

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- 189-221030000
County Stevens
- NW - SE - NE Sec. 11 Twp. 34S Rge. 39 X W

Operator: License # 5208

1495 Feet from S (N) (circle one) Line of Section

Name: Mobil Oil Corporation

1265 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 Grabber Fee #1 Unit Well # 2

City/State/Zip Liberal, KS 67905-2173

Field Name Hugoton

Purchaser: Spot Market

Producing Formation Chase

Operator Contact Person: Sharon Cook

Elevation: Ground 3278 KB 3286

Phone (316) 626-1142

Total Depth 3002 PBDT 2951

Contractor: Name: Norseman Drilling Inc.

Amount of Surface Pipe Set and Cemented at 600 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

X Oil SWD S10W Temp. Abd.
X Gas ENHR S1GW
Dry Other (Core, WSW, Expl., Cathodic, etc)

feet depth to NA w/ NA sx cmt.

If Workover:

Drilling Fluid Management Plan AH.1, 3-6-98 v.c.
(Data must be collected from the Reserve Pit)

Operator: _____

Chloride content 12,200 ppm Fluid volume 360 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
Commingle Docket No. _____
Dual Completion Docket No. _____
Other (SWD or Inj?) Docket No. _____

Operator Name Mobil Oil Corporation

9-24-96 9-28-96 10-22-96
Spud Date Date Reached TD Completion Date

Lease Name Mangels #1-2 SWDW License No. 5208

SE Quarter Sec. 6 Twp. 34 S Rng. 39 (E/W)

County Morton Docket No. D-19,354

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 1-6-97

Subscribed and sworn to before me this 6th day of January, 19 97.

Notary Public Kathleen R. Poulton

Date Commission Expires August 18, 1998
7-1.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. 02-18-98

SIDE TWO

Operator Name Mobil Oil Corporation Lease Name Graber Fee #1 Unit Well # 2
 Sec. 11 Twp. 34S Rge. 39 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.)
 List All E.Logs Run:
 Compensated Neutron Compensated Photo-Density Log
 Array Induction Shallow Focused Electric Log

<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
Name	Top	Datum
Glorietta	1302	1458
Stone Corral	1758	1808
Chase	2622	2958
Council Grove	2958	--

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#	600	Class C Class C	200 150	50:50 C/poz 50:50 C/poz
Production Casing	7.875	5.500	14#	2992	Class C Class C	175 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	2680-2695	Acid: 1,000 gals 7.5% HCL	
	2740-2750	Fract: 29,500 gals 20# Crosslink gel	
	2800-2815	145,820 lbs 12/20 Brady Sand	
	2850-2865		

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.	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
11-4-96				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity
		460		

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) 2865

CEMENTING SERVICE REPORT

Schlumberger

Dowell

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER	05-12-8644	DATE	9-24-96
STAGE	DS	DISTRICT	Ulisses Kc

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

WELL NAME AND NO. **Craber Fee # 1-2** LOCATION (LEGAL) **Sec 11-34s-39w**

FIELD-POOL **FORMATION**

COUNTY/PARISH **Stevens** STATE **Kc** API-NO.

NAME **Mobil Oil Corp**

AND **ORIGINAL**

ADDRESS

ZIP CODE

RIG NAME: **NORSEMAN # 2**

WELL DATA: **BIT SIZE 2 1/4** CSG/Liner Size **8 5/8** **TOTAL DEPTH 600** **WEIGHT 24**

ROT CABLE FOOTAGE **600**

MUD TYPE **USSSK** GRADE **USSSK**

BHST BHCT THREAD **8 2 1/2**

MUD DENSITY **4.3** LESS FOOTAGE SHOE JOINT(S)

MUD VISC. **354** Disp. Capacity

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

SPECIAL INSTRUCTIONS

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE **247** PSI CASING WEIGHT ÷ SURFACE AREA (3.14 x R²)

PRESSURE LIMIT **550** PSI BUMP PLUG TO **550** PSI

ROTATE RPM RECIPROCAT FT No. of Centralizers

Float	TYPE	BAFFLE Plate	Stage Tool	TYPE	
	DEPTH	557		DEPTH	
SHOE	TYPE	CNT HOSE	Stage Tool	TYPE	
	DEPTH	600		DEPTH	

Head & Plugs TBG D.P. SQUEEZE JOB

Double Single Swage Knockoff

SIZE WEIGHT GRADE THREAD

TAIL PIPE: SIZE DEPTH

TUBING VOLUME CASING VOL. BELOW TOOL TOTAL ANNUAL VOLUME

TIME	PRESSURE		VOLUME PUMPED bbl		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME	DATE	TIME	DATE	TIME	DATE	
0001 to 2400											
0150	2200										
0152	0		28		5.7	H2O					
0157	140		67		5.5	CMT	12.8				
0212	170		18		5.5	CMT	14.6				
0218	0										
0220	0		35.4		5	H2O					
0223	100		10		5	H2O					
0224	150		20		5						
0226	240		27		2						
0227	170		30		2						
0228	160		33		2						
0230	550		36		2						
0231											

