

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name MONGEAU 'A' #5 Test No. 1 Date 4/16/93
Company OXY USA, INC. Zone ARBUCKLE
Address 110 S MAIN WICHITA KS 67202 Elevation 2185
Co. Rep./Geo. STEVE DAVIS Cont. ABERCROMBIE DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 27 Twp. 9S Rge. 19W Co. ROOKS State KS

Interval Tested 3609-3614 Drill Pipe Size 4.5" XH
Anchor Length 5 Wt. Pipe I.D. - 2.7 Ft. Run 375
Top Packer Depth 3604 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3609 Mud Wt. 9.1 lb/Gal.
Total Depth 3614 Viscosity 40 Filtrate 11.6

Tool Open @ 6:10 PM Initial Blow WEAK - DECREASING FROM 1" TO NO BLOW IN 30 MINUTES

Final Blow NO BLOW - FLUSHED TOOL

Recovery - Total Feet 20 Flush Tool? YES

Rec. 20 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 107 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 4500 ppm System

(A) Initial Hydrostatic Mud 2113.6 PSI AK1 Recorder No. 11058 Range 4475

(B) First Initial Flow Pressure 26.3 PSI @ (depth) 3599 w / Clock No. 30401

(C) First Final Flow Pressure 26.3 PSI AK1 Recorder No. 22150 Range 3925

(D) Initial Shut-in Pressure 26.3 PSI @ (depth) 3611 w / Clock No. 25814

(E) Second Initial Flow Pressure 26.3 PSI AK1 Recorder No. _____ Range _____

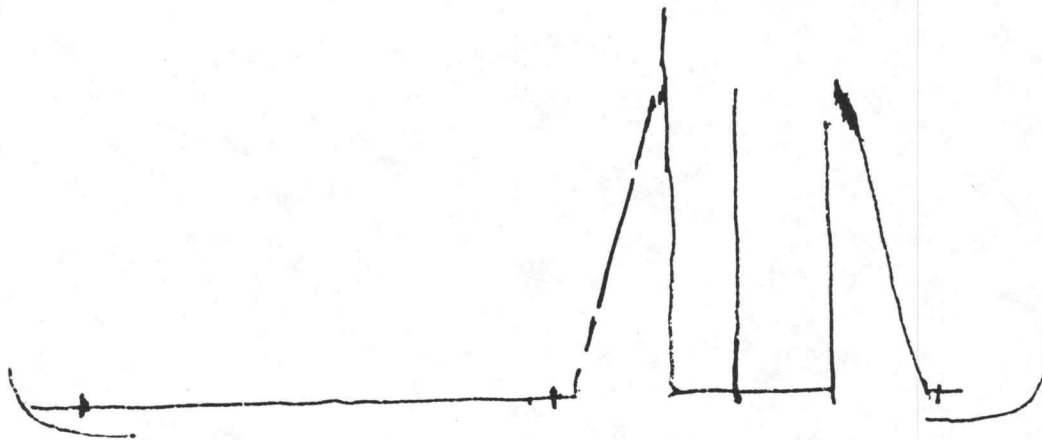
(F) Second Final Flow Pressure 26.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 26.3 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2086.7 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2109	2113.6
(B) FIRST INITIAL FLOW PRESSURE	22	26.3
(C) FIRST FINAL FLOW PRESSURE	22	26.3
(D) INITIAL CLOSED-IN PRESSURE	22	26.3
(E) SECOND INITIAL FLOW PRESSURE	22	26.3
(F) SECOND FINAL FLOW PRESSURE	22	26.3
(G) FINAL CLOSED-IN PRESSURE	22	26.3
(H) FINAL HYDROSTATIC MUD	2080	2086.7

TRILOBITE TESTING L.L.C.

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Test Ticket

No 5720

Well Name & No. <u>Mongeau "A" #5</u>	Test No. <u>1</u>	Date <u>4-16-93</u>
Company <u>Oxy USA, Inc.</u>	Zone Tested <u>Arb.</u>	
Address <u>110 S. Main, Wichita, Ks. 67202</u>	Elevation <u>2185 K.B.</u>	
Co. Rep./Geo. <u>Steve Davis</u>	Cont. <u>Aber #8</u>	Est. Ft. of Pay _____
Location: Sec. <u>27</u> Twp. <u>9</u> Rge. <u>19</u>	Co. <u>Rocks</u>	State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3609-3614</u>	Drill Pipe Size <u>4.5 XH</u>
Anchor Length <u>5'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3604</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3609</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>375</u>
Total Depth <u>3614</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.1</u> lb/gal.	Viscosity <u>40</u> Filtrate <u>11.6</u>
Tool Open @ <u>6:10 p.m.</u>	Initial Blow <u>weak-decreasing from 1" to no blow in 30 min.</u>
Final Blow <u>No blow - flushed Tool</u>	

