

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTOIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1. NO. OF COPIES RECEIVED		2. Name of Operator		3. Address of Operator		4. Location of Well		5. State Oil & Gas Lease No.		6. Farm or Lease Name		7. Unit Agreement Name		8. State Type of Lease	
DISTRIBUTION		Amerind Oil Co.		500 Wilco Building, Midland, TX 79701		UNIT LETTER <u>M</u> LOCATED <u>660'</u> FEET FROM THE <u>South</u> LINE AND <u>510</u> FEET FROM <u>West</u>				Higgins Trust, Inc.		(none)		State ☐ Fee ☒	
SANTA FE															
FILE															
U.S.G.S.															
LAND OFFICE															
OPERATOR															
10. TYPE OF WELL															
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐															
b. TYPE OF COMPLETION															
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐															
12. County															
Lea															
15. Date Spudded															
7/8/84															
16. Date T.D. Reached															
8/4/84															
17. Date Compl. (Ready to Prod.)															
8/21/84															
18. Elevations (DF, RAB, RT, GR, etc.)															
3800 GL, 3814 KB															
19. Elev. Casinghead															
3800'															
20. Total Depth															
11,575'															
21. Plug Back T.D.															
11,532'															
22. If Multiple Compl., How Many															
23. Intervals Drilled By															
Rotary Tools ☒ Cable Tools ☐															
24. Producing Interval(s), of this completion - Top, Bottom, Name															
11,325, 11,407, Strawn															
25. Was Directional Survey Made															
yes, see attached															
26. Type Electric and Other Logs Run															
Dual Induction/Focused, Neutron-Density, Acoustilog															
27. Was Well Cored															
Yes (30')															
28. CASING RECORD (Report all strings set in well)															
CASING SIZE WEIGHT LB./FT. DEPTH SET HOLE SIZE CEMENTING RECORD AMOUNT PULLED															
13 3/8" 54.5 & 48 385 17 1/2" 420 sx CIs "C"															
8 5/8 32 & 24 4,312 11" 2000 Sx Lite & 300 sx "C"															
5 1/2 17, 20 & 23 11,575 7 7/8" 300 sx CIs "H"															
29. LINER RECORD															
SIZE TOP BOTTOM SACKS CEMENT SCREEN															
2 3/8" 11,246 11,246															
30. TUBING RECORD															
SIZE DEPTH SET PACKER SET															
2 3/8" 11,246 11,246															
31. Perforation Record (Interval, size and number)															
One hole each @ 11,325, 327, 385, 387, 389, 391, 393, 395, 397, 399, 401 (2), 403, 405, 407 (15 holes)															
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.															
DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED															
11,325-11,407 5000 gal MOD-202															
33. PRODUCTION															
Date First Production															
8/22/84															
Production Method (Flowing, gas lift, pumping - Size and type pump)															
Flowing															
Well Status (Prod. or Shut-in)															
Prod.															
Date of Test															
8/24/84															
Hours Tested															
24															
Choke Size															
30/64"															
Prod'n. For Test Period															
Oil - Bbl. Gas - MCF Water - Bbl. Gas - Oil Ratio															
436 418 121 959															
Flow Tubing Press.															
Casing Pressure															
160 psi (pkr)															
Calculated 24-Hour Rate															
Oil - Bbl. Gas - MCF Water - Bbl. Oil Gravity - API (Corr.)															
430															
34. Disposition of Gas (Sold, used for fuel, vented, etc.)															
Sold															
Test Witnessed By															
Jim Clowe															
35. List of Attachments															
Record of Inclination, DST & Form C-104 (Request for Allowable)															
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.															
SIGNED <u>Robert C. Leibrock</u> TITLE <u>Vice President</u> DATE <u>8/30/84</u>															

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 10 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and non-electrical logs run in the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 30 through 34 shall be reported for each zone. The form is to be filed in quarterly items except on some logs, where six copies are required. See Rule 1005.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE
(NOTE: Picks from logs; log reading 25' shallow @ TD)
Southeastern New Mexico Northwestern New Mexico

T. Anhy	2096	T. Canyon	10783	T. Ojo Alamo		T. Penn. "B"	
T. Salt	2183	T. Strawn	11195	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka		T. Pictured Cliffs		T. Penn. "D"	
T. Yates	3219	T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen	4205	T. Silurian		T. Point Lockout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres	4959	T. Simpson		T. Gallup		T. Ignacio Qtzite	
T. Glorieta	6303	T. McKee		Base Greenhorn		T. Granite	
T. Paddock	6372	T. Ellenburger		T. Dakota		T.	
T. Blinberry		T. Gr. Wash		T. Morrison		T.	
T. Tubb	7740	T. Granite		T. Todilto		T.	
T. Drinkard	7856	T. Delaware Sand		T. Entrada		T.	
T. Abo	8425	T. Bone Springs		T. Wingate		T.	
T. Wolfcamp	9797	T.		T. Chinle		T.	
T. Penn.	10003	T.		T. Permian		T.	
T. Cisco (XXXX)	10464	T.		T. Penn. "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from	11,366	to	11,450	No. 4, from		to	
No. 2, from		to		No. 5, from		to	
No. 3, from		to		No. 6, from		to	

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rises in hole.

No. 1, from		to		feet	
No. 2, from		to		feet	
No. 3, from		to		feet	
No. 4, from		to		feet	

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
surf	200	200	sand & gravel				
200	2096	1896	red beds				
2096	2183	87	anhy				
2183	3130	947	salt				
3130	4959	1829	alt. anhy, sand, shale, gyp				
4959	9797	4838	dolo w/sand & shale				
9797	11575	1778	alt. lime & shale				

RECEIVED

AUG 21 1984

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. Name of Operator Amerind Oil Co.		7. Unit Agreement Name
2. Address of Operator 500 Wilco Building, Midland, Texas 79701		8. Farm or Lease Name Higgins Trust, Inc.
3. Location of Well UNIT LETTER <u>M</u> <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>510</u> FEET FROM THE <u>West</u> LINE, SECTION <u>21</u> TOWNSHIP <u>16S</u> RANGE <u>37E</u> NMPM.		9. Well No. 2
15. Elevation (Show whether DF, RT, GR, etc.) 3800' GL, 3814' KB		10. Field and Pool, or Wildcat Northeast Lovington Penn (Strawn)
		12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	OTHER <u>Install pumping equipment</u> ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1503.