PRE-JOB SAFETY MEETING & PSI TEST LINE

start H2O ahead

start lead cmt.

start tail cmt.

shut down drop top plug

start displacement

psi check

cmt to surface

lower rate

psi check

psi check

psi check

bump top plug

shut in cmt manifold

bleed psi of ord job

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	200	1.89	sopar + 6% gal + 3% cacl2 + 5% D44 + 1/4 #1029				67.5	12.8
2.								
3.	150	1.22	sopar + 2.5% cacl2 + 1/4 #1029				37.5	14.6
4.								
5.								
6.								

BREAKDOWN FLUID TYPE HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO

Pressure **455** MAX. **455** MIN.

Cement Circulated To Surf. YES NO

BREAKDOWN PSI FINAL **35.4** Bbls

Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE

PERFORATIONS TO TO

CUSTOMER REPRESENTATIVE **Mike MARRS**

DS SUPERVISOR **James Esquivel**

CEMENTING SERVICE REPORT

Schlumberger
Dowell

TREATMENT NUMBER: 703
DATE: 1-28-96
STAGE: 1 DS: 23 DISTRICT: 12

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

WELL NAME AND NO. GRABER #1-2
LOCATION (LEGAL) SEC, 11-345-39W
FIELD-POOL Hvanton
FORMATION chasie
COUNTY/PARISH STEVENS
STATE KS, API. NO.
NAME mobil oil corp.
AND
ADDRESS
ZIP CODE

RIG NAME: MORSMAN 2
WELL DATA: BOTTOM TOP
BIT SIZE 7 1/8 CSG/Liner Size 5 1/2
TOTAL DEPTH 7 WEIGHT 14
 ROT CABLE FOOTAGE 2892
MUD TYPE GRADE U5550
 BHST BHCT THREAD 3/80
MUD DENSITY LESS FOOTAGE SHOE JOINT(S) 2948
MUD VISC. Disp. Capacity 72
NOTE: Include Footage From Ground Level To Head In Disp. Capacity

ORIGINAL

SPECIAL INSTRUCTIONS
Scribe cement 5% LIS on per nit
no instructions
IS CASING/TUBING SECURED? YES NO
LIFT PRESSURE PSI CASING WEIGHT SURFACE AREA (3.14 x R²)
PRESSURE LIMIT 1500 PSI BUMP PLUG TO 1000 ft - 1 PSI
ROTATE RPM RECIPROCATE FT No. of Centralizers

Float TYPE AUTO FILL IN DEPTH 2948
SHOE TYPE CMT. NOSE DEPTH 2948
Head & Plugs TBG D.P. SQUEEZE JOB
 Double SIZE WEIGHT
 Single WEIGHT
 Swage GRADE TAIL PIPE: SIZE DEPTH
 Knockoff THREAD TUBING VOLUME Bbls
TOP NEW USED CASING VOL. BELOW TOOL Bbls
BOT OR QW DEPTH TOTAL Bbls
ANNUAL VOLUME Bbls

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	TIME	DATE	TIME	DATE
0001 to 2400								0207	9-28	0145	9-28
								SERVICE LOG DETAIL 1-6-96			
0505	1700			X		H2O	8.3	PRE-JOB SAFETY MEETING			
0507	200	10	X	5.0		"	"	PS TEST			
0508	210	87	10	5.6	CMT	11.5		START H2O			
0524	90	21	97	5.6	CMT	14.8		PLANT			
0527	200			118				CMT			
0528	50	72		5.6	H2O	8.3		3.0E Shut down wash to P.T.D.			
0540	460		60	5.6	"	"		PUMPING START DISP			
0541	380		62	2	"	"		PS CHECK			
0543	572		70	1.7	"	"		LOWER RATE			
0546	1000		72	1.7	"	"		PS CHECK			
0548								Bump Plug			
								Bump Plug check floor			

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED			
							BBLs	DENSITY		
1.	175	2.75	C	+ 3%	D-79	+ 10.0%	D-46	+ 0.25%	87	11.5
2.										
3.	75	1.37	C	+ 2%	B-28	+ 2%	S-1	+ 2.6%	21	14.8
4.										
5.										
6.										

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE 1000 MAX. MIN: 50
 HESITATION SQ. RUNNING-SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO Bbls
 BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. 72 Bbls TYPE OF WELL OIL GAS STORAGE BRINE WATER
 Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE INJECTION WILDCAT
 PERFORATIONS TO TO CUSTOMER REPRESENTATIVE DS SUPERVISOR
 TO TO MIKO MARKS Det Hanson