



P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET

Nº 18742

Elevation 2050' 82 Formation Merrow Eff. Pay _____ Ft.

District Colby Date 6-5-93 Customer Order No. _____

COMPANY NAME 390 Robinson Oil Company

ADDRESS 420 W Douglas Suite 500 450 Wichita KS. 67202

LEASE AND WELL NO. Blay "A" #1 COUNTY Clark STATE KS. Sec. 22 Twp. 31 Rge. 21

Mail Invoice To _____ Co. Name Same Address #1 Blay A No. Copies Requested Reg

Mail Charts To _____ Address _____ No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 5093 ft. to 5140 ft. Total Depth 5140 ft.

Packer Depth 5088 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 5093 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 5096 ft. Recorder Number 6233 Cap. 4000

Bottom Recorder Depth (Outside) 5099 ft. ☒ Recorder Number 13400 Cap. 3950

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Vel Energy Rig #1 Drill Collar Length _____ I. D. _____ in.

Mud Type Low Solids Viscosity 57 Weight Pipe Length _____ I. D. _____ in.

Weight 9.1 Water Loss 9.6 cc. Drill Pipe Length 5064 I. D. 5 1/2 CD 3.8 in.

Chlorides 9000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 CD in.

Jars: Make Western Serial Number 415 Anchor Length 47 ft. Size 5 1/2 CD in.

Did Well Flow? no Reversed Out no Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 CH in.

Blow: IFP- Bottom of bucket immediately - Gas to surface in 6 min

FFP- Gas to surface

Recovered 50 ft. of mud

Recovered _____ ft. of _____

Recovered 5140 ft. of Gas

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Chlorides _____ P.P.M. Sample Jars used _____ Remarks: _____

JUN 09 1993

Time On Location 600 (6-4) A.M. Time Pick Up Tool 1200 P.M. Time Off Location _____ A.M.

Time Set Packer(s) 300 A.M. Time Started Off Bottom 700 A.M. Maximum Temperature 117

Initial Hydrostatic Pressure (A) 2436 P.S.I.

Initial Flow Period Minutes 30 (B) 242 P.S.I. to (C) 135 P.S.I.

Initial Closed In Period Minutes 60 (D) 1453 P.S.I.

Final Flow Period Minutes 60 (E) 193 P.S.I. to (F) 77 P.S.I.

Final Closed In Period Minutes 90 (G) 1433 P.S.I.

Final Hydrostatic Pressure (H) 2356 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to 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, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By _____
Signature of Customer or his authorized representative

Western Representative Mike Skuruit

Thanks.

FIELD INVOICE

Open Hole Test \$ _____
Misrun \$ _____
Straddle Test \$ _____
Jars \$ _____
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. \$ _____
Mileage \$ _____
Fluid Sampler \$ _____
Extra Charts \$ _____
Insurance \$ _____
Telecopier \$ _____
TOTAL \$ _____

N^o 5046

GAS FLOW REPORT

Date 6-5-93 Ticket 18742 Company Robinson Oil Company
 Well Name and No. Blau "A" #1 Dst No. 1 Interval Tested 5093 - 5140
 County Clark State KS Sec. 22 Twp. 31 Rg. 21

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
					<u>Gas to surface in 6 min</u>
10	32	3/4			546 MCF - Day
20	24	3/4			449 MCF
30	18	3/4			370 MCF

SECOND FLOW

10	16	3/4			344 MCF - Day
20	20	"			398 MCF
30	16	"			344 MCF
40	14	"			317 MCF
50	12	"			303 MCF
60	9	"			288 MCF
					245 MCF

