

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

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: RECEIVED

Well Name: KANSAS CORPORATION

Comp. Date DEC 7 1997 Old Total Depth 12-116-97

Deepening Re-perf. Conv. to Inj/SWD PBTD

Plug Back Docket No. CONSERVATION DIVISION

Commingled Docket No. WICHITA

Dual Completion Docket No.

Other (SWD or Inj?) Docket No.

9-5-97 9-8-97 10-9-97

Spud Date Date Reached TD Completion Date

API NO. 15- 189-22230000

County Stevens

- SW - NE - NE Sec. 36 Twp. 34 Rge. 38 X E W

1300 Feet from S/N (circle one) Line of Section

1300 Feet from E/W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

SE, NW or SW (circle one)

Lease Name Harrison #1 Unit Well # 2

Field Name Hugoton

Producing Formation Chase

Elevation: Ground 3169 KB 3178

Total Depth 2943 PBTD 2893

Amount of Surface Pipe Set and Cemented at 687 Feet

Multiple Stage Cementing Collar Used? Yes 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 Att. 1, 4-22-98 U.C.
(Data must be collected from the Reserve Pit)

Chloride content 5,000 ppm Fluid volume 400 bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite:

Operator Name Mobil Oil Corporation

Lease Name CONSERVATION DIVISION

License No. 5208

Quarter Sec. Twp. S Rng. E/W

County Docket No.

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 12-15-97

Subscribed and sworn to before me this 15th day of December, 19 97.

Notary Public Lynn K. Hunt

Date Commission Expires February 20, 2001

7-98.kcc

K.C.C. OFFICE USE ONLY		
F	<input type="checkbox"/>	Letter of Confidentiality Attached
C	<input type="checkbox"/>	Wireline Log Received
C	<input type="checkbox"/>	Geologist Report Received
Distribution		
<input checked="" type="checkbox"/>	KCC	<input type="checkbox"/> SWD/Rep
<input type="checkbox"/>	KGS	<input type="checkbox"/> Plug
		<input type="checkbox"/> NGPA
		<input type="checkbox"/> Other
		(Specify)



Operator Name Mobil Oil Corporation Lease Name Harrison #1 Unit Well # 2
 Sec. 36 Twp. 34 Rge. 38 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 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:
 NO LOGS RUN

Log Formation (Top), Depth and Datums Sample

Name	Top	Datum
------	-----	-------

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#	687	Class C Class C	225 150	50:50 C/poz 50:50 C/poz
Production Casing	7.875	5.500	14#	2933	Class C Class C	225 100	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
2 SPF	2690-2700	Acid: 1,000 gals 7.5% HCL	
	2754-2760	Fracd: 36,000 gals WF130 in 70q foam	
	2815-2830	110,600 lbs 16/30 sand	

TUBING RECORD Size Set At Packer At Liner Run Yes No

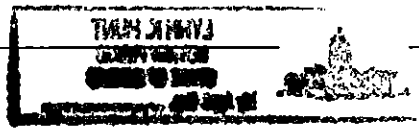
Date of First, Resumed Production, SWD or Inj. 9-24-97 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		233			

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

METHOD OF COMPLETION Open Hole Perf. Dually Comp. Commingled Other (Specify)

Production Interval 2690 2830



CEMENTING SERVICE REPORT

Schlumberger
Dowell

TREATMENT NUMBER: 1180
DATE: 9-6-97
STAGE: DS DISTRICT: Ulysses, KS

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

WELL NAME AND NO. Harrison #1-2 LOCATION (LEGAL) Sec. 36-34s-38w RIG NAME: Norseman #2

FIELD-POOL Hugoton FORMATION _____ WELL DATA: BIT SIZE 8 1/2 CSG/Liner Size 8 1/2 BOTTOM _____ TOP _____

COUNTY/PARISH Stevens STATE KS APL. NO. _____ TOTAL DEPTH 29 WEIGHT 29

NAME Mobil Oil Corp ROT CABLE FOOTAGE 687 MUD TYPE _____ GRADE USSP

AND _____ ORIGINAL _____ BHST _____ THREAD 8ed

ADDRESS _____ MUD DENSITY _____ LESS FOOTAGE SHOE JOINT(S) _____ TOTAL _____

ZIP CODE _____ MUD VISC. _____ Disp. Capacity 40.1

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

Float	TYPE <u>Ball Flo plate</u>	DEPTH <u>1043</u>	TYPE _____	DEPTH _____
SHOE	TYPE <u>cmtnose</u>	DEPTH <u>687</u>	TYPE _____	DEPTH _____

