

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name HADSON - LOW #13-3 Test No. 1 Date 4/22/92
Company SINCLAIR OIL CORPORATION Zone WABAUNSEE
Address 1625 BROADWAY #800 DENVER CO Elevation 3385
Co. Rep./Geo. J RITENOUR Cont. MURFIN RIG #25 Est. Ft. of Pay 10
Location: Sec. 3 Twp. 24S Rge. 43W Co. HAMILTON State KS

Interval Tested	<u>3220-3275</u>	Drill Pipe Size	<u>4.5 XH</u>
Anchor Length	<u>55</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>633</u>
Top Packer Depth	<u>3215</u>	Drill Collar - 2.25 Ft. Run	<u>8.9</u>
Bottom Packer Depth	<u>3220</u>	Mud Wt.	<u>54</u> lb/Gal.
Total Depth	<u>3275</u>	Viscosity	<u>9</u>

Tool Open @ 9:05 PM Initial Blow 1" BLOW TO 10" IN 5 MINUTES-OPEN 2" -NO PSI
GO TO BUCKET 3" IN 15 MINUTES
Final Blow 1/2" BLOW TO 10" BLOW 8 MINUTES TO 36" IN 30 MIN TO
15" IN 40 MINUTES TO 2" BLOW IN 60 MINUTES

Recovery - Total Feet 1120 Flush Tool? NO

Rec. <u>434</u>	Feet of	<u>GAS IN PIPE</u>
Rec. <u>1120</u>	Feet of	<u>SLTLY MUD CUT WATER-95%WTR/5%MUD</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT 105 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.12 @ 60 °F Chlorides 85000 ppm Recovery Chlorides 16000 ppm System

(A) Initial Hydrostatic Mud 1541 PSI AK1 Recorder No. 2023 Range 4000

(B) First Initial Flow Pressure 101.8 PSI @ (depth) 3230 w / Clock No. 21058

(C) First Final Flow Pressure 280.4 PSI AK1 Recorder No. 13308 Range 4700

(D) Initial Shut-in Pressure 774.9 PSI @ (depth) 3270 w / Clock No. 8698

(E) Second Initial Flow Pressure 352.3 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 553.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 774.9 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 1468 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative MARK HERSKOWITZ

FLUID SAMPLER DATA

Ticket No.: 4568 Date: 4/22/92

Company: SINCLAIR OIL CORPORATION

Lease: HADSON - LOW #13-3 Test No.: 1

County: HAMILTON Sec.: 3 Twp.: 24S Rng.: 43W

SAMPLER RECOVERY

Gas 0.5

Oil

Mud

Water 4000

Other

Pressure 85

TOTAL 4000.5

SAMPLER ANALYSIS

Resistivity 0.13 ohms@ 60 F

Chlorides 85000 ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 34000

Resistivity ohms@ F

Viscosity 54

Mud Wt. 8.9

Filtrate 9

Other

PIPE RECOVERY

TOP

Resistivity 0.22 ohms@ 60 F

Chlorides 38000 ppm

MIDDLE

Resistivity 0.12 ohms@ 55 F

Chlorides 88000 ppm

BOTTOM

Resistivity 0.12 ohms@ 60 F

Chlorides 85000 ppm

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Test Ticket

No 4568

Well Name & No. Hudson - Low 13-3 Test No. 1 Date 4-22-92
 Company Singair Oil Corp Zone Tested WABAUENSEE
 Address 1425 BROADWAY STE 800 DENVER Elevation 3385
 Co. Rep./Geo. J. RITENOUR Cont. MURFIN Rig 25 Est. Ft. of Pay 10
 Location: Sec. 3 Twp. 24s Rge. 43w Co. HAMILTON State KS
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3220 - 3275 Drill Pipe Size 4 1/2 XH
 Anchor Length 55 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 3215 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 3220 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 3275 Drill Collar — 2.25 Ft. Run 633

Mud Wt. 8.1 6CM 2 lb/gal. Viscosity 54 Filtrate 9.10
 Tool Open 8:05 Initial Blow 1" Blow to 10" in 5 min OPEN 2" NO PSI
go to BUCKET 3" in 15 min
 Final Blow 1/2 Blow to 10" Blow 8 min to 36" in 30 min to
15" in 40 min to 2" Blow in 60 min

Recovery — Total Feet 1120 Feet of Gas In Pipe 434 Flush Tool? _____
 Rec. 1120 Feet Of S MUD WATER %gas _____ %oil 95 %water 5 %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 105 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW 0.12 @ 40 °F Chlorides 85 ppm Recovery Chlorides 16 ppm System