GAS BOTTLE

Serial No. 300 ML Date Bottle Filled 6-5-93 Date to be Invoiced 7-5-93

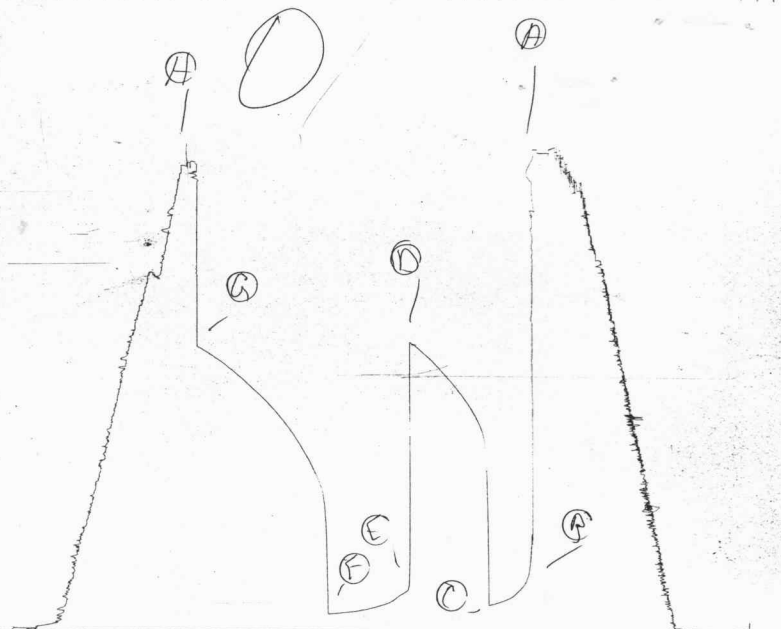
Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Robinson Oil CoAuthorized by [Signature]

13400

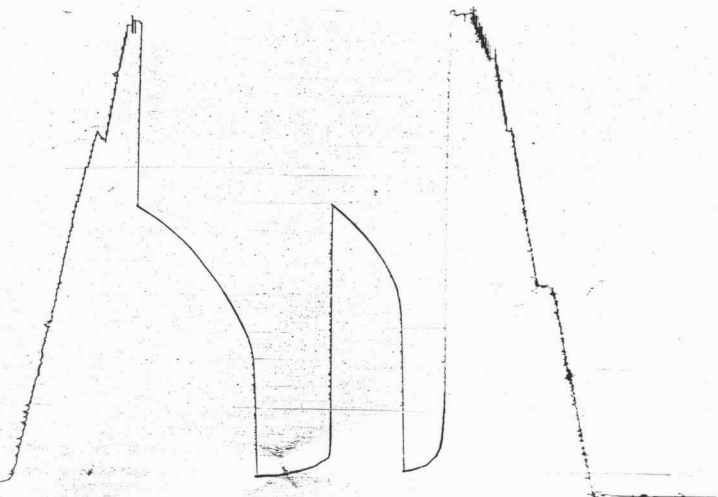
KT 18742



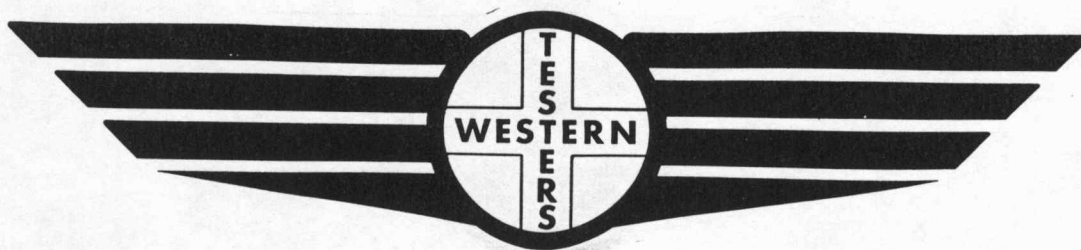
6233

KT 18742

I



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1 - 800-688-7021**

DST REPORT

GENERAL INFORMATION

DATE	: 6-5-93	TICKET	: 18742
CUSTOMER	: ROBINSON OIL COMPANY	LEASE	: BLAU
WELL	: A-1	TEST:	1
ELEVATION:	2050 G.L.	GEOLOGIST:	BEN LANDES
SECTION	: 22	FORMATION:	MORROW
RANGE	: 21W	TOWNSHIP	: 31S
GAUGE SN#:	13400	STATE	: KS
		CLOCK	: 12 HR.
	COUNTY: CLARK		
	RANGE : 3950		

