

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

API NO. 15- 189-21,487 -0000

County Stevens

N2 N2 SE Sec. 13 Twp. 31S Rge. 35 X East West

Operator: License # 5208

2160 Ft. North from Southeast Corner of Section

Name: MOBIL OIL CORPORATION

1250 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

Address 2319 NORTH KANSAS

Lease Name Carrie Winter Unit Well # 4

City/State/Zip LIBERAL, KS 67901

Field Name Hugoton

Purchaser: Spot Market

Producing Formation Chase

Operator Contact Person: RAE KELLY

Elevation: Ground 2912 KB 2923

Phone (316) 626-1160

Total Depth 2870 PBTD 2819

Contractor: Name: Exeter Drilling Co.

License: 3098

Wellsite Geologist: R. Stever

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD Temp. Abd.

Gas Inj Delayed Completion

Dry Other (Core, Water Supply, etc.)

If OWMID: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

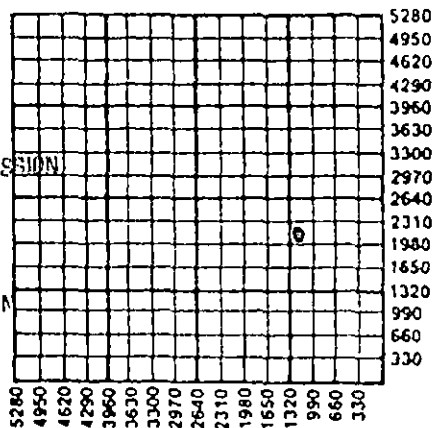
Drilling Method:

Mud Rotary Air Rotary Cable

2/18/91 2/21/91 4/6/91

Spud Date Date Reached TD Completion Date

RECEIVED
STATE CORPORATION COMMISSION
9-27-91
SEP 27 1991
OIL & GAS CONSERVATION DIVISION
Wichita, Kansas



Amount of Surface Pipe Set and Cemented at 822 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set NA feet

If Alternate II completion, cement circulated from _____

feet depth to NA w/ NA sx cmr.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers time log 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. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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.

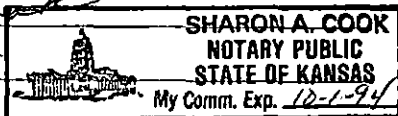
Signature R. Kelly

Title Engineering Technician Date _____

Subscribed and sworn to before me this 26th day of September, 19 91.

Notary Public Sharon A. Cook

Date Commission Expires 10-1-94



K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other (Specify)

SIDE TWO

Operator Name Mobil Oil Corporation Lease Name Carrie Winter Unit Well # 4
 Sec. 13 Twp. 31S Rge. 35 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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Attach Additional Sheets.) Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Submit Copy.)	<p align="center">Formation Description</p> <p><input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: center;">Top</th> <th style="text-align: center;">Bottom</th> </tr> </thead> <tbody> <tr><td>Blain</td><td style="text-align: center;">1160</td><td style="text-align: center;">1143</td></tr> <tr><td>Flowerpot</td><td style="text-align: center;">1143</td><td style="text-align: center;">1193</td></tr> <tr><td>Glorietta</td><td style="text-align: center;">1193</td><td style="text-align: center;">1387</td></tr> <tr><td>Stone Corral</td><td style="text-align: center;">1678</td><td style="text-align: center;">1743</td></tr> <tr><td>Wellington</td><td style="text-align: center;">2187</td><td style="text-align: center;">2520</td></tr> <tr><td>Chase</td><td style="text-align: center;">2520</td><td style="text-align: center;">2831</td></tr> <tr><td>Council Grove</td><td style="text-align: center;">2831</td><td style="text-align: center;">--</td></tr> </tbody> </table>	Name	Top	Bottom	Blain	1160	1143	Flowerpot	1143	1193	Glorietta	1193	1387	Stone Corral	1678	1743	Wellington	2187	2520	Chase	2520	2831	Council Grove	2831	--
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CASING RECORD <input 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#	822	CL"C"	250sx 175sx	3%cc 2%cc
Production Casing	7.000	5.500	14#	2860	CL"H"	290sx 290sx	50:50:2+2%
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			Amount and Kind of Material Used			Depth
2 SPF	2520-2524	2705-2714		Acidize w/3500 gal & 7.5% FE acid & 470 gal 2% flush. Frac'd w/97,000 gal gel & 410,000 lbs sand.			2520-2740
	2526-2528	2730-2740					
	2541-2551						
	2571-2584						
	2584-2596						
	2616-2637						
	2663-2684						
	2684-2705						
TUBING RECORD							
	Size NA	Set At NA	Packer At None	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Date of First Production 4/17/91	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
				495			

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION

Open Hole Perforation Dually Completed Commingled Other (Specify)

Production Interval 2520-2740 O.A.