(A) Initial Hydrostatic Mud 1535 PSI Ak1 Recorder No. 2023 Range 4000
 (B) First Initial Flow Pressure 97 PSI @ (depth) 3230 W/Clock No. 21058 ^{24 Hour}
 (C) First Final Flow Pressure 274 PSI AK1 Recorder No. 13308 Range 4700
 (D) Initial Shut-In Pressure 771 PSI @ (depth) 3270 W/Clock No. 8698 ^{12 Hour}
 (E) Second Initial Flow Pressure 347 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 548 PSI @ (depth) _____ W/Clock No. _____
 (G) Final Shut-In Pressure 771 PSI Initial Opening 15 Test 550.00
 (H) Final Hydrostatic Mud 1467 PSI Initial Shut-In 30 Jars 200.00

TRILOBITE TESTING COMPANY 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 SUBSTAINED, 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 60 Safety Joint 50.00
 Final Shut-In 120 Straddle _____
 Circ. Sub N.C.
 Sampler 200.00
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ 1000.00

Approved By [Signature]
 Our Representative [Signature]

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name HADSON - LOW #13-3 Test No. 2 Date 4/26/92
Company SINCLAIR OIL CORPORATION Zone MORROW
Address 1625 BROADWAY #800 DENVER CO Elevation 3385
Co. Rep./Geo. J RITENOUR Cont. MURFIN RIG #25 Est. Ft. of Pay _____
Location: Sec. 3 Twp. 24S Rge. 43W Co. HAMILTON State KS

Interval Tested	<u>4660-4913</u>	Drill Pipe Size	<u>4.5 XH</u>
Anchor Length	<u>253</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>419</u>
Top Packer Depth	<u>4655</u>	Drill Collar -- 2.25 Ft. Run	<u>9.1</u>
Bottom Packer Depth	<u>4660</u>	Mud Wt.	<u>48</u> lb/Gal.
Total Depth	<u>4913</u>	Viscosity	<u>8.8</u> Filtrate

Tool Open @ 8:24 Initial Blow OPEN 1/2" BLOW FOR 15 MINUTES

Final Blow SURFACE BLOW DIED OFF IN 25 MINUTES

Recovery - Total Feet 40 Flush Tool? NO

Rec. <u>40</u>	Feet of	<u>MUD</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT 119 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 11000 ppm System

(A) Initial Hydrostatic Mud 1994 PSI AK1 Recorder No. 2023 Range 4000

(B) First Initial Flow Pressure 60.3 PSI @ (depth) 4665 w / Clock No. 21058

(C) First Final Flow Pressure 71.2 PSI AK1 Recorder No. 13308 Range 4700

(D) Initial Shut-in Pressure 102.5 PSI @ (depth) 4690 w / Clock No. 8698

(E) Second Initial Flow Pressure 71.2 PSI AK1 Recorder No. _____ Range _____

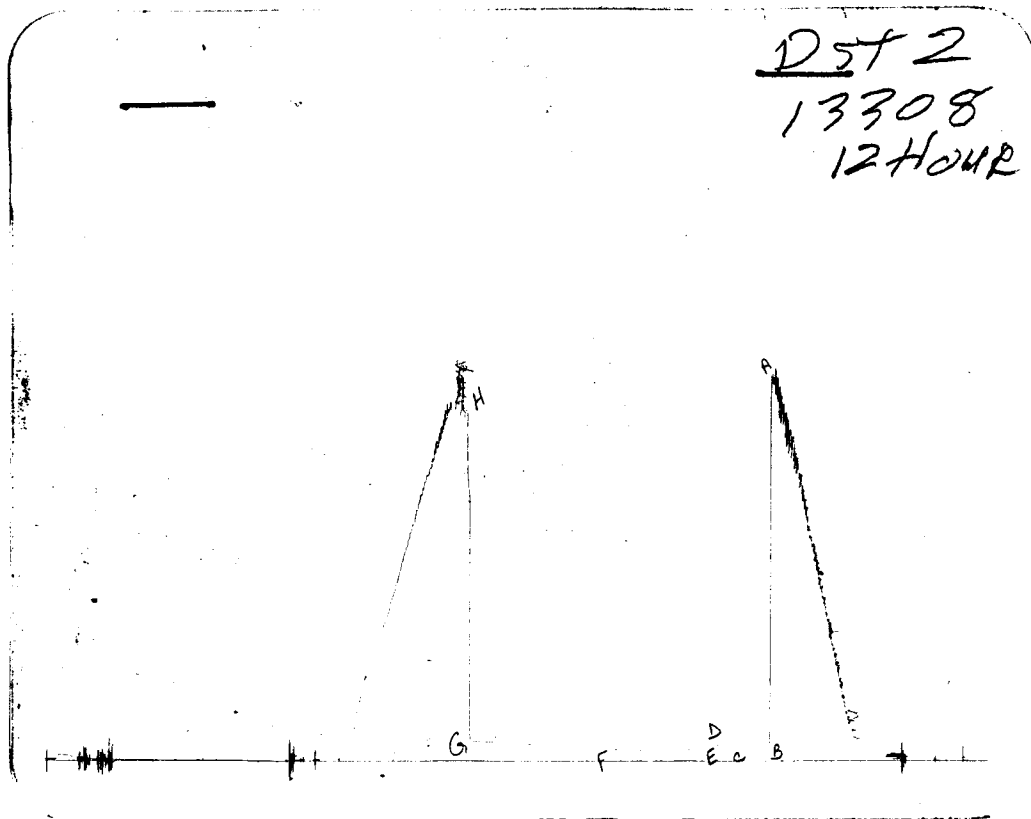
(F) Second Final Flow Pressure 71.2 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 111.4 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 1963 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1988	1994.2
(B) FIRST INITIAL FLOW PRESSURE	55	60.3
(C) FIRST FINAL FLOW PRESSURE	66	71.2
(D) INITIAL CLOSED-IN PRESSURE	98	102.5
(E) SECOND INITIAL FLOW PRESSURE	66	71.2
(F) SECOND FINAL FLOW PRESSURE	66	71.2
(G) FINAL CLOSED-IN PRESSURE	109	111.4
(H) FINAL HYDROSTATIC MUD	1959	1963.2