WELL INFORMATION

PERFORATION INTERVAL FROM:	5093.00 ft	TO:	5140.00 ft	TVD:	5140.0 ft
DEPTH OF SELECTIVE ZONE:	NONE			TEST TYPE:	GAS
DEPTH OF RECORDERS:	5096.0 ft		5099.0 ft		
TEMPERATURE:	117.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	5064.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	29.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	47.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	5088.0 ft	SIZE:		6.750 in	
PACKER DEPTH:	5093.0 ft	SIZE:		6.750 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	VAL ENERGY RIG #1	VISCOSITY :	57.00 cp
MUD TYPE :	LOW SOLIDS	WATER LOSS:	9.600 cc
WEIGHT :	9.100 ppg		
CHLORIDES :	9000 ppm	SERIAL NUMBER:	415
JARS-MAKE :	WESTERN	REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD BOTTOM OF BUCKET IMMEDIATELY.
GAS TO SURFACE IN 6 MIN
FINAL FLOW PERIOD GAS TO SURFACE

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
50.0	0.0	0.0	0.0	100.0	MUD
5140.0	0.0	100.0	0.0	0.0	GAS

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	404.8160	SCF	TOTAL FLOW TIME:	90.0000 min.
MUD VOLUME:	0.0000	STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	0.0000	STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	0.0000	STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2436.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	242.00	135.00
INITIAL SHUT-IN	60.00		1453.00
FINAL FLOW	60.00	193.00	77.00
FINAL SHUT-IN	90.00		1433.00

FINAL HYDROSTATIC PRESSURE: 2356.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2436.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	242.00	139.00
INITIAL SHUT-IN	60.00		1466.00
FINAL FLOW	60.00	193.00	85.00
FINAL SHUT-IN	90.00		1427.00
FINAL HYDROSTATIC PRESSURE:	2350.00		

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 6-5-93	TICKET : 18742
CUSTOMER : ROBINSON OIL COMPANY	LEASE : BLAU
WELL : A-1 TEST: 1	GEOLOGIST: BEN LANDES
ELEVATION: 2050 G.L.	FORMATION: MORROW
SECTION : 22	TOWNSHIP : 31S
RANGE : 21W COUNTY: CLARK	STATE : KS
GAUGE SN#: 13400 RANGE : 3950	CLOCK : 12 HR.

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10	MERLA	0.750	32PSI	546000 SCF/D
20	MERLA	0.750	24PSI	449000 SCF/D
30	MERLA	0.750	18PSI	370000 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10	MERLA	0.750	16PSI	344000 SCF/D
20	MERLA	0.750	20PSI	398000 SCF/D
30	MERLA	0.750	16PSI	344000 SCF/D
40	MERLA	0.750	14PSI	317000 SCF/D
50	MERLA	0.750	12PSI	288000 SCF/D
60	MERLA	0.750	9PSI	245000 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 6-5-93	TICKET : 18742
CUSTOMER : ROBINSON OIL COMPANY	LEASE : BLAU
WELL : A-1 TEST: 1	GEOLOGIST: BEN LANDES
ELEVATION: 2050 G.L.	FORMATION: MORROW
SECTION : 22	TOWNSHIP : 31S
RANGE : 21W COUNTY: CLARK	STATE : KS
GAUGE SN#: 13400 RANGE : 3950	CLOCK : 12 HR.

