

ORIGINAL

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

Operator: License # 5208Name: Mobil Oil CorporationAddress P.O. Box 21732319 North Kansas AvenueCity/State/Zip Liberal, KS 67905-2173Purchaser: Spot MarketOperator Contact Person: Sharon CookPhone (316) 626-1142Contractor: Name: Norseman Drilling Inc.License: 3779Wellsite Geologist: L. J. Reimer

Designate Type of Completion

X New Well Re-Entry Workover Oil SWD SLOW Temp. Abd.X 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 PBDT Commingled Docket No. Dual Completion Docket No. Other (SWD or Inj?) Docket No. 12-8-97 12-13-97 1-23-98
Spud Date Date Reached TD Completion Date

API NO. 15- 129-215500000

County MortonW/2 - E/2 - NW Sec. 21 Twp. 34 Rge. 39 X W1333 Feet from S/N (circle one) Line of Section1440 Feet from E/W (circle one) Line of SectionFootages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)Lease Name L. M. Tillett Unit Well # 3Field Name HugotonProducing Formation ChaseElevation: Ground 3307 KB 3317Total Depth 3007 PBDT 2950Amount of Surface Pipe Set and Cemented at 1467 FeetMultiple Stage Cementing Collar Used? Yes X NoIf yes, show depth set NA FeetIf Alternate II completion, cement circulated from NAfeet depth to NA w/ NA sx cmt.Drilling Fluid Management Plan Att. 6-12-98 U.C.
(Data must be collected from the Reserve Pit)Chloride content 6,000 ppm Fluid volume 240 bblsDewatering method used EvaporationLocation of fluid disposal if hauled offsite: Operator Name: Mobil Oil CorporationLEASE NAME COMMISSION License No. 5208 Quarter 9 Sec. Twp. S Rng. E/WCounty Docket No.

CONSERVATION DIVISION

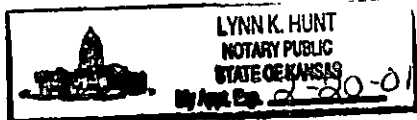
INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side 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. CookTitle Regulatory Assistant Date 3-30-98Subscribed and sworn to before me this 30th day of March, 19 98.Notary Public Lynn K. HuntDate Commission Expires February 20, 2001
8-29.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)



SIDE TWO

ORIGINAL

Operator Name Mobil Oil Corporation Lease Name L. M. Tillett Unit Well # 3
 Sec. 21 Twp. 34 Rge. 39 ☐ East ☒ West
 County Morton

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 Micro resistivity/GR
 Compensated Neutron Lithodensity/GR
 Natural Gamma Ray Spectrometry

☒ Log Formation (Top), Depth and Datums ☐ Sample

Name	Top	Datum
Glorietta	--	--
Stone Corral	1726	1768
Chase	2561	2905
Council Grove	2905	--

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#	1467	Class C	700	50:50 C/poz
					Class C	150	50:50 C/poz
Production Casing	7.875	5.500	14#	2997	Class C	200	3% D79
					Class C	100	2% B28

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
☐ Perforate				
☐ Protect Casing				
☐ Plug Back TD				
☐ 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	2588-94 2759-69	Acid: 1,000 gals 7.5% HCL	
	2612-20 2802-14	Fract: 46,000 gals WF130 in 75q foam	
	2631-39	125,560 lbs 16/30 sand	
	2684-94		

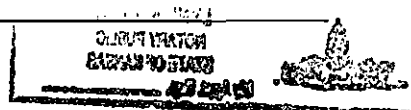
TUBING RECORD	Size	Set At	Packer At	Liner Run	☐ Yes ☒ No
Date of First, Resumed Production, SWD or Inj. 12-29-97	Producing Method ☒ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain)				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		251			

Disposition of Gas: METHOD OF COMPLETION

Production Interval

☐ Vented ☒ Sold ☐ Used on Lease
 (If vented, submit ACO-18.)

