



SIDE TWO

Operator Name MOBIL OIL CORPORATION Lease Name BROWER UNIT Well # 3  
 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Electric Log Run (Submit Copy.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th align="center" colspan="3">Formation Description</th> </tr> <tr> <td></td> <td align="center"><input checked="" type="checkbox"/> Log</td> <td align="center"><input type="checkbox"/> Sample</td> </tr> <tr> <th align="left">Name</th> <th align="center">Top</th> <th align="center">Bottom</th> </tr> <tr> <td>CHASE</td> <td align="center">2629</td> <td></td> </tr> <tr> <td>COUNCIL GROVE</td> <td align="center">2946</td> <td></td> </tr> <tr> <td>ADMIRE</td> <td align="center">3260</td> <td></td> </tr> <tr> <td>LANSING</td> <td align="center">4232</td> <td></td> </tr> <tr> <td>KANSAS CITY</td> <td align="center">4596</td> <td></td> </tr> <tr> <td>MARMATON</td> <td align="center">4938</td> <td></td> </tr> <tr> <td>CHEROKEE</td> <td align="center">5154</td> <td></td> </tr> <tr> <td>MORROW</td> <td align="center">5590</td> <td></td> </tr> <tr> <td>CHESTER</td> <td align="center">5970</td> <td></td> </tr> <tr> <td>ST. GENEVIEVE</td> <td align="center">6120</td> <td></td> </tr> <tr> <td>ST. LOUIS</td> <td align="center">6257</td> <td></td> </tr> </table>	Formation Description				<input checked="" type="checkbox"/> Log	<input type="checkbox"/> Sample	Name	Top	Bottom	CHASE	2629		COUNCIL GROVE	2946		ADMIRE	3260		LANSING	4232		KANSAS CITY	4596		MARMATON	4938		CHEROKEE	5154		MORROW	5590		CHESTER	5970		ST. GENEVIEVE	6120		ST. LOUIS	6257	
Formation Description																																											
	<input checked="" type="checkbox"/> Log	<input type="checkbox"/> Sample																																									
Name	Top	Bottom																																									
CHASE	2629																																										
COUNCIL GROVE	2946																																										
ADMIRE	3260																																										
LANSING	4232																																										
KANSAS CITY	4596																																										
MARMATON	4938																																										
CHEROKEE	5154																																										
MORROW	5590																																										
CHESTER	5970																																										
ST. GENEVIEVE	6120																																										
ST. LOUIS	6257																																										

**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#	1824'	CL C LITE	540	65:35:6+3%CA
					CL C	310	+2% CACL

Shots Per Foot	PERFORATION RECORD Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	
		Amount	Depth
	PLUGGED & ABANDONED		

**TUBING RECORD** Size NA Set At NA Packer At NA Liner Run  Yes  No

Date of First Production P&A'D 1-15-91  
 Producing Method  Flowing  Pumping  Gas Lift  Other (Explain) DRY

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

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 \_\_\_\_\_

ESTHER M. MERTER  
 CLIENT WATCH  
 SACRAMENTO, CALIF.

ORIGINAL

\*\*\*\*\*

MSD991

\*\*\* PRISM \*\*\*  
Primary Cementing Report

Page 1

CONFIDENTIAL

Lease: BROWER UNIT  
Field: OUTPOST  
API #: 15-189- -00

Well #: 003  
State: KS  
Ppty ID: 1335300

Well ID: 0018712  
County: STEVENS  
OCSG #:

FEB 05 1992

FROM CONFIDENTIAL

=====  
Cementing Job Information  
=====

Date: 01/07/1991      Starting Time: 07:45      Ending Time: 08:58

Cementing Company: HALLIBURTON      District: OKLAHOMA CITY, OK

Cementing Company Rating (1 to 10, 10 = Best): 9

Was top plug dropped? Y  
Was bottom plug dropped?  
Did plug bump? Y  
Was there full circulation while pumping? Y  
Amount of cement returns to surface:      Bbls  
Did floats hold? Y  
Flow regime: LAMINAR