Head & Plugs TBG D.P. SQUEEZE JOB

Double WEIGHT GRADE THREAD NEW USED

Swage GRADE THREAD NEW USED

Knockoff GRADE THREAD NEW USED

TOTAL _____ Bbls

SPECIAL INSTRUCTIONS _____

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE 282 PSI CASING WEIGHT ÷ SURFACE AREA (3.14 x R²) _____

PRESSURE LIMIT _____ PSI BUMP PLUG TO 680 PSI

ROTATE _____ RPM RECIPROCATE _____ FT No. of Centralizers _____

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR TIME DATE: <u>0730 9-6</u>			ARRIVE ON LOCATION TIME DATE: <u>0730 9-6</u>		LEFT LOCATION TIME DATE: <u>0700 9-6</u>	
	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL			
0449	1534							PRE-JOB SAFETY MEETING + psi test			
0451	0	25			5.7	H ₂ O		start H ₂ O ahead			
0456	150	76			5.7	cmtn	12.8	start lead cmtn			
0505	140	54			5.6	cmtn	12.8	psi check			
0510	110	33			5.6	cmtn	14.6	start tail cmtn			
0511	220	5			5.6	cmtn	14.6	psi check			
0514	180	20			5.6	cmtn	14.6	psi check			
0516	0	40 ⁹			5.7	H ₂ O		shut down drop top plug			
0518	0	10			5.7	H ₂ O		start displacement			
0520	80	20			5.7	H ₂ O		psi check			
0522	150	30			5.7			psi check			
0524	200	34			5.6			psi check			
0524	225	35			5.6			cmtn to surface			
0525	275	40			2			lower rate			
0526	190	41			2			psi check			
0528	680							bump top plug shut in cmtn manifold			
0529								lead psi			

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DEC 16 1997
CONSERVATION DIVISION
WICHITA, KS

REMARKS END JOB

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	225	1.89	50% $\text{CaSO}_4 + 6\% \text{gel} + 3\% \text{CaCl}_2 + 5\% \text{D44} + \frac{1}{4} \#1079$				75.7	12.8
2.								
3.	150	1.22	50% $\text{CaSO}_4 + 2.5\% \text{CaCl}_2 + \frac{1}{4} \#1079$				32.5	14.6
4.								
5.								
6.								

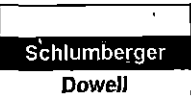
BREAKDOWN FLUID TYPE _____ VOLUME _____ DENSITY _____ PRESSURE _____ MAX. _____ MIN. _____

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

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. 40.9 Bbls TYPE OF WELL OIL STORAGE BRINE WATER GAS INJECTION WILDCAT