7/1/85: Ran 2½" x 1 3/4" x 24' pump, 1 2"x7/8" pony rod, 12 7/8" rods, 113 3/4" rods, 98 7/8" rods, 94 1" rods, 1 6"x1" pony rod, 1 8"x1" pony rod, 1 4"x1" pony rod, hung on with 26' polish rod. Set American 640-365-144 pumping unit.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Robert C. Lethrook TITLE Vice President DATE July 11, 1985

APPROVED BY DATE TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

JUL 1

1944

FIELD _____ COUNTY Lea, Nl. OCC NUMBER _____
OPERATOR Amerind Oil Company ADDRESS 500 Wilco Building, Midland, Texas 79701
LEASE Higgins Trust, Inc. WELL NO. 2
SURVEY 660' FSL & 510' FWL of Section 21, T-16-S, R-37-E

RECORD OF INCLINATION

<u>DEPTH (FEET)</u>	<u>ANGLE OF INCLINATION (DEGREES)</u>
385	3/4
882	1/2
1,382	3/4
1,864	1/2
2,121	1
2,614	1/2
3,108	3/4
3,702	3/4
4,195	1
4,300	1
4,800	1/2
5,298	3/4
5,788	3/4
6,284	3/4
6,664	3/4
7,151	1
7,649	1/2
8,147	1/2
8,647	1/2
9,143	3/4
9,301	1/4
9,768	1/2
10,172	1/2
10,667	3/4
10,967	1 1/4
11,398	2
11,575	1 3/4

Certification of personal knowledge inclination data:

I hereby certify that I have personally assembled the data and facts placed on this form, and such information given above is true and complete to the best of my knowledge.

HONDO DRILLING COMPANY

BY: _____

Walter Frederickson
Vice President

Sworn and subscribed to before me the undersigned authority, on this the

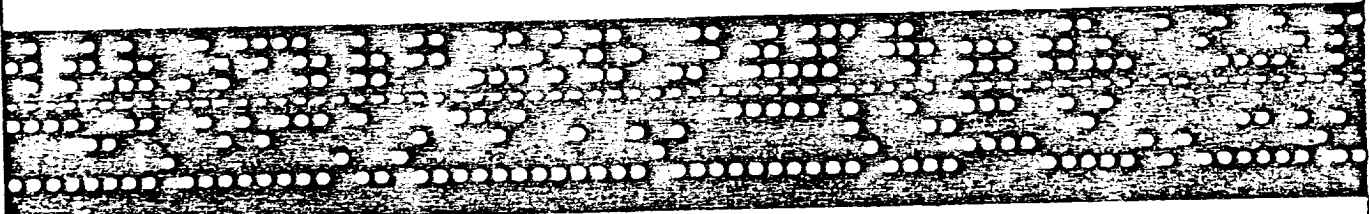
17th day of August,

Margaret B. Anderson Notary Public in and for Midland County, Texas

25-115

JOHNSTON
Schlumberger

**computerized
data
analysis**



COMPANY AMERIND OIL COMPANY WELL HIGGINS TRUST #2 TEST NO. 2 COUNTY LEA STATE NEW MEXICO
11551 TO 115521



COMPUTERIZED DATA ANALYSIS

AUGUST 16, 1984

GENTLEMEN:

THE FOLLOWING IS AN ANALYSIS OF THE DRILLSTEM TEST ON THE LOWER STRAWN FORMATION OF HIGGINS TRUST #2. A FLOW RATE OF 724 BLPD WAS CALCULATED FROM THE PRESSURE DIFFERENTIAL OF THE TOTAL FLOW PERIOD. THIS LIQUID RATE WAS COMPOSED OF 97% OIL WITH 43.6°API GRAVITY AND 3% WATER WITH 28000 PPM CHLORIDES.

THIS SYSTEM BEHAVES AS A HOMOGENEOUS RESERVOIR WITH WELLBORE STORAGE AND SKIN. A PERMEABILITY-THICKNESS (KH) OF 1480 MD-FT WAS FOUND FOR THE REPORTED 83 FOOT NET INTERVAL, GIVING A PERMEABILITY (K) OF 17.8 MD. EFFECTIVE TO OIL. A DAMAGE RATIO OF 7.6 WAS CALCULATED, INDICATING THAT WELLBORE DAMAGE WAS PRESENT AT THE TIME AND CONDITIONS OF THIS TEST. A SKIN FACTOR OF 32.7 WAS DETERMINED.

A RESERVOIR PRESSURE OF 2697 PSIA WAS FOUND FROM THE EXTRAPOLATION OF THE FINAL SHUT-IN PERIOD. EXTRAPOLATION OF THE INITIAL SHUT-IN YIELDED A PRESSURE OF 2708 PSIA.

NODAL ANALYSIS OF THE WELL TEST DATA WAS RUN TO SHOW THE OPTIMUM SHOT DENSITY FOR 2 7/8 INCH TUBING WITH VARIOUS WELLHEAD PRESSURES. THE FOLLOWING PLOT REPRESENTS A SYSTEM WITH SKIN = 32.7 AND WITH SKIN REMOVED (0). BOTH CURVES SHOW THAT THE OPTIMUM SHOT DENSITY IS ABOUT 2 SHOTS/FOOT GIVING THE RESULTING PRODUCTION RATE:

- WITH SKIN - WHP = 200 ; 440 BBLs/DAY
- WITHOUT SKIN - WHP = 200 ; 1190 BBLs/DAY
- WHP = 500 ; 425 BBLs/DAY

RESERVOIR PRESSURE	=	2697 PSIA
PERMEABILITY-THICKNESS	=	1480 MD-FT
PERMEABILITY	=	17.8 MD
DAMAGE RATIO	=	7.6
SKIN NUMBER	=	32.7
RADIUS OF INVESTIGATION	=	56 FT.
VISCOSITY	=	.456 CP
TOTAL COMPRESSIBILITY	=	1.57×10^{-4} PSI ⁻¹
FORMATION VOLUME FACTOR	=	1.31 BBL/STB
POROSITY	=	6.9 %
GOR	=	997 SCF/BBL
OIL GRAVITY	=	43.6 API @ 60

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.



MIKE BEHOUNEK
MIDLAND RESERVOIR
EVALUATION DEPARTMENT

AMERIND OIL COMPANY
10351' TO 10552; TEST #2
LEA COUNTY, NEW MEXICO

AMERIND OIL CO.