FLUID SAMPLER DATA

Ticket No.:	4541	Date:	4/26/92
Company:	SINCLAIR OIL CORPORATION		
Lease:	HADSON - LOW #13-3	Test No.:	2
County:	HAMILTON	Sec.:	3
		Twp.:	24S
		Rng.:	43W

SAMPLER RECOVERY

Gas	
Oil	
Mud	2300
Water	
Other	
Pressure	25
TOTAL	2300

SAMPLER ANALYSIS

Resistivity	ohms@	F
Chlorides		ppm.
Gravity		corrected @60F

PIT MUD ANALYSIS

Chlorides	34000
Resistivity	ohms@ F
Viscosity	48
Mud Wt.	9.1
Filtrate	8.8
Other	

PIPE RECOVERY

TOP

Resistivity	ohms@	F
Chlorides		ppm

MIDDLE

Resistivity	ohms@	F
Chlorides		ppm

BOTTOM

Resistivity	ohms@	F
Chlorides		ppm

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Test Ticket

No 4571

Well Name & No. <u>HADSON - LOW 13-3</u>	Test No. <u>2</u>	Date <u>4-26-92</u>
Company <u>SINCLAIR OIL CORP</u>	Zone Tested <u>MORROW</u>	
Address <u>1125 BROADWAY STE 800 DENVER</u>	Elevation <u>3385</u>	
Co. Rep./Geo. <u>J. RITIENOUR</u>	Cont. <u>MURFIN RIG 25</u>	Est. Ft. of Pay
Location: Sec. <u>3</u>	Twp. <u>24S</u>	Rge. <u>93W</u>
Co. <u>HAMILTON</u>	State <u>KS</u>	
No. of Copies	Distribution Sheet	Yes No Turnkey Yes No Evaluation

Interval Tested <u>4660 - 4913</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>253</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>4655</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4660</u>	Wt. Pipe I.D. — 2.7 Ft. Run
Total Depth <u>4913</u>	Drill Collar — 2.25 Ft. Run <u>419</u>
Mud Wt. <u>9.1</u> <u>LCM 5</u> lb/gal.	Viscosity <u>48</u> Filtrate <u>8.8</u>
Tool Open @ <u>8:24</u>	Initial Blow <u>OPEN 1/2</u> Blow For <u>15 MIN</u>

Final Blow SURBLOW DIES OFF IN 25 MIN

Recovery — Total Feet <u>40</u>	Feet of Gas in Pipe	Flush Tool? ☒
Rec. <u>40</u> Feet Of <u>MUD</u>	%gas %oil %water 100% 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 119 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 11000 ppm System

(A) Initial Hydrostatic Mud 1988 PSI AK1 Recorder No. 2023 Range 4000

(B) First Initial Flow Pressure 55 PSI @ (depth) 4665 w/Clock No. 21058 ^{2nd Hour}

(C) First Final Flow Pressure 66 PSI AK1 Recorder No. 13308 Range 4700

(D) Initial Shut-In Pressure 98 PSI @ (depth) 4690 w/Clock No. 8698 ^{12 Hour}

(E) Second Initial Flow Pressure 66 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 66 PSI @ (depth) w/Clock No.

(G) Final Shut-In Pressure 109 PSI Initial Opening 15 Test ☒ 550.00

(H) Final Hydrostatic Mud 1959 PSI Initial Shut-In 30 Jars ☒ 200.00

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Final Flow 60 Safety Joint ☒ 50.00

Final Shut-In 120 Straddle

Circ. Sub ☒ NC

Sampler ☒ 200.00

Extra Packer

Other

TOTAL PRICE \$ 1000.00

Approved By

Our Representative