

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- 189-219740000

County Stevens

NE - SW - SW Sec. 1 Twp. 32S Rge. 37 X E

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

1250 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 Brower Unit Well # 4

Field Name Hugoton

Producing Formation Chase

Elevation: Ground 3122 KB 3131

Total Depth 3010 PBTD 2953

Amount of Surface Pipe Set and Cemented at 638 Feet

Multiple Stage Cementing Collar Used? Yes X 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 alt I 4-3-96
(Data must be collected from the Reserve Pit) le

Chloride content 4,100 ppm Fluid volume 150 bbls

Dewatering method used Waste Minimization Mud System

Location of fluid disposal if hauled offsite:

Operator Name Mobil Oil Corporation

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

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: 1-5-96

Well Name: RECEIVED STATE CORPORATION COMMISSION

Comp. Date Old Total Depth

Deepening Re-perf. Conv. to INJ/SWD
 Plug Back PBTD

Commingled Docket No. JAN 5 1996

Dual Completion Docket No. REGISTRATION DIVISION

Other (SWD or Inj?) Docket No. ---

9-25-95 9-28-95 10-13-95
Spud Date Date Reached TD Completion Date

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

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

Notary Public Kathleen R. Poulton

Date Commission Expires August 18, 1998

6-6.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)



Operator Name Mobil Oil Corporation Lease Name Brower Unit Well # 4

Sec. 1 Twp. 32S 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#	638	Class C Class C	175 175	50:50 C/poz 50:50 C/poz
Production Casing	7.875	5.500	14#	3000	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	2696-2706	Acid: 1,000 gals 7.5% HCL	
	2740-50	Fract: 29,274 gals 20# Crosslink gel	
	2796-2811	135,740 lbs 12/20 Brady Sand	
	2839-54		

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. 10-12-95	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 343 Mcf	Water Bbls.	Gas-Oil Ratio Gravity

Disposition of Gas: Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled 2696
 (If vented, submit ACO-18.) Other (Specify) 2854

CEMENTING SERVICE REPORT

Schlumberger

Dowell

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER 03-12-7590	DATE 9-25-95
STAGE DS	DISTRICT ULYSSES, KS 03-12

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

WELL NAME AND NO. BROWERS #4	LOCATION (LEGAL) SEC 1-325-37W	RIG NAME: NORMAN #2
FIELD-POOL HUSOTON	FORMATION SURFACE	WELL DATA:
COUNTY/PARISH STEVENS	STATE KS	API. NO.

NAME: MOBIL OIL CORP.
AND:
ADDRESS:
ZIP CODE:

WELL DATA:	BOTTOM	TOP
BIT SIZE 12 1/4	CSG/Liner Size 8 5/8	
TOTAL DEPTH	WEIGHT 24	
<input checked="" type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE 657	
MUD TYPE	GRADE 1550	
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD 8 F2	
MUD DENSITY 9.0	LESS FOOTAGE SHOE JOINT(S) 43	
MUD VISC.	Disp. Capacity 37.8	
NOTE: Include Footage From Ground Level To Head In Disp. Capacity		

ORIGINAL

SPECIAL INSTRUCTIONS SAFELY CEMENT 8 5/8 SURFACE CASING WITH 175 SKS OF LEAD AND 125 SKS OF TAIL AS DIRECTED BY THE CUSTOMER

Float	TYPE Baffle Plate	DEPTH 594
SHOE	TYPE CMT NOSE	DEPTH 637

IS CASING/TUBING SECURED? YES NO
LIFT PRESSURE 226 PSI CASING WEIGHT ÷ SURFACE AREA (3.14 x R²)
PRESSURE LIMIT 500 OVER PSI BUMP PLUG TO 990 PSI
ROTATE RPM RECIPROCATE FT No. of Centralizers

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

JOB SCHEDULED FOR TIME: 2300 DATE: 9-25-95 ARRIVE ON LOCATION TIME: 2240 DATE: 9-25-95 LEFT LOCATION TIME: 0215 DATE: 9-26-95

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUM				
0015								PRE-JOB SAFETY MEETING
0040	25	00	-	-	-	H ₂ O	8.33	PRESSURE TEST LINES
0042	-	Ø	25	-	5.8	H ₂ O	8.33	START H ₂ O SPACER
0047	-	140	58	25	5.8	CMT	12.8	START LEAD SLURRY
0057	-	130	38	83	5.7	CMT	14.6	START TAIL SLURRY
0104	-	-	-	121	-	-	-	SHUTDOWN / DROP TOP PLUG
0106	-	Ø	38	-	5.8	H ₂ O	8.33	START DISPLACEMENT
0112	-	240	-	30	5.9	H ₂ O	8.33	PSI CHECK
0115	-	210	-	37	1.9	H ₂ O	8.33	PSI check
0116	-	990	-	377	-	-	-	STOP PUMP / PLUS DOWN
0116	-	350	-	-	-	-	-	Bled Lines / Close manifold
0118								END JOB

RECEIVED STATE CORPORATION COMMISSION JAN 05 1996

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
			BBLs	DENSITY		
1.	175	1.89	50/50 107/14 6% D20 + 3% SI + 5% 144(BWOW) + 1/4 #/SK D29	58.9	12.8	
2.	175	1.22	50/50 107/14 + 2.5% SI + 1/4 #/SK D29	38	14.6	
3.						
4.						
5.						
6.						