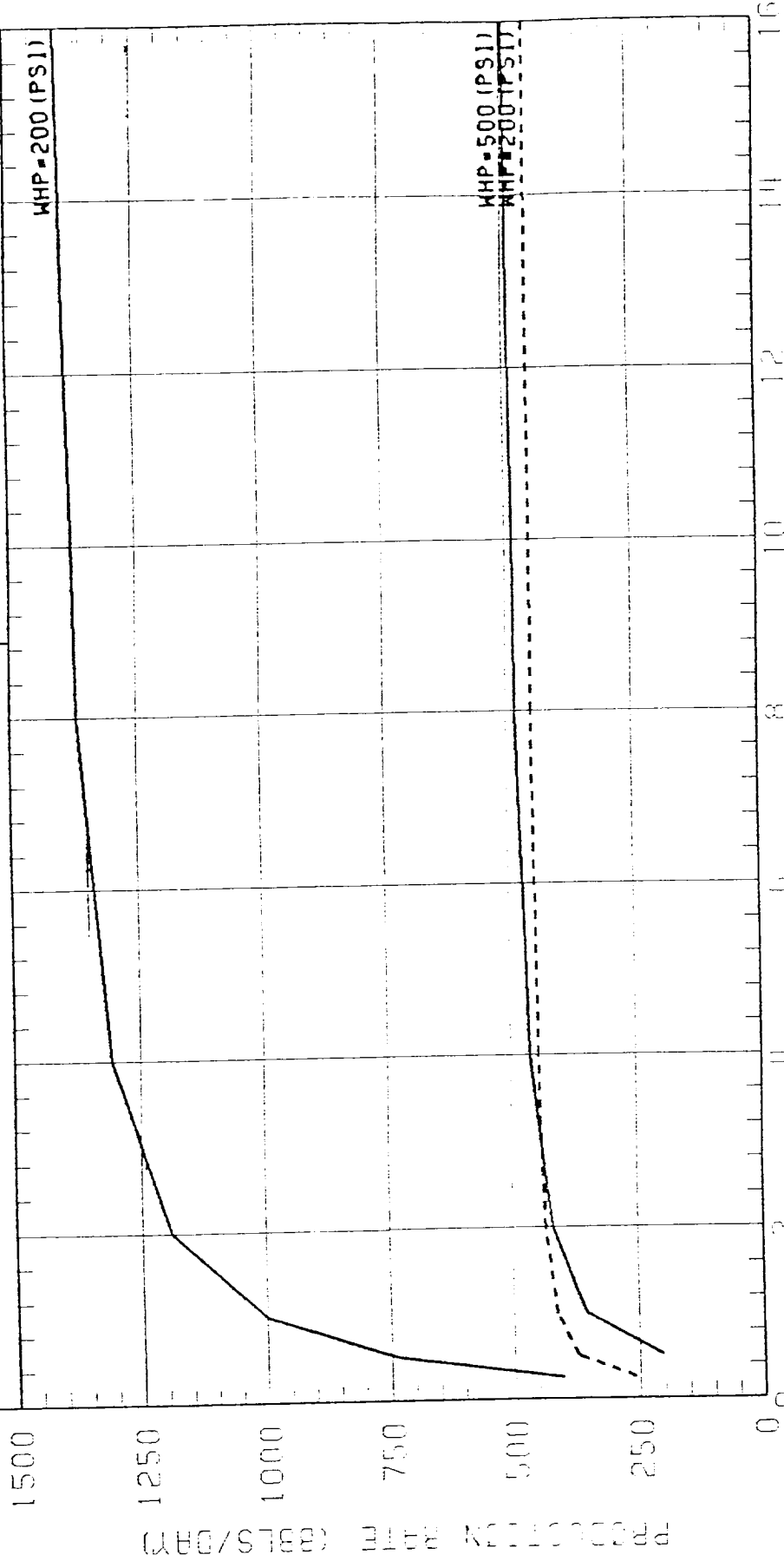
HIGGING TRUST #2

11/5/93 16-AUG-84

NO. 1

SHOT SENSITIVITY WITH/WITHOUT SKIN

 PENETRATION O.D. = .43 IN.
 PENETRATION LENGTH = 10 IN.
 TUBING SIZE = 2.441 IN. I.D.
 PRODUCTION @ PSEUDO STEADY STATE



SHOT DENSITY (SHOTS/FOOT)

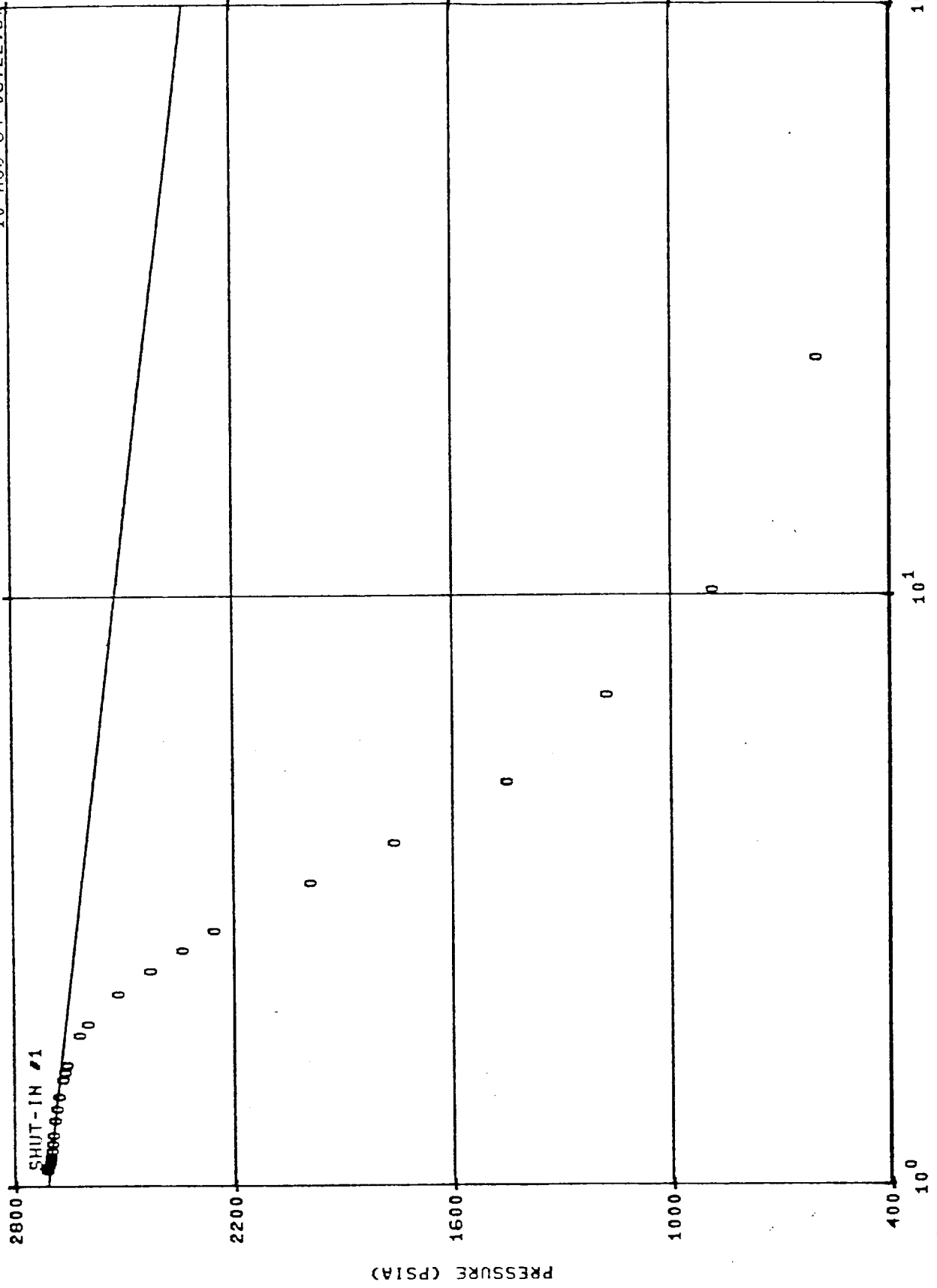
--- WITH SKIN = 92.7
 --- WITHOUT SKIN = 92.7

[ELECTRON JOURNAL]
 [500 UNRECORDED]

