978 PBDT 2926

Contractor: Name: Norseman Drilling Inc.

Amount of Surface Pipe Set and Cemented at 651 Feet

License: 3779

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 S10W 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 4-3-96
(Data must be collected from the Reserve Pit)

Operator: _____

Chloride content 12,500 ppm Fluid volume 100 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

10-2-95 10-5-95 10-23-95
Spud Date Date Reached TD Completion Date

Lease Name William Rapp #1 SWDW License No. 5208

NW Quarter Sec. 13 Twp. 31 S Rng. 36 E(W)

County Stevens Docket No. D-19,690

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 1-3-96

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)

Subscribed and sworn to before me this 3rd day of January 19 96.

Notary Public Kathleen R. Poulton

Date Commission Expires August 18, 1998
6-8.kcc



Operator Name Mobil Oil Corporation Lease Name Barngrover Unit Well # 3
 Sec. 3 Twp. 32S Rge. 36 East County Stevens
 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.)

Log Formation (Top), Depth and Datums Sample
 Name Top Datum

List All E.Logs Run:

NO LOGS RUN

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 Casing	12.250	8.625	24#	651	Class C Class C	175 175	50:50 C/poz 50:50 C/poz
Production Casing	7.875	5.500	14#	2968	Class C Class C	225 175	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				

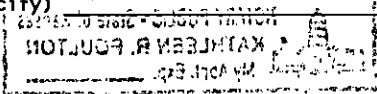
Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
1 SPF	2680-95	Acid: 1,000 gals 7.5% HCL	
	2730-45	Fract: 25,326 gals 20# Crosslink gel	
	2780-2800	125,260 lbs 12/20 Brady Sand	

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. 10-19-95 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		355			

Disposition of Gas: METHOD OF COMPLETION Production Interval
 Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled 2680
 (If vented, submit ACO-18.) Other (Specify) 2800



CEMENTING SERVICE REPORT

Schlumberger

Dowell

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER	DATE
03-12-7639	10-5-95
STAGE	DISTRICT
DS	U1VSSFS 03-12

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

WELL NAME AND NO. Barn Grover #3	LOCATION (LEGAL) SEC 3-325-36W
FIELD-POOL Hugoton	FORMATION Chase
COUNTY/PARISH STEVENS 189	STATE Kansas 15
API. NO.	

RIG NAME: Norsman #2	
WELL DATA:	BOTTOM
BIT SIZE 77/8	CSG/Liner Size 5 1/2
TOTAL DEPTH 2978	WEIGHT 14 #
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE 2974
MUD TYPE	GRADE 45550
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD 8RD
MUD DENSITY 9.3	LESS FOOTAGE SHOE JOINT(S) 40'
MUD VISC.	Disp. Capacity 71.58 bbls
TOTAL	

NAME MOBIL OIL CORP.
AND
ADDRESS
ZIP CODE

ORIGINAL

SPECIAL INSTRUCTIONS
Safely Cmt 5 1/2" Production casing with 225 SKS Class "C" + 3% D79 + 0.2% D46 + 0.25 lbs/SK D29 Lead and 175 SKS Class "C" + 2% B28 + 2% S1 + 0.6% D60 + 0.2% D46 Tail as directed by the customer.

NOTE: Include Footage From Ground Level To Head In Disp. Capacity					
Float	TYPE INSERT Float Valve	DEPTH 2934	Stage Tool	TYPE	DEPTH
SHOE	TYPE CMT NOSE	DEPTH 2974	TYPE	DEPTH	
Head & Plugs	<input type="checkbox"/> TBG <input type="checkbox"/> D.P.	SQUEEZE JOB			
<input type="checkbox"/> Double	SIZE	TOOL	TYPE		
<input type="checkbox"/> Single	WEIGHT	DEPTH			
<input type="checkbox"/> Swage	GRADE	TAIL PIPE: SIZE		DEPTH	
<input type="checkbox"/> Knockoff	THREAD	TUBING VOLUME Bbls			
TOP <input type="checkbox"/> R <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL Bbls			
BOT <input type="checkbox"/> R <input type="checkbox"/> W	DEPTH	TOTAL Bbls			
ANNUAL VOLUME Bbls					

IS CASING/TUBING SECURED? YES NO
LIFT PRESSURE 1512 PSI CASING WEIGHT ÷ SURFACE AREA (3.14 x R²)
PRESSURE LIMIT 500 OVER PSI BUMP PLUG TO 1500 PSI
ROTATE RPM RECIPROCATATE FT No. of Centralizers

TIME	PRESSURE	VOLUME PUMPED BBL	JOB SCHEDULED FOR TIME: 0700 DATE: 10-5-95	ARRIVE ON LOCATION TIME: 0645 DATE: 10-5-95	LEFT LOCATION TIME: 1130 DATE: 10-5-95
0001 to 2400	TBG OR D.P.	CASING	INJECT RATE	FLUID TYPE	FLUID DENSITY

TIME	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL	
								DESCRIPTION	REMARKS
0900								PRE-JOB SAFETY MEETING	
0934	2900					H ₂ O	8.33	PRESSURE TEST LINES	
0936		Ø	25		5.3	H ₂ O	8.33	START H ₂ O SPACER	
0941		280	110	25	5.7	CMT	11.5	START LEAD SLURRY	
1000		160	42	135	5.8	CMT	14.8	START TAIL SLURRY	
1007				177				Shutdown/WASH LINES / Drop Top Plug	
1011		Ø	71.5		5.8	H ₂ O	8.33	START Displacement	
1021		940		80	5.6	H ₂ O	8.33	PSI Check	
1026		980		70	2.1	H ₂ O	8.33	PSI Check	
1027		1490		71.5				STOP Pump / Plug Down	
1027		Ø						Bleed Lines / check FLOAT	
1029								Holding / PREPARED JOB	