Washed Thru Perfs YES NO TO _____ FT. MEASURED DISPLACEMENT WIRELINE

PERFORATIONS _____ CUSTOMER REPRESENTATIVE R. Wooley DS SUPERVISOR T. Esquivel



Cementing Service Report

15-189-22223

ORIGINAL

Well HARRISON #1 UNIT 2		Location (legal) 36, 34S, 38W		Dowell Location Ulysses, KS		Service Date 9/8/97				
Field HUGOTON		Formation Name/Type Dolomite		Deviation 0 °	Bit Size 7.88 in	Well MD 2,943 ft	Well TVD 2,943 ft			
County Stevens		State/Province KS		BHP 0 psi	BHST 0 °F	BHCT 0 °F	Pore Press. Gradient 0 psi/ft			
Rig Name NORSEMAN 4	Drilled For Gas	Service Via Land		Casing/Liner						
Water Depth	Well Class 101	Well Type Development		Depth, ft 2933	Size, in 5.5	Weight, lb/ft 14	Grade 0			
Drilling Fluid Type Bentonite	Max. Density 9.3 lb/gal	Plastic Viscosity 0 cp		Tubing/Drill Pipe						
Service Line Cementing	Job Type Cem Prod Casing		Depth, ft 0	Size, in 0	Weight, lb/ft 0	Grade 0	Thread 0			
Max. Allowed Tubing Pressure 0 psi	Max. Allowed Ann. Pressure 0 psi	Wellhead Connection Single cement head		Perforations/Open Hole						
Service Instructions Cement and equipment to safely cement 5 1/2 casing as per customer's request. Field Est. \$5454.85 Acc Code 4903 Loc# 63199 I.D. RD WORLEY				Top, ft 0	Bottom, ft 0	spf 0	No. of Shots 0	Total Interval 0 ft		
				Diameter 0	in 0	Packor Depth 0	ft 0	Open Hole Vol 0	bbl 0	
				Treat Down Casing	Displacement 70.4 bbl	Packer Type 0	Packer Depth 0	ft 0	Open Hole Vol 0	bbl 0
				Tubing Vol. 0	Casing Vol. 71.56	Annular Vol. 0	Packor Depth 0	ft 0	Open Hole Vol 0	bbl 0
				Casing/Tubing Secured <input type="checkbox"/>	1 Hole Volume Circulated prior to Cementing <input checked="" type="checkbox"/>		Casing Tools			
Lift Pressure: 505 psi	Pipe Rotated <input type="checkbox"/>	Pipe Reciprocated <input type="checkbox"/>		Shoe Type: Guide	Squeeze Type					
No. Centralizers: 10	Top Plugs: 1	Bottom Plugs: 0		Shoe Depth: 2933 ft	Tool Type:					
Cement Head Type: Single	Job Scheduled For: 9/8/97 8:00	Arrived on Location: 9/8/97 8:00	Leave Location:		Stage Tool Type	Tool Depth: 0 ft				
Job Scheduled For: 9/8/97 8:00	Arrived on Location: 9/8/97 8:00	Leave Location:		Stage Tool Depth: 0 ft	Tail Pipe Size: 0 in	Tail Pipe Depth: 0 ft				
Collar Type: Auto-Fill	Collar Depth: 2886 ft	Squeeze Job		Squeeze Job	Squeeze Job					
Collar Depth: 2886 ft	Squeeze Job	Squeeze Job		Squeeze Job	Squeeze Job					
Time	Density	Pressure U/I	TotFlowrate	Message						
24 hr clock	ppg	psi	bpm							
11:38	0	0	0	START ACQUISITION						
11:38	8.486	-4.563	0							
11:38	0	0	0	Pressure Test Lines						
11:39	8.471	3314	3386E-6							
11:39	0	0	0	Bleed Off Pressure						
11:40	8.485	-2.398	1251E-12							
11:41	0	0	0	[CumVol]=.2641 bbl						
11:41	0	0	0	Reset Volume						
11:41	0	0	0	Start Pumping Water						
11:41	8.616	112.7	2.484	RECEIVED KANSAS CORPORATION COMMISSION						
11:42	8.61	181.2	5.585							
11:43	8.606	200	5.604	DEC 10 1997						
11:44	8.576	221.4	5.588							
11:45	8.606	279.2	5.606							
11:46	8.529	276	5.591	CONSERVATION DIVISION WICHITA, KS						
11:46	0	0	0	[CumVol]=26.14 bbl						
11:46	0	0	0	Reset Volume						
11:46	0	0	0	Start Mixing Lead Slurry						
11:46	11.67	320.3	5.591							
11:47	11.48	288.6	5.592							
11:48	11.57	276.6	5.592							