BREAKDOWN FLUID TYPE: HESITATION SQ. RUNNING SQ. VOLUME: CIRCULATION LOST YES NO DENSITY: YES NO PRESSURE: MAX. 415/ks MIN. 14 Bbls
 Cement Circulated To Part. YES NO
 BREAKDOWN: PSI FINAL PSI DISPLACEMENT VOL. 37.7 Bbls
 Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE
 PERFORATIONS: TO TO TO TO CUSTOMER REPRESENTATIVE: TOM DUNNING SUPERVISOR: RUSS WAGSTAFF

CEMENTING SERVICE REPORT

Schlumberger
Dowell

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER 604	DATE 1/28
STAGE 1	DS 23
DISTRICT 12	

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

WELL NAME AND NO. BR 41494 4	LOCATION (LEGAL) SEC 1-325-374
FIELD-POOL H 10102	FORMATION chase
COUNTY/PARISH S 13 20 5	STATE KS
API. NO.	

RIG NAME: MORSEMAN 2	WELL DATA:		BOTTOM	TOP
BIT SIZE 7 7/8	CSG/Liner Size	5 1/2		
TOTAL DEPTH 2957	WEIGHT	14		
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE			
MUD TYPE	GRADE	USG		
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD	8 AD		
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)	7957		TOTAL
MUD VISC.	Disp. Capacity	7211		

ORIGINAL

NAME: M. J. L.
AND:
ADDRESS:
ZIP CODE:

SPECIAL INSTRUCTIONS
Baffle on K 5 1/2 115 on for customer

NOTE: Include Footage From Ground Level To Head In Disp. Capacity			
Float TYPE: AUTO FILL FLEP	DEPTH: 2957	Stage Tool TYPE	DEPTH
SHOE TYPE: CMT 2050	DEPTH: 3000	TYPE	DEPTH

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE 1770 PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)

PRESSURE LIMIT 2900 PSI BUMP PLUG TO 1300 PSI

ROTATE RPM RECIPROCAT FT No. of Centralizers

Head & Plugs	<input type="checkbox"/> TBG <input type="checkbox"/> D.P.	SQUEEZE JOB
<input type="checkbox"/> Double	SIZE	TOOL TYPE
<input checked="" type="checkbox"/> Single	<input type="checkbox"/> WEIGHT	DEPTH
<input type="checkbox"/> Swage	<input type="checkbox"/> GRADE	TAIL PIPE: SIZE DEPTH
<input type="checkbox"/> Knockoff	<input type="checkbox"/> THREAD	TUBING VOLUME Bbls
TOP <input type="checkbox"/> OFF <input type="checkbox"/> ON	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL Bbls
BOT <input type="checkbox"/> OR <input type="checkbox"/> OW	DEPTH	TOTAL Bbls
		ANNUAL VOLUME Bbls

JOB SCHEDULED FOR TIME: 0800 DATE: 9-28 ARRIVE ON LOCATION TIME: 0225 DATE: 9-28 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				
00:01 to 24:00								PRE-JOB SAFETY MEETING
03:04		2300	1.5	1.5		H ₂ O		Pressure on Ball & surge back
03:08		2500	1.5	3.0	2	"	"	Replace Ball Circulat 10RR
03:30		220	26	3	3.5	"	"	Start H ₂ O
03:35		430	112	29	5.8	CMT	11.5	Start Cement
03:54		170	42	141	4	CMT	14.8	Start ILMT
04:04		100		183				Shut down wash port
04:07		30	22.7	X	5.7	H ₂ O	9.3	Drop plug start disp
04:13		282		30	5.7	"	"	psi check
04:14		550		37	5.7	"	"	CMT 14.8
04:19		1090		61	5.8	"	"	psi check
04:19		980		64	2	"	"	lower rate
04:20		900		67	2	"	"	psi check
04:23		1300		69.7	2	"	"	Bump plug
04:25								Check pres check float

RECEIVED
STATE CORPORATION COMMISSION
JAN 05 1996
CONSULTING ENGINEER

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED		
							BBLs	DENSITY	
1.	125	2.75	C 7 3/8 P-75 + 0.2% P-46 1/2 7/8 P-29					112	11.5
2.									
3.	76	1.27	C 7 206 B-28 + 2% S-1 + 0.6% P-60 + 0.2% P-46					42	14.8
4.									
5.									
6.									

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE 2500 MAX. MIN: 30

HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO 30 Bbls

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. 72.7 Bbls TYPE OF WELL OIL STORAGE BRINE WATER 61 GAS INJECTION WILDCAT

PERFORATIONS TO TO CUSTOMER REPRESENTATIVE TO TO Tom Dunning DS SUPERVISOR Key Pearson