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled 2588
☐ Other (Specify) 2814



Schlumberger
Dowell

TRIP NUMBER 224159		DATE 12-9-87
STAGE 1	DS DISTRICT 11/11/88	

WELL NAME AND NO. 1 M Tillet #3		LOCATION (LEGAL) Cor 21-24--39		RIG NAME: Nordspan #2									
FIELD-POOL Upton		FORMATION		WELL DATA:		BOTTOM		TOP					
COUNTY/PARISH Madison		STATE KS		API. NO.		BIT SIZE 2 1/4		CSG/Liner Size 4 1/2					
NAME Mobil Off-Gas		AND		ADDRESS		TOTAL DEPTH 1167		WEIGHT 24					
ORIGINAL				ZIP CODE		☒ ROT ☐ CABLE		FOOTAGE 1167					
						MUD TYPE		GRADE 1550					
						☐ BHST ☐ BHCT		THREAD 800					
						MUD DENSITY		LESS FOOTAGE SHOE JOINT(S) 03					
						MUD VISC.		Disp. Capacity 40.7					
						NOTE: Include Footage From Ground Level To Head In Disp. Capacity							
						Float		TYPE 1 1/2" 1 Flap / 1 1/2"		Tool		TYPE 1 1/2"	
						DEPTH 1167				DEPTH 1167			

SPECIAL INSTRUCTIONS										SHOE		TYPE		DEPTH		STAGE		TYPE		DEPTH							
										Head & Plugs		☐ TBG ☐ D.P.		SQUEEZE JOB													
										☐ Double		SIZE		TOOL		TYPE											
										☐ Single		WEIGHT				DEPTH											
										☐ Swage		GRADE				TAIL PIPE: SIZE				DEPTH							
										☐ Knockoff		THREAD				TUBING VOLUME				Bbl							
IS CASING/TUBING SECURED? ☒ YES ☐ NO										LIFT PRESSURE		PSI		CASING WEIGHT ÷ SURFACE AREA		TOP ☐ R ☐ W		☐ NEW ☐ USED		CASING VOL. BELOW TOOL				Bbl			
PRESSURE LIMIT										PSI		BUMP PLUG TO		1067		PSI		BOT ☐ R ☐ W		DEPTH		TOTAL		Bbl			
ROTATE										RPM		RECIPROCATÉ		FT		No. of Centralizers						ANNUAL VOLUME		Bbl			

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					INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL			
2058	1450							PRE-JOB SAFETY MEETING J psi test			
2059	0	25			6.3	1120		start 1120 check			
2103	210	235.6			6.3	cmf 128		start 1120 cmf			
2118	180		94		4	cmf 128		1120 psi test			
2130	100		111		4	cmf 128		psi check			
2138	160	33			4	cmf 140		start 1120 cmf			
2154	150		20		4	cmf 140		psi check			
2203	0							check down down to 1120, 1120			
2204	0	4017			4	1120		start discharge			
2210	110		20		4	1120		psi check			
2213	530		37		33			1120 psi test			
2218	205		50		3			psi check			
2221	370		60		3			psi check			
2225	120		70		3			" "			
2228	160		80		3			" "			
2232	515		90		3			" "			
2237	1067		11		3			" "			

REMARKS: 233 blood on pt's chest, 1st floor - holding

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS	SLURRY MIXED	
				BBLs	DENSITY
1.	700	1.84	50% $\text{CaSO}_4 + 6\% \text{gel} + 3\% \text{cell} + 5\% \text{D40} + 34\% \text{D79}$	235.6	17.8
2.					
3.	150	1.22	50% $\text{CaSO}_4 + 25\% \text{cell} + 25\% \text{D79}$	22.3	14.6
4.					
5.					
6.					