Was the pipe reciprocated before cementing? Y  
Was the pipe reciprocated during cementing? Y  
Was the pipe rotated before cementing? N  
Was the pipe rotated during cementing? N  
If pipe was rotated, Type of rotation equipment:  
Torque on rotated pipe:      ft/lbs  
Rotation Speed:      RPM

Job Remarks: HALLIBURTON PUMPED JOB RE DESIGN W/NO PROBLEMS

=====  
Stage Information  
=====

Stage No.: 1

Casing O.D.: 8.625 In.  
Hole Size: 12.250 In.  
Estimated Top of Cement for this stage: 0 Ft.  
Estimated Bottom of Cement for this stage: 1824 Ft.  
Time to mix and pump this stage: 41 (Hr:Min)  
Average Pump Rate: 6.5 BPM  
Maximum Pump Pressure: 650 PSIG  
Foam Cement? N

STATE OF OKLAHOMA  
OIL & GAS COMMISSION  
RECEIVED  
FFR 7 1991  
COURTESY OF HALLIBURTON  
L. J. HARRIS

Lead Composition: CLASS C LITE 65:35:6 + 3% CACL  
Tail Composition: CLASS C + 2% CACL

	Lead	Tail
	----	----
No. of Sacks	540	310
Slurry Yields (CuFt/Sk)	1.99	1.33
Slurry Density (Ppg)	12.4	14.8

Lease: BROWER UNIT

Well #: 003

Well ID: 0018712

**CONFIDENTIAL**

Slurry Volume (Bbl)	191.0	73.0
Mix Water Amount (Gal/SK)	10.97	6.32
Mix Water Type	FRESH	FRESH
Thickening Time (Hr:Min)		
12-Hr Compressive Strength (PSI)		
24-Hr Compressive Strength (PSI)		
Compressive Strength Test Temperature (F)		
Fluid Loss (cc)		
Free Water (cc)		

FEB 05 1992

FROM CONFIDENTIAL

===== Flush Information =====

Density	Volume	Description
(PPG)	(Bbls)	
-----	-----	-----

Preflush  
 Flush  
 Postflush  
 Displacement

Displacement Rate: 5.0 BPM

Stage Remarks:

RECEIVED  
STATE OF MISSOURI COMMISSION

FEB 7 1991

CONSERVATION DIVISION  
W. M. HANCOCK

Report Generated on: 01/27/91 @ 08:44 End of Report.....

\*\*\*\*\*

# ORIGINAL TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

RELEASED

FEB 9 5 1992

## Drill-Stem Test Data

AAE 15-189-21464

**CONFIDENTIAL**

Well Name & No. <u>BROWER UNIT 1#3</u>		Test No. <u>1</u>	Date <u>1/13/91</u>
Company <u>MOBIL OIL CORPORATION</u>		Zone Tested <u>LWR MORROW</u>	
Address <u>2319 NORTH KANSAS LIBERAL KS 67801</u>		Elevation <u>3136 KB</u>	
Co. Rep./Geo. <u>MR JAY CUNNINGHAM</u>		Cont. <u>UNIT #19</u>	Est. Ft. of Pay <u>0</u>
Location: Sec. <u>1</u>	Twp. <u>32S</u>	Rge. <u>37W</u>	Co. <u>STEVENS</u> State <u>KANSAS</u>

Interval Tested <u>5905-5986</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>81</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>5900</u>	Hole Size — 77/8" _____ Rubber Size — 63/4" _____
Bottom Packer Depth <u>5905</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>0</u>
Total Depth <u>5986</u>	Drill Collar — 2.25 Ft. Run <u>780</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>47</u> Filtrate <u>12.0</u>

Tool Open @ N/A Initial Blow SURFACE BLOW SLOWLY BUILT TO 2"  
THROUGHOUT-ISI: BLED OFF BLOW-NO RETURN

Final Blow SURFACE BLOW @1/2" IN BUCKET STAYED STEADY THROUGHOUT  
FSI: BLED OFF BLOW-NO RETURN

Recovery — Total Feet <u>90</u>	Flush Tool? <u>NO</u>
Rec. <u>90</u> Feet of <u>DRILLING MUD</u>	
Rec. <u>0</u> Feet of _____	
Rec. <u>0</u> Feet of _____	
Rec. <u>0</u> Feet of _____	
Rec. <u>0</u> Feet of _____	