M=192.58

P*=2708 PSIA

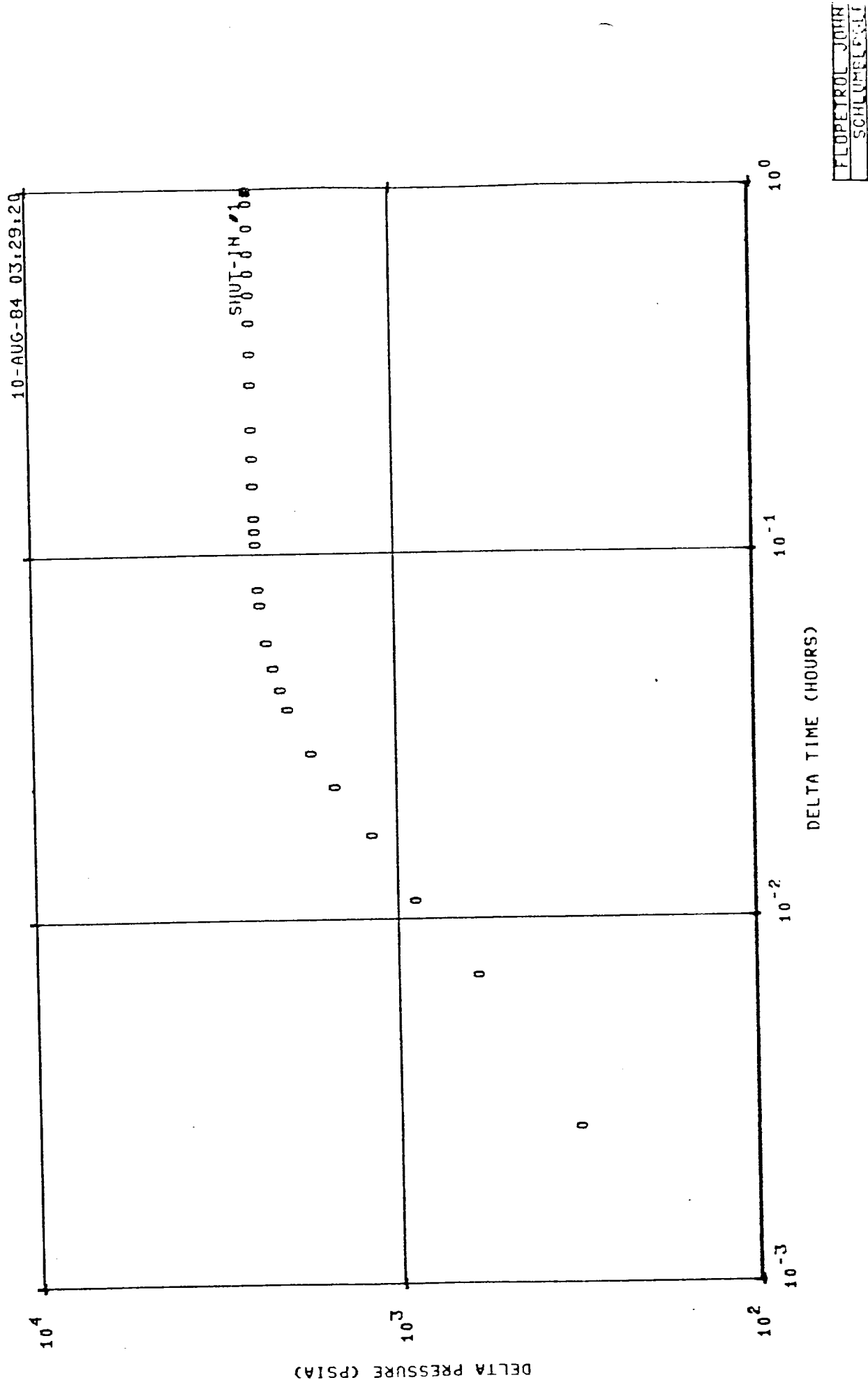
10-AUG-84 03:22:33



(TP + DELTA T)/DELTA T

HORNER PLOT, Production Time = 6.4500E-02

FLOPETROL JOURNAL
SOLUZIONI

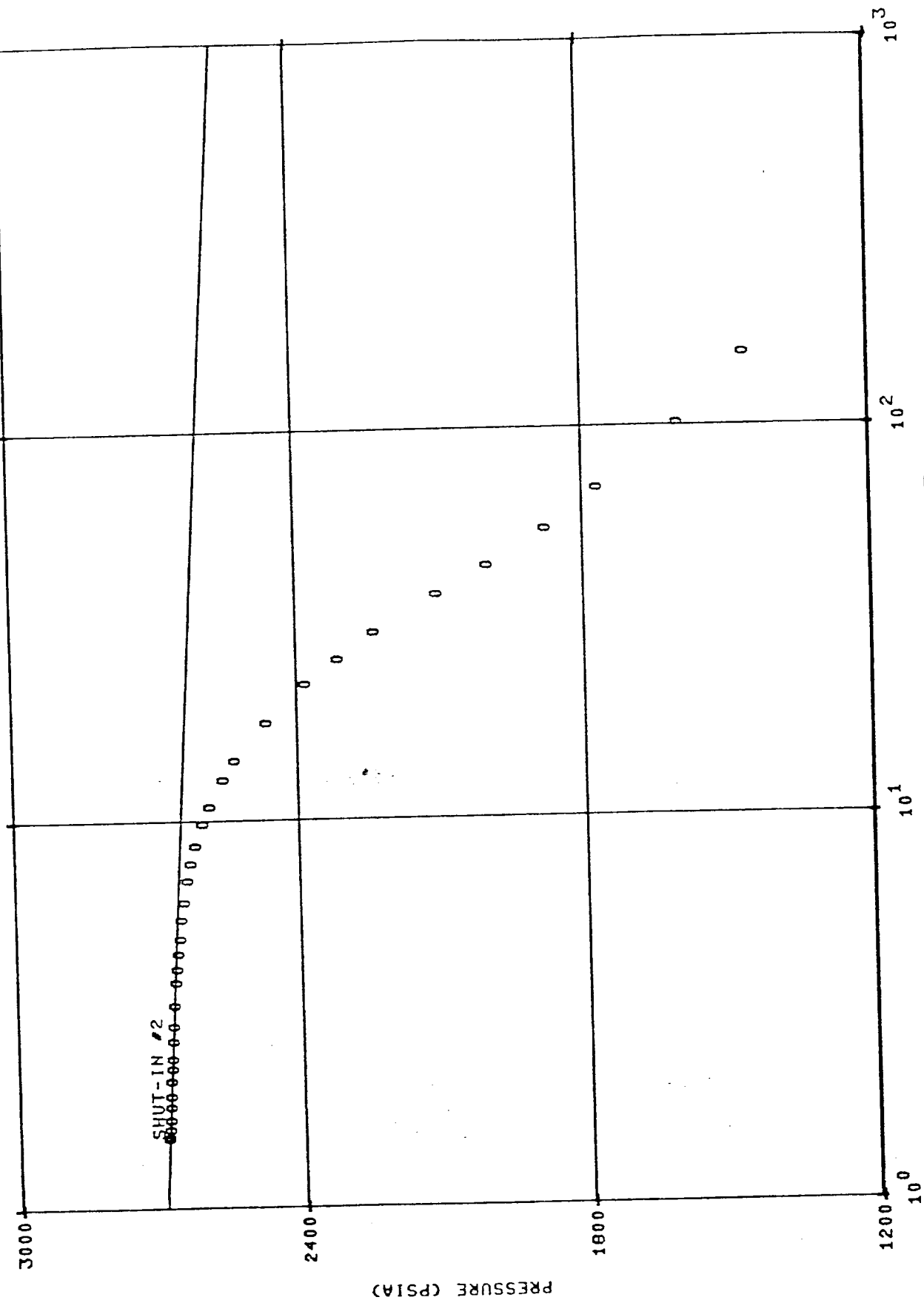


FLOPETROL JOHN
SCHLUMBERGER

M=47.56

PX=2697 PSIA

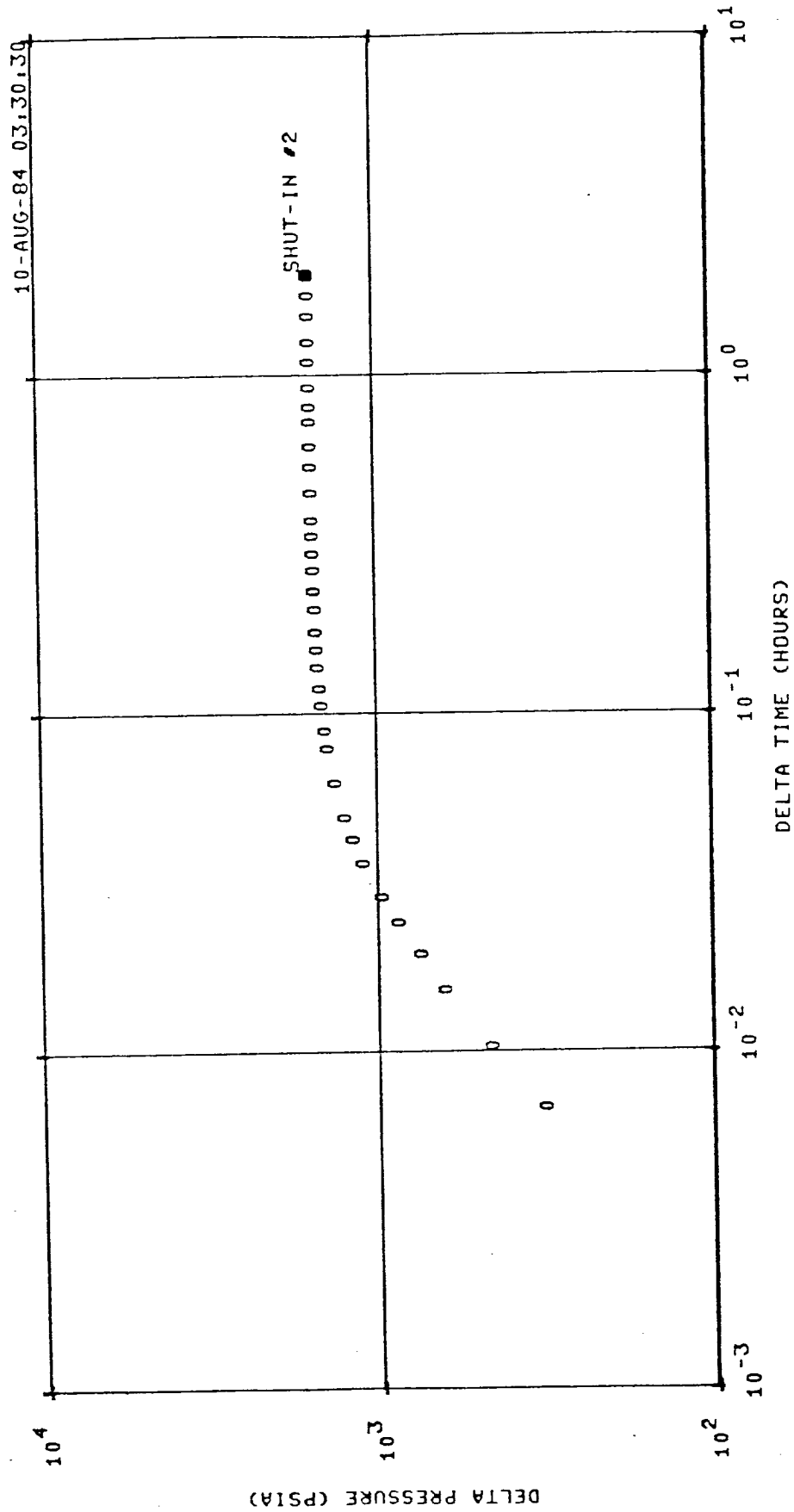
10-AUG-84 03:25:02



$(TP + \Delta T) / \Delta T$

HORNER PLOT, Production Time = 1.042

FLOPETROL JOINT
SCHLUMBERGER



FLOPETROL JAM
SCHUMBERG

 * TEST TICKET DATA PRINTOUT *

WELL IDENTIFICATION

1. WELL	: HIGGINS TRUST #2
2. COMPANY	: AMERIND OIL COMPANY
3.	: 500 WILCO BUILDING
4.	: MIDLAND, TEXAS 79701
5. CUSTOMER	: SAME
6.	:
7.	:
8. FIELD	: N.A.
9. COUNTY	: LEA
10. STATE/PROV.	: NEW MEXICO
11. LOCATION	: SEC.21/TWN.16S/RGE.37E
12. TECHNICIAN	: MILLONIG (HOBBS)
13. TEST APPROVED BY	: MR. JIM CLOWE
14. TEST DATE	: 8-9-84
15. DEPTH REFERENCE	: KELLY BUSHING