BREAKDOWN FLUID TYPE			VOLUME		DENSITY	PRESSURE		MAX. MIN.
☐ HESITATION SQ. ☐ RUNNING SQ.			CIRCULATION LOST		☐ YES ☒ NO	Cement Circulated To Surf.		☐ YES ☒ NO
BREAKDOWN	PSI	FINAL	PSI	DISPLACEMENT VOL.	Bbls	TYPE		
Washed Thru Perfs	☐ YES ☐ NO	TO	FT.	MEASURED DISPLACEMENT	☐ ☐ WIRELINE	☐ OIL ☐ STORAGE ☐ BRINE WATER ☒ OF WELL ☒ GAS ☐ INJECTION ☐ WILDCAT		
PERFORATIONS				CUSTOMER REPRESENTATIVE		DS SUPERVISOR		
TO TO TO TO				2111111111		F-111111		

Well			Field			Service Date		Customer		Job Number	
L. M. TILLET #3			HUGOTON			12/9/97		MOBIL DRILLING		20034278	
Time	CumVol	Density	Pressure U1	Pump	Unit 1 Pump 2	Message					
24 hr clock	bbl	ppg	psi	bpm	bpm						
23:33	0	0	0	0	0	0	0	Start Mixing Tail Slurry			
23:34	6.213	14.91	151.9	2.419	2.72	0	0				
23:35	15.1	14.63	153.2	2.44	2.714	0	0				
23:37	24.01	14.47	151.5	2.437	2.722	0	0				
23:38	0	0	0	0	0	0	0	End Tail Slurry			
23:38	0	0	0	0	0	0	0	Drop Top Plug			
23:38	0	0	0	0	0	0	0	Start Displacement			
23:38	0	0	0	0	0	0	0	[CumVol]=26.13 bbl			
23:38	0	0	0	0	0	0	0	Reset Volume			
23:38	0	0	0	0	0	0	0	PAUSE ACQUISITION			
23:43	0	0	0	0	0	0	0	RESTART AFTER PAUSE			
23:43	6384E-6	8.914	-3607E-11	6292E-5	1569E-21	0	0				
23:45	5.67	8.857	81.87	2.475	2.719	0	0				
23:47	14.58	8.719	70.37	2.467	2.72	0	0				
23:49	23.54	8.842	69.87	2.458	2.719	0	0	ORIGINAL			
23:50	32.47	8.778	68.37	2.442	2.719	0	0				
23:52	41.4	8.925	125.2	2.442	2.717	0	0				
23:54	50.33	8.844	246.3	2.444	2.716	0	0				
23:56	58.56	8.691	418	2443E-5	2.714	0	0				
23:57	0	0	0	0	0	0	0	Lower Pump Rate			
23:57	63.56	8.095	493.9	1.253	1.733	0	0				
23:59	68.33	7.836	1268	7014E-5	1.274	0	0				
23:59	0	0	0	0	0	0	0	Bump Top Plug			
0:00	0	0	0	0	0	0	0	Bleed Off Pressure			
0:01	68.34	6.577	935	1034E-16	1878E-16	0	0				
0:02	68.62	1.027	9.096	.2306	2768E-28	0	0				
0:04	68.99	9158E-5	835.9	1506E-6	1698E-6	0	0				

Post Job Summary									
Average Pump Rates, bpm					Volume of Fluid Injected, bbl				
Slurry	N2	Mud	Maximum Rate		Total Slurry	Mud	Spacer	N2	
5	0	0	5		106	0	25	0	
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density		
1278	1278	250	1278	0		0 bbl	0 lb/gal		
Avg. N2 Percent		Designed Slurry Volume		Displacement	☐ Cement Circulated to Surface?		Volume 0 bbl		
0 %		0 bbl		72 bbl	☐ Washed Thru Perfs To		0 ft		
Customer or Authorized Representative				Dowell Supervisor			☐ Circulation Lost ☒ Job Completed		
RUSSELL WORLEY				Jeffrey Dutton					