RECEIVED
REGISTRATION COMMISSION
JAN 05 1996
MINNAPOLIS, MINN.
KANSAS

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
			BBLs	DENSITY	BBLs	DENSITY		
1.	225	2.75	Class "C" + 3% D79 + 0.2% D46 + 0.25 lbs/SK D29				110	11.5
2.	175	1.37	Class "C" + 2% B28 + 2% S1 + 0.6% D60 + 0.2% D46				42.6	14.8
3.								
4.								
5.								
6.								

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX.	MIN: 70 SKS
<input type="checkbox"/> HESITATION SQ.	<input type="checkbox"/> RUNNING SQ.	CIRCULATION LOST	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Cement Circulated To Surf.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 34 Bbls
BREAKDOWN	PSI	FINAL	PSI	DISPLACEMENT VOL. 71.5	Bbls
Washed Thru Perfs	<input type="checkbox"/> YES <input type="checkbox"/> NO	TO	FT.	MEASURED DISPLACEMENT <input checked="" type="checkbox"/>	<input type="checkbox"/> WIRELINE
PERFORATIONS	TO	TO	CUSTOMER REPRESENTATIVE	DS	SUPERVISOR
			Tom Dunning		Russ Wagstaff

CEMENTING SERVICE REPORT

Schlumberger

Dowell

DOWELL SCHLUMBERGER INCORPORATED

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

TREATMENT NUMBER 7514		DATE 10-3-95
STAGE 1	DS 03	DISTRICT 12

WELL NAME AND NO. BUNGROVER #3

LOCATION (LEGAL) SEC 3-322-364

FIELD-POOL HUSON

FORMATION SURF

COUNTY/PARISH SECURE

STATE KS API. NO.

RIG NAME: NORMAN 2

WELL DATA:		BOTTOM	TOP
BIT SIZE <u>11 7/8</u>	CSG/Liner Size <u>8 7/8</u>		
TOTAL DEPTH	WEIGHT <u>24</u>		
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE <u>656</u>		
MUD TYPE	GRADE <u>USSS 0</u>		
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD <u>8X0</u>		
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S) <u>616</u>		TOTAL
MUD VISC.	Disp. Capacity <u>39.2</u>		

NAME MOBIL

ADDRESS _____

ZIP CODE _____

ORIGINAL

SPECIAL INSTRUCTIONS
Safety cmt 4 3/4 as per customer's orders

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

Float	TYPE <u>CIF PLATE</u>	DEPTH <u>616</u>	Stage Tool	TYPE	DEPTH
SHOE	TYPE <u>CMT ROSE</u>	DEPTH <u>656</u>		TYPE	DEPTH

Head & Plugs TBG D.P. SQUEEZE JOB

Double WEIGHT TYPE

Single GRADE DEPTH

Swage THREAD TAIL PIPE: SIZE DEPTH

Knockoff NEW USED TUBING VOLUME Bbls

TOP R W DEPTH CASING VOL. BELOW TOOL Bbls

BOT R W DEPTH TOTAL Bbls

ANNUAL VOLUME Bbls

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE 270 PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)

PRESSURE LIMIT 2000 PSI BUMP PLUG TO PSI

ROTATE RPM RECIPROCATATE FT No. of Centralizers

JOB SCHEDULED FOR TIME: 02:30 DATE: 10-3 ARRIVE ON LOCATION TIME: 02:30 DATE: 10-3 LEFT LOCATION TIME: DATE:

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUM				
0001 to 2400								PRE-JOB SAFETY MEETING
07:47		1600				H2O 8.3		1st TEST
07:48		200	25	25	6	" "		START H2O
07:53		220	41	25	6	CMT 12.8		START 20 CMT
08:01		210	28	69	6	CMT 14.6		START TL CMT
08:06		120		97	6	CMT 14.6		SHUT DOWN DROP PLUG
08:07		100	39.5	X	6	H2O 8.3		START DISP
08:10		230		19	6	" "		CMT TO SURFACE
08:13		340		30	6	" "		LOWER RG70
08:13		250		31	2	" "		POST CHECK
08:17		920		39.5	2	" "		BUMP PLUG
08:19		370		-	-	-		BLEED PRESS. CLOSE IN HEAD

RECEIVED
CORPORATION COMMISSION
JAN 05 1996
CONSERVATION
WICHITA, KANSAS

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
			BBLs	DENSITY		
1.	175	1.87	50% 100 + 6% D-20T 3% S-1 + 5% D-44 (BUNGE) + 1/4% D-29	44	12.8	
2.						
3.	175	1.22	50% 100 + 2.5% S-1 + 1/4% D-29	28	14.6	
4.						
5.						
6.						

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE MAX. 920 MIN. 20

HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO Bbls

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. 39.5 Bbls TYPE OF WELL OIL STORAGE BRINE WATER WILDCAT 60

Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE

PERFORATIONS TO TO CUSTOMER REPRESENTATIVE DS SUPERVISOR

Tom Downing Ref Pearson