BHT 136 °F Gravity \_\_\_\_\_ °API @ 0 °F Corrected Gravity 0 °API  
 RW 2.93 @ 70 °F Chlorides 2000 ppm Recovery Chlorides 1100 ppm System

(A) Initial Hydrostatic Mud <u>2799.6</u> PSI	AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>71.3</u> PSI	@ (depth) <u>5910</u>	w/Clock No. <u>27567</u>
(C) First Final Flow Pressure <u>71.3</u> PSI	AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>151.6</u> PSI	@ (depth) <u>5981</u>	w/Clock No. <u>30418</u>
(E) Second Initial Flow Pressure <u>71.3</u> PSI	AK1 Recorder No. <u>0</u>	Range <u>0</u>
(F) Second Final Flow Pressure <u>71.3</u> PSI	@ (depth) <u>0</u>	w/Clock No. <u>0</u>
(G) Final Shut-In Pressure <u>170.5</u> PSI	Initial Opening <u>15</u>	
(H) Final Hydrostatic Mud <u>2780.6</u> PSI	Initial Shut-In <u>30</u>	
	Final Flow <u>60</u>	
	Final Shut-In <u>120</u>	

MR ROD STEINBRINK

1200

Our Representative \_\_\_\_\_

TOTAL PRICE \$ \_\_\_\_\_

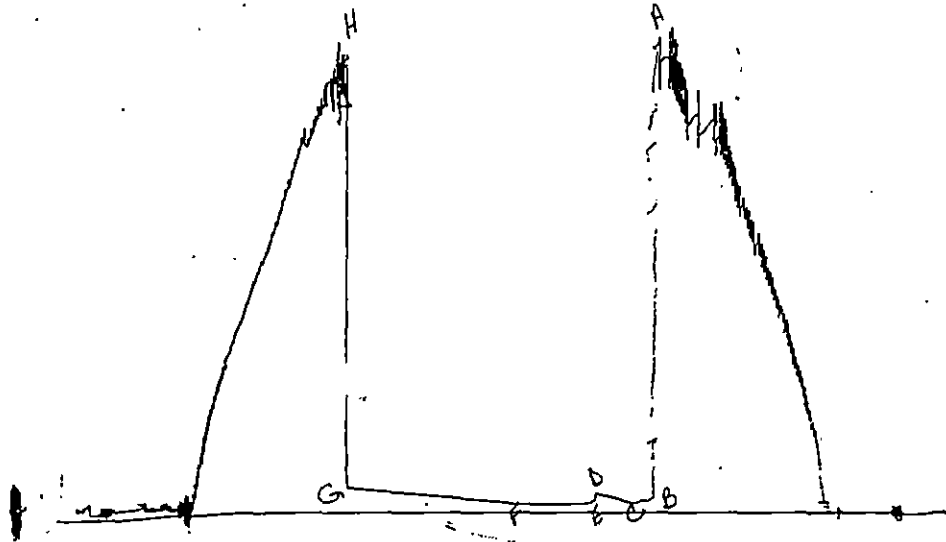
ORIGINAL

DST# 1

RECORDER# 13309

DST #1  
13309

CONFIDENTIAL



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	2810	2799.6	PSI
(B) First Initial Flow Pressure	72	71.3	PSI
(C) First Final Flow Pressure	72	71.3	PSI
(D) Initial Closed-In Pressure	145	151.6	PSI
(E) Second Initial Flow Pressure	72	71.3	PSI
(F) Second Final Flow Pressure	72	71.3	PSI
(G) Final Closed-In Pressure	166	170.5	PSI
(H) Final Hydrostatic Mud	2781	2780.6	PSI