Well		Field		Service Date		Customer		Job Number	
HARRISON #1 UNIT #2		HUGOTON		9/8/97		IOBIL OIL CORP V39050075		20017184	
Time	Density	Pressure U1	TotFlowrate					Message	
24 hr clock	ppg	psi	bpm						
11:49	11.43	252	5.594	0	0	0	0		
11:50	11.69	245.9	5.592	0	0	0	0		
11:51	11.54	219.8	5.592	0	0	0	0	ORIGINAL	
11:52	11.57	208.6	5.59	0	0	0	0		
11:53	11.65	196.9	5.592	0	0	0	0		
11:54	11.58	171.6	5.593	0	0	0	0		
11:55	11.56	126.5	5.591	0	0	0	0		
11:56	11.57	99.09	5.592	0	0	0	0		
11:57	11.72	101.1	5.58	0	0	0	0		
11:58	11.57	96.81	5.592	0	0	0	0		
11:59	11.57	100.4	5.598	0	0	0	0		
12:00	11.54	97.46	5.587	0	0	0	0		
12:00	11.56	99.1	5.581	0	0	0	0		
12:01	11.55	100.9	5.592	0	0	0	0		
12:02	11.54	100.4	5.595	0	0	0	0		
12:03	11.67	100.6	5.592	0	0	0	0		
12:04	11.52	99.46	5.584	0	0	0	0		
12:05	11.56	97.85	5.591	0	0	0	0		
12:06	11.57	97.12	5.592	0	0	0	0		
12:07	0	0	0	0	0	0	0	Reset Volume	
12:07	0	0	0	0	0	0	0	[CumVol]=117.1 bbl	
12:07	0	0	0	0	0	0	0	Start Mixing Tail Slurry	
12:07	12.97	123.5	5.591	0	0	0	0		
12:08	13.26	143.6	5.587	0	0	0	0		
12:09	13.85	40.97	2.385	0	0	0	0		
12:10	14.58	98.07	3.912	0	0	0	0		
12:11	14.48	96.59	3.911	0	0	0	0		
12:12	15.21	105.6	3.916	0	0	0	0		
12:13	15.06	100.4	3.904	0	0	0	0		
12:13	0	0	0	0	0	0	0	Shutdown	
12:13	0	0	0	0	0	0	0	Reset Volume	
12:13	0	0	0	0	0	0	0	[CumVol]=29.04 bbl	
12:14	14.3	-6.29	1186E-5	0	0	0	0		
12:17	8.523	-4.564	5576E-11	0	0	0	0		
12:17	0	0	0	0	0	0	0	Drop Top Plug	
12:17	0	0	0	0	0	0	0	Start Displacement	
12:18	8.635	30.93	5.586	0	0	0	0		
12:19	8.431	43.89	5.601	0	0	0	0		
12:20	8.327	35.45	5.586	0	0	0	0		
12:21	8.357	39.54	5.587	0	0	0	0		
12:22	8.276	42.04	5.592	0	0	0	0		
12:23	8.104	94.99	5.592	0	0	0	0		
12:24	8.221	139.6	5.582	0	0	0	0		
12:25	8.395	177.6	5.591	0	0	0	0		
12:26	8.151	226.1	5.59	0	0	0	0		
12:27	8.195	292	5.593	0	0	0	0		
12:27	7.926	379.1	5.589	0	0	0	0		
12:28	7.498	472	5.591	0	0	0	0		
12:29	0	0	0	0	0	0	0	Lower Pump Rate	
12:29	7.087	404.3	1.936	0	0	0	0		
12:30	6.278	434.6	1.928	0	0	0	0		
12:31	4.67	456.2	1.926	0	0	0	0		
12:32	2.437	484.3	1.927	0	0	0	0		

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KANSAS CORPORATION COMMISSION
DEC 13 1997
CONSERVATION DIVISION
WICHITA, KS

Well HARRISON #1 UNIT #2		Field HUGOTON		Service Date 9/8/97		Customer MOBIL OIL CORP V39050079		Job Number 20017184		
Time	Density	Pressure U1	Total Flowrate					Message		
24 hr clock	ppg	psi	bpm							
12:33	1.281	517.6	1.924	0	0	0	0			
12:34	0	0	0	0	0	0	0	Bump Top Plug		
12:34	0	0	0	0	0	0	0	Bleed Off Pressure		
12:34	.175	1207	4329E-9	0	0	0	0			
12:35	.1681	5.528	2082E-15	0	0	0	0			
12:35	0	0	0	0	0	0	0	End Job		
Post Job Summary										
Average Pump Rates, bpm				Volume of Fluid Injected, bbl						
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2			
4.5	0	0	5.6	143	0	26	0			
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density			
1200	505	250	0	0		0 bbl	0 lb/gal			
Avg. N2 Percent	Designed Slurry Volume		Displacement		Cement Circulated to Surface? Volume		bbl			
0 %	0 bbl		70.7 bbl		<input type="checkbox"/> Washed Thru Porfs To		0 ft			
Customer or Authorized Representative				Dowell Supervisor			Circulation Lost			Job Completed
Russell Worley				Charley King			<input type="checkbox"/>			<input checked="" type="checkbox"/>