Recovery — Total Feet <u>20</u>	Feet of Gas in Pipe _____	Flush Tool? <u>X</u>
Rec. <u>20</u> Feet Of <u>D.M.</u>	%gas _____ %oil _____ %water <u>100</u> %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT 107 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 4500 ppm System

- (A) Initial Hydrostatic Mud 2109 PSI Ak1 Recorder No. 11058 Range 4475
- (B) First Initial Flow Pressure 22 PSI @ (depth) 3599 w/Clock No. 30401
- (C) First Final Flow Pressure 22 PSI AK1 Recorder No. 22150 Range 3925
- (D) Initial Shut-In Pressure 22 PSI @ (depth) 3611 w/Clock No. 25814
- (E) Second Initial Flow Pressure 22 PSI AK1 Recorder No. _____ Range _____
- (F) Second Final Flow Pressure 22 PSI @ (depth) _____ w/Clock No. _____
- (G) Final Shut-In Pressure 22 PSI Initial Opening 30 Test _____
- (H) Final Hydrostatic Mud 2080 PSI Initial Shut-In 30 Jars _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE

Final Flow 30 Safety Joint _____
Final Shut-In 30 Straddle _____
Circ. Sub _____
Sampler _____
Extra Packer _____
Other _____
TOTAL PRICE \$ _____

Approved By Donald E. Shelden

Our Representative Dan Rangle

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name MONGEAU 'A' #5 Test No. 2 Date 4/17/93
Company OXY USA, INC. Zone ARBUCKLE
Address 110 S MAIN WICHITA KS 67202 Elevation 2185
Co. Rep./Geo. STEVE DAVIS Cont. ABERCROMBIE DRLG RIG #8 Est. Ft. of Pay _____
Location: Sec. 27 Twp. 9S Rge. 19W Co. ROOKS State KS

Interval Tested 3611-3623 Drill Pipe Size 4.5" XH
Anchor Length 12 Wt. Pipe I.D. - 2.7 Ft. Run 375
Top Packer Depth 3606 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3611 Mud Wt. 9.2 lb/Gal.
Total Depth 3623 Viscosity 49 Filtrate 9.6

Tool Open @ 5:40 AM Initial Blow 2" BLOW BUILDING TO 5 1/2"

Final Blow SURFACE BLOW BUILDING TO 4"

Recovery - Total Feet 230 Flush Tool? NO

Rec. 90 Feet of GAS IN PIPE
Rec. 120 Feet of CLEAN GASSY OIL 10%GAS/90%OIL
Rec. 110 Feet of OIL CUT MUD 20%OIL/80%WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 106 °F Gravity 26 °API @ 80 °F Corrected Gravity 24 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1796.8 PSI AK1 Recorder No. 22150 Range 3975

(B) First Initial Flow Pressure 50.7 PSI @ (depth) 3613 w / Clock No. 30401

(C) First Final Flow Pressure 52.6 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 630.7 PSI @ (depth) 3620 w / Clock No. 25814