TRILOBITE TESTING COMPANY ORIGINAL

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

CONFIDENTIAL

Ticket No. 3019 Date 1/13/91
Company Name MOBIL OIL CORPORATION
Lease BROWER UNIT 1#3 Test No. 1
County STEVENS Sec. 1 Twp. 32S Rng. 37W

SAMPLER RECOVERY

Gas 0 CU.FT. 0 ML
Oil 0 ML
Mud 4000 ML
Water 0 ML
Other 0 ML
Pressure 100 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 1100 ppm.
Resistivity 0 ohms @ 0 F
Viscosity 47
Mud Weight 9.0
Filtrate 12.0
Other

SAMPLER ANALYSIS

Resistivity 2.993 ohms @ 70 F
Chlorides 2000 ppm.
Gravty 0 corrected @ 80 F

PIPE RECOVERY

TOP
Resistivity 0 ohms @ 0 F
Chlorides 0 ppm.
MIDDLE
Resistivity 0 ohms @ 0 F
Chlorides 0 ppm.
BOTTOM
Resistivity 2.93 ohms @ 70 F
Chlorides 2000 ppm.

ORIGINAL

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

CONFIDENTIAL

No 3019

Well Name & No. Brower Unit #3 Test No. 1 Date 1-13-91  
 Company Mobil Oil Corporation Zone Tested Lower Morrow  
 Address 2319 North Kansas Liberal, KS. 67901 Elevation 3136 (KB)  
 Co. Rep./Geo. Jay Cunningham Cont. Unit #19 Est. Ft. of Pay \_\_\_\_\_  
 Location: Sec. 1 Twp. 32 S Rge. 37 W Co. Stevens state KS.  
 No. of Copies 5 Distribution Sheet Yes  No  Turnkey Yes  No

Interval Tested 5905 - 5986 Drill Pipe Size 4 1/2" XH  
 Anchor Length 81' Top Choke - 1" Bottom Choke - 3/4"  
 Top Packer Depth 5900 Hole Size - 7 7/8" Rubber Size - 6 3/4"  
 Bottom Packer Depth 5905 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
 Total Depth 5986 Drill Collar - 2.25 Ft. Run 780'  
 Mud Wt. 9.0 lb/gal. Viscosity 47 Filtrate 12.0

Tool Open @ \_\_\_\_\_ Initial Blow Surface blow slowly built to 5" throughout.  
 TSI: Bled off blow - no return.  
 Final Blow Surface blow @ 1/2" in bucket stayed steady throughout.  
 FSI: Bled off blow - no return.

Recovery - Total Feet 90' Flush Tool? No.

Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. 90' Feet of Drlg. Mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 136° °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API

RW 2.93 @ 70° °F Chlorides 2,000 ppm Recovery Chlorides 1,100 ppm System

(A) Initial Hydrostatic Mud	<u>2810</u>	<u>2781</u>	PSI	AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure	<u>72</u>	<u>58</u>	PSI	@ (depth) <u>5910</u>	w/Clock No. <u>27567</u>
(C) First Final Flow Pressure	<u>72</u>	<u>58</u>	PSI	AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure	<u>145</u>	<u>129</u>	PSI	@ (depth) <u>5981</u>	w/Clock No. <u>30418</u>
(E) Second Initial Flow Pressure	<u>72</u>	<u>58</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure	<u>72</u>	<u>58</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure	<u>166</u>	<u>153</u>	PSI	Initial Opening <u>15</u>	Test <u>750.00</u>
(H) Final Hydrostatic Mud	<u>2781</u>	<u>2746</u>	PSI	Initial Shut-In <u>30</u>	Jars <input checked="" type="checkbox"/> <u>200.00</u>
	<u>Black</u>	<u>White</u>		Final Flow <u>60</u>	Safety Joint <input checked="" type="checkbox"/> <u>50.00</u>
				Final Shut-In <u>120</u>	Straddle _____

Approved By M. J. Cunningham

Our Representative Rod Steinbrink

Circ. Sub  n/c  
 Sampler  200.00  
 Extra Packer \_\_\_\_\_  
 Other \_\_\_\_\_  
 TOTAL PRICE \$ 1200.00