16. DEPTH REFERENCE ELEVATION	: S.L. 3814. FT & 3800. (GROUND LEVEL)

HOLE INFORMATION

1. THE HOLE IS STRAIGHT.	
2. TOTAL DEPTH	: 11552. FT
3. OPEN HOLE DIAMETER	: 7.88 IN

MUD INFORMATION

1. MUD TYPE	: DRISFAC
2. MUD WEIGHT	: 9.0 LB/GAL
3. MUD VISCOSITY	: 44. MARSH FUNNEL SEC
4. CORRECTED WATER LOSS	: 6.6 CC/30 MIN
5. MUD RESISTIVITY	: 1.20 OHM-M
6. MUD RES. MEAS. TEMP.	: 70.0 DEG F
7. MUD FILTRATE RESISTIVITY	: OHM-M
8. MUD FILT. RES. MEAS. TEMP.	: DEG F
9. MUD CHLORIDES CONTENT	: 1500.0 PPM BY WEIGHT

 * TEST TICKET DATA PRINTOUT *

TEST INFORMATION

1. FIELD REPORT NUMBER : 53988E
 2. TEST TYPE : MFE OPEN HOLE
 3. TEST NUMBER : 2
 4. TELEFLOW IN USE ? : NO
 5. SSDR OR J-300 IN USE ? : NO
 6. SPRG IN USE ? : NO
 7. PTSDL IN USE ? : NO

TEST STRING INFORMATION

#	COMPONENT NAME	EFFECTIVE		FLOW PATH
		I.D. (IN)	O.D. (IN)	LENGTH (FT)
1	DRILL PIPE	3.83	4.50	10894.
2	DRILL COLLARS	2.25	6.25	421.
3	TOOL STRING	0.94	5.00	237.