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	242.00	242.00
5.00	242.00	0.00
10.00	217.00	-25.00
15.00	184.00	-33.00
20.00	164.00	-20.00
25.00	145.00	-19.00
30.00	139.00	-6.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	955.00	955.00	0.00
6.00	1027.00	72.00	0.00
9.00	1078.00	51.00	0.00
12.00	1107.00	29.00	0.00
15.00	1140.00	33.00	0.00
18.00	1173.00	33.00	0.00
21.00	1201.00	28.00	0.00
24.00	1226.00	25.00	0.00
27.00	1250.00	24.00	0.00
30.00	1275.00	25.00	0.00
33.00	1296.00	21.00	0.00
36.00	1326.00	30.00	0.00
39.00	1345.00	19.00	0.00
42.00	1367.00	22.00	0.00
45.00	1384.00	17.00	0.00
48.00	1404.00	20.00	0.00
51.00	1421.00	17.00	0.00
54.00	1435.00	14.00	0.00
57.00	1457.00	22.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
60.00	1466.00	9.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	193.00	193.00
5.00	187.00	-6.00
10.00	162.00	-25.00
15.00	147.00	-15.00
20.00	133.00	-14.00
25.00	124.00	-9.00
30.00	116.00	-8.00
35.00	106.00	-10.00
40.00	102.00	-4.00
45.00	98.00	-4.00
50.00	96.00	-2.00
55.00	91.00	-5.00
60.00	85.00	-6.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	637.00	637.00	0.00
6.00	748.00	111.00	0.00
9.00	801.00	53.00	0.00
12.00	837.00	36.00	0.00
15.00	876.00	39.00	0.00
18.00	909.00	33.00	0.00
21.00	939.00	30.00	0.00
24.00	974.00	35.00	0.00
27.00	1005.00	31.00	0.00
30.00	1028.00	23.00	0.00
33.00	1062.00	34.00	0.00
36.00	1087.00	25.00	0.00
39.00	1115.00	28.00	0.00
42.00	1121.00	6.00	0.00
45.00	1152.00	31.00	0.00
48.00	1174.00	22.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

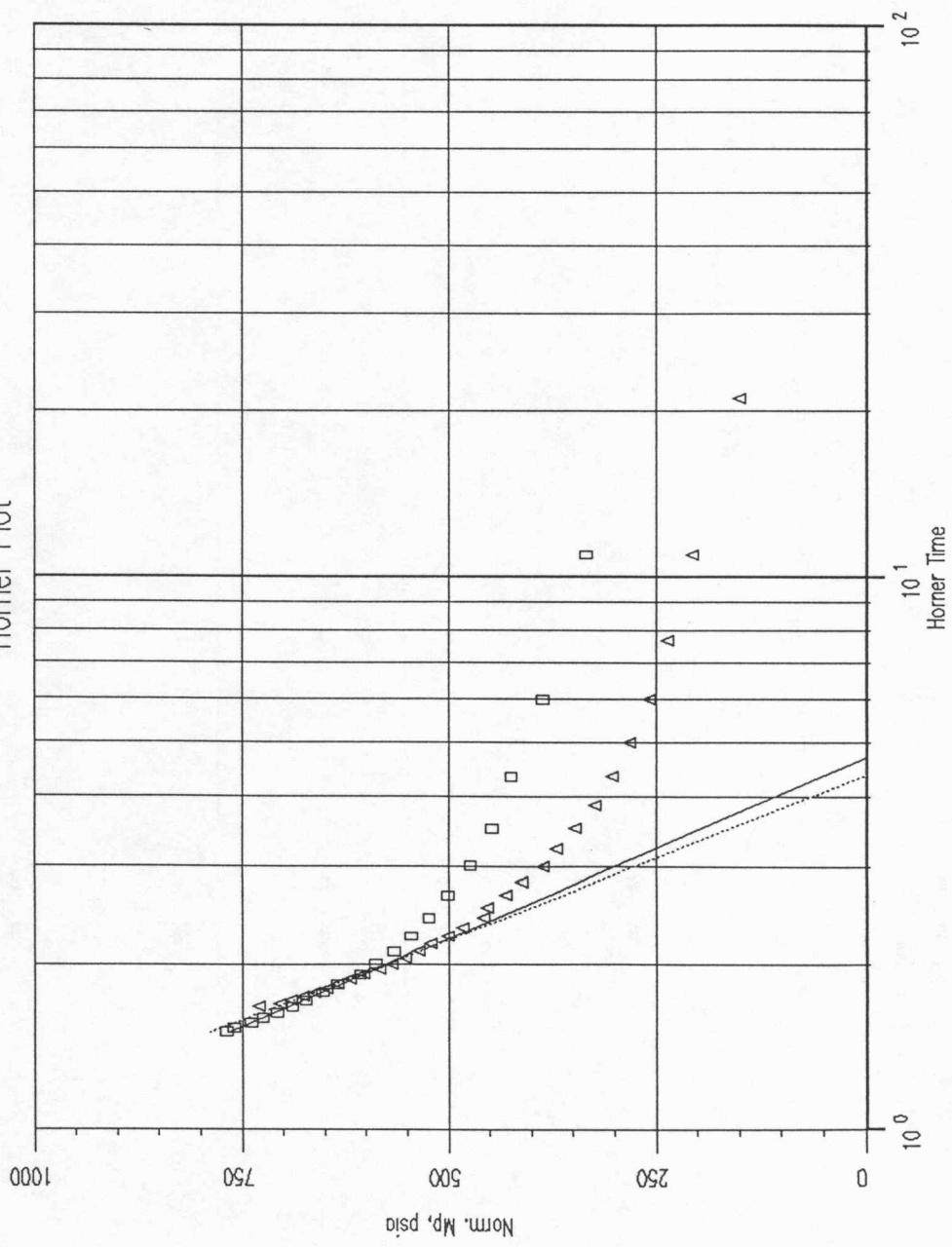
Time (min)	Pressure	Delta P	Horner T
51.00	1199.00	25.00	0.00
54.00	1216.00	17.00	0.00
57.00	1234.00	18.00	0.00
60.00	1253.00	19.00	0.00
63.00	1271.00	18.00	0.00
66.00	1292.00	21.00	0.00
69.00	1310.00	18.00	0.00
72.00	1326.00	16.00	0.00
75.00	1341.00	15.00	0.00
78.00	1356.00	15.00	0.00
81.00	1371.00	15.00	0.00
84.00	1386.00	15.00	0.00
87.00	1400.00	14.00	0.00
90.00	1427.00	27.00	0.00