(E) Second Initial Flow Pressure 85.2 PSI AK1 Recorder No. _____ Range _____

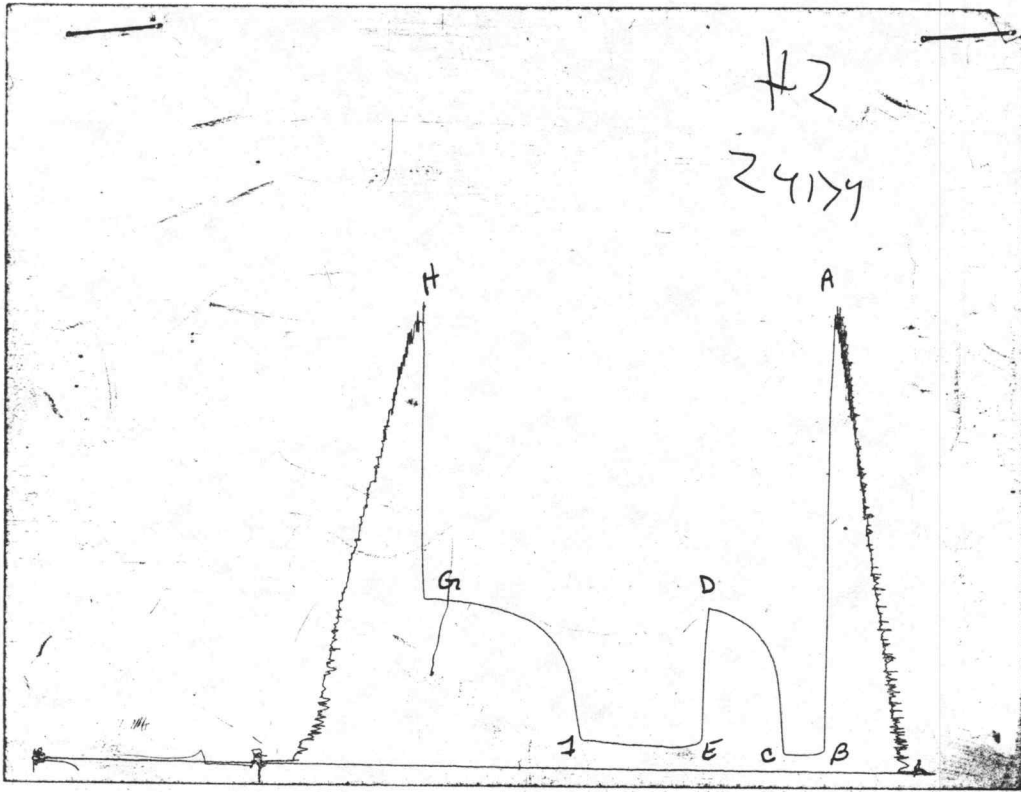
(F) Second Final Flow Pressure 97.7 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 647.2 PSI Initial Opening 30 Final Flow 90

(H) Final Hydrostatic Mud 1753.9 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1795	1796.8
(B) FIRST INITIAL FLOW PRESSURE	59	50.7
(C) FIRST FINAL FLOW PRESSURE	67	52.6
(D) INITIAL CLOSED-IN PRESSURE	636	630.7
(E) SECOND INITIAL FLOW PRESSURE	74	85.2
(F) SECOND FINAL FLOW PRESSURE	104	97.7
(G) FINAL CLOSED-IN PRESSURE	644	647.2
(H) FINAL HYDROSTATIC MUD	1750	1753.9

CALCULATED RECOVERY ANALYSIS

WEIGHT PIPE

DST #

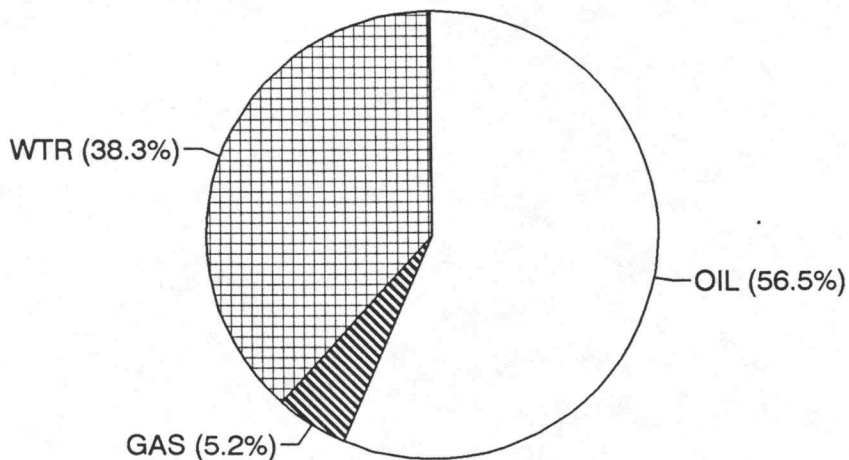
2

TICKET #

5721

SAMPLE #	TOTAL		GAS		OIL		WATER		MUD	
	FEET	%	FEET	%	FEET	%	FEET	%	FEET	%
1	120	10	12	90	108		0		0	
2	110		0	20	22	80	88		0	
3			0		0		0		0	
4			0		0		0		0	
5			0		0		0		0	
TOTAL	230	5.217	12	56.521739	130	38.261	88		0	0

		HRS OPEN	BBL/DAY
BBL OIL=	0.91	*	2 10.92
BBL WATER=	0.616	*	7.392
BBL MUD=	0		
BBL GAS=	0.084		



INITIAL FLOW

RECORDER # 22150 DST # 2

TIME(MIN) PRESSURE <> PRESSURE

TIME(MIN)	PRESSURE	<> PRESSURE
3	50.7	50.7
6	50.7	0
9	50.7	0
12	50.7	0
15	50.7	0
18	50.7	0
21	52.6	1.9
24	52.6	0
27	52.6	0
30	52.6	0