TEST STRING PLACEMENT

1. TEST TYPE CODE 1 - ON BOTTOM : 11345. FT & 11351. FT
 2. PACKER DEPTHS

TEST ZONE DESCRIPTION

	FORMATION NAME	TOP (FT)	BOTTOM (FT)	PRODUCTION ZONE	
				THICKNESS (FT)	PEROSITY (%)
1	LOWER STRAWN			83	6.9

TEST CONDITIONS

1. BOTTOMHOLE CHOKE(S) EFF. INTERNAL DIA. : 0.94 IN

 * TEST TICKET DATA PRINTOUT *

TEST TOOL SAMPLE CHAMBER RECOVERY DATA

SAMPLE PRESSURE : 820. PSIG
 OIL GRAVITY : 43.6 DEG. API @ 60.0 DEG F
 GAS/OIL RATIO : 854. FT3/BBL
 GAS/LIQUID RATIO : 830. FT3/BBL

SAMPLE CHAMBER CONTENTS

FLUID	VOLUME	RESISTIVITY	CHLORIDES
GAS	3.76 FT3		
OIL	700.0 CC		
WATER	20.0 CC	0.20 OHM-M @ 70.0 DEG F	28000. PPM
MUD	CC	OHM-M @ DEG F	
TOTAL LIQUID	720.0 CC		

RECOVERY INFORMATION

DESCRIPTION	FEET	% OIL	% H2O	OTH	API DEG.	DEG. F	RESISTIVITY OHM-M	DEG. F	CHL PPM
1 DRUG MUD/GAS & OIL CUT	250			100			1.00	70	2400.
2 OIL/HEAVY GAS CUT WITH TRACE OF WATER	1740	95	5		43	60	0.20	70	25000.
3 FORMATION WATER	70		100				0.20	70	28000.

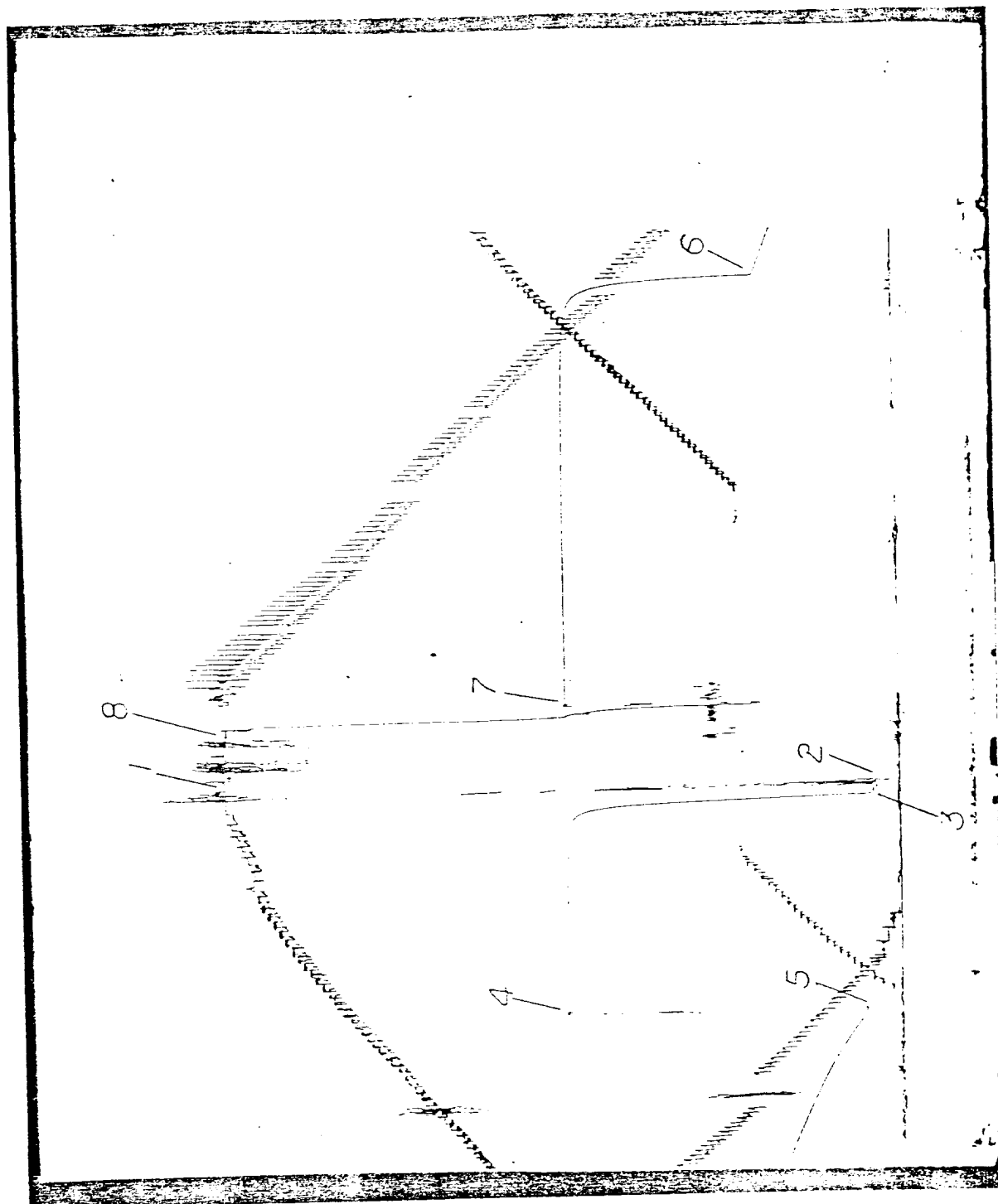
SURFACE INFORMATION

DESCRIPTION	TIME	PRESSURE	CHOKESIZE
1 SET PACKER (8-9-84)	0940	-	-
2 OPENED TOOL	0942	-	BUBBLE
3 BLOW OFF BOTTOM OF BUCKET	0943	-	HOSE
4	0944	1.0 #	"
5 CLOSED FOR INITIAL SHUT-IN	0945	3.50 #	"
6 FINISHED SHUT-IN	1045	-	-
7 RE-OPENED TOOL	1046	-	"
8	1051	4.0 #	"
9	1050	12.0 #	"
10	1101	16.50 #	1/4"
11	1105	17.0 #	"
12	1111	18.0 #	"
13 GAS TO SURFACE	1113	18.0	"