DATE 6-5-93
 CUSTOMER ROBINSON OIL COMPANY
 WELL A-1
 ELEVATION 2050 G.L.
 SECTION 22
 RANGE 21
 GAUGE SN# 13400

TEST 1
 COUNTY CLARK
 RANGE 3950

TICKET 18742
 LEASE BLAU
 GEOLOGIST BEN LANDES
 FORMATION MORROW
 TOWNSHIP 31
 STATE KS
 CLOCK 12 HR.

Horner Plot



Result

	#1	#2
tp, hrs	0.50	1.00
Slope	-1544.00	-1697.58
Pstar, psig	1717.80	1761.67
P1hr, psig	765.28	575.89
Skin	1.65	1.32
k, md	0.00	0.00
kh/u, md-ft/cp	0.04	0.04
ri, ft	0.18	0.24
DR, %	-1.05	-0.66
Drawdown Factor, %	0.027	0.027
Drawdown P*	-0.026	-0.026

— BUILD 1
 BUILD 2

HORNER ANALYSIS REPORT

GENERAL INFORMATION

DATE : 6-5-93	TICKET : 18742
CUSTOMER : ROBINSON OIL COMPANY	LEASE : BLAU
WELL : A-1 TEST: 1	GEOLOGIST: BEN LANDES
ELEVATION: 2050 G.L.	FORMATION: MORROW
SECTION : 22	TOWNSHIP : 31
RANGE : 21 COUNTY: CLARK	STATE : KS
GAUGE SN#: 13400 RANGE : 3950	CLOCK : 12 HR.

Input Data

Porosity 0.150 Rw: 0.328 ft h: 6.000 ft

qg 245.0 STB

Pvt Data

Evaluation Pressure : 1466.0

Evaluation Temperature: 117.0

Gas Grav 0.65 API

Bg 0.002 RBL/STB Vis 0.015 cp Ct 7.7108E-004 1/PSI

Horner Results

	Inital Shut-In	Final Shut-In
pseudo pressure time	0.50 hrs	1.00 hrs
slope	-1544.00	-1697.58
pstar	1717.80 psig	1761.67 psig
plhr	765.28 psig	575.89 psig
skin	1.65	1.32
permeability	0.00 md	0.00 md
transmisability	0.04 md-ft/cp	0.04 md-ft/cp
radius of investigation	0.18 ft	0.24 ft
Damage-Ratio	-1 percent	-0.66 percent
Drawdown Factor		0.027 percent
Drawdown P*		-0.026 percent

Profile Plot Total Test