FINAL FLOW

RECORDER # 22150 DST # 2

TIME(MIN) PRESSURE <> PRESSURE

TIME(MIN)	PRESSURE	<> PRESSURE
6	79.5	79.5
12	78.5	-1
18	78.5	0
24	78.5	0
30	78.5	0
36	82.3	3.8
42	82.3	0
48	82.3	0
54	82.3	0
60	85.2	2.9
66	88.1	2.9
72	89.1	1
78	91.9	2.8
84	94.8	2.9
90	97.7	2.9

MONGEAU 'A
INITIAL

DST #2
SHUTIN

30 TOTAL FLOW TIME

Slope 435.13 psi/cycle
P * 704 psi

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	-----	-----	-----	-----	-----
	3	219.3	1.041	219.3	11
	6	359.1	0.778	139.8	6
X	9	427.2	0.637	68.1	4
	12	469.3	0.544	42.1	4
	15	493.4	0.477	24.1	3
	18	513.6	0.426	20.2	3
	21	533.1	0.385	19.5	2
	24	548.4	0.352	15.3	2
	27	561.1	0.325	12.7	2
	30	571.7	0.301	10.6	2
	33	580.4	0.281	8.7	2
	36	588.1	0.263	7.7	2
	39	595.9	0.248	7.8	2
	42	600.7	0.234	4.8	2
	45	605.5	0.222	4.8	2
	48	612.3	0.211	6.8	2
	51	617.2	0.201	4.9	2
	54	621.1	0.192	3.9	2
	57	623.9	0.184	2.8	2
	60	627.8	0.176	3.9	2
X	63	630.7	0.169	2.9	1

MONGEAU 'A' DST #2
 FINAL SHUTIN

120 TOTAL FLOW TIME

 Slope 185.17 psi/cycle
 P * 703 psi

		Pws (psi)	Log Horn T	<> PRESSURE	Horn T	
		-----	-----	-----	-----	
		6	320.8	1.322	320.8	21
		12	433.9	1.041	113.1	11
		18	484.7	0.885	50.8	8
		24	521.4	0.778	36.7	6
		30	543.6	0.699	22.2	5
		36	562.9	0.637	19.3	4
		42	577.5	0.586	14.6	4
		48	590.1	0.544	12.6	4
		54	600.7	0.508	10.6	3
		60	610.4	0.477	9.7	3
		66	616.2	0.450	5.8	3
		72	621.1	0.426	4.9	3
		78	625.9	0.405	4.8	3
		84	628.8	0.385	2.9	2
		90	634.6	0.368	5.8	2
		96	638.5	0.352	3.9	2
x		102	640.4	0.338	1.9	2
		108	643.3	0.325	2.9	2
		114	646.2	0.312	2.9	2
X		120	647.2	0.301	1.0	2

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Test Ticket

No 5721

Well Name & No. Mongean 'A' #5 Test No. 2 Date 4-17-93
 Company OXY USA Inc Zone Tested Arbuckle
 Address _____ Elevation 2185 KB
 Co. Rep./Geo. Steve Davis cont. Abercrombie #8 Est. Ft. of Pay _____
 Location: Sec. 27 Twp. 9 Rge. 19 Co. Rooks State Ks
 No. of Copies 5 Distribution Sheet _____ Yes _____ No Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3611-3623 Drill Pipe Size 4 1/2 XH
 Anchor Length 12 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 3606 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 3611 Wt. Pipe I.D. — 2.7 Ft. Run 375
 Total Depth 3623 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.2 lb/gal. Viscosity 49 Filtrate 9.6
 Tool Open @ 5:40AM Initial Blow 2" blow building to 5 1/2"

Final Blow surface blow building to 4"

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
Rec. <u>120</u> Feet Of <u>cl gassy oil</u>	<u>90</u> %gas <u>90</u> %oil	%water _____ %mud _____
Rec. <u>110</u> Feet Of <u>OCM</u>	%gas <u>20</u> %oil _____	%water <u>80</u> %mud _____
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____

BHT 1.06 °F Gravity 26 °API @ 80 °F Corrected Gravity 24 °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1795 PSI Ak1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 59 PSI @ (depth) 3613 w/Clock No. 30401
 (C) First Final Flow Pressure 67 PSI AK1 Recorder No. 24174 Range 3050
 (D) Initial Shut-in Pressure 636 PSI @ (depth) 3620 w/Clock No. 25814
 (E) Second Initial Flow Pressure 74 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 104 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-in Pressure 644 PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 1750 PSI Initial Shut-in 60 Jars _____

Final Flow 90 Safety Joint _____
 Final Shut-in 120 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By Donald E. Melder
 Our Representative Paul Simpson