* TEST TICKET DATA PRINTOUT *

	DESCRIPTION	TIME	PRESSURE	CHOKESIZE
14		1116	18.25 #	"
15		1121	19.0 #	"
16		1131	19.25 #	"
17		1136	19.50 #	"
18	GAS RATE 29.4 MCF/DAY	1141	19.75 #	"
19	CLOSED FOR FINAL SHUT-IN	1146	20.0 #	"
20	CYCLE TOOL	1346	-	-
21	OPEN TOOL	1347	-	-
22	CLOSED FOR SHUT-IN	1348	-	-
23	FINISHED SHUT-IN	1349	-	-
24	PULLED PACKER LOOSE	1351	-	-
25	STARTED REVERSING OUT	1740	250.0 #	1"
26	FINISHED REVERSING OUT	1830	-	-

FIELD REPORT NO.: 53988E CAPACITY: 6400#
INSTRUMENT NO.: J-1321 NUMBER OF REPORTS: 29



BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 53988E

COMPANY : AMERIND OIL CO.
WELL : HIGGINS TRUST #2

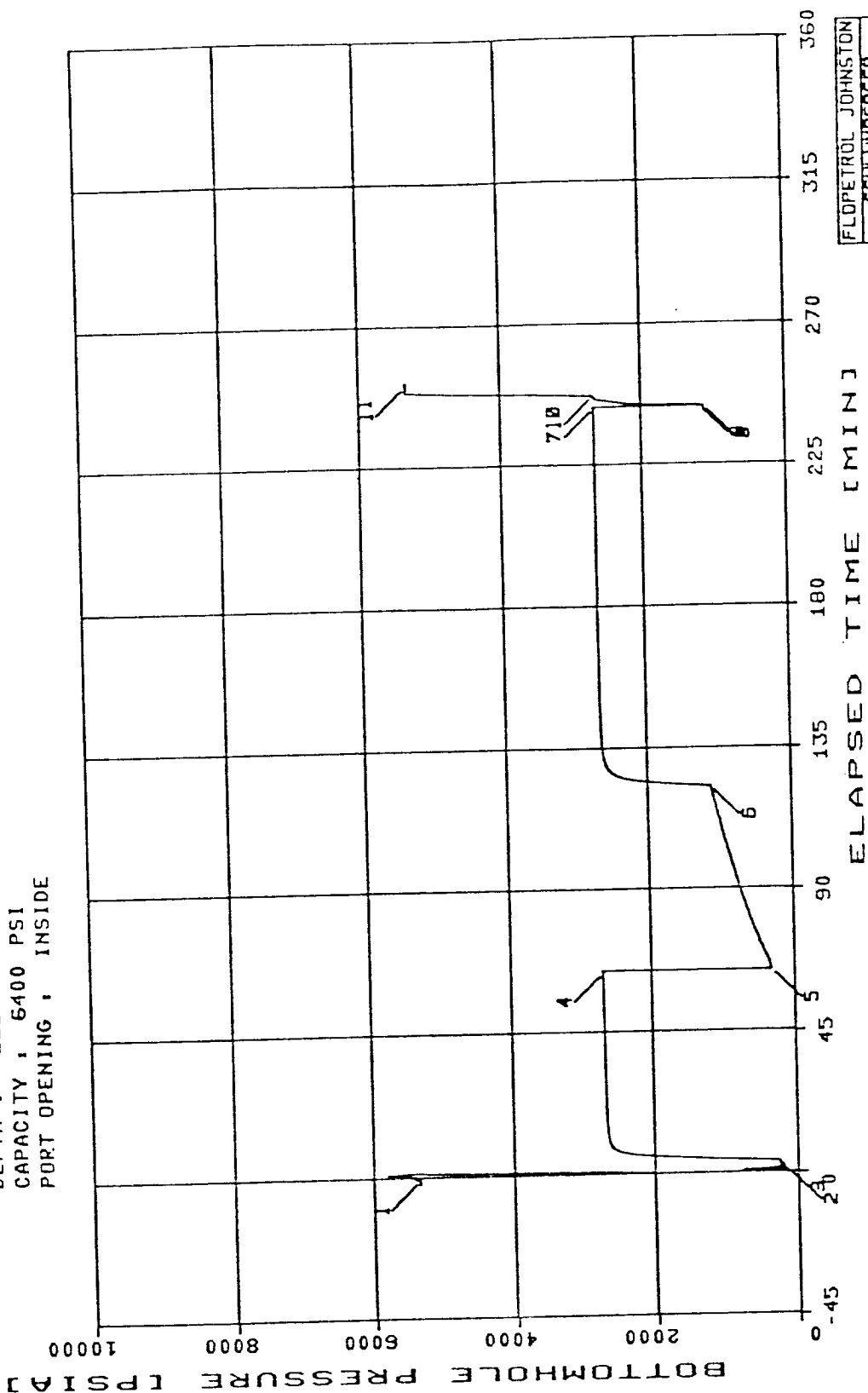
INSTRUMENT NO. J-1321

WELL, HIGGINS TRUST #2

DEPTH : 11322 FT

CAPACITY : 6400 PSI

PORT OPENING , INSIDE



 * WELL 1ST DATA PRINTOUT *

FIELD REPORT # : 53988E

COMPANY : AMERIND OIL CO.

WELL : HIGGINS TRUST #2

INSTRUMENT # : J-1321
 CAPACITY [PSI] : 6400.
 DEPTH [FT] : 11322.0
 PORT OPENING : INSIDE
 TEMPERATURE [DEG F] : 178.0

LABEL POINT INFORMATION

	TIME OF DAY DATE # HH:MM:SS DD-MM	EXPLANATION	ELAPSED TIME,MIN	BOT HOLE PRESSURE PSIA
***	*****	*****	*****	*****
1	9:41: 0 9-AU HYDROSTATIC MUD		-1.00	5364
2	9:42: 0 9-AU START FLOW		0.00	94
3	9:45:52 9-AU END FLOW & START SHUT-IN		3.87	281
4	10:45:37 9-AU END SHUT-IN		63.61	2708
5	10:46: 6 9-AU START FLOW		64.10	319
6	11:44:45 9-AU END FLOW & START SHUT-IN		122.75	1139
7	13:45: 3 9-AU END SHUT-IN		243.05	2689
8	13:45:28 9-AU START FLOW		243.47	1130
9	13:45:50 9-AU END FLOW & START SHUT-IN		243.84	1200
10	13:49: 0 9-AU END SHUT-IN		247.00	2694
11	13:52:48 9-AU HYDROSTATIC MUD		250.80	5350

SUMMARY OF FLOW PERIODS

	START ELAPSED PERIOD TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA
*****	*****	*****	*****	*****	*****
1	0.00	3.87	3.87	94	281
2	64.10	122.75	58.65	319	1139
3	243.47	243.84	0.37	1130	1200

SUMMARY OF SHUTIN PERIODS

	START ELAPSED PERIOD TIME,MIN	END ELAPSED TIME,MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
*****	*****	*****	*****	*****	*****	*****	*****
1	3.87	63.61	59.74	281	2708	281	3.87
2	122.75	243.05	120.30	1139	2689	1139	62.52
3	243.84	247.00	3.16	1200	2694	1200	62.89