STATE OF MINNESOTA
 COUNTY OF STEVENS
 3.28.91

ORIGINAL

MOBIL OIL CORPORATION DENVER DIVISION
PRIMARY CASING CEMENTING JOB REPORT

WELL NAME WINTER 4 LOCATION 13-31-35 COUNTY STEVENSON STATE KS
 WELL DEPTH 822 BIT SIZE 12 1/4 AVG. CALIFER HOLE SIZE NA MAX. DEVIATION 1 3/4 MUD TYPE Low 3/16
 MUD WT. 9.5 VIS 35 FV/WT 5/1 BAPI WL 90 LAST CCG. SIZE, WT., DEPTH NONE

CASING DATA (list weights/grades in order run)

SIZE	WEIGHT	GRADE	CONN.	NO. JTS.	LENGTH
<u>8 5/8</u>	<u>24</u>	<u>K35</u>	<u>372</u>	<u>19</u>	<u>811</u>
---	---	---	---	---	---
---	---	---	---	---	---
SETTING DEPTH: <u>822'</u>				TOTAL	<u>811</u>
SHOE JOINT LENGTH: <u>12.10</u>				DV TOOL DEPTH: <u>NA</u>	

RUNNING SPEED/JT., LAST 1/3 STRING 10 sec/4 FULL RETURNS RUNNING CCG? YES TIME TO INSTALL HEAD 10 MIN
 TIME CIRC. BEFORE CEMENTING 15 MIN CIRC. PRESS. 100 at 270 kpm.

PICK UP WEIGHT 20 SLACK OFF WEIGHT 18 CASING LANDING WT. LESS HOOK, BLOCK LOAD: 18
 CEMENTING AIDS (No., type, and location of centralizers, scratchers, baskets, DV tools, etc.)
1st 2 jts, every 3rd thereafter.

REMARKS (unusual hole conditions - fill, drag, lost circ. etc.)

CEMENT DATA:

Stage & Lead/Tail	Class	Additives	Yield	Water Req.	# Sacks	Slurry Wt.
<u>1 Lead</u>	<u>C</u>	<u>Pacesetter Lite) & 3% cc</u>	<u>1.99</u>	<u>11</u>	<u>250</u>	<u>12.4</u>
<u>1 Tail</u>	<u>C</u>	<u>2% cc & 1/4" dia Cell O'Gel</u>	<u>1.33</u>	<u>6.3</u>	<u>175</u>	<u>14.8</u>

	1ST STAGE	2ND STAGE	3RD STAGE
Calc Cement Top	<u>SURFACE</u>		
Preflush Type & Amount	<u>20 3/16 H₂O</u>		
Bottom Plug?	<u>NO</u>		
Top Plug?	<u>YES</u>		
Washed Up Lines To Displace?	<u>NO</u>		
Type & Amount Of Displacement	<u>50 3/16 H₂O</u>		
Flow Regime (Furb, laminar, plug)	<u>LAM</u>		
Cement Mix Time	<u>22 MIN</u>		
Displacement Time	<u>12 "</u>		
Pull Circ? (if not, describe below)*	<u>YES</u>		
Max Press Before Plug Bumped	<u>100</u>		
Press Plug Bumped At	<u>1100</u>		
Time Plug Down	<u>0:45 B</u>		
Pipe Worked Regip. Or Rooste	<u>NO</u>		
Cement Returns To Surf? Volume?	<u>25 bbls</u>		
Floors Held?	<u>YES</u>		

CEMENTING COMPANY Western RATING (1 bad - 10 excellent) 10

* REMARKS ON LOST CIRC. WHILE CEMENTING, JOB PERFORMANCE, ETC.: Great job

O. P. L. 2-19-91
 09-25-91 10:58PM POS