RECEIVED
STATE GEOLOGICAL COMMISSION

MAR 3 1998

CONSERVATION DIVISION
Wichita, Kansas

Schlumberger

Dowell

Cementing Service Report

ORIGINAL

15-129-21550

Customer

MOBIL DRILLING

Job Number

20034278

Well L. M. TILLET 3		Location (legal) 21, 34S, 39W		Dowell Location Ulysses, KS		Service Date 12/9/97	
Field HUGOTON		Formation Name/Type Dolomite		Deviation 0 °		Bit Size 7.88 in	
County Morton		State/Province KS		Well MD 3,007 ft		Well TVD 3,007 ft	
Rig Name NORSEMAN 2		Drilled For Gas		Service Via Land		Casing/Liner	
Offshore Zone		Well Class New		Well Type Development		Pore Press. Gradient	
Drilling Fluid Type Bentonite		Max. Density 9.2 lb/gal		Plastic Viscosity 0 cp		Tubing/Drill Pipe	
Service Line Cementing		Job Type Cem Prod Casing		Depth, ft		Size, in	
Max. Allowed Tubing Pressure 2500 psi		Max. Allowed Ann. Pressure 2500 psi		Wellhead Connection Single cement head		Perforations/Open Hole	
Service Instructions Safely cement 5 1/2 production casing as per customer request. Loc. 63010 Acc. Code. 4903 I.D. RDWORLEY Field est. \$ 6423.58		Top, ft		Bottom, ft		spf	
		0		0		0	
		0		0		0	
		0		0		0	
		Treat Down Casing		Displacement 72 bbl		Packer Type n/a	
		Tubing Vol. 0 bbl		Casing Vol. 73.1 bbl		Annular Vol. 92.6 bbl	
						Packer Depth ft	
						Open Hole Vol 180 bbl	
Casing/Tubing Secured ☒		1 Hole Volume Circulated prior to Cementing ☐		Casing Tools		Squeeze Job	
Lift Pressure: 550 psi		Pipe Rotated ☐		Pipe Reciprocated ☐		Shoe Type: Guide	
No. Centralizers: 14		Top Plugs: 1		Bottom Plugs: 0		Shoe Depth: 2997 ft	
Cement Head Type: Single		Job Scheduled For: 12/12/97 18:00		Arrived on Location: 12/12/97 18:00		Leave Location: 12/13/97 1:00	
		Stage Tool Type n/a		Stage Tool Depth: ft		Tool Type: Tool Depth: 0 ft	
		Collar Type: Auto-Fill		Collar Depth: 2950 ft		Tail Pipe Size: 0 in	
						Tail Pipe Depth: 0 ft	
						Sqz Total Vol: 0 bbl	
Time	CumVol	Density	Pressure U1	Pump	Unit 1 Pump 2	Message	
24 hr clock	bbl	ppg	psi	bpm	bpm		
23:09	0	-6.25	-3625	0	0	START ACQUISITION	
23:11	.1752	8.394	261.8	7206E-5	288E-5		
23:12	0	0	0	0	0	Pressure Test Lines	
23:13	.2264	8.396	301.2	2365E-10	3594E-18		
23:14	0	0	0	0	0	Start Job	
23:15	.5148	8.409	17.53	.6309	1.84		
23:16	9.228	8.364	130.9	2.429	2.718		
23:18	18.14	8.272	144.8	2.437	2.721		
23:19	0	0	0	0	0	[CumVol]=24.72 bbl	
23:19	0	0	0	0	0	Reset Volume	
23:20	0	0	0	0	0	Start Mixing Lead Slurry.	
23:20	2.247	12.59	193.4	2.414	2.717		
23:22	11.17	11.57	143.3	2.451	2.72		
23:23	20.1	11.45	106.9	2.456	2.714		
23:25	29.02	11.55	104.6	2.443	2.718		
23:27	37.96	11.69	103.5	2.457	2.72		
23:28	46.9	11.54	100.8	2.468	2.721		
23:30	55.83	11.67	105.4	2.453	2.72		
23:32	64.78	11.29	96.67	2.467	2.719		
23:32	0	0	0	0	0	End Lead Slurry	
23:32	0	0	0	0	0	[CumVol]=67.39 bbl	
23:32	0	0	0	0	0	Reset Volume	