TEST PHASE : FLOW PERIOD # 1

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
9:42:00	9-AU	0.00	0.00	94
9:45:52	9-AU	3.87	3.87	281

TEST PHASE : SHUTIN PERIOD # 1
 FINAL FLOW PRESSURE [PSIA] = 281
 PRODUCING TIME [MIN] = 3.87

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
9:45:52	9-AU	3.87	0.00	281	0	
9:46:52	9-AU	4.87	1.00	1440	1159	0.688
9:47:52	9-AU	5.87	2.00	2131	1850	0.468
9:48:52	9-AU	6.87	3.00	2438	2157	0.360
9:49:52	9-AU	7.87	4.00	2562	2282	0.294
9:50:52	9-AU	8.87	5.00	2621	2341	0.249
9:51:52	9-AU	9.87	6.00	2644	2363	0.216
9:52:52	9-AU	10.87	7.00	2659	2379	0.191
9:53:52	9-AU	11.87	8.00	2667	2386	0.171
9:54:52	9-AU	12.87	9.00	2674	2393	0.155
9:55:52	9-AU	13.87	10.00	2678	2397	0.142
9:57:52	9-AU	15.87	12.00	2683	2403	0.121
9:59:52	9-AU	17.87	14.00	2688	2407	0.106
10: 1:52	9-AU	19.87	16.00	2690	2409	0.094
10: 3:52	9-AU	21.87	18.00	2692	2411	0.085
10: 5:52	9-AU	23.87	20.00	2693	2413	0.077
10: 7:52	9-AU	25.87	22.00	2694	2414	0.070
10: 9:52	9-AU	27.87	24.00	2695	2414	0.065
10:11:52	9-AU	29.87	26.00	2696	2415	0.060
10:13:52	9-AU	31.87	28.00	2697	2416	0.056
10:15:52	9-AU	33.87	30.00	2698	2417	0.053
10:20:52	9-AU	38.87	35.00	2699	2419	0.046
10:25:52	9-AU	43.87	40.00	2700	2420	0.040
10:30:52	9-AU	48.87	45.00	2703	2422	0.036
10:35:52	9-AU	53.87	50.00	2705	2424	0.032
10:40:52	9-AU	58.87	55.00	2707	2427	0.030
10:45:37	9-AU	63.61	59.74	2708	2428	0.027

TEST PHASE : FLOW PERIOD # 2

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
10:46: 6	9-AU	64.10	0.00	319
10:51: 6	9-AU	69.10	5.00	408
10:56: 6	9-AU	74.10	10.00	509
11: 1: 6	9-AU	79.10	15.00	598
11: 6: 6	9-AU	84.10	20.00	673
11:11: 6	9-AU	89.10	25.00	745
11:16: 6	9-AU	94.10	30.00	811
11:21: 6	9-AU	99.10	35.00	874
11:26: 6	9-AU	104.10	40.00	935
11:31: 6	9-AU	109.10	45.00	995
11:36: 6	9-AU	114.10	50.00	1047
11:41: 6	9-AU	119.10	55.00	1101
11:44:45	9-AU	122.75	58.65	1139

TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE [PSIA] = 1139

PRODUCING TIME [MIN] = 62.52

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
11:44:45	9-AU	122.75	0.00	1139	0	
11:45:45	9-AU	123.75	1.00	1807	668	1.803
11:46:45	9-AU	124.75	2.00	2191	1052	1.509
11:47:45	9-AU	125.75	3.00	2387	1248	1.339
11:48:45	9-AU	126.75	4.00	2484	1345	1.221
11:49:45	9-AU	127.75	5.00	2546	1407	1.130
11:50:45	9-AU	128.75	6.00	2579	1440	1.058
11:51:45	9-AU	129.75	7.00	2602	1463	0.997
11:52:45	9-AU	130.75	8.00	2618	1478	0.945
11:53:45	9-AU	131.75	9.00	2628	1489	0.900
11:54:45	9-AU	132.75	10.00	2636	1497	0.860
11:56:45	9-AU	134.75	12.00	2646	1507	0.793
11:58:45	9-AU	136.75	14.00	2654	1515	0.738
12: 0:45	9-AU	138.75	16.00	2657	1518	0.691
12: 2:45	9-AU	140.75	18.00	2662	1523	0.651
12: 4:45	9-AU	142.75	20.00	2665	1525	0.616
12: 6:45	9-AU	144.75	22.00	2668	1529	0.585
12: 8:45	9-AU	146.75	24.00	2670	1530	0.557
12:10:45	9-AU	148.75	26.00	2671	1532	0.532
12:12:45	9-AU	150.75	28.00	2673	1534	0.510
12:14:45	9-AU	152.75	30.00	2674	1535	0.489
12:19:45	9-AU	157.75	35.00	2676	1537	0.445
12:24:45	9-AU	162.75	40.00	2678	1538	0.409
12:29:45	9-AU	167.75	45.00	2679	1540	0.378
12:34:45	9-AU	172.75	50.00	2680	1541	0.352

TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE [PSIA] = 1139

PRODUCING TIME [MIN] = 62.52

TIME OF DAY	DATE	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
12:39:45	9-AU	177.75	55.00	2682	1543	0.330
12:44:45	9-AU	182.75	60.00	2683	1544	0.310
12:49:45	9-AU	187.75	65.00	2683	1544	0.293
12:54:45	9-AU	192.75	70.00	2684	1545	0.277
12:59:45	9-AU	197.75	75.00	2684	1545	0.263
13: 4:45	9-AU	202.75	80.00	2685	1545	0.251
13: 9:45	9-AU	207.75	85.00	2685	1546	0.239
13:14:45	9-AU	212.75	90.00	2685	1546	0.229
13:19:45	9-AU	217.75	95.00	2686	1547	0.220
13:24:45	9-AU	222.75	100.00	2686	1547	0.211
13:29:45	9-AU	227.75	105.00	2687	1548	0.203
13:34:45	9-AU	232.75	110.00	2688	1548	0.195
13:39:45	9-AU	237.75	115.00	2688	1549	0.189
13:44:45	9-AU	242.75	120.00	2689	1549	0.182
13:45: 3	9-AU	243.05	120.30	2689	1549	0.182

TEST PHASE : FLOW PERIOD # 3

TIME OF DAY	DATE	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
13:45:28	9-AU	243.47	0.00	1130
13:45:50	9-AU	243.84	0.37	1200

TEST PHASE : SHUTIN PERIOD # 3

FINAL FLOW PRESSURE [PSIA] = 1200

PRODUCING TIME [MIN] = 62.89

TIME OF DAY	DATE	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
13:45:50	9-AU	243.84	0.00	1200	0	
13:46:50	9-AU	244.84	1.00	2330	1130	1.805
13:47:50	9-AU	245.84	2.00	2640	1440	1.511
13:48:50	9-AU	246.84	3.00	2692	1492	1.342
13:49: 0	9-AU	247.00	3.16	2694	1494	1.320