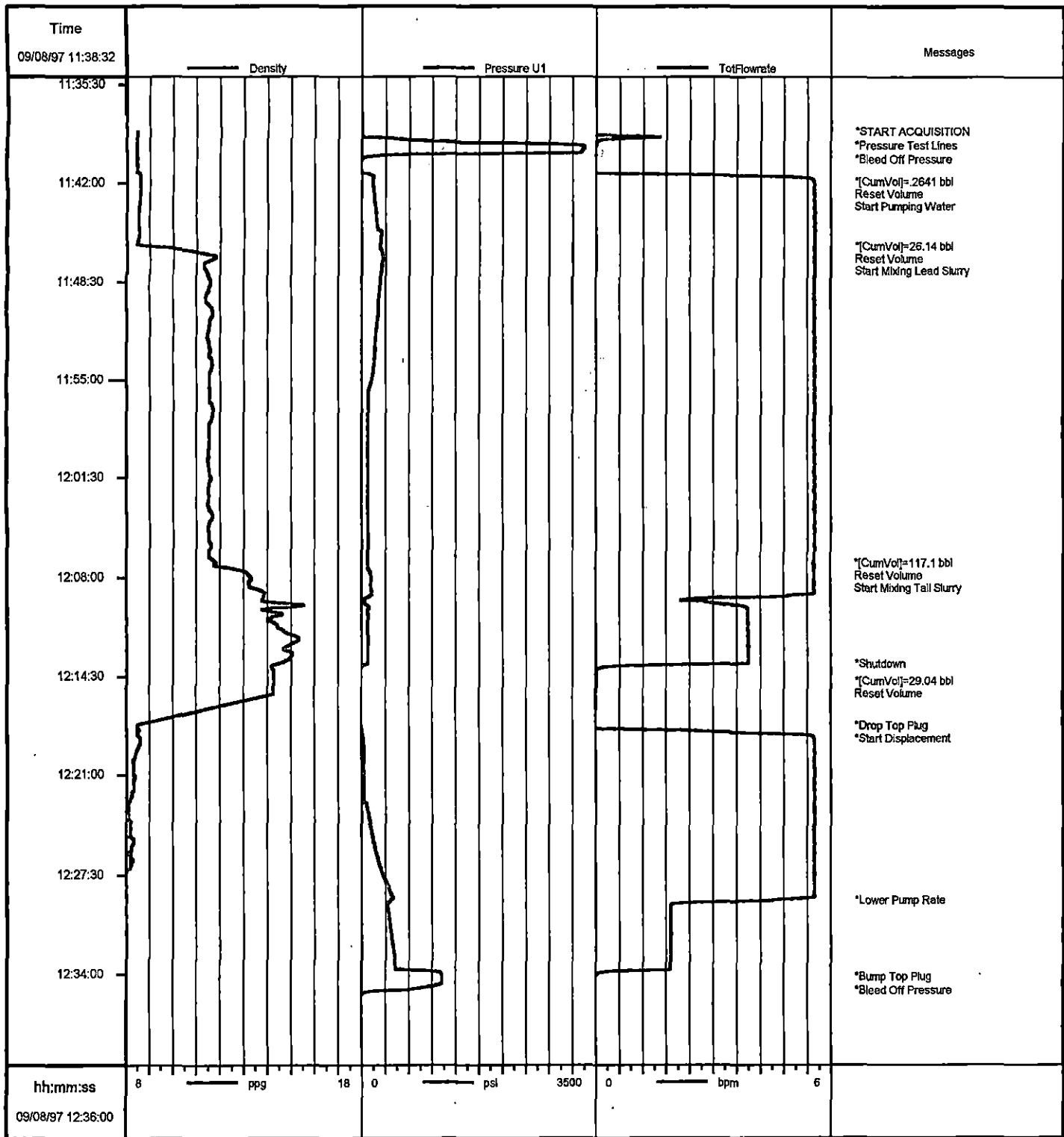
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KANSAS CORPORATION COMMISSION

DEC 16 1997

CONSERVATION DIVISION
WICHITA, KS

Well	Harrison 1-2	Client	Mobil	ORIGINAL
Field	Hugoton	SIR No.	20017184	
Country	USA	Job Date	9/8/97 11:38:32 AM	



Job: mobil

09/08/1997 12:45

* Mark of